

# Annual Review of Pteridological Research



**Volume 30 2016**



# ANNUAL REVIEW OF PTERIDOLOGICAL RESEARCH

VOLUME 30 (2016 Publications)

Compiled by  
Klaus Mehltreter & Elisabeth A. Hooper

Under the Auspices of:  
**International Association of Pteridologists**

*President*

Maarten J. M. Christenhusz, Finland

*Vice President*

Jefferson Prado, Brazil

*Secretary*

Leticia Pacheco, Mexico

*Treasurer*

Elisabeth A. Hooper, USA

*Council members*

Yasmin Baksh-Comeau, Trinidad

Michel Boudrie, French Guiana

Julie Barcelona, New Zealand

Atsushi Ebihara, Japan

Ana Ibars, Spain

S. P. Khullar, India

Christopher Page, United Kingdom

Leon Perrie, New Zealand

John Thomson, Australia

Xian-Chun Zhang, P. R. China

and

**Pteridological Section, Botanical Society of America**  
Melanie Link-Perez, Chair



**TABLE OF CONTENTS**

Introduction.....	5
Literature Citations for 2016.....	7
Index to Authors, Keywords, Countries, Genera and Species.....	59
Research Interests .....	83
Directory of Respondents (addresses, phone, e-mail) .....	91

**Cover photo:** *Didymoglossum godmanii*, epiphyte on trunks of the palm *Welfia regia*, Costa Rica (Klaus Mehlreter)



## INTRODUCTION

This volume of the *Annual Review of Pteridological Research* (ARPR) provides a comprehensive list of 776 literature citations on ferns and lycophytes published during 2016, an index to authors and keywords, and a description of research interests and contact information of pteridologists who answered our annual questionnaire.

In 2016, research in ferns and lycophytes yielded important worldwide contributions, such as the PPG I (2016) community-derived classification system for ferns and lycophytes and several family treatments for the Manual of the Vascular Plants of the Northeastern United States (Moran 2016 b & c, Taylor et al. 2016) and the Flora of the cangas of the Serra dos Carajás, Pará, Brazil (Moura & Salino 2016 a & b, Moura et al. 2016 a & b, Salino & Arruda 2016 a-d, Viana et al. 2016). In addition, 45 new species were described from Africa-Madagascar (11 spp.), China (9), Brazil (6), Peru (4), New Guinea (3), Guianas (3), Thailand (2), and Argentina, Ecuador, Mexico, Myanmar, New Zealand, Taiwan, and Vietnam (each 1 sp.). New insights on molecular phylogeny came from Testo & Sundue's (2016) analysis of 4000 leptosporangiate ferns. Physiological research focused on stomatal dynamics and hydraulic architecture, especially under drought stress (Baer et al. 2016, Brodersen et al. 2016, Holmlund et al. 2016, Klepsch et al. 2016, Martins et al. 2016), but also on the ecophysiology of leaf dimorphism (Watkins et al. 2016). Haufler et al. (2016) reviewed the homosporous vascular plant life cycle, whereas Sessa et al. (2016) looked at the functional significance of extreme inbreeding and Imai et al. (2016) at the relationship between mating systems and genetic diversity.

Other exciting examples of fern and lycophyte research include the sex-dependent nutrient content of gametophytes (Goodnoe & Hill 2016) and the oil-absorbing properties of the highly hydrophobic leaves of four *Salvinia* species for possible use in clean-up of oil spills (Zeiger et al. 2016). Finally, Shukla et al. (2016) transferred a fern gene into cotton to provide an insecticidal effect against whiteflies. The former are just a few examples of the enormous diversity of research published on ferns and lycophytes in 2016. We hope that this edition of ARPR will help you quickly find references within your own field of research or personal interest.

Joanne M. Sharpe supported this year's issue by contributing to database searches. Elisabeth Hooper took charge of the annual questionnaire, directory and research interests of respondents. Klaus Mehlreter compiled and formatted the literature citations and index. We hope that the continuous publication of ARPR will enhance access to information published about ferns and lycophytes worldwide and stimulate further collaboration among pteridologists. For any feedback on this year's issue, please contact Klaus Mehlreter, Instituto de Ecología, A. C., Red de Ecología Funcional, carretera antigua a Coatepec No. 351, El Haya, 91070 Xalapa, Ver., Mexico (klaus.mehlreter@inecol.mx).

If you are not on our mailing list but would like to receive information about how to be included in future issues, or if you would like to obtain back issues of the ARPR please contact Elisabeth A. Hooper, Treasurer, International Association of Pteridologists, Biology Department, Truman State University, 100 E Normal Street, Kirksville MO 63501-4221 USA, (iapferns@gmail.com). On-line access to the literature from back issues since 1994 is available on the website of the American Fern Society ([www.amerfernsoc.org](http://www.amerfernsoc.org)).

Klaus Mehlreter, Xalapa, Veracruz, Mexico  
Elisabeth Hooper, Kirksville, Missouri





1. Abdel-Azeem, A. M., Zaki, S. M., Khalil, W. F., Makhlof, N. A. & Farghaly, L. M. 2016. Anti-rheumatoid activity of secondary metabolites produced by endophytic *Chaetomium globosum*. *Frontiers in Microbiology* 7(SEP): e1477. [*Adiantum capillus-veneris*]
2. Abu Hamad, A. M. B., Amireh, B., El Atfy, H., Jasper, A. & Uhl, D. 2016. Fire in a *Weichselia*-dominated coastal ecosystem from the Lower Cretaceous (Barremian) of the Kurnub Group in NW Jordan. *Cretaceous Research* 66: 82-93.
3. Adhikari, P., Park, S. M., Kim, T. W., Lee, J. W., Kim, G. R., Han, S. H. & Oh, H. S. 2016. Seasonal and altitudinal variation in roe deer (*Capreolus pygargus tianschanicus*) diet on Jeju Island, South Korea. *Journal of Asia-Pacific Biodiversity* 9(4): 422-428. [*Athyrium koryoense*, *Lycopodium chinense*]
4. Akinbile, C. O., Ogunrinde, T. A., Che Bt Man, H. & Aziz, H. A. 2016. Phytoremediation of domestic wastewaters in free water surface constructed wetlands using *Azolla pinnata*. *International Journal of Phytoremediation* 18(1): 54-61.
5. Alekseeva, T., Kabanov, P., Alekseev, A., Kalinin, P. & Alekseeva, V. 2016. Characteristics of early Earth's critical zone based on middle-late Devonian paleosol properties (Voronezh High, Russia). *Clays and Clay Minerals* 64(5): 677-694.
6. Alfredsson, H., Clymans, W., Stadmark, J., Conley, D. & Rousk, J. 2016. Bacterial and fungal colonization and decomposition of submerged plant litter: consequences for biogenic silica dissolution. *FEMS Microbiology Ecology* 92(3): e011. [*Equisetum arvense*]
7. Allen, D. E. 2016. Hunting plants: the story of those who discovered the flowering plants and ferns of North Lancashire. *Archives of Natural History* 43(2): 369-370.
8. Alm, T. 2016. Fern rhizomes as fodder in Norway. *Journal of Ethnobiology and Ethnomedicine* 12(1): e37.
9. Almeida, T. E. & Salino, A. 2016. State of the art and perspectives on neotropical fern and lycophyte systematics. *Journal of Systematics and Evolution* 54(6): 679-690.
10. Almeida, T. E., Hennequin, S., Schneider, H., Smith, A. R., Batista, J. A. N., Ramalho, A. J., Proite, K. & Salino, A. 2016. Towards a phylogenetic generic classification of Thelypteridaceae: additional sampling suggests alterations of neotropical taxa and further study of paleotropical genera. *Molecular Phylogenetics and Evolution* 94: 688-700.
11. Ambrose, B. A. & Vasco, A. 2016. Bringing the multicellular fern meristem into focus. *New Phytologist* 210(3): 790-793.
12. Amoroso, V. B., Coritico, F. P. & Fritsch, P. W. 2016. Species richness and conservation status of ferns and lycophytes in Mt. Hamiguitan Range Wildlife Sanctuary, Davao Oriental, Philippines. *Philippine Journal of Science* 145(2): 127-137.
13. Andersen, F. & Paulsen, E. 2016. Allergic contact dermatitis caused by the Boston fern *Nephrolepis exaltata* "Bostoniensis". *Contact Dermatitis* 75(4): 255-256.
14. Andrade, J. M. D., Passos, C. D., Rubio, M. A. K., Mendonca, J. N., Lopes, N. P. & Henriques, A. T. 2016. Combining *in vitro* and *in silico* approaches to evaluate the multifunctional profile of rosmarinic acid from *Blechnum brasiliense* on targets related to neurodegeneration. *Chemico-Biological Interactions* 254: 135-145.
15. Antony, R., Fraser-Jenkins, C. R. & Mohanan, N. 2016. A note on *Taphrina* infection of ferns and re-interpretation of aposporous gametophytes reported in *Pteris* and *Arachniodes* from South India. *Indian Fern Journal* 33(1-2): 81-90.

16. Araki, T., Saga, Y., Marugami, M., Otaka, J., Araya, H., Saito, K., Yamazaki, M., Suzuki, H. & Kushiro, T. 2016. Onocerin biosynthesis requires two highly dedicated triterpene cyclases in a fern *Lycopodium clavatum*. *Chembiochem* 17(4): 288-290.
17. Arana, M. D., Larsen, C. & Ponce, M. M. 2016. Revision and panbiogeographic analysis of Hymenophyllaceae from meridional Yungas from Argentina (Tucumano-Boliviana Rainforest). *Rodriguesia* 67(1): 55-75.
18. Arana, M. D., Prado, J. & Ponce, M. 2016. Revision of the genus *Megalastrum* (Dryopteridaceae) for Argentina. *Darwiniana* 4(2): 217-233. [Spanish]
19. Arana, M. D., Prado, J. & Ponce, M. M. 2016. *Megalastrum* Holttum. In: Anton, A. M. & Zuloaga, F.O. (Org.). *Flora Argentina: Licofitas, Helechos, Gymnospermae*. 1 ed. Córdoba: Instituto Multidisciplinario de Biología Vegetal (CONICET-UNC) v. 2: 149-154. [Spanish]
20. Arana, M., Ponce, M. & Christenhusz, M. J. M. 2016. Proposal to conserve the name *Marattia kaulfussii* (*Eupodium kaulfussii*) against *M. raddiana* (Marattiaceae). *Taxon* 65: 1423.
21. Araujo, R. N., Nogueira, A. C. R., Bandeira, J. & Angelica, R. S. 2016. Shallow lacustrine system of the Permian Pedra de Fogo Formation, Western Gondwana, Parnaíba Basin, Brazil. *Journal of South American Earth Sciences* 67: 57-70.
22. Araya, T. Z., Padilla, W. P., Archidona-Yuste, A., Cantalapedra-Navarrete, C., Liebanas, G., Palomares-Rius, J. E. & Castillo, P. 2016. Root-lesion nematodes of the genus *Pratylenchus* (Nematoda: Pratylenchidae) from Costa Rica with molecular identification of *P-gutierrezii* and *P-panamaensis* topotypes. *European Journal of Plant Pathology* 145(4): 973-998.
23. Artigas Vilches, R. & Gallego Roig, J. J. 2016. About a new botanical exploration inside the longest navigable underground river in Europe. *Flora Montiberica* 64: 26-28. [*Nephrolepis exaltata*]
24. Asis, F. C., Almeida, T. E., Russell, S. J., Schneider, H. & Salino, A. 2016. Molecular phylogeny and recircumscription of the fern genus *Pecluma* (Polypodiaceae-Polypodiopsida). *Phytotaxa* 247(4): 235-246.
25. Askerov, A. M. & Akcay, Ü. 2016. About the status of certain species of *Dryopteris* Adans. s. str. in the flora of Azerbaijan. *Turczaninowia* 19(1): 79-86.
26. Asuquo, E. D. & Martin, A. D. 2016. Sorption of cadmium (II) ion from aqueous solution onto sweet potato (*Ipomoea batatas* L.) peel adsorbent: Characterisation, kinetic and isotherm studies. *Journal of Environmental Chemical Engineering* 4(4): 4207-4228.
27. Atta-Peters, D. & Achaegakwo, C. A. 2016. Palynofacies and palaeoenvironmental significance of the Albian - Cenomanian succession of the Epunsa-1 well, onshore Tano Basin, western Ghana. *Journal of African Earth Sciences* 114: 1-12.
28. Aximoff, I., Nunes-Freitas, A. F. & Braga, J. M. A. 2016. Post-fire natural regeneration of high altitude grasslands in the Itatiaia National Park, Southeast of Brazil. *Oecologia Australis* 20(2): 62-80.
29. Aya-Ay, A. M. 2016. Ethnobotany of ferns and fern allies in Mount Macabol, Marilog District, Davao City, Philippines. *International Journal of Applied Business and Economic Research* 14(2): 1127-1137.
30. Baer, A., Wheeler, J. K. & Pittermann, J. 2016. Not dead yet: the seasonal water relations of two perennial ferns during California's exceptional drought. *New Phytologist* 210(1): 122-132.

31. Bai, L. N., Qiao, M., Zheng, R., Deng, C. Y., Mei, S. Q. & Chen, W. P. 2016. Phylogenomic analysis of transferrin family from animals and plants. *Comparative Biochemistry and Physiology D-Genomics & Proteomics* 17: 1-8.
32. Balarak, D., Azarpira, H. & Mostafapour, F. K. 2016. Study of the adsorption mechanisms of cephalixin on to *Azolla filiculoides*. *Der Pharma Chemica* 8(10): 114-121.
33. Balarak, D., Mahdavi, Y., Bazrafshan, E. & Mahvi, A. H. 2016. Kinetic, isotherms and thermodynamic modeling for adsorption of acid blue 92 (ab92) from aqueous solution by modified *Azolla filiculoides*. *Fresenius Environmental Bulletin* 25(5): 1321-1330.
34. Baldwin, J. W. & Londono, G. A. 2016. First nesting account and breeding biology of "Gould's Inca" (*Coeligena Torquata Omissa*) in Manu National Park, Peru. *Wilson Journal of Ornithology* 128(3): 606-618.
35. Barbacka, M., Pacyna, G., Pienkowski, G. & Ziaja, J. 2016. New data about *Matonia braunii* (Goppert) Harris from the Early Jurassic of Poland and its ecology. *Geological Quarterly* 60(4): 857-868.
36. Barbe, M., Chavel, E. E., Fenton, N. J., Imbeau, L., Mazerolle, M. J., Drapeau, P. & Bergeron, Y. 2016. Dispersal of bryophytes and ferns is facilitated by small mammals in the boreal forest. *Ecoscience* 23(3-4): 67-76.
37. Barbolini, N., Smith, R. M. H., Tabor, N. J., Sidor, C. A. & Angielczyk, K. D. 2016. Resolving the age of Madumabisa fossil vertebrates: Palynological evidence from the mid-Zambezi Basin of Zambia. *Palaeogeography Palaeoclimatology Palaeoecology* 457: 117-128.
38. Barker, M. S., Husband, B. C. & Pires, J. C. 2016. Spreading Wings and flying high: The evolutionary importance of polyploidy after a century of study. *American Journal of Botany* 103(7): 1139-1145.
39. Barral, A., Gomez, B., Zorrilla, J. M., Serrano, J. M., Yans, J., Cazedebat, M., Daviero-Gomez, V., Ewin, T. A. M. & Lecuyer, C. 2016. Local-scale analysis of plant community from the early Cretaceous riparian ecosystem of Hautrage, Belgium. *Palaeogeography Palaeoclimatology Palaeoecology* 443: 107-122.
40. Barthlott, W., Mail, M. & Neinhuis, C. 2016. Superhydrophobic hierarchically structured surfaces in biology: evolution, structural principles and biomimetic applications. *Philosophical Transactions of the Royal Society a-Mathematical Physical and Engineering Sciences* 374(2073): e20160191.
41. Bashforth, A. R., Dimichele, W. A., Eble, C. F. & Nelson, W. J. 2016. Dryland vegetation from the middle Pennsylvanian of Indiana (Illinois Basin): the dryland biome in glacioeustatic, paleobiogeographic, and paleoecologic context. *Journal of Paleontology* 90(5): 785-814.
42. Bashforth, A. R., Dimichele, W. A., Eble, C. F. & Nelson, W. J. 2016. A Middle Pennsylvanian macrofloral assemblage from wetland deposits in Indiana (Illinois Basin): a taxonomic contribution with biostratigraphic, paleobiogeographic, and paleoecologic implications. *Journal of Paleontology* 90(4): 589-631.
43. Baskaran, X., Vigila, A. V. G., Parimelazhagan, T., Muralidhara-Rao, D. & Zhang, S. Z. 2016. Biosynthesis, characterization, and evaluation of bioactivities of leaf extract-mediated biocompatible silver nanoparticles from an early tracheophyte, *Pteris tripartita* Sw. *International Journal of Nanomedicine* 11: 5789-5806.

44. Bateman, R. M., Stevens, L. G. & Hilton, J. 2016. Stratigraphy, palaeoenvironments and palaeoecology of the Loch Humphrey Burn lagerstatte and other Mississippian palaeobotanical localities of the Kilpatrick Hills, southwest Scotland. *Peerj* 4: e1700.
45. Batke, S. P., Cascante-Marin, A. & Kelly, D. L. 2016. Epiphytes in Honduras: a geographical analysis of the vascular epiphyte flora and its floristic affinities to other Central American countries. *Tropical Ecology* 57(4): 663-675.
46. Batten, D. J., Li, J. & Peng, J. 2016. Megaspores attributable to *Ghoshispora* in Late Cretaceous deposits of the Songliao Basin, north-east China: Taxonomic clarification and distribution. *Review of Palaeobotany and Palynology* 232: 40-60.
47. Bauer, D. S., Prado, J., Trovo, M., Coan, A. I., Stützel, T. & Schulz, C. 2016. Megaspore investigations of *Selaginella* species from Sao Paulo, Brazil. *American Fern Journal* 106(2): 55-86.
48. Baykal, H. & Atamov, V. 2016. Floristic diversity in Bashemsin valley of Kackar Mountains National Park of Rize, Turkey. *Pakistan Journal of Botany* 48(5): 1871-1876.
49. Beauvais, M. P., Pellerin, S. & Lavoie, C. 2016. Beta diversity declines while native plant species richness triples over 35 years in a suburban protected area. *Biological Conservation* 195: 73-81.
50. Bedini, G., Pierini, B., Roma-Marzio, F., Caparelli, K. F., Bonari, G., Dolci, D., Gestri, G., D'antraccoli, M. & Peruzzi, L. 2016. Wikiplantbase #Toscana, breaking the dormancy of floristic data. *Plant Biosystems* 150(3): 601-610.
51. Bendik, N. F., Mcentire, K. D. & Sissel, B. N. 2016. Movement, demographics, and occupancy dynamics of a federally-threatened salamander: evaluating the adequacy of critical habitat. *Peerj* 4: e1817. [*Adiantum*]
52. Berman, B., Ellis, C. & Elmetts, C. 2016. *Polypodium leucotomos* - An overview of basic investigative findings. *Journal of Drugs in Dermatology* 15(2): 224-228.
53. Bhadra, B. N., Ahmed, I. & Jhung, S. H. 2016. Remarkable adsorbent for phenol removal from fuel: functionalized metal-organic framework. *Fuel* 174: 43-48.
54. Blair, D. P., McBurney, L. M., Blanchard, W., Banks, S. C. & Lindenmayer, D. B. 2016. Disturbance gradient shows logging affects plant functional groups more than fire. *Ecological Applications* 26(7): 2280-2301.
55. Blume, F., Liu, Y. C., Thiel, D. & Deska, J. 2016. Chemoenzymatic total synthesis of (+)- & (-)-cis-Osmundalactone. *Journal of Molecular Catalysis B-Enzymatic* 134: 280-284.
56. Boardman, D. R., Iannuzzi, R. & Dutra, T. L. 2016. A new genus of Sphenopsida from the Lower Permian of the Paraná Basin, Southern Brazil. *Review of Palaeobotany and Palynology* 233: 44-55.
57. Boch, S., Berlinger, M., Prati, D. & Fischer, M. 2016. Is fern endozoochory widespread among fern-eating herbivores? *Plant Ecology* 217(1): 13-20.
58. Boer, H. J., Price, C. A., Wagner-Cremer, F., Dekker, S. C., Franks, P. J. & Veneklaas, E. J. 2016. Optimal allocation of leaf epidermal area for gas exchange. *New Phytologist* 210(4): 1219-1228.
59. Bohnert, T., Wenzel, A., Altenhovel, C., Beeretz, L., Tjitrosoedirdjo, S. S., Meijide, A., Rembold, K. & Kreft, H. 2016. Effects of land-use change on vascular epiphyte diversity in Sumatra (Indonesia). *Biological Conservation* 202: 20-29.
60. Bona, M. & Gibby, M. 2016. The fern family Pteridaceae in Turkey. *The Fern Gazette* 20(3): 119-132.

61. Bonavita, S. & Regina, T. M. R. 2016. The evolutionary conservation of rps3 introns and rps19-rps3-rpl16 gene cluster in *Adiantum capillus-veneris* mitochondria. *Current Genetics* 62(1): 173-184.
62. Boudrie, M. & Chauvignat, A. M. 2016. Compte-rendu de la sortie botanique du samedi 7 juin 2014 dans la vallée du Vianon (Corrèze), à la recherche de *Cystopteris dickieana*. *Bulletin de la Société Botanique du Centre-Ouest* 46: 71-73. [French]
63. Boudrie, M. & Cremers, G. 2016. Nomenclatural note on the pteridophyte flora of the Guianas. *American Fern Journal* 106(3): 171-174.
64. Boudrie, M. 2016. – Compte-rendu de la mini-session Ptéridophytes dans la vallée du Lot, aux environs de Maurs (Cantal), du 5 au 7 septembre 2014. *Journal de Botanique de la Société Botanique de France* 74: 61-69. [French]
65. Boudrie, M., Mady, M. & Chabrol, L. 2016. État des lieux des espèces du genre *Isoëtes* en Limousin (Isoëtaceae, Lycophyta). *Bulletin de la Société Botanique du Centre-Ouest* 46: 62-70. [French]
66. Bourgeois, B., Vanasse, A. & Poulin, M. 2016. Effects of competition, shade and soil conditions on the recolonization of three forest herbs in tree-planted riparian zones. *Applied Vegetation Science* 19(4): 679-688.
67. Braganca, C. A. D., Damm, U., Baroncelli, R., Massola, N. S. & Crous, P. W. 2016. Species of the *Colletotrichum acutatum* complex associated with anthracnose diseases of fruit in Brazil. *Fungal Biology* 120(4): 547-561.
68. Brandt, A. J., Tanentzap, A. J., Leopold, D. R., Heenan, P. B., Fukami, T. & Lee, W. G. 2016. Precipitation alters the strength of evolutionary priority effects in forest community assembly of pteridophytes and angiosperms. *Journal of Ecology* 104(6): 1673-1681.
69. Bravo, S., Parra, M. J., Castillo, R., Sepulveda, F., Turner, A., Bertin, A., Osorio, G., Tereszczuk, J., Bruna, C. & Hasbun, R. 2016. Reversible *in vivo* cellular changes occur during desiccation and recovery: desiccation tolerance of the resurrection filmy fern *Hymenophyllum dentatum* Cav. *Gayana Botanica* 73(2): 402-413.
70. Bremer, P. & Egelmeers, J. 2016. De Lansvaren in Nederland. *Varenvaria* 29(1): 8-13.
71. Bremer, P. 2016. Het *Luzulo luzuloides* – *Thelypteridetum limbospermae* Wittig 2000 in Nederland? *Stratiotes* 49: 11-22.
72. Britton, M. R. & Watkins, J. E. 2016. The economy of reproduction in dimorphic ferns. *Annals of Botany* 118(6): 1139-1149.
73. Brock, J. M. R., Perry, G. L. W., Lee, W. G. & Burns, B. R. 2016. Tree fern ecology in New Zealand: a model for southern temperate rainforests. *Forest Ecology and Management* 375: 112-126.
74. Brodersen, C. R., Rico, C., Guenni, O. & Pittermann, J. 2016. Embolism spread in the primary xylem of *Polystichum munitum*: implications for water transport during seasonal drought. *Plant Cell and Environment* 39(2): 338-346.
75. Brodribb, T. J., Bienaime, D. & Marmottant, P. 2016. Revealing catastrophic failure of leaf networks under stress. *Proceedings of the National Academy of Sciences of the United States of America* 113(17): 4865-4869.
76. Brouwer, P., van der Werf, A., Schlupepmann, H., Reichart, G. J. & Nierop, K. G. J. 2016. Lipid yield and composition of *Azolla filiculoides* and the implications for biodiesel production. *Bioenergy Research* 9(1): 369-377.

77. Brown, W. D. 2016. Mating behavior of the endemic Hawaiian cricket *Leptogryllus elongatus* (Orthoptera: Gryllidae: Oecanthinae). *Journal of Insect Behavior* 29(4): 449-458.
78. Brownsey, P. J. & Perrie, L. R. 2016. *Asplenium decurrens* Willd., an earlier name for *A. northlandicum* (Brownsey) Ogle. *New Zealand Journal of Botany* 54(4): 515-519.
79. Brownsey, P. J. & Perrie, L. R. 2016. Taxonomic notes on the New Zealand flora: lectotypes in the fern families Dennstaedtiaceae and Lindsaeaceae. *New Zealand Journal of Botany* 54(4): 511-514.
80. Brownsey, P. J. & Perrie, L. R. 2016. Taxonomic notes on the New Zealand flora: lectotypes in the fern family Hymenophyllaceae. *New Zealand Journal of Botany* 54(1): 48-62.
81. Brownsey, P. J. & Perrie, L. R. 2016. Taxonomic notes on the New Zealand flora: lectotypes in the fern family Thelypteridaceae. *New Zealand Journal of Botany* 54(1): 87-91.
82. Brummitt, N., Aletrari, E., Syfert, M. M. & Mulligan, M. 2016. Where are threatened ferns found? Global conservation priorities for pteridophytes. *Journal of Systematics and Evolution* 54(6): 604-616.
83. Burnard, D., Shepherd, L., Perrie, L. & Munkacsi, A. 2016. Phylogenetic relationships of New Zealand Lycopodiaceae. *Plant Systematics and Evolution* 302(6): 661-667.
84. Cajamarca, F. A. S., Corazza, M. Z., Prete, M. C., Dragunski, D. C., Rocker, C., Caetano, J., Goncalves Junior, A. C. & Tarley, C. R. T. 2016. Investigation on the performance of chemically modified aquatic macrophytes *Salvinia molesta* for the micro-solid phase preconcentration of Cd (II) on-line coupled to FAAS. *Bulletin of Environmental Contamination and Toxicology* 97(6): 863-869.
85. Campbell, L. M. 2016. Collections in the Plant Research Laboratory of The New York Botanical Garden. *Brittonia* 68(3): 341-347.
86. Campos, N. V., Araujo, T. O., Arcanjo-Silva, S., Freitas-Silva, L., Azevedo, A. A. & Nunes-Nesi, A. 2016. Arsenic hyperaccumulation induces metabolic reprogramming in *Pityrogramma calomelanos* to reduce oxidative stress. *Physiologia Plantarum* 157(2): 135-146.
87. Cantamessa, S., D'agostino, G. & Berta, G. 2016. Hydathode structure and localization in *Pteris vittata* fronds and evidence for their involvement in arsenic leaching. *Plant Biosystems* 150(6): 1208-1215.
88. Cantero, J. J., Palchetti, V., Nunez, C. O. & Barboza, G. E. 2016. Halophytic flora of Argentina: A checklist and an analysis of its diversity, In: Khan, M., Boër, B., Öztürk, M., Clüsener-Godt, M., Gul, B., Breckle, S. W. (ed.). *Sabkha Ecosystems*. Springer, Cham, pp. 137-204.
89. Cao, J. G., Dai, X. F., Dai, X. L. & Wang, Q. X. 2016. Observations on fertilization and a novel cytological mechanism for preventing polyspermy in the fern *Osmunda japonica*. *International Journal of Plant Sciences* 177(3): 287-293.
90. Cardenas, A. V. C., Hernandez, L. R., Juarez, Z. N., Sanchez-Arreola, E. & Bach, H. 2016. Antimicrobial, cytotoxic, and anti-inflammatory activities of *Pleopeltis polylepis*. *Journal of Ethnopharmacology* 194: 981-986.
91. Cardenas, G. G., Tuomisto, H. & Lehtonen, S. 2016. Erratum to: Newly discovered diversity in the tropical fern genus *Metaxya* based on morphology and molecular phylogenetic analyses. *Kew Bulletin* 71(9): e49.
92. Cardenas, G. G., Tuomisto, H. & Lehtonen, S. 2016. Newly discovered diversity in the tropical fern genus *Metaxya* based on morphology and molecular phylogenetic analyses. *Kew Bulletin* 71(3): e5.

93. Carlozzi, P. & Padovani, G. 2016. The aquatic fern *Azolla* as a natural plant-factory for ammonia removal from fish-breeding fresh wastewater. *Environmental Science and Pollution Research* 23(9): 8749-8755.
94. Carvalho, E. S., Pimenta, J. A. & Bianchini, E. 2016. Ferns influence on the woody species seedling bank in semi-deciduous forest, Southern Brazil. *Acta Scientiarum - Biological Sciences* 38(3): 347-354.
95. Cascales-Minana, B., Diez, J. B., Gerrienne, P. & Cleal, C. J. 2016. A palaeobotanical perspective on the great end-Permian biotic crisis. *Historical Biology* 28(8): 1066-1074.
96. Catterall, C. P. 2016. Roles of non-native species in large-scale regeneration of moist tropical forests on anthropogenic grassland. *Biotropica* 48(6): 809-824.
97. Chaity, F. R., Khatun, M. & Rahman, M. S. 2016. *In vitro* membrane stabilizing, thrombolytic and antioxidant potentials of *Drynaria quercifolia* L., a remedial plant of the Garo tribal people of Bangladesh. *BMC Complementary and Alternative Medicine* 16: e184.
98. Chambers, S. M. & Emery, N. C. 2016. Population differentiation and countergradient variation throughout the geographic range in the fern gametophyte *Vittaria appalachiana*. *American Journal of Botany* 103(1): 86-98.
99. Chandanshive, V. V., Rane, N. R., Gholave, A. R., Patil, S. M., Jeon, B. H. & Govindwar, S. P. 2016. Efficient decolorization and detoxification of textile industry effluent by *Salvinia molesta* in lagoon treatment. *Environmental Research* 150: 88-96.
100. Chang, Y. H., Wang, H., Liu, H. Y., Lu, P. F., Lin, C. Y. & Tu, S. H. 2016. *Metathelypteris flaccida* (Blume) Ching (Thelypteridaceae; Polypodiales), a newly recorded fern in Taiwan. *Taiwan Journal of Forest Science* 31(4): 323-330.
101. Chauvet, E., Cornut, J., Sridhar, K. R., Selosse, M. A. & Barlocher, F. 2016. Beyond the water column: aquatic hyphomycetes outside their preferred habitat. *Fungal Ecology* 19: 112-127.
102. Chear, N. J. Y., Khaw, K. Y., Murugaiyah, V. & Lai, C. S. 2016. Cholinesterase inhibitory activity and chemical constituents of *Stenochlaena palustris* fronds at two different stages of maturity. *Journal of Food and Drug Analysis* 24(2): 358-366.
103. Chen, C. W., Schuettelpelz, E., Lindsay, S. & Middleton, D. J. 2016. Proposal to conserve the name *Haplopteris* against *Monogramma* (Pteridaceae). *Taxon* 65: 884-885.
104. Chen, N. H., Zhang, Y. B., Huang, X. J., Jiang, L., Jiang, S. Q., Li, G. Q., Li, Y. L. & Wang, G. C. 2016. Drychampones A-C: Three meroterpenoids from *Dryopteris championii*. *Journal of Organic Chemistry* 81(19): 9443-9448.
105. Chen, X., Schreiber, K., Appel, J., Makowka, A., Fahrnich, B., Roettger, M., Hajirezaei, M. R., Sonnichsen, F. D., Schonheit, P., Martin, W. F. & Gutekunst, K. 2016. The Entner-Doudoroff pathway is an overlooked glycolytic route in cyanobacteria and plants. *Proceedings of the National Academy of Sciences of the United States of America* 113(19): 5441-5446.
106. Chen, Z. D., Yang, T., Lin, L., Lu, L. M., Li, H. L., Sun, M., Liu, B., Chen, M., Niu, Y. T., Ye, J. F., Cao, Z. Y., Liu, H. M., Wang, X. M., Wang, W., Zhang, J. B., Meng, Z., Cao, W., Li, J. H., Wu, S. D., Zhao, H. L., Liu, Z. J., Du, Z. Y., Wang, Q. F., Guo, J., Tan, X. X., Su, J. X., Zhang, L. J., Yang, L. L., Liao, Y. Y., Li, M. H., Zhang, G. Q., Chung, S. W., Zhang, J., Xiang, K. L., Li, R. Q., Soltis, D. E., Soltis, P. S., Zhou, S. L., Ran, J. H., Wang, X. Q., Jin, X. H., Chen, Y. S., Gao, T. G., Li, J. H., Zhang, S. Z. & Lu, A. M. 2016. Tree of life for the genera of Chinese vascular plants. *Journal of Systematics and Evolution* 54(4): 277-306.

107. Chen, Z., Chen, Z. & Bai, L. 2016. Rare earth element migration in gullies with different *Dicranopteris dichotoma* covers in the Huangnikeng gully group, Changting County, Southeast China. *Chemosphere* 164: 443-450.
108. Cheng, T., Xu, C., Lei, L., Li, C. H., Zhang, Y. & Zhou, S. L. 2016. Barcoding the kingdom Plantae: new PCR primers for ITS regions of plants with improved universality and specificity. *Molecular Ecology Resources* 16(1): 138-149.
109. Chinnappa, C. H., Rajanikanth, A. & Rao, Y. V. 2016. Early Cretaceous floral diversity and ecology in the Pranhita-Godavari Basin, East Coast of India. *Journal of the Palaeontological Society of India* 61(2): 189-214.
110. Chlachula, J. & Krupyanko, A. A. 2016. Sequence stratigraphy and environmental background of the late Pleistocene and Holocene occupation in the Southeast Primor'ye (the Russian Far East). *Quaternary Science Reviews* 142: 120-142.
111. Choo, T. Y. S., Escapa, I. H. & Bomfleur, B. 2016. Monotypic colonies of *Clathropteris meniscioides* (Dipteridaceae) from the Early Jurassic of central Patagonia, Argentina: implications for taxonomy and palaeoecology. *Palaeontographica Abteilung B-Palaophytologie* 294(1-4): 85-109.
112. Christenhusz, M. J. M. & Byng, J. W. 2016. The number of known plants species in the world and its annual increase. *Phytotaxa* 261(3): 201-217.
113. Chua, S. C., Ramage, B. S. & Potts, M. D. 2016. Soil degradation and feedback processes affect long-term recovery of tropical secondary forests. *Journal of Vegetation Science* 27(4): 800-811.
114. Clark, J., Hidalgo, O., Pellicer, J., Liu, H. M., Marquardt, J., Robert, Y., Christenhusz, M., Zhang, S. Z., Gibby, M., Leitch, I. J. & Schneider, H. 2016. Genome evolution of ferns: evidence for relative stasis of genome size across the fern phylogeny. *New Phytologist* 210(3): 1072-1082.
115. Clauson-Kaas, F., Hansen, H. C. B. & Strobel, B. W. 2016. UPLC-MS/MS determination of ptaquiloside and pterosin B in preserved natural water. *Analytical and Bioanalytical Chemistry* 408(28): 7981-7990.
116. Clauson-Kaas, F., Ramwell, C., Hansen, H. C. B. & Strobel, B. W. 2016. Ptaquiloside from bracken in stream water at base flow and during storm events. *Water Research* 106: 155-162.
117. Cleary, D. F. R. 2016. Diversity and composition of plants, butterflies and odonates in an *Imperata cylindrica* grassland landscape in East Kalimantan, Indonesia. *Journal of Tropical Ecology* 32: 555-560.
118. Clyde, W. C., Ramezani, J., Johnson, K. R., Bowring, S. A. & Jones, M. M. 2016. Direct high-precision U-Pb geochronology of the End-Cretaceous extinction and calibration of Paleocene astronomical timescales. *Earth and Planetary Science Letters* 452: 272-280.
119. Coca-Salazar, A., Villca, H., Torrico, M. & Alfaro, F. D. 2016. Plant communities on the islands of two Altiplanic salt lakes in the Andean region of Bolivia. *Check List* 12(5): e1975.
120. Colletta, G. D., Souza, V. C., Almeida, T. E., Cabral, F. N., Diogo, I. J. S., Flores, T. B., Coelho, R. L. G., Moreno, V. S., Salino, A., Ferreira, M. A. P., Ivanauskas, N. M., Tamashiro, J. Y., Liboni, A. P., Neto, A. C. R., Virillo, C. B., Delfini, C. F., De Moraes Potascheff, C., Braga, D. P., Oliveira, D. B., Castillo-Dãaz, D. C., Mello, F. N. A., Florido, F. G., Fagundes, I. C., Rigon, J., Kuntz, J., Costa, M. F. B., Bettinardi, M. L., Neto, M. A. O., Caraméz, R. B., Polisel, R. T., Girão, V. J. & Rodrigues, R. R. 2016. Vascular flora of the legado das Águas, reserva Votorantim, municipalities of Tapirá, Miracatá and Juquiá, Sao Paulo, Brazil. *Check List* 12(6): e2020.



121. Colwell, R. K., Gotelli, N. J., Ashtone, L. A., Beck, J., Brehm, G., Fayle, T. M., Fiedler, K., Forister, M. L., Kessler, M., Kitching, R. L., Klimes, P., Kluge, J., Longino, J. T., Maunsell, S. C., McCain, C. M., Moses, J., Noben, S., Sam, K., Sam, L., Shapiro, A. M., Wangu, X. & Novotny, V. 2016. Midpoint attractors and species richness: Modeling the interaction between environmental drivers and geometric constraints. *Ecology Letters* 19: 1009-1022.
122. Cook, J. G., Cook, R. C., Davis, R. W. & Irwin, L. L. 2016. Nutritional ecology of elk during summer and autumn in the Pacific Northwest. *Wildlife Monographs* 195(1): 1-81.
123. Corton, J., Donnison, I. S., Patel, M., Böhle, L., Hodgson, E., Wachendorf, M., Bridgewater, A., Allison, G. & Fraser, M. D. 2016. Expanding the biomass resource: sustainable oil production via fast pyrolysis of low input high diversity biomass and the potential integration of thermochemical and biological conversion routes. *Applied Energy* 177: 852-862. [*Pteridium aquilinum*]
124. Costa, R. M. S., Pavone, P., Caruso, R. & Pulvirenti, S. 2016. Diachronic analysis of biodiversity: study of a herbarium "reviewed" by Francesco Cupani (1657-1710) at the end of the 17th century. *Plant Biosystems* 150(4): 834-845.
125. Cremers, G., Boudrie, M., Aymonin, G. & Viane, R. L. L. 2016. Le Père Charles Plumier (1646 - 1704): son œuvre, son herbier de ptéridophytes américains. 1. Biographie – collection. *Journal de Botanique de la Société Botanique de France* 75: 81-110. [French]
126. Cremers, G., Flament, G. & Boudrie, M. 2016. Lectotypification of ten pteridophyte taxa from tropical America, especially for the Paris herbarium (P). *Adansonia* 38(1): 9-14. [French]
127. Cross, R. 2016. Fern-derived insecticide protects cotton. *Chemical & Engineering News* 94(37): 8-9. [*Tectaria macrodonta*]
128. Cullen, E. & Rudall, P. J. 2016. The remarkable stomata of horsetails (*Equisetum*): patterning, ultrastructure and development. *Annals of Botany* 118(2): 207-218.
129. da Conceicao, D. M., Andrade, L. S. de, Cisneros, J. C., Iannuzzi, R., Pereira, A. A. & Machado, F. C. 2016. New petrified forest in Maranhao, Permian (Cisuralian) of the Parnaiba Basin, Brazil. *Journal of South American Earth Sciences* 70: 308-323.
130. da Silva, D. A., Watanabe, A. H. Q. & Marcal, W. S. 2016. Epidemiological study on the prevalence of Bovine Enzootic Haematuria associated with bracken fern presence in Parana State, Brazil. *Brazilian Journal of Hygiene and Animal Sanitary* 10(1): 78-89.
131. da Silveira, R. R. & Souza, P. A. 2016. Palynology (fungi and fern spores, gymnosperm pollen grains, algae cysts and scolecodont) from the solimões and içá formations (Neogene and Pleistocene, Solimões Basin), Amazonas, Brazil. *Pesquisas em Geociencias* 43(1): 17-39.
132. Dada, O. A., Adekola, F. A. & Odebunmi, E. O. 2016. Kinetics and equilibrium models for sorption of Cu(II) onto a novel manganese nano-adsorbent. *Journal of Dispersion Science and Technology* 37(1): 119-133. [tree ferns]
133. Danelli, M. F., Fisch, S. T. V. & Vieira, S. A. 2016. Analysis of the forest structure and the biomass of harvesting areas of Jucara fruits (*Euterpe edulis* Mart.) in the northern coast and in Serra do Mar, SP state - Brazil. *Ciencia Florestal* 26(3): 773-786.
134. D'Aquino, L., Staiano, M., Gambale, E., Basile, A. & Tommasi, F. 2016. Uptake and distribution of several inorganic ions in *Nephrolepis cordifolia* (L.) C. Presl grown on contaminated soil. *Plant Biosystems*: 1-11.
135. Das, S. & Mazumdar, K. 2016. Phytoremediation potential of a novel fern, *Salvinia cucullata*, Roxb. ex Bory, to pulp and paper mill effluent: physiological and anatomical response. *Chemosphere* 163: 62-72.

136. Dauphin, B., Grant, J. & Mraz, P. 2016. Ploidy level and genome size variation in the homosporous ferns *Botrychium* s.l. (Ophioglossaceae). *Plant Systematics and Evolution* 302(5): 575-584.
137. De, A. K., Dey, N. & Adak, M. K. 2016. Bioindices for 2,4-D sensitivity between two plant species: *Azolla pinnata* R.Br. and *Vernonia cinerea* L. with their cellular responses. *Physiology and Molecular Biology of Plants* 22(3): 371-380.
138. del Castillo-Batista, A. P., Figueroa-Rangel, B. L., Lozano-Garcia, S., Olvera-Vargas, M. & Guzman, R. C. 2016. Floristic and environmental history of the cloud forest in west-central Mexico during the little ice age. *Revista Mexicana de Biodiversidad* 87(1): 216-229.
139. del Pliego, P. G., Scheffers, B. R., Basham, E. W., Woodcock, P., Wheeler, C., Gilroy, J. J., Uribe, C. A. M., Haugaasen, T., Freckleton, R. P. & Edwards, D. P. 2016. Thermally buffered microhabitats recovery in tropical secondary forests following land abandonment. *Biological Conservation* 201: 385-395.
140. Delorme, Q., Mille, C. & Jourdan, H. 2016. Description of a new genus and two new species of high frequency cicada from New Caledonia (Insecta: Hemiptera, Cicadoidea, Cicadidae). *Zootaxa* 4126(4): 563-576.
141. Devi, K. 2016. Anthelmintic pteridophytes. *Indian Fern Journal* 33(1-2): 61-68.
142. Devi, R. K., Vasantha, S., Panneerselvam, A., Rajesh, N. V. & Jeyathilakan, N. 2016. Phytochemical constituents and *in vitro* trematocidal activity of *Blechnum orientale* Linn. against *Gastrothylax crumenifer*. *Annals of Phytomedicine-an International Journal* 5(1): 127-134.
143. Di Pasquo, M., Rodriguez, E., Otano, N. N., Munoz, N. & Silvestri, L. 2016. Fern (Monilophyta) and lycophyte spores present in the National Park El Palmar (Entre Rios, Argentina). *Boletín de la Sociedad Argentina de Botánica* 51(2): 269-298.
144. Dimichele, W. A., Bashforth, A. R., Eble, C. F. & Nelson, W. J. 2016. A Middle Pennsylvanian (Early Asturian) tropical dry forest, Atokan-Desmoinesian boundary, Illinois Basin, USA. *Spanish Journal of Paleontology* 31(1): 41-84.
145. Dissanayake, D., Wijesinghe, W., Iqbal, S. S., Priyantha, N. & Iqbal, M. C. M. 2016. Fuchsine biosorption using *Asplenium nidus* biosorbent-a mechanism using kinetic and isotherm data. *RSC Advances* 6(101): 98682-98692.
146. Dissanayake, D., Wijesinghe, W., Iqbal, S. S., Priyantha, N. & Iqbal, M. C. M. 2016. Isotherm and kinetic study on Ni(II) and Pb(II) biosorption by the fern *Asplenium nidus* L. *Ecological Engineering* 88: 237-241.
147. Ditusa, S. F., Fontenot, E. B., Wallace, R. W., Silvers, M. A., Steele, T. N., Elnagar, A. H., Dearman, K. M. & Smith, A. P. 2016. A member of the phosphate transporter 1 (Pht1) family from the arsenic-hyperaccumulating fern *Pteris vittata* is a high-affinity arsenate transporter. *New Phytologist* 209(2): 762-772.
148. Donaldson, L. 2016. Aquatic ferns show how to clean up oil. *Materials Today* 19(9): 485.
149. Dong, S. Y., Zuo, Z. Y., Chao, Y. S., Damas, K. & Sule, B. 2016. New species of the fern genus *Lindsaea* (Lindsaeaceae) from New Guinea with notes on the phylogeny of L. sect. *Synaphlebium*. *Plos One* 11(10): e0163686.[*Lindsaea novoguineensis*, *Lindsaea subobscura*]
150. Doweld, A. B. 2016. *Marsilea owambo*, a new name for *Marsilea vera* (Marsileaceae). *American Fern Journal* 106(2): 143.
151. Du, C., Wang, L., Pan, M. & Guo, Z. 2016. Study on granul shape and pasting properties of fern root starch. *Journal of the Chinese Cereals and Oils Association* 31(7): 46-50.

152. Dubal, K., Patil, S., Dongare, M. & Kale, M. 2016. GC-MS analysis of *Tectaria polymorpha* (Wall. ex Hook.) Copel. from northern Western Ghats. Indian Fern Journal 33(1-2): 206-211.
153. Dubuisson, J. Y., Bauret, L., Grall, A., Li, T., Ebihara, A. & Hennequin, S. 2016. Discussion on the taxonomy of African fern *Abrodictyum rigidum* (Sw.) Ebihara & Dubuisson and description of two new *Abrodictyum* C. Presl species (Hymenophyllaceae, Polypodiidae) for the Afro-Malagasy region. Phytotaxa 284(3): 151-168.[*Abrodictyum franceae*, *A. pseudorigidum*, new species]
154. Dubuisson, J. Y., Hennequin, S., Droissart, V. & Deblauwe, V. 2016. *Hymenophyllum senterreanum* Dubuisson & Deblauwe, sp. nov. (Hymenophyllaceae) and its relatives in western Central Africa. Phytotaxa 257(3): 287-294.[new species]
155. Dussan, C. M., Martinez, C., Escapa, I. & Madrinan, S. 2016. New records of ferns and conifers from the Lower Cretaceous in the Upper Magdalena Valley Basin, Colombia. Boletín de Geología 38(4): 29-42.
156. Earp, C. 2016. Cunningham's *Florae Insularum Novae Zelandiae* precursor and the correct author of the fern genus *Loxsoma* nom. cons. New Zealand Journal of Botany 54(3): 366-376.
157. Ebihara, A., Nakato, N., Amoroso, V. B., Hidayat, A. & Kuo, L. Y. 2016. *Monachosorum arakii* Tagawa (Dennstaedtiaceae) is a relict "international" hybrid: a reassessment of the *Monachosorum* species. Systematic Botany 41(3): 586-595.
158. Ebuele, V. O., Santoro, A. & Thoss, V. 2016. Phosphorus speciation by <sup>31</sup>P NMR spectroscopy in bracken (*Pteridium aquilinum* (L.) Kuhn) and bluebell (*Hyacinthoides non-scripta* (L.) Chouard ex Rothm.) dominated semi-natural upland soil. Science of the Total Environment 566-567: 1318-1328.
159. Ekrt, L. & Koutecky, P. 2016. Between sexual and apomictic: unexpectedly variable sporogenesis and production of viable polyhaploids in the pentaploid fern of the *Dryopteris affinis* agg. (Dryopteridaceae). Annals of Botany 117(1): 97-106.
160. El Atfy, H., Sallam, H., Jasper, A. & Uhl, D. 2016. The first evidence of paleo-wildfire from the Campanian (Late Cretaceous) of North Africa. Cretaceous Research 57: 306-310.
161. El-Deen, G. E. S. & El-Deen, S. 2016. Kinetic and isotherm studies for adsorption of Pb(II) from aqueous solution onto coconut shell activated carbon. Desalination and Water Treatment 57(59): 28910-28931. [tree fern]
162. Elliott-Kingston, C., Haworth, M., Yearsley, J. M., Batke, S. P., Lawson, T. & Mcelwain, J. C. 2016. Does size matter? Atmospheric CO<sub>2</sub> may be a stronger driver of stomatal closing rate than stomatal size in taxa that diversified under low CO<sub>2</sub>. Frontiers in Plant Science 7: e1253.
163. Ellison, A. M., Plotkin, A. A. B. & Khalid, S. 2016. Foundation species loss and biodiversity of the herbaceous layer in New England forests. Forests 7(1): e9.
164. Ellwood, M. D. F., Bluthgen, N., Fayle, T. M., Foster, W. A. & Menzel, F. 2016. Competition can lead to unexpected patterns in tropical ant communities. Acta Oecologica-International Journal of Ecology 75: 24-34.[*Asplenium nidus*]
165. El-Shafai, S. A., Abdelfattah, I., Nasr, F. A. & Fawzy, M. E. 2016. *Lemna gibba* and *Azolla filiculoides* for sewage treatment and plant protein production. Research Journal of Pharmaceutical, Biological and Chemical Sciences 7(2): 1869-1876.
166. Encina-Dominguez, J. A., Estrada-Castillon, E., Villarreal-Quintanilla, J. A., Villasenor, J. L., Cantu-Ayala, C. M. & Arevalo, J. R. 2016. Floristic richness of the Sierra de Zapaliname, Coahuila, Mexico. Phytotaxa 283(1): 1-42.

167. Engemann, K., Sandel, B., Enquist, B. J., Jorgensen, P. M., Kraft, N., Marcuse-Kubitza, A., McGill, B., Morueta-Holme, N., Peet, R. K., Violle, C., Wisser, S. & Svenning, J. C. 2016. Patterns and drivers of plant functional group dominance across the Western Hemisphere: a macroecological re-assessment based on a massive botanical dataset. *Botanical Journal of the Linnean Society* 180(2): 141-160.
168. Ermilov, S. G. 2016. First record of the genus *Dorycranosus* (Acari, Oribatida, Liacaridae) from the Neotropical region, with description of a new species from Grenada. *Ecologica Montenegrina* 9: 13-18.
169. Erwin, Anggeraini, D. & Suryani. 2016. Chemical analysis and antibacterial activity of the ethanolic extract of *Stenochlaena palustris*. *Der Pharmacia Lettre* 8(1): 233-236.
170. Esteban, S., Llamas, P. M., Garcia-Cortes, H. & Catala, M. 2016. The endocrine disruptor nonylphenol induces sublethal toxicity in vascular plant development at environmental concentrations: A risk for riparian plants and irrigated crops? *Environmental Pollution* 216: 480-486.[bioassay, *Polystichum setiferum*, spores]
171. Eycott, A. E., Esaete, J., Reinio, J., Telford, R. J. & Vandvik, V. 2016. Plant functional group responses in an African tropical forest recovering from disturbance. *Plant Ecology & Diversity* 9(1): 69-80.
172. Ezike, D. N., Nnamani, C. V., Ogunidipe, O. T. & Adekanmbi, O. H. 2016. Airborne pollen and fungal spores in Garki, Abuja (North-Central Nigeria). *Aerobiologia* 32(4): 697-707.
173. Faison, E. K., Foster, D. R. & Destefano, S. 2016. Long-term deer exclusion has complex effects on a suburban forest understory. *Rhodora* 118(976): 382-402.
174. Farahpour-Haghani, A., Jalaiean, M. & Landry, B. 2016. *Diasemiopsis ramburialis* (Duponchel) (Lepidoptera, Pyralidae s. l., Spilomelinae) in Iran: First record for the country and first host plant report on water fern (*Azolla filiculoides* Lam., Azollaceae). *Nota Lepidopterologica* 39(1): 1-11.
175. Farfan-Santillan, N., Mendoza-Ruiz, A., Perez-Garcia, B. & Velazquez-Montes, E. 2016. Palinology of the Mexican species of Gleicheniaceae. *Botanical Sciences* 94(2): 281-289.
176. Farooq, M. A., Islam, F., Ali, B., Najeeb, U., Mao, B. Z., Gill, R. A., Yan, G. J., Siddique, K. H. M. & Zhou, W. J. 2016. Arsenic toxicity in plants: cellular and molecular mechanisms of its transport and metabolism. *Environmental and Experimental Botany* 132: 42-52.
177. Farouji, A. E. & Khodayari, H. 2016. Evaluation of vegetation types in the west Zagros (Beiranshahr region as a case study), in Lorestan province, Iran. *Biodiversitas* 17(1): 1-10.
178. Farrar, D. R. 2016. *Vittaria appalachiana* continues to provide insight into the biology of ferns: a commentary on two studies recently published in *American Journal of Botany*. *American Journal of Botany* 103(4): 593-595.
179. Fawcett, S. & Sundue, M. 2016. Evidence of primary hemiepiphytism in *Pleopeltis bradeorum* (Polypodiaceae). *Brittonia* 68(2): 187-194.
180. Fay, M. F. & Christenhusz, M. J. M. 2016. Plant conservation and botanic gardens. In: eLS. 1-15.
181. Fayiga, A. O. & Saha, U. K. 2016. Arsenic hyperaccumulating fern: Implications for remediation of arsenic contaminated soils. *Geoderma* 284: 132-143.[*Pteris vittata*]
182. Feilich, K. 2016. How a fern designs a catapult. *Journal of Experimental Biology* 219(9): 1273-1274.[biomechanics, spore dispersal]
183. Feoktistov, D. S. & Gureyeva, I. I. 2016. The ultrastructure of epidermal surface of stem and branch internodes and spores of horsetails of subgenus *Equisetum* (*Equisetum* L., Equisetaceae). *Turczaninowia* 19(1): 47-57.

184. Feoktistov, D. S. & Gureyeva, I. I. 2016. The ultrastructure of epidermal surface of stem internodes of horsetails of subgenus *Hippochaete* (*Equisetum*, Equisetaceae). *Turczaninowia* 19(3): 59-67.
185. Feoktistov, D. S., Gureyeva, I. I. & Mochalov, A. S. 2016. New for the flora of Russia records of horsetail hybrid *Equisetum* × *lofotense* Lubienski. Systematic notes on the materials of P.N. Krylov Herbarium of Tomsk State University 113: 41–50.
186. Fernandes, R. S. & Salino, A. 2016. A new species and a new combination in *Meniscium* (Thelypteridaceae) from Brazil. *Phytotaxa* 273(3): 175-182.[*Meniscium delicatum*]
187. Fernandez, R., Moreno-Chacon, M., Canessa, R., Mardones, D., Viveros, N. & Saldana, A. 2016. Relationship between ecological breadth of vascular epiphytes and their ecophysiological responses to light availability and moisture in the sclerophyllous mediterranean coastal forest of Chile. *Gayana Botanica* 73(1): 68-76.
188. Ferreira, D. M. C., Amorim, B. S., Maciel, J. R. & Alves, M. 2016. Floristic checklist from an Atlantic Forest vegetation mosaic in reserva particular do patrimônio natural Fazenda Tabatinga, Pernambuco, Brazil. *Check List* 12(6): e2019.
189. Ferreira, N. N., Ferreira, E. P., Ramos, R. R. C. & Carvalho, I. S. 2016. Palynological and sedimentary analysis of the Igarape Ipiranga and Querru 1 outcrops of the Itapecuru Formation (Lower Cretaceous, Parnaíba Basin), Brazil. *Journal of South American Earth Sciences* 66: 15-31.
190. Field, A. R., Testo, W., Bostock, P. D., Holtum, J. A. M. & Waycott, M. 2016. Molecular phylogenetics and the morphology of the Lycopodiaceae subfamily Huperzioidae supports three genera: *Huperzia*, *Phlegmariurus* and *Phylloglossum*. *Molecular Phylogenetics and Evolution* 94: 635-657.
191. Filipin, E. P., Schmidt, E. C., Barufi, J. B., Bouzon, Z. L. & Randi, A. M. 2016. The gametophyte of *Pleopeltis lepidopteris* (Langsd. & Fisch.) de La Sota (Polypodiaceae), a fern from Restinga, after spore cryopreservation: morphological, ultrastructural, and physiological analyses. *International Journal of Plant Sciences* 177(3): 294-303.
192. Flores-Bavestrello, A., Krol, M., Ivanov, A. G., Huner, N. P. A., Garcia-Plazaola, J. I., Corcuera, L. J. & Bravo, L. A. 2016. Two Hymenophyllaceae species from contrasting natural environments exhibit a homoiochlorophyllous strategy in response to desiccation stress. *Journal of Plant Physiology* 191: 82-94.
193. Forbes, A. S., Norton, D. A. & Carswell, F. E. 2016. Tree fern competition reduces indigenous forest tree seedling growth within exotic *Pinus radiata* plantations. *Forest Ecology and Management* 359: 1-10.
194. Fordyce, A., Hradsky, B. A., Ritchie, E. G. & Di Stefano, J. 2016. Fire affects microhabitat selection, movement patterns, and body condition of an Australian rodent (*Rattus fuscipes*). *Journal of Mammalogy* 97(1): 102-111.[*Pteridium esculentum*]
195. Franks, P. J. & Britton-Harper, Z. J. 2016. No evidence of general CO<sub>2</sub> insensitivity in ferns: one stomatal control mechanism for all land plants? *New Phytologist* 211(3): 819-827.
196. Fraser-Jenkins, C. R. 2016. A revised checklist of Indian pteridophytes - 1. *Indian Fern Journal* 33(1-2): 193-205.
197. Freitas, L., Salino, A., Neto, L. M., Almeida, T. E., Mortara, S. R., Stehmann, J. R., Amorim, A. M., Guimaraes, E. F., Coelho, M. N., Zanin, A. & Forzza, R. C. 2016. A comprehensive checklist of vascular epiphytes of the Atlantic Forest reveals outstanding endemic rates. *Phytokeys* 58: 65-79.

198. Freitas-Silva, L. de, Araujo, T. O. de, Silva, L. C., Oliveira, J. A. de & Araujo, J. M. de. 2016. Arsenic accumulation in Brassicaceae seedlings and its effects on growth and plant anatomy. *Ecotoxicology and Environmental Safety* 124: 1-9.
199. Freund, F. D. 2016. Characterizing quantitative variation in the glossopodia of three western North American *Isoetes* species. *American Fern Journal* 106(2): 87-115.
200. Furtado, S. G. & Neto, L. M. 2016. Vascular epiphytic flora of a high montane environment of Brazilian Atlantic Forest: composition and floristic relationships with other ombrophilous forests. *Acta Botanica Brasilica* 30(3): 422-436.
201. Gallegos, S. C., Beck, S. G., Hensen, I., Saavedra, F., Lippok, D. & Schleuning, M. 2016. Factors limiting montane forest regeneration in bracken-dominated habitats in the tropics. *Forest Ecology and Management* 381: 168-176.
202. Ganger, M. T., Zimmerman, E. A., Grund, S. P. & Bissell, J. K. 2016. The vascular plant flora and plant communities of Erie Bluffs State Park, Erie County, Pennsylvania. *Rhodora* 118(974): 148-188.
203. Gao, N. N., Wadhvani, P., Muhlhauser, P., Liu, Q., Riemann, M., Ulrich, A. S. & Nick, P. 2016. An antifungal protein from *Ginkgo biloba* binds actin and can trigger cell death. *Protoplasma* 253(4): 1159-1174.[*Selaginella*]
204. Gasper, A. L. de, Dittrich, V. A. O., Smith, A. R. & Salino, A. 2016. A classification for Blechnaceae (Polypodiales: Polypodiopsida): new genera, resurrected names, and combinations. *Phytotaxa* 275(3): 191-227.
205. Gasper, A. L. de, Eisenlohr, P. V. & Salino, A. 2016. Improving collection efforts to avoid loss of biodiversity: lessons from comprehensive sampling of lycophytes and ferns in the subtropical Atlantic Forest. *Acta Botanica Brasilica* 30(2): 166-175.
206. Gasper, A. L. de, Dittrich, V. A. O., Smith, A. R. & Salino, A. 2016. A classification for Blechnaceae (Polypodiales: Polypodiopsida): new genera, resurrected names, and combinations. *Phytotaxa* 275: 191-227.
207. Ge, Y. C., Liu, J., Zeng, M. H., He, J. F., Qin, P., Huang, H. & Xu, L. 2016. Identification of WOX family genes in *Selaginella kraussiana* for studies on stem cells and regeneration in lycophytes. *Frontiers in Plant Science* 7: e93.
208. Genre, A. & Bonfante, P. 2016. The structure of arbuscular mycorrhizas: a cell biologist's view, In: Martin, F. (ed.). *Molecular Mycorrhizal Symbiosis*. Wiley Blackwell: Hoboken, pp. 33-45.
209. George, M. & Josekumar, V. S. 2016. *In vitro* cytotoxicity screening, phytochemical profile and heavy metal analysis of different extracts of *Acrostichum heterophyllum* L. *Indian Journal of Natural Products and Resources* 7(1): 19-24.[*Drymoglossum heterophyllum*]
210. Geraskina, A. P. 2016. Population of earthworms (Lumbricidae) in the main types of dark coniferous forests at the Pechora-Ilych Nature Reserve. *Biology Bulletin* 43(8): 819-830.[*Dryopteris dilatata*]
211. Ghoreishi, L. & Moniri, M. H. 2016. Cytological confirmation of tetraploid *Asplenium ceterach* in Iran. *American Fern Journal* 106(4): 271-273.
212. Ghosh, A. K., Kar, R. & Chatterjee, R. 2016. Reassessment of the Macroflora of the Parsora formation with remarks on the age connotation. *Journal of the Palaeontological Society of India* 61(2): 225-238.
213. Gibby, M. & Paul, A. M. 2016. The publications of A. C. Jermy. *The Fern Gazette* 20(3): 136-142.

214. Gomez-Garay, A., Pintos, B., Manzanera, J. A., Prada, C., Martin, L. & Gabriel-y-Galan, J. M. 2016. Nanoceria and bulk cerium oxide effects on the germination of *Asplenium adiantum-nigrum* spores. *Forest Systems* 25(3): e067.
215. Gomez-Noguez, F., Perez-Garcia, B., Mehlreter, K., Orozco-Segovia, A. & Rosas-Perez, I. 2016. Spore mass and morphometry of some fern species. *Flora* 223: 99-105.
216. Gonzalez, F., Moreno, C., Lorenzo, E. & Marquez, G. 2016. Factors controlling the vegetation distribution and coal-forming environments in a strike-slip basin. The Pennsylvanian Penarroya-Belmez-Espiel Basin, southern Spain. *Terra Nova* 28(3): 171-180.
217. Gonzalez, G. E., Prada, C. & Rolleri, C. H. 2016. A new polyploid of *Blechnum occidentale* (Blechnaceae-Polypodiopsida) for the northwest of Argentina. *Botanica Complutensis* 40: 53-61.
218. Gonzatti, F., Machado, L. & Windisch, P. G. 2016. Distribution patterns of ferns and lycophytes in the Coastal Region of the state of Rio Grande do Sul, Brazil. *Acta Botanica Brasiliica* 30(2): 239-253.
219. Goodnoe, T. T. & Hill, J. P. 2016. Absolute and relative content of carbon and nitrogen differ by sex in *Ceratopteris richardii* gametophytes. *Botany* 94(5): 405-410.
220. Goodnoe, T. T., Hill, J. P. & Aho, K. 2016. Effects of variation in carbon, nitrogen, and phosphorus molarity and stoichiometry on sex determination in the fern *Ceratopteris richardii*. *Botany* 94(4): 249-259.
221. Goswami, H. K., Sen, K. & Mukhopadhyay, R. 2016. Pteridophytes: evolutionary boon as medicinal plants. *Plant Genetic Resources-Characterization and Utilization* 14(4): 328-355.
222. Gottlieb, J. E. 2016. Fern sex after 60 million years of separation. *Indian Fern Journal* 33(1-2): 47-54.
223. Grimm, J., Hoffmann, M., Stöver, B., Müller, K. & Steinhage, V. 2016. Image-based identification of plant species using a model-free approach and active learning C3. *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)* 9904: 169-176.
224. Groot, M. de, Eler, K., Flajsman, K., Grebenc, T., Marinsek, A. & Kutnar, L. 2016. Differential short-term response of functional groups to a change in forest management in a temperate forest. *Forest Ecology and Management* 376: 256-264.
225. Grusz, A. L. 2016. A current perspective on apomixis in ferns. *Journal of Systematics and Evolution* 54(6): 656-665.
226. Grusz, A. L., Rothfels, C. J. & Schuettelpelz, E. 2016. Transcriptome sequencing reveals genome-wide variation in molecular evolutionary rate among ferns. *BMC Genomics* 17: e692.
227. Guatimosim, E., Schwartsburd, P. B., Barreto, R. W. & Crous, P. W. 2016. Novel fungi from an ancient niche: cercosporoid and related sexual morphs on ferns. *Persoonia* 37: 106-141.
228. Guatimosim, E., Schwartsburd, P. B., Crous, P. W. & Barreto, R. W. 2016. Novel fungi from an ancient niche: lachnoid and chalara-like fungi on ferns. *Mycological Progress* 15(12): 1239-1267.
229. Guerriero, G., Hausman, J. F. & Legay, S. 2016. Silicon and the plant extracellular matrix. *Frontiers in Plant Science* 7: e463.
230. Guislon, A. V., Ceron, K., Elias, G. A., Santos, R. & Citadini-Zanette, V. 2016. Structure of herbaceous vegetation in riparian landscapes in Southern Santa Catarina, Brazil. *Revista Ambiente e Agua* 11(3): 650-664.

231. Guo, Z. Y., Zhang, H. R., Wei, R., Li, Z. Y., Yao, Z. M. & Zhang, X. C. 2016. New records of lycopods and ferns from Maolan Nature Reserve of Libo (Guizhou, China). *Indian Fern Journal* 33(1-2): 222-225.
232. Gureyeva, I. I. & Timoshok, E. E. 2016. Ferns in the present-day periglacial zone of the Central Altai. *Contemporary Problems of Ecology* 9(1): 18-28.
233. Haig, D. 2016. Living together and living apart: the sexual lives of bryophytes. *Philosophical Transactions of the Royal Society B-Biological Sciences* 371(1706): e20150535.
234. Halamski, A. T. & Kvacek, J. 2016. The Coniacian leaf flora from the northeastern part of the Bohemian Cretaceous Basin. *Bulletin of Geosciences* 91(2): 297-318.
235. Halamski, A. T., Kvacek, J. & Vajda, V. 2016. Late Cretaceous (Campanian) leaf and palynoflora from southern Skane, Sweden, In: Kear, B. P., Lindgren, J., Hurum, J. H., Milan, J. & Vajda, V. (ed.). *Mesozoic biotas of Scandinavia and its Arctic territories*. Geological Society: Bath, pp. 207-230.
236. Hamad, A. M. B. A., Amireh, B., El Atfy, H., Jasper, A. & Uhl, D. 2016. Fire in a *Weichselia*-dominated coastal ecosystem from the Lower Cretaceous (Barremian) of the Kurnub Group in NW Jordan. *Cretaceous Research* 66: 82-93.
237. Hamdan, M. A., Ibrahim, M. I. A., Shiha, M. A., Flower, R. J., Hassan, F. A. & Eltelet, S. A. M. 2016. An exploratory Early and Middle Holocene sedimentary record with palynoflora and diatoms from Faiyum Lake, Egypt. *Quaternary International* 410: 30-42.
238. Hammami, S., Snene, A., El Mokni, R., Faidi, K., Falconieri, D., Dhaouadi, H., Piras, A., Mighri, Z. & Porcedda, S. 2016. Essential oil constituents and antioxidant activity of *Asplenium* ferns. *Journal of Chromatographic Science* 54(8): 1341-1345.
239. Han, M. Q., Liu, Y. & Zhang, L. B. 2016. Seven new species of *Polystichum* (subg. *Haplopolystichum*; Dryopteridaceae) from southern China. *Phytotaxa* 280(3): 201-221. [*Polystichum arcuatum*, *P. crassirachis*, *P. membranifolium*, *P. multispinulosum*, *P. paraobliquum*, *P. paucicarpum*, *P. serratissimum*]
240. Han, P., Lai, Y. J., Chen, J., Zhang, X. N., Chen, J. L., Yang, X., Xue, P. P. & Ruan, J. L. 2016. Protective potential of the methanol extract of *Macrothelypteris oligophlebia* rhizomes for chronic non-bacterial prostatitis in rats. *Pakistan Journal of Pharmaceutical Sciences* 29(4): 1217-1221.
241. Han, Y. H., Yang, G. M., Fu, J. W., Guan, D. X., Chen, Y. & Ma, L. Q. 2016. Arsenic-induced plant growth of arsenic-hyperaccumulator *Pteris vittata*: Impact of arsenic and phosphate rock. *Chemosphere* 149: 366-372.
242. Hande, P. R. & Dongare, M. M. 2016. Rhizosphere and non-rhizosphere mycoflora of two ferns from Panhala Fort, Kolhapur, Maharashtra, India. *Journal of Threatened Taxa* 8(3): 8638-8640. [*Anogramma leptophylla*, *Hypodematum crenatum*]
243. Hara, A., Takaichi, H., Murata, Y., Sakata, R., Hara, Y., Iwase, J., Comparini, D., Suzuki, T. & Kawano, T. 2016. Optical evaluation of the shading properties of climbing fern *Lygodium japonicum* used as a thermal buffering green wall plant. *Advances in Horticultural Science* 30(2): 59-67.
244. Harris, E. B. & Arens, N. C. 2016. A mid-Cretaceous angiosperm-dominated macroflora from the Cedar Mountain Formation of Utah, USA. *Journal of Paleontology* 90(4): 640-662.
245. Harris-Valle, C., Mora-Guzman, E., Sanchez-Arias, M. D. & Palafox-Rodriguez, M. 2016. Characterization of arbuscular mycorrhizal fungi associated with *Cyathea* spp. in Sierra



- Nororiental Poblana following an altitude gradient in spring and summer. *Interciencia* 41(10): 680-685.
246. Haufler, C. H., Pryer, K. M., Schuettpelz, E., Sessa, E. B., Farrar, D. R., Moran, R., Schneller, J. J., Watkins, J. E. & Windham, M. D. 2016. Sex and the single gametophyte: revising the homosporous vascular plant life cycle in light of contemporary research. *Bioscience* 66(11): 928-937.
247. Hawes, M. C., Mclain, J., Ramirez-Andreotta, M., Curlango-Rivera, G., Flores-Lara, Y. & Brigham, L. A. 2016. Extracellular trapping of soil contaminants by root border cells: new insights into plant defense. *Agronomy-Basel* 6(1): e5. [*Pteris vittata*]
248. Hawksworth, D. L., van Geel, B. & Wiltshire, P. E. J. 2016. The enigma of the *Diporothea* palynomorph. *Review of Palaeobotany and Palynology* 235: 94-98.
249. He, X. Z., Wang, S. J. & Wang, J. 2016. *Chansitheca wudaensis* (Gleicheniaceae, fern) from the early Permian Wuda Tuff Flora, Inner Mongolia. *Palaeoworld* 25(2): 199-211.
250. He, Z. Y., Yan, H. L., Chen, Y. S., Shen, H. L., Xu, W. X., Zhang, H. Y., Shi, L., Zhu, Y. G. & Ma, M. 2016. An aquaporin PvTIP4;1 from *Pteris vittata* may mediate arsenite uptake. *New Phytologist* 209(2): 746-761.
251. Hebda, R. J., Lian, O. B. & Hicock, S. R. 2016. Olympia Interstadial: vegetation, landscape history, and paleoclimatic implications of a mid-Wisconsinan (MIS3) nonglacial sequence from southwest British Columbia, Canada. *Canadian Journal of Earth Sciences* 53(3): 304-320.
252. Hegland, S. J. & Rydgren, K. 2016. Eaten but not always beaten: winners and losers along a red deer herbivory gradient in boreal forest. *Journal of Vegetation Science* 27(1): 111-122.
253. Hein, A., Polsakiewicz, M. & Knoop, V. 2016. Frequent chloroplast RNA editing in early-branching flowering plants: pilot studies on angiosperm-wide coexistence of editing sites and their nuclear specificity factors. *BMC Evolutionary Biology* 16: e23.
254. Heringer, G., Valdespino, I. A. & Salino, A. 2016. *Selaginella* P. Beauv. from Minas Gerais, Brazil. *Acta Botanica Brasilica* 30(1): 60-77.
255. Herman, A. B. & Sokolova, A. B. 2016. Late Cretaceous Kholokhovchan flora of Northeastern Asia: composition, age and fossil plant descriptions. *Cretaceous Research* 59: 249-271.
256. Herman, A. B., Golovneva, L. B., Shczepetov, S. V. & Grabovsky, A. A. 2016. The Late Cretaceous Arman flora of Magadan Oblast, Northeastern Russia. *Stratigraphy and Geological Correlation* 24(7): 651-760.
257. Hibbett, D., Blanchette, R., Kenrick, P. & Mills, B. 2016. Climate, decay, and the death of the coal forests. *Current Biology* 26(13): R563-R567.
258. Hirai, R. Y., Gissi, D. S. & Prado, J. 2016. Criptógamos do Parque Estadual das Fontes do Ipiranga, São Paulo, SP, Brasil. Pteridophyta: 22. Thelypteridaceae e lista atualizada dos táxons. *Hoehnea* 43(1): 39-56. [Portuguese]
259. Hirai, R. Y., Schuettpelz, E., Huiet, L., Pryer, K. M., Smith, A. R. & Prado, J. 2016. Phylogeny and relationships of the neotropical *Adiantum raddianum* group (Pteridaceae). *Taxon* 65(6): 1225-1235.
260. Ho, Y. W., Huang, Y. L., Chen, J. C. & Chen, C. T. 2016. Habitat environment data and potential habitat interpolation of *Cyathea lepifera* at the Tajen Experimental Forest Station in Taiwan. *Tropical Conservation Science* 9(1): 153-166.

261. Holmlund, H. I., Lekson, V. M., Gillespie, B. M., Nakamatsu, N. A., Burns, A. M., Sauer, K. E., Pittermann, J. & Davis, S. D. 2016. Seasonal changes in tissue-water relations for eight species of ferns during historic drought in California. *American Journal of Botany* 103(9): 1607-1617.
262. Hou, C. J. & Yang, C. H. 2016. Comparative analysis of the pteridophyte *Adiantum* MFT ortholog reveals the specificity of combined FT/MFT C and N terminal interaction with FD for the regulation of the downstream gene AP1. *Plant Molecular Biology* 91(4-5): 563-579.
263. Houser, D. C., From, M., Landry, M., Copeland, A. & Kellar, P. R. 2016. Systematics of *Diplazium laffanianum* (Athyraceae), a fern species endemic to Bermuda. *American Fern Journal* 106(3): 206-222.
264. Hoveka, L. N., Bezeng, B. S., Yessoufou, K., Boatwright, J. S. & van der Bank, M. 2016. Effects of climate change on the future distributions of the top five freshwater invasive plants in South Africa. *South African Journal of Botany* 102: 33-38.[*Azolla filiculoides*, *Salvinia molesta*]
265. Hovenkamp, P. 2016. The publications of E. "Bert" Hennipman. *The Fern Gazette* 20(3): 133-135.
266. Hovenkamp, P., Hetterscheid, W., Roos, M. & van Uffelen, G. 2016. Bert Hennipman (1937-2014). *American Fern Journal* 106(2): 144-146.
267. Hovenkamp, P., Yan, S. K. & Choi, Y. H. 2016. Seasonal changes in starch content in trophopods of *Matteuccia struthiopteris*. *American Fern Journal* 106(3): 153-160.
268. Howell, C. J. & McAlpine, K. G. 2016. Native plant species richness in non-native *Pinus contorta* forest. *New Zealand Journal of Ecology* 40(1): 131-136.
269. Hsieh, H. L., Yang, S. H., Lee, T. H., Fang, J. Y. & Lin, C. F. 2016. Evaluation of anti-inflammatory effects of *Helminthostachys zeylanica* extracts via inhibiting bradykinin-induced MMP-9 expression in brain astrocytes. *Molecular Neurobiology* 53(9): 5995-6005.
270. Huang, S. Q., Fu, J. T., Wang, K., Xu, H. H. & Zhang, Z. X. 2016. Insecticidal activity of the methanol extract of *Pronephrium megacuspis* (Thelypteridaceae) and its active component on *Solenopsis invicta* (Hymenoptera: Formicidae). *Florida Entomologist* 99(4): 634-638.
271. Huang, Y., Miyauchi, K., Inoue, C. & Endo, G. 2016. Development of suitable hydroponics system for phytoremediation of arsenic-contaminated water using an arsenic hyperaccumulator plant *Pteris vittata*. *Bioscience Biotechnology and Biochemistry* 80(3): 614-618.
272. Hussain, N., Abbasi, T. & Abbasi, S. A. 2016. Vermiremediation of an invasive and pernicious weed salvinia (*Salvinia molesta*). *Ecological Engineering* 91: 432-440.[allelopathy, decomposition, vermicompost]
273. Iacona, G., Price, F. D. & Armsworth, P. R. 2016. Predicting the presence and cover of management relevant invasive plant species on protected areas. *Journal of Environmental Management* 166: 537-543.[*Lygodium microphyllum*]
274. Ichihara, Y. & Nakato, N. 2016. A new record of pentaploid *Pteris x psuedosefuricola* from Shizuoka and Tochigi Prefectures. *Bunrui* 16(2): 153-158.
275. Iglesias, A. 2016. New Upper Cretaceous (Campanian) Flora from James Ross Island, Antarctica. *Ameghiniana* 53(3): 358-374.
276. Imai, R., Tsuda, Y., Matsumoto, S., Ebihara, A. & Watano, Y. 2016. The relationship between mating system and genetic diversity in diploid sexual populations of *Cyrtomium falcatum* in Japan. *Plos One* 11(10): e0163683.
277. Iwatsuki, K. 2016. Studies on Asian ferns 3. *Journal of Japanese Botany* 91: 330-334.

278. Jaffe, B. D., Ketterer, M. E. & Hofstetter, R. W. 2016. Terrestrial invertebrate arsenic accumulation associated with an arsenic hyperaccumulating fern, *Pteris vittata* (Polypodiales: Pteridaceae). *Environmental Entomology* 45(5): 1306-1315.
279. Jaimez, D. G. & Martinez, O. G. 2016. *Campyloneurum angustifolium*, a new Polypodiaceae record for Argentina. *Boletín de La Sociedad Argentina de Botánica* 51(2): 353-357.
280. Jaimez, D. G., Martinez, O. G. & León, B. 2016. *Campyloneurum*. *Flora Argentina* 2: 237-242. [Spanish]
281. Janakiraman, N. & Johnson, M. 2016. Ethanol extracts of selected *Cyathea* species decreased cell viability and inhibited growth in MCF 7 cell line cultures. *JAMS Journal of Acupuncture and Meridian Studies* 9(3): 151-155.
282. Jarzynka, A. 2016. Fossil flora of Middle Jurassic Grojec clays (southern Poland). Raciborski's original material reinvestigated and supplemented. II. Pteridophyta. Osmundales. *Acta Palaeobotanica* 56: 183-221.
283. Jatoba, L. D., Varela, R. M., Molinillo, J. M. G., Din, Z. U., Gualtieri, S. C. J., Rodrigues, E. & Macias, F. A. 2016. Allelopathy of bracken fern (*Pteridium arachnoideum*): new evidence from green fronds, litter, and soil. *Plos One* 11(8): e0161670.
284. Jha, A. K. & Prasad, K. 2016. Aquatic fern (*Azolla* sp.) assisted synthesis of gold nanoparticles. *International Journal of Nanoscience* 15(1-2): e1650008.
285. Jia, Q., Li, G., Köllner, T. G., Fu, J., Chen, X., Xiong, W., Crandall-Stotler, B. J., Bowman, J. L., Weston, D. J., Zhang, Y., Chen, L., Xie, Y., Li, F. W., Rothfels, C. J., Larsson, A., Graham, S. W., Stevenson, D. W., Wong, G. K. S., Gershenzon, J. & Chen, F. 2016. Microbial-type terpene synthase genes occur widely in nonseed land plants, but not in seed plants. *Proceedings of the National Academy of Sciences of the United States of America* 113(43): 12328-12333.
286. Jiang, B., Tang, L. J. & Huang, J. H. 2016. Study on the inorganic components elements in rare and endangered plant *Alsophila spinulosa*. *Spectroscopy and Spectral Analysis* 36(5): 1468-1472.
287. Jimenez, J. E., Juarez, P. & Diaz, A. 2016. Checklist of the vascular flora of Reserva Biológica San Luis, Costa Rica. *Check List* 12(2): e1859.
288. Johnson, M., Rajkumar, S. D., Shibila, T., Gautam, R. P., Singh, S. K. & Srivastava, S. K. 2016. Intraspecific variation studies on medicinally important species of *Adiantum* using SDS PAGE. *Indian Fern Journal* 33(1-2): 55-60.
289. Jones, M. M., Ruokolainen, K., Martinez, N. C. L. & Tuomisto, H. 2016. Differences in topographic and soil habitat specialization between trees and two understorey plant groups in a Costa Rican lowland rain forest. *Journal of Tropical Ecology* 32: 482-497.
290. Kaewsuwan, S. & Salaeh, A. 2016. Production of polyunsaturated fatty acids in the fern *Pteris ensiformis* suspension culture. *Asian Journal of Pharmaceutical Sciences* 11(1): 156-157.
291. Kajihara, K., Yamaura, Y., Soga, M., Furukawa, Y., Morimoto, J. & Nakamura, F. 2016. Urban shade as a cryptic habitat: fern distribution in building gaps in Sapporo, northern Japan. *Urban Ecosystems* 19(1): 523-534.
292. Kakishima, M., Ji, J. X., Wang, Q. & Li, Y. 2016. First report of rust disease caused by *Milesina dryopteridis* on two species of ferns, *Rumohra adiantiformis* and *Pteris fauriei*, in Japan. *Plant Disease* 100(12): 2529-2529.
293. Kale, M. 2016. GC-MS analysis of the pteridophyte *Thelypteris dentata* (Forssk.) E. St. John from northern Western Ghats. *Indian Fern Journal* 33(1-2): 188-192.

294. Kalita, S., Kandimalla, R., Sharma, K. K., Katak, A. C., Deka, M. & Kotoky, J. 2016. Amoxicillin functionalized gold nanoparticles reverts MRSA resistance. *Materials Science and Engineering C* 61: 720-727.[*Adiantum philippense*]
295. Karger, D. N., Kluge, J. & Kessler, M. 2016. Comparing species richness patterns of epiphytic and terrestrial ferns along elevational and latitudinal gradients. In: Zotz, G. *Plants on Plants – The Biology of Vascular Epiphytes*. Springer, Berlin, pp. 53-54.
296. Kavitha, C. H. & Murugan, K. 2016. Fourier transform infrared fingerprint of desiccated fronds of forked fern-*Dicranopteris linearis* (Burm. f.) Underw.: Some observations. *Phytomorphology: An International Journal of Plant Morphology* 66(1-2): 13-20.
297. Kavitha, C. H. & Murugan, K. 2016. Photochemical efficacy analysis using chlorophyll fluorescence of *Dicranopteris linearis* in response to desiccation and rehydration stress. *Bioscience Biotechnology Research Communications* 9(3): 439-444.
298. Kawakami, S. M., Kawakami, S., Damdinsuren, O., Kato, J., Smirnov, S. V. & Kondo, K. 2016. Decaploid gametophyte formation from spores of a pentaploid *Cystopteris fragilis* (Cystopteridaceae) collected in Mongolian Altai. *The Fern Gazette* 20(4): 149-155.
299. Ke, L. L., Yu, T. T., Lin, B., Liu, B. D., Zhang, S. & Deng, C. 2016. From a 3D hollow hexahedron to 2D hierarchical nanosheets: controllable synthesis of biochemistry-enabled NaV3(P2O7)(4)/C composites for high-potential and long-life sodium ion batteries. *Nanoscale* 8(45): 19120-19128.[spores]
300. Kear, B. P., Lindgren, J., Hurum, J. H., Milan, J. & Vajda, V. 2016. An introduction to the Mesozoic biotas of Scandinavia and its Arctic territories, In: Kear, B. P., Lindgren, J., Hurum, J. H., Milan, J. & Vajda, V. (ed.). *Mesozoic biotas of Scandinavia and its Arctic territories*. Geological Society: Bath, pp. 1-14.
301. Keighery, G. 2016. Status of the fern *Histiopteris incisa* (Dennstaedtiaceae) in southern Western Australia. *Nuytsia* 27: 243-244.
302. Kessler, M., Karger, D. N. & Kluge, J. 2016. Elevational diversity patterns as an example for evolutionary and ecological dynamics in ferns and lycophytes. *Journal of Systematics and Evolution* 54(6): 617-625.
303. Khanalipour, M., Otaghvari, A. M. & Kazemitabar, S. K. 2016. Biosystematics investigation of the fern (genus *Asplenium*) in Hyrcanian forests of north of Iran using ISSR molecular marker. *Plant Cell Biotechnology and Molecular Biology* 17(7-8): 404-414.
304. Khine, P. K., Lindsay, S., Fraser-Jenkins, C., Kluge, J., Kyaw, M. & Hovenkamp, P. 2016. *Selliguea kachinensis* (Polypodiaceae), a new fern species of uncertain affinity from Northern Myanmar. *Phytokeys* 62: 73-81.[new species]
305. Khullar, S. P. & Verma, S. 2016. The genus *Osmunda* and the oddities in W. Himalayan *Osmunda claytoniana* L. and the existence of *O. regalis* in India still remains an unsolved mystery! - a discussion. *Indian Fern Journal* 33(1-2): 142-163.
306. Kim, J. H. & Lu, T. M. 2016. Bio-inspired Janus composite nanoscrolls for on-demand tumour targeting. *RSC Advances* 6(21): 17179-17187.[biomimeticism]
307. Klepsch, M., Lange, A., Angeles, G., Mehlreter, K. & Jansen, S. 2016. The hydraulic architecture of petioles and leaves in tropical fern species under different levels of canopy openness. *International Journal of Plant Sciences* 177(2): 209-216.

308. Klymiuk, A. A. 2016. Paleomycology of the Princeton Chert. III. Dictyosporic microfungi, *Monodictyosporites princetonensis* gen. et sp. nov., associated with decayed rhizomes of an Eocene semi-aquatic fern. *Mycologia* 108(5): 882-890.
309. Knie, N., Grewe, F. & Knoop, V. 2016. Monilophyte mitochondrial rps1 genes carry a unique group II intron that likely originated from an ancient paralog in rpl2. *RNA* 22(9): 1338-1348.
310. Knie, N., Grewe, F., Fischer, S. & Knoop, V. 2016. Reverse U-to-C editing exceeds C-to-U RNA editing in some ferns - a monilophyte-wide comparison of chloroplast and mitochondrial RNA editing suggests independent evolution of the two processes in both organelles. *Bmc Evolutionary Biology* 16: e134.
311. Knight, J. A. & Sardina, L. J. 2016. An emended and amplified description of *Pecopteris apicalis* Knight, a fern morphospecies of Mid-Stephanian age from NW Spain. *Spanish Journal of Paleontology* 31(1): 95-114.
312. Kodym, A., Lang, M. & Delpratt, J. 2016. Propagation by partial tissue culture of Austral bracken (*Pteridium esculentum*) for revegetation. *Ecological Management & Restoration* 17(2): 159-163.
313. Kollah, B., Patra, A. K. & Mohanty, S. R. 2016. Aquatic microphylla *Azolla*: a perspective paradigm for sustainable agriculture, environment and global climate change. *Environmental Science and Pollution Research* 23(5): 4358-4369.
314. Kong, D. L., Wang, J. J., Kardol, P., Wu, H. F., Zeng, H., Deng, X. B. & Deng, Y. 2016. Economic strategies of plant absorptive roots vary with root diameter. *Biogeosciences* 13(2): 415-424. [*Dicranopteris dichotoma*]
315. Kong, S. G. & Okajima, K. 2016. Diverse photoreceptors and light responses in plants. *Journal of Plant Research* 129(2): 111-114. [*Adiantum capillus-veneris*]
316. Kong, S. G. & Wada, M. 2016. Molecular basis of chloroplast photorelocation movement. *Journal of Plant Research* 129(2): 159-166. [*Adiantum*]
317. Kooh, M. R. R., Lim, L. B. L., Lim, L. H. & Bandara, J. 2016. Batch adsorption studies on the removal of malachite green from water by chemically modified *Azolla pinnata*. *Desalination and Water Treatment* 57(31): 14632-14646.
318. Korasidis, V. A., Wallace, M. W., Wagstaff, B. E., Holdgate, G. R., Tosolini, A. M. P. & Jansen, B. 2016. Cyclic floral succession and fire in a Cenozoic wetland/peatland system. *Palaeogeography Palaeoclimatology Palaeoecology* 461: 237-252.
319. Kormin, F., Khan, M. & Iwansyah, A. C. 2016. Microwave assisted extraction; phytochemical evaluation of Malaysian palm oil trunk epiphytes ferns. *International Journal of Pharmacy and Pharmaceutical Sciences* 8(4): 174-180.
320. Kosesakal, T., Unal, M., Kulen, O., Memon, A. & Yuksel, B. 2016. Phytoremediation of petroleum hydrocarbons by using a freshwater fern species *Azolla filiculoides* Lam. *International Journal of Phytoremediation* 18(5): 467-476.
321. Kreutz, C., Athayde, F. D. & Sanchez, M. 2016. Spatial and seasonal variation in the species richness and abundance of ferns and lycophytes in gallery forests of Cerrado in Central Brazil. *Brazilian Journal of Botany* 39(1): 315-326.
322. Krippel, Y. & Colling, G. 2016. Floristic notes. Observations made in Luxembourg (2004-2005). *Bull. Soc. Nat. Luxemb.* 118: 27-51. [French]
323. Kristanc, L. & Kreft, S. 2016. European medicinal and edible plants associated with subacute and chronic toxicity part I: Plants with carcinogenic, teratogenic and endocrine-disrupting effects. *Food and Chemical Toxicology* 92: 150-164. [*Pteridium*]

324. Kumar, V., Bhandawat, A., Sharma, H., Nag, A. & Sharma, R. K. 2016. Novel microsatellite markers identification and diversity characterization in *Pteris cretica* L. *Journal of Plant Biochemistry and Biotechnology* 25(1): 104-110.
325. Kumari, A., Lal, B. & Rai, U. N. 2016. Assessment of native plant species for phytoremediation of heavy metals growing in the vicinity of NTPC sites, Kahalgaon, India. *International Journal of Phytoremediation* 18(6): 592-597.
326. Kuo, L. Y., Chang, Y. H., Glowienka, J. M. O., Amoroso, V. B., Dong, S. Y., Kao, T. T., Wang, C. N. & Chiou, W. L. 2016. A revised framework of *Dryopteris* subg. *Nothoperanema* (Dryopteridaceae) inferred from phylogenetic evidence, with descriptions of two new sections. *Systematic Botany* 41(3): 596-605.
327. Kuo, L. Y., Ebihara, A., Shinohara, W., Rouhan, G., Wood, K. R., Wang, C. N. & Chiou, W. L. 2016. Historical biogeography of the fern genus *Deparia* (Athyriaceae) and its relation with polyploidy. *Molecular Phylogenetics and Evolution* 104: 123-134.
328. Kustatscher, E., Scanu, G. G., Kvacek, J. & van Konijnenburg-van Cittert, J. H. A. 2016. The Krasser collection in the Faculty of Sciences, Charles University, Prague and new insights into the middle Jurassic flora of Sardinia. *Fossil Imprint* 72(3-4): 140-154.
329. Kvacek, J. & Vodrazka, R. 2016. Late Cretaceous flora of the Hidden Lake Formation, James Ross Island (Antarctica), its biostratigraphy and palaeoecological implications. *Cretaceous Research* 58: 183-201.
330. Kvacek, Z. & Martinetto, E. 2016. Foliage accumulations of *Osmunda lignitum* (Osmundaceae) in the Oligocene of Northern Italy and Western Germany. *Fossil Imprint* 72(3-4): 131-139.
331. Labandeira, C. C., Kustatscher, E. & Wappler, T. 2016. Floral assemblages and patterns of insect herbivory during the Permian to Triassic of northeastern Italy. *Plos One* 11(11): e0165205.
332. Labiak, P. H. & Pereira, J. B. S. 2016. A new species of *Ceradenia* (Polypodiaceae) from Southern Brazil. *Systematic Botany* 41(4): 902-905.[*Ceradenia maackii*]
333. Lahiri, I., Gurung, C., Bhandari, J. B. & Hegde, S. 2016. Morpho-anatomical and biochemical characterization of *Davallia griffithiana* Hook. *Indian Fern Journal* 33(1-2): 212-221.
334. Lai, J. C. Y., Lai, H. Y., Rao, N. K. & Ng, S. F. 2016. Treatment for diabetic ulcer wounds using a fern tannin optimized hydrogel formulation with antibacterial and antioxidative properties. *Journal of Ethnopharmacology* 189: 277-289.
335. Landi, M., Zoccola, A., Gonnelli, V., Lastrucci, L., Saveri, C., Quilghini, G., Bottacci, A. & Angiolini, C. 2016. Effect of grazing on the population of *Matteuccia struthiopteris* at the southern limit of its distribution in Europe. *Plant Species Biology* 31(1): 3-10.
336. Lane, T. S., Rempe, C. S., Davitt, J., Staton, M. E., Peng, Y. H., Soltis, D. E., Melkonian, M., Deyholos, M., Leebens-Mack, J. H., Chase, M., Rothfels, C. J., Stevenson, D., Graham, S. W., Yu, J., Liu, T., Pires, J. C., Edger, P. P., Zhang, Y., Xie, Y. L., Zhu, Y., Carpenter, E., Wong, G. K. S. & Stewart, C. N. 2016. Diversity of ABC transporter genes across the plant kingdom and their potential utility in biotechnology. *BMC Biotechnology* 16: e47.
337. Law, B., Brassil, T. & Gonsalves, L. 2016. Recent decline of an endangered, endemic rodent: does exclusion of disturbance play a role for Hastings River mouse (*Pseudomys oralis*)? *Wildlife Research* 43(6): 482-491.[habitat]
338. Le Pechon, T., He, H., Zhang, L., Zhou, X. M., Gao, X. F. & Zhang, L. B. 2016. Using a multilocus phylogeny to test morphology-based classifications of *Polystichum* (Dryopteridaceae), one of the largest fern genera. *BMC Evolutionary Biology* 16: e55.

339. Le Pechon, T., Zhang, L., He, H., Zhou, X. M., Bytebier, B., Gao, X. F. & Zhang, L. B. 2016. A well-sampled phylogenetic analysis of the polystichoid ferns (Dryopteridaceae) suggests a complex biogeographical history involving both boreotropical migrations and recent transoceanic dispersals. *Molecular Phylogenetics and Evolution* 98: 324-336.
340. Leal-Alvarado, D. A., Espadas-Gil, F., Saenz-Carbonell, L., Talavera-May, C. & Santamaria, J. M. 2016. Lead accumulation reduces photosynthesis in the lead hyper-accumulator *Salvinia minima* Baker by affecting the cell membrane and inducing stomatal closure. *Aquatic Toxicology* 171: 37-47.
341. Lee, D. E., Lee, W. G., Jordan, G. J. & Barreda, V. D. 2016. The Cenozoic history of New Zealand temperate rainforests: comparisons with southern Australia and South America. *New Zealand Journal of Botany* 54(2): 100-127.
342. Lehnert, M. & Kessler, M. 2016. Mycorrhizal relationships in lycophytes and ferns. *The Fern Gazette* 20(3): 101-116.
343. Lehnert, M. & Tejedor, A. 2016. Three new scaly tree fern species (*Cyathea*-Cyatheaceae) from the Amotape-Huancabamba Zone and their biogeographic context. *American Fern Journal* 106(3): 175-190.[*Cyathea abrapatriciana*, *C. chimaera*, *C. oreopteroides*, new species]
344. Lehnert, M. 2016. *Alsophila weidenbrueckii* (Cyatheaceae), a new scaly tree fern from Papua New Guinea. *Blumea* 61(1): 20-23.[new species]
345. Lehnert, M. 2016. A synopsis of the exindusiate species of *Cyathea* (Cyatheaceae-Polypodiopsida) with bipinnate-pinnatifid or more complex fronds, with a revision of the *C. lasiosora* complex. *Phytotaxa* 243(1): 1-53.
346. León, B. 2016. Proposal to conserve *Campyloneurum densifolium* against *Polypodium ccallahualla* (*P. calaguala*) (Polypodiaceae). *Taxon* 65(6): 1424-1425.
347. Li, C. X., Lu, S. G., Ma, J. Y., Gai, Y. H. & Yang, Q. 2016. Phylogeographic history of the woodwardioid ferns, including species from the Himalayas. *Palaeoworld* 25(2): 318-324.
348. Li, C. X., Patel, N. R. & Zhang, L. B. 2016. *Polystichum clarinervium* (subg. *Haplopolystichum*; Dryopteridaceae), a new fern from Emei shan, China. *Phytotaxa* 280(3): 271-277.[new species]
349. Li, F. W. & Mathews, S. 2016. Evolutionary aspects of plant photoreceptors. *Journal of Plant Research* 129(2): 115-122.
350. Li, F. W., Kuo, L. Y., Chang, Y. H., Hsu, T. C., Hung, H. C., Chiou, W. L., Rothfels, C. J. & Huang, Y. M. 2016. *Asplenium pifongiae* (Aspleniaceae: Polypodiales), a new species from Taiwan. *Systematic Botany* 41(1): 24-31.
351. Li, F. W., Kuo, L. Y., Pryer, K. M. & Rothfels, C. J. 2016. Genes translocated into the plastid inverted repeat show decelerated substitution rates and elevated GC content. *Genome Biology and Evolution* 8(8): 2452-2458.
352. Li, J., He, S. Y. & Qin, X. D. 2016. Allelopathic potential and volatile compounds of *Manihot esculenta* Crantz against weeds. *Allelopathy Journal* 37(2): 195-206.[*Lygodium microphyllum*]
353. Li, K., Gu, Y. & Liu, H. 2016. Holocene climate changes derived from spore-pollen records and neolithic culture succession in northern Henan plain. *Journal of Jilin University (Earth Science Edition)* 46(5): 1449-1457.
354. Li, L. Q. & Wang, Y. D. 2016. Late Triassic palynofloras in the Sichuan Basin, South China: Synthesis and perspective. *Palaeoworld* 25(2): 212-238.

355. Li, L. Q., Wang, Y. D., Liu, Z. S., Zhou, N. & Wang, Y. 2016. Late Triassic palaeoclimate and palaeoecosystem variations inferred by palynological record in the northeastern Sichuan Basin, China. *Palaeontologische Zeitschrift* 90(2): 327-348.
356. Li, N., Li, Y. Y., Zheng, C. C., Huang, J. G. & Zhang, S. Z. 2016. Genome-wide comparative analysis of the codon usage patterns in plants. *Genes & Genomics* 38(8): 723-731.
357. Li, Q., Yang, X., Wang, H., Wang, H. & He, S. 2016. Endogenous trans-zeatin content in plants with different metal-accumulating ability: a field survey. *Environmental Science and Pollution Research* 23(23): 23422-23435.[*Pteris vittata*]
358. Li, S. S., Chen, L. L., Wang, H. M., Hu, B. Z. & Chang, Y. 2016. Analysis on codon using features and expression prediction of 4CL gene in *Dryopteris fragrans*. *Chinese Traditional and Herbal Drugs* 47(10): 1753-1761.
359. Liao, X. Y., Ma, X., Yan, X. L., Lin, L. Y., Shi, P. L. & Wu, Z. Y. 2016. Transportation and localization of phenanthrene and its interaction with different species of arsenic in *Pteris vittata* L. *Chemosphere* 153: 307-314.
360. Link-Perez, M. A., Ludwig, T. G., Ledford, C. J., Seabolt, M. H. & Sessa, E. B. 2016. Lectotypification of *Adiantopsis alata* (Pteridaceae) and descriptions of new palmate species in the Guiana shield. *Systematic Botany* 41(4): 906-918.[*Adiantopsis aurea*, *A. hickeyi*, *A. scalariformis*, new species]
361. Liu, B., Guo, Z. Y., Bussmann, R., Li, F. F., Li, J. Q., Hong, L. Y. & Long, C. L. 2016. Ethnobotanical approaches of traditional medicine studies in Southwest China: a literature review. *Journal of Ethnopharmacology* 186: 343-350.
362. Liu, D. M., Sheng, J. W., Wang, S. H., Zhang, W. F., Zhang, W. & Zhang, D. J. 2016. Cytoproliferative and cytoprotective effects of striatisporolide A isolated from rhizomes of *Athyrium multidentatum* (Doell.) Ching on human umbilical vein endothelial cells. *Molecules* 21(10): e1280.
363. Liu, H. M., Zhang, S. Z., Wan, T., Kamau, P. W., Wang, Z. W., Grall, A., Hemp, A. & Schneider, H. 2016. Exploring the pteridophyte flora of the Eastern Afromontane biodiversity hotspot. *Journal of Systematics and Evolution* 54(6): 691-705.
364. Liu, H. M., Zhang, X. C., Wang, M. P., Shang, H., Zhou, S. L., Yan, Y. H., Wei, X. P., Xu, W. B. & Schneider, H. 2016. Phylogenetic placement of the enigmatic fern genus *Trichoneuron* informs on the infra-familial relationship of Dryopteridaceae. *Plant Systematics and Evolution* 302(3): 319-332.
365. Liu, H. M. 2016. Embracing the pteridophyte classification of Ren-Chang Ching using a generic phylogeny of Chinese ferns and lycophytes. *Journal of Systematics and Evolution* 54(4): 307-335.
366. Liu, L. T., Wen, Q., Huang, X. C. & Liu, Q. J. 2016. *De novo* sequencing and characterization of juvenile sporophyte transcriptome of a fern, *Dicranopteris dichotoma*. *Forest Research* 29(4): 500-507.
367. Liu, X., Fu, J. W., Guan, D. X., Cao, Y., Luo, J., Rathinasabapathi, B., Chen, Y. S. & Ma, L. Q. 2016. Arsenic induced phytate exudation, and promoted FeAsO<sub>4</sub> dissolution and plant growth in As-hyperaccumulator *Pteris vittata*. *Environmental Science & Technology* 50(17): 9070-9077.
368. Liu, Y., Sun, Q. L., Fan, D. D., Lai, X. H., Xu, L. C., Finlayson, B. & Chen, Z. Y. 2016. Pollen evidence to interpret the history of rice farming at the Hemudu site on the Ningshao coast, eastern China. *Quaternary International* 426: 195-203.[spores]



369. Llorens, C., Argentina, M., Rojas, N., Westbrook, J., Dumais, J. & Noblin, X. 2016. The fern cavitation catapult: mechanism and design principles. *Journal of the Royal Society Interface* 13(114): e20150930.[biomechanics, spore dispersal]
370. Locatelli, E. R., Krajewski, L., Chochinov, A. V. & Laflamme, M. 2016. Taphonomic variance between Marattialean ferns and Medullosan seed ferns in the Carboniferous Mazon Creek Lagerstätte, Illinois, USA. *Palaios* 31(3): 97-110.
371. Loek, L. H. 2016. Ferns in the Lickebaert. *Gorteria* 38(1): 3-12.
372. Long, H., Li, J., Li, Y. Y., Xie, D. Y., Peng, Q. Z. & Li, L. 2016. Ontogenetic characterization of sporangium and spore of *Huperzia serrata*: an anti-aging disease fern. *Botanical Studies* 57: e36.
373. Lopez, R. A. & Renzaglia, K. S. 2016. Arabinogalactan proteins and arabinan pectins abound in the specialized matrices surrounding female gametes of the fern *Ceratopteris richardii*. *Planta* 243(4): 947-957.
374. Lopez-Romero, J. M., Riano, K. & Briones, O. 2016. Germination and sporophyte frequency of two sympatric species of *Blechnum* (Blechnaceae). *Acta Botanica Mexicana* 117: 47-58.
375. Lopez-Tirado, J. 2016. First record of the American native fern *Thelypteris kunthii* (Desv.) C. V. Morton from Europe. *American Fern Journal* 106(4): 269-270.
376. Lu, H. Z., Song, L., Liu, W. Y., Xu, X. L., Hu, Y. H., Shi, X. M., Li, S., Ma, W. Z., Chang, Y. F., Fan, Z. X., Lu, S. G., Wu, Y. & Yu, F. H. 2016. Survival and growth of epiphytic ferns depend on resource sharing. *Frontiers in Plant Science* 7: e416.
377. Lu, N. T., Zhang, L., Nguyen, D. T. & Zhang, L. B. 2016. *Polystichum quangbinhense* sp. nov. (subg. *Haplopolystichum*; Dryopteridaceae), the southernmost cave species of *Polystichum* from central Vietnam. *Phytotaxa* 283(3): 295-299.[new species]
378. Lubaina, A. S., Brijithlal, N. D. & Murugan, K. 2016. Unravelling desiccation and rehydration tolerance mechanism in the fern, *Adiantum latifolium*. *Bioscience Biotechnology Research Communications* 9(4): 672-679.
379. Lubienski, M. & Dorken, V. M. 2016. The hybrid between *Equisetum scirpoides* and *E. variegatum* in Northern Europe. *American Fern Journal* 106(2): 116-130.
380. Luke, D., McLaren, K. & Wilson, B. 2016. Short-term dynamics and the effects of biotic and abiotic factors on plant physiognomic groups in a hurricane-impacted lower montane tropical forest. *Biotropica* 48(3): 332-341.
381. Luna, M. L., Giacosa, J. P. R., Yanez, A. & Giudice, G. E. 2016. Anatomical features of the tubercle and young sporophyte of the annual fern *Anogramma chaerophylla* growing in the Punta Lara Natural Reserve (Buenos Aires, Argentina). *American Fern Journal* 106(4): 231-241.
382. Luna, M. L., Yanez, A., Giacosa, J. P. R., Gorrer, D., Berrueta, P. C. & Giudice, G. E. 2016. *In vitro* spore culture and reproductive aspects of the annual fern *Anogramma chaerophylla* (Pteridaceae). *Boletín de la Sociedad Argentina de Botánica* 51(4): 675-682.
383. Luo, C. X., Lin, G., Chen, M. H., Xiang, R., Zhang, L. L., Liu, J. G., Pan, A. D., Yang, S. X. & Yang, M. X. 2016. Characteristics of pollen in surface sediments from the southern South China Sea and its paleoclimatic significance. *Palaeogeography Palaeoclimatology Palaeoecology* 461: 12-28.
384. Luo, X., Li, C., Luo, P., Lin, X., Ma, H., Seeram, N. P., Song, C., Xu, J. & Gu, Q. 2016. Pterisin sesquiterpenoids from *Pteris cretica* as hypolipidemic agents via activating liver X receptors. *Journal of Natural Products* 79(12): 3014-3021.

385. Luvuno, L. B., Kotze, D. C. & Kirkman, K. P. 2016. Long-term landscape changes in vegetation structure: fire management in the wetlands of Kwambonambi, South Africa. *African Journal of Aquatic Science* 41(3): 279-288.
386. Ma, F. J., Wang, Q. J., Dong, J. L., Wang, H. F., Wang, Z. X., Zhang, F. T. & Sun, B. N. 2016. A new plant assemblage from the Middle Triassic volcanic tuffs of Pingchuan, Gansu, northwestern China and its paleoenvironmental significance. *Palaeontologische Zeitschrift* 90(2): 349-376.
387. Ma, J., Wang, S. J., He, X. Z., He, X. Y. & Ma, S. M. 2016. *Diodonopteris*, a new genus of the Paleozoic leptosporangiate fern family Botryopteridaceae, from the lower Permian of Shanxi Province, North China. *Review of Palaeobotany and Palynology* 234: 11-24.
388. Ma, Z., Huang, Q., Zhuang, C., Huang, J. & Wang, H. 2016. Characteristics of two nest epiphytic ferns in mountain rainforests of Diaoluoshan National Forest Park. *Scientia Silvae Sinicae* 52(12): 22-28.
389. Machado, L. S., Gonzatti, F. & Windisch, P. G. 2016. Epiphytic ferns in swamp forest remnants of the coastal plain of southern Brazil: latitudinal effects on the plant community. *Acta Botanica Brasilica* 30(4): 644-657.
390. Machado, S. A., Oliveira, A. V., Fabrin, T. M. C., Prioli, S. & Prioli, A. J. 2016. Molecular characterization of the species *Salvinia* (Salviniaceae) from the upper Parana River floodplain. *Genetics and Molecular Research* 15(3): e15038575.
391. Maciel, S. 2016. *Nephrolepis* (Lomariopsidaceae - Polypodiopsida) in the Brazilian Amazon. *Rodriguesia* 67(1): 77-84.
392. Madeira, P. T., Facey, J., Pratt, P. D., Maul, D. P. & Wheeler, G. 2016. Are three colonies of *Neostromboceros albicomus*, a candidate biological control agent for *Lygodium microphyllum*, the same host biotype? *Biocontrol Science and Technology* 26(3): 440-445.
393. Madeira, P. T., Hill, M. P., Dray, F. A., Coetzee, J. A., Paterson, I. D. & Tipping, P. W. 2016. Molecular identification of *Azolla* invasions in Africa: the *Azolla* specialist, *Stenopelmus rufinasus* proves to be an excellent taxonomist. *South African Journal of Botany* 105: 299-305.
394. Magill, C. R., Ashley, G. M., Dominguez-Rodrigo, M. & Freeman, K. H. 2016. Dietary options and behavior suggested by plant biomarker evidence in an early human habitat. *Proceedings of the National Academy of Sciences of the United States of America* 113(11): 2874-2879.
395. Maine, M. A., Hadad, H. R., Sánchez, G., Caffaratti, S. & Pedro, M. C. 2016. Kinetics of Cr(III) and Cr(VI) removal from water by two floating macrophytes. *International Journal of Phytoremediation* 18(3): 261-268.[*Salvinia herzogii*]
396. Makowski, D., Tomiczak, K., Rybczynski, J. J. & Mikula, A. 2016. Integration of tissue culture and cryopreservation methods for propagation and conservation of the fern *Osmunda regalis* L. *Acta Physiologiae Plantarum* 38(1): e19.
397. Mali, A. M., Patil, V. B., Pise, N. M. & Ade, A. B. 2016. First report of leaf spot caused by *Fusarium* sp. NFCCI 2882 on *Angiopteris evecta*: a king fern from Western Ghats, India. *Plant Disease* 100(3): 646-646.
398. Mallmann, I. T., Da Silva, V. L. & Schmitt, J. L. 2016. Community structure of ferns in riparian forest: evaluation in anthropization gradient. *Revista Ambiente e Agua* 11(1): 110-124.
399. Marchant, D. B., Soltis, D. E. & Soltis, P. S. 2016. Patterns of abiotic niche shifts in allopolyploids relative to their progenitors. *New Phytologist* 212(3): 708-718.

400. Marsilobo, S. & Krishnakumar, G. 2016. An assessment of heavy metal pollution and accumulation potential of mangrove fern *Acrostichum aureum* L. from South west coast of Karnataka, India. *Pollution Research* 35(4): 773-779.
401. Martinez, O. G., Assis, F. C., Meza Torres, E. I., Cacharani, D. A. & Jaimez, D. G. 2016. The genus *Pecluma* (Polypodiaceae) in Argentina. *Darwiniana* 4(2): 234-251.
402. Martinez, O. G. & Prado, J. 2016. *Pteris* L. In: Anton, A. M. & Zuloaga, F. O. (Org.). *Flora Argentina: Licofitas, Helechos, Gymnospermae*. 1 ed. Córdoba: Instituto Multidisciplinario de Biología Vegetal (CONICET-UNC) v. 2: 321-329. [Spanish]
403. Martinez, O. G. 2016. *Pteris sotae* (Pteridaceae), a new endemic species for the Argentinean flora. *Phytotaxa* 267(4): 291-295. [new species]
404. Martin-Garcia, J., Jactel, H., Oria-de-Rueda, J. A. & Diez, J. J. 2016. The effects of poplar plantations on vascular plant diversity in riparian landscapes. *Forests* 7(3): e50.
405. Martins, S. C. V., McAdam, S. A. M., Deans, R. M., Damatta, F. M. & Brodribb, T. J. 2016. Stomatal dynamics are limited by leaf hydraulics in ferns and conifers: results from simultaneous measurements of liquid and vapour fluxes in leaves. *Plant Cell and Environment* 39(3): 694-705.
406. Massini, J. G., Escapa, I. H., Guido, D. M. & Channing, A. 2016. First glimpse of the silicified hot spring biota from a new Jurassic chert deposit in the Deseado Massif, Patagonia, Argentina. *Ameghiniana* 53(2): 205-230.
407. Mateo, R. G., Broennimann, O., Normand, S., Petitpierre, B., Araujo, M. B., Svenning, J. C., Baselga, A., Fernandez-Gonzalez, F., Gomez-Rubio, V., Munoz, J., Suarez, G. M., Luoto, M., Guisan, A. & Vanderpoorten, A. 2016. The mossy north: an inverse latitudinal diversity gradient in European bryophytes. *Scientific Reports* 6: e25546.
408. Mathewes, R. W., Greenwood, D. R. & Archibald, S. B. 2016. Paleoenvironment of the Quilchena flora, British Columbia, during the early Eocene climatic optimum. *Canadian Journal of Earth Sciences* 53(6): 574-590. [Azolla]
409. Matos, F. B. & Moran, R. C. 2016. *Elaphoglossum mickeliorum* (Dryopteridaceae), a new species of *Elaphoglossum* sect. *Polytrichia* from Peru. *Brittonia* 68: 5p.
410. Matowicka, B. 2016. A new locality of *Botrychium multifidum* (Ophioglossaceae) in the Podlasie region (Kurpie Plain). *Fragmenta Floristica et Geobotanica Polonica* 23(1): 162-165.
411. Mazumdar, J. & Arana, M. D. 2016. Typification of the name *Pteris multifida* (Pteridaceae subfamily Pteridoideae). *Phytotaxa* 261(2): 199-200.
412. Mazumdar, J. 2016. Lectotypification of *Acrostichum spicatum* (*Lepisorus spicatus*, Polypodiaceae). *Nordic Journal of Botany* 34(2): 217-218.
413. Mazumdar, J. 2016. Retyfication of *Adiantum incisum* (Pteridaceae) and *Pteris interrupta* (Thelypteridaceae). *The Fern Gazette* 20(3): 143-145.
414. Mazumdar, J. 2016. Typifications of five Linnaean fern names based on Osbeck's specimens. *Nordic Journal of Botany* 34(4): 464-469.
415. McAdam, S. A. M., Brodribb, T. J., Banks, J. A., Hedrich, R., Atallah, N. M., Cai, C., Geringer, M. A., Lind, C., Nichols, D. S., Stachowski, K., Geiger, D. & Susmilch, F. C. 2016. Abscisic acid controlled sex before transpiration in vascular plants. *Proceedings of the National Academy of Sciences of the United States of America* 113(45): 12862-12867.
416. McArthur, A. D., Jolley, D. W., Hartley, A. J., Archer, S. G. & Lawrence, H. M. 2016. Palaeoecology of syn-rift topography: A Late Jurassic footwall island on the Josephine Ridge, Central Graben, North Sea. *Palaeogeography Palaeoclimatology Palaeoecology* 459: 63-75.

417. McLoughlin, S. & Bomfleur, B. 2016. Biotic interactions in an exceptionally well preserved osmundaceous fern rhizome from the Early Jurassic of Sweden. *Palaeogeography Palaeoclimatology Palaeoecology* 464: 86-96.
418. McLoughlin, S. & Strullu-Derrien, C. 2016. Biota and palaeoenvironment of a high middle-latitude Late Triassic peat-forming ecosystem from Hopen, Svalbard archipelago, In: Kear, B. P., Lindgren, J., Hurum, J. H., Milan, J. & Vajda, V. (ed.). *Mesozoic biotas of Scandinavia and its Arctic territories*. Geological Society: Bath, pp. 87-112.
419. McNair, D. M., Singley, S. B. N. & Alford, M. H. 2016. Checklist of the vascular flora of the Gopher Farm Sandhill, Wayne County, Mississippi. *Castanea* 81(2): 138-147.
420. McPeak, R. H. & Oberbauer, T. A. 2016. *Coenonycha globosa* McClay (Coleoptera: Scarabaeidae) rediscovered in Washington State, with comments on its habitat and host plant associations. *Coleopterists Bulletin* 70(2): 272-273.
421. Medeanic, S., Costa, C. S. B. & Diniz, D. 2016. Modern pollen-vegetation relationships in saltmarsh habitats along a salinity gradient of a fluvial estuary. *Review of Palaeobotany and Palynology* 233: 67-76.
422. Meena, K. & Yadav, B. L. 2016. *Selaginella* P. Beauv. in Sitamata Wildlife Sanctuary of Rajasthan. *Indian Fern Journal* 33(1-2): 175-187.
423. Mendoza-Ruiz, A., Ceja-Romero, J. & Perez-Garcia, B. 2016. Epiphytic ferns and lycophytes of Veracruz, Mexico: species richness and distribution. *Acta Botanica Mexicana* 114: 87-136.
424. Metzgar, J. S. 2016. Clarifying the taxonomy of Alaskan *Asplenium trichomanes* populations. *American Fern Journal* 106(3): 227-229.
425. Metzgar, J., Stamey, M. & Ickert-Bond, S. 2016. Genetic differentiation and polyploid formation within the *Cryptogramma crispera* complex (Polypodiales: Pteridaceae). *Turkish Journal of Botany* 40(3): 231-240.
426. Miao, Y. F., Wu, F. L., Chang, H., Fang, X. M., Deng, T., Sun, J. M. & Jin, C. S. 2016. A late-Eocene palynological record from the Hoh Xil Basin, northern Tibetan Plateau, and its implications for stratigraphic age, paleoclimate and paleoelevation. *Gondwana Research* 31: 241-252.
427. Mifsud, S., Napier, M., Fenech, S. & Cassar, L. F. 2016. Current status of *Asplenium sagittatum* (Aspleniaceae) in the Maltese islands. *Flora Mediterranea* 26: 69-80.
428. Miller, M. F., Knepprath, N. E., Cantrill, D. J., Francis, J. E. & Isbell, J. L. 2016. Highly productive polar forests from the Permian of Antarctica. *Palaeogeography, Palaeoclimatology, Palaeoecology* 441: 292-304.
429. Mingma, R., Tanaka, K., Åœmura, S., Takahashi, Y. & Matsumoto, A. 2016. *Actinorhabdospora filicis* gen. nov., sp. nov., a new member of the family Micromonosporaceae. *International Journal of Systematic and Evolutionary Microbiology* 66(8): 3071-3077.[actinomycetes]
430. Miraj, S. & Farsani, E. A. 2016. Photochromic relocation quality of *Adiantum capillus-veneris* L. *Der Pharmacia Lettre* 8(9): 48-51.
431. Miranda, C. V. & Schwartsburd, P. B. 2016. Aquatic ferns from Vicoso (MG, Brazil): Salviniiales (Filicopsida; Tracheophyta). *Brazilian Journal of Botany* 39(3): 935-942.
432. Miroshnik, N. V. & Tertychna, O. V. 2016. Dependence of grass cover taxonomic and ecological structure on the anthropogenic impact in forest ecosystems. *Biological Bulletin of Bogdan Chmelnitskiy Melitopol State Pedagogical University* 6(1): 29-40.

433. Mishra, V. K. & Shukla, R. 2016. Aquatic macrophytes for the removal of heavy metals from coal mining effluent, In: Ansari, A. A., Gill, S. S., Gill, R., Lanza, G. R. & Newman, L. (ed.). Phytoremediation: management of environmental contaminants, Volume 3. Springer International Publishing: Cham, pp. 143-156. [*Azolla pinnata*]
434. Misumi, S. Y., Asevedo, L., Avilla, L. S., Barth, O. M. & Barros, M. A. de 2016. Technique of palynomorphs extraction from dental calculi of South American gomphotheres. Anuario do Instituto de Geociencias 39(1): 127-132.[*Lycopodium clavatum*, spores]
435. Mitrovic, D., Dokovic, N., Zivotic, D., Bechtel, A., Sajnovic, A. & Stojanovic, K. 2016. Petrographical and organic geochemical study of the Kovin lignite deposit, Serbia. International Journal of Coal Geology 168: 80-107.
436. Mizuno, T., Takezaki, H., Momohara, A. & Okitsu, S. 2016. Spore-holding capacity of bryophyte colonies influences pteridophyte establishment in a vertical environment. American Fern Journal 106(3): 161-170.
437. Mohammad, R. H., Nur-E-Alam, M., Lahmann, M., Parveen, I., Tizzard, G. J., Coles, S. J., Fowler, M., Drake, A. F., Heyes, D. & Thoss, V. 2016. Isolation and characterisation of 13 pterosins and pterosides from bracken (*Pteridium aquilinum* (L.) Kuhn) rhizome. Phytochemistry 128: 82-94.
438. Mohandas, S. & Somvanshi, R. 2016. Evaluation of toxico-pathological effects of *Pteris cretica* in laboratory rats. Vegetos 29(SI): 87-94.
439. Mondal, S. & Sukul, S. 2016. Diversity of pteridophytes in Burbhum district, West Bengal. Indian Fern Journal 33(1-2): 91-106.
440. Moraes Ferreira, R. de, Souza, M. D. P. de, Takase, I. & Araujo Stapelfeldt, D. M. de 2016. Pb(II) adsorption by biomass from chemically modified aquatic macrophytes, *Salvinia* sp. and *Pistia stratiotes*. Water Science and Technology 73(11): 2670-2679.
441. Morais-Braga, M. F. B., Souza, T. M., Santos, K. K. A., Guedes, G. M. M., Andrade, J. C., Tintino, S. R., Sobral-Souza, C. E., Costa, J. G. M., Saraiva, A. A. F. & Coutinho, H. D. M. 2016. Additive effect of *Lygodium venustum* Sw. in association with gentamicin. Natural Product Research 30(16): 1851-1853.[antibiotica]
442. Morales-Arias, J. G., Cuevas-Guzman, R., Rodriguez-Hernandez, J. L., Guzman-Hernandez, L., Nunez-Lopez, N. M., Sanchez-Rodriguez, E. V., Solis-Magallanes, A. & Santana-Michel, F. J. 2016. Vascular flora of Villas de Cacoma, Sierra de Cacoma, Jalisco, Mexico. Botanical Sciences 94(2): 393-418.
443. Moran, R. C. & Labiak, P. H. 2016. Phylogeny and character evolution of the Neotropical fern genus *Stigmatopteris* (Dryopteridaceae). Brittonia 68(4): 476-488.
444. Moran, R. C. 2016a. *Bolbitis occidentalis* (Dryopteridaceae), a new species from the western side of the Andes of Ecuador. Brittonia 68(4): 433-439.
445. Moran, R. C. 2016b. Lycopodiaceae. In: Naczi, R. (ed.) Manual of the Vascular Plants of the Northeastern United States. New York Botanical Garden Press, Bronx, USA. 13p.
446. Moran, R. C. 2016c. Selaginellaceae. In: Naczi, R. (ed.) Manual of the Vascular Plants of the Northeastern United States. New York Botanical Garden Press, Bronx, USA. 4p.
447. Mora-Olivo, A., Mendoza-Ruiz, A. & Martínez-Ávalo, J. G. 2016. *Isoetes tamaulipana* (Isoetaceae), a new species from Mexico. Phytotaxa 267 (2): 113-120.

448. More, S., Paruya, D. K., Tarai, S., Chakraborty, T. & Bera, S. 2016. Depositional environment of Mio-Pliocene Siwalik sedimentary strata from the Darjeeling Himalayan Foothills, India: a palynological approach. *Plos One* 11(3): e0150168.
449. Moreau, J. D., Neraudeau, D., Platel, J. P. & Ravon, A. L. 2016. Fossiliferous flints (marine invertebrates and terrestrial plants) from the Upper Cretaceous of Claix (Charente). *Annales de Paleontologie* 102(2): 103-116.
450. Moreno-Dominguez, R., Cascales-Minana, B., Ferrer, J. & Diez, J. B. 2016. *Acrostichum*, a pioneering fern of floodplain areas from the late Oligocene Sarinena Formation of the Iberian Peninsula. *Plos One* 11(9): e0162334.
451. Morero, R. E., Barrington, D. S., McHenry, M. A., Condack, J. S. & Barboza, G. E. 2016. Typifications and synonymy in *Polystichum* (Dryopteridaceae) from Chile and Argentina. *Phytokeys* 65: 91-105.
452. Morozov, S. Y., Solovyev, A. G. & Troitsky, A. V. 2016. Phylogeny of the plant 4/1 proteins. *Data in Brief* 6: 8-11.
453. Morris, P. H. & Batten, D. J. 2016. Megaspores and associated palynofloras of Middle Jurassic fluvio-deltaic sequences in North Yorkshire and the northern North Sea: a biofacies-based approach to palaeoenvironmental analysis and modelling. *Journal of Micropalaeontology* 35: 151-172.
454. Moteetee, A. & Seleteng Kose, L. 2016. Medicinal plants used in Lesotho for treatment of reproductive and post reproductive problems. *Journal of Ethnopharmacology* 194: 827-849.[*Adiantum capillus-veneris*, *Equisetum ramosissimum*, *Selaginella caffrorum*]
455. Moura, I. O. & Salino, A. 2016a. Flora of the cangas of the Serra dos Carajás, Pará, Brazil: Dryopteridaceae. *Rodriguesia* 67(5): 1151-1157.
456. Moura, I. O. & Salino, A. 2016b. Flora of the cangas of the Serra dos Carajás, Pará, Brazil: Pteridaceae. *Rodriguesia* 67(5): 1167-1175.
457. Moura, I. O., Arruda, A. J. & Salino, A. 2016a. Flora of the cangas of the Serra dos Carajás, Pará, Brazil: Aspleniaceae. *Rodriguesia* 67(5): 1141-1144.
458. Moura, L. C., Arruda, A. J. & Salino, A. 2016b. Flora of the cangas of the Serra dos Carajás, Pará, Brazil: Thelypteridaceae. *Rodriguesia* 67(5): 1181-1189.
459. Mubarak, M., Shaija, A. & Suchithra, T. V. 2016. Optimization of lipid extraction from *Salvinia molesta* for biodiesel production using RSM and its FAME analysis. *Environmental Science and Pollution Research* 23(14): 14047-14055.
460. Mudge, C. R., Perret, A. J. & Winslow, J. R. 2016. Evaluation of foliar herbicide and surfactant combinations for control of giant *Salvinia* at three application timings. *Journal of Aquatic Plant Management* 54: 32-36.
461. Muller, A., Cunha, S., Junges, F. & Schmitt, J. L. 2016. Climate effects on the phenology of *Lindsaea lancea* (L.) Bedd. (Lindaeaceae) in an Atlantic Forest fragment in southern Brazil. *Interciencia* 41(1): 34-39.
462. Muro, J., van Doninck, J., Tuomisto, H., Higgins, M. A., Moulatlet, G. M. & Ruokolainen, K. 2016. Floristic composition and across-track reflectance gradient in Landsat images over Amazonian forests. *ISPRS Journal of Photogrammetry and Remote Sensing* 119: 361-372.
463. Murray, B. D., Webster, C. R., Jenkins, M. A., Saunders, M. R. & Haulton, G. S. 2016. Ungulate impacts on herbaceous-layer plant communities in even-aged and uneven-aged managed forests. *Ecosphere* 7(6): e01378.

464. Mynssen, C. M., Vasco, A., Moran, R. C., Sylvestre, L. S. & Rouhan, G. 2016. Desmophlebiaceae and *Desmophlebium*: a new family and genus of Eupolypod II ferns. *Taxon* 65(1): 19-34.[new genus]
465. Nakato, N. & Ebihara, A. 2016. Chromosome numbers of 18 ferns in Japan: toward completion of chromosome information in Japanese ferns. *Bulletin of the National Museum of Nature and Science, Series B (Botany)* 42(1): 25-40.
466. Namyatova, A. & Cassis, G. 2016. A remarkable new genus and six new species of fern-inhabiting plant bugs endemic to the Society Islands (Insecta: Heteroptera: Miridae: Mirinae: *Filicicoris* gen. nov.). *Insect Systematics & Evolution* 47(3): 285-312.
467. Namyatova, A. A. & Cassis, G. 2016. Revision and phylogeny of the fern-inhabiting genus *Felisacus* Distant (Insecta: Heteroptera: Miridae: Bryocorinae). *Bulletin of the American Museum of Natural History* 403: 4-168.
468. Nath, K., Bhattacharya, M. K. & Kar, S. 2016. Antibacterial activity of some ethno-botanically important ferns of Southern Assam, India. *Taiwania* 61(3): 260-268.
469. Naugolnykh, S. V. 2016. *Palaeobotrychium* gen. nov., the first discovery of an Ophioglossalean fern from the Middle Carboniferous deposits of Russia. *Wulfenia* 23: 147-161.
470. Naugolnykh, S. V., Wang, L., Han, M. & Jin, J. H. 2016. A new find of the fossil *Cyclosorus* from the Eocene of South China and its paleoclimatic implication. *Journal of Plant Research* 129(1): 3-12.
471. Naya, M., Avila-Nunez, J. L. & Calcagno-Pissarelli, M. P. 2016. Haemolymph defense capacity of the Neotropical sawfly *Aneugmenus merida* against ant predation. *Journal of Insect Behavior* 29(4): 459-472.[*Pteridium aquilinum*, bracken]
472. Negin, B. & Moshelion, M. 2016. The evolution of the role of ABA in the regulation of water-use efficiency: from biochemical mechanisms to stomatal conductance. *Plant Science* 251: 82-89.
473. Nelsen, M. P., Dimichele, W. A., Peters, S. E. & Boyce, C. K. 2016. Delayed fungal evolution did not cause the Paleozoic peak in coal production. *Proceedings of the National Academy of Sciences of the United States of America* 113(9): 2442-2447.[Carboniferous, tree ferns]
474. Neregato, R., D'Apolito, C., Glasspool, I. J., Wang, S. J., Liu, F., Windslow, P., Lu, J., Shao, L. & Hilton, J. 2016. Palynological constraints on the provenance and stratigraphic range of a Lopingian (Late Permian) inter-extinction floral lagerstätte from the Xuanwei Formation, Guizhou Province, China. *International Journal of Coal Geology* 162: 139-150.
475. Nervo, M. H., Coelho, F. V. D., Windisch, P. G. & Overbeck, G. E. 2016. Fern and lycophyte communities at contrasting altitudes in Brazil's subtropical Atlantic Rain Forest. *Folia Geobotanica* 51(4): 305-317.
476. Niazi, N. K., Bashir, S., Bibi, I., Murtaza, B., Shahid, M., Javed, M. T., Shakoor, M. B., Saqib, Z. A., Nawaz, M. F., Aslam, Z., Wang, H. & Murtaza, G. 2016. Phytoremediation of arsenic-contaminated soils using arsenic hyperaccumulating ferns, In: (ed.). *Phytoremediation: Management of environmental contaminants*, volume 3. Springer, Cham: pp. 521-545.
477. Niklas, K. J., Cobb, E. D. & Kutschera, U. 2016. Haeckel's biogenetic law and the land plant phylotypic stage. *Bioscience* 66(6): 510-519.
478. Nithya, T. G., Swetha, K., Jayanthi, J. & Ragunathan, M. G. 2016. *In silico* characterisation of proteins of *Salvinia molesta* D.S.Mitchell an aquatic weed and assessment of nanoparticle synthesising ability of closely related plant species. *International Journal of Pharma and Bio Sciences* 7(3): 889-894.

479. Nobrega, G. A., Aidar, M. P. M., Paciencia, M. & Prado, J. 2016. Identification key for lycophytes and ferns from the Picinguaba and Santa Virginia Nuclei, Parque Estadual da Serra do Mar, Ubatuba, SP, Brazil. *Biota Neotropica* 16(4): e20150144.
480. Nopun, P., Traiperm, P., Boonkerd, T. & Jenjittikul, T. 2016. Systematic importance of rhizome stelar anatomy in selected monilophytes from Thailand. *Taiwania* 61(3): 175-184.
481. Nurul Ain, M. B., Nornasuha, Y. & Ismail, B. S. 2016. Allelopathic assessment of selected common weeds in Malaysia C3 - AIP Conference Proceedings, In: Basri, K. H., Noorani, M. S. M., Yaacob, W. Z. W., Yusoff, M. F. M., Karim, N. H. A., Jumali, M. H. H., Ibrahim, N., Mustapha, M. A., Zainuddin, Z., Masseran, N., Nor, M. M., Ibarahim, Z., Rasol, N. H. A., Zain, C. R. C. M., Joe, L. S., Ibrahim, K., Ahmad, N., Daud, N. M. & Dzul-Kifli, S. C. (ed.). American Institute of Physics Inc.: pp. e060039. [*Lygodium flexuosum*, *Nephrolepis biserrata*]
482. Obeidy, C., Bravin, M. N., Bouchardon, J. L., Conord, C., Moutte, J., Guy, B. & Faure, O. 2016. Plants increase arsenic in solution but decrease the non-specifically bound fraction in the rhizosphere of an alkaline, naturally rich soil. *Ecotoxicology and Environmental Safety* 126: 23-29. [*Pteris vittata*]
483. O'Driscoll, C., Ramwell, C., Harhen, B., Morrison, L., Clauson-Kaas, F., Hansen, H. C. B., Campbell, G., Sheahan, J., Misstear, B. & Xiao, L. W. 2016. Ptaquiloside in Irish bracken ferns and receiving waters, with implications for land managers. *Molecules* 21(5): e543.
484. Ogura-Tsujita, Y., Hirayama, Y., Sakoda, A., Suzuki, A., Ebihara, A., Morita, N. & Imaichi, R. 2016. Arbuscular mycorrhizal colonization in field-collected terrestrial cordate gametophytes of pre-polypod leptosporangiate ferns (Osmundaceae, Gleicheniaceae, Plagiogyriaceae, Cyatheaceae). *Mycorrhiza* 26(2): 87-97.
485. Olayiwola, M. A. & Bamford, M. K. 2016. Petroleum of the deep: Palynological proxies for palaeoenvironment of deep offshore upper Miocene-Pliocene sediments from Niger Delta, Nigeria. *Palaeontologia Africana* 50: 31-47.
486. Olivares, E., Herrera, F., Aguiar, G., Pena, E., Ramos, M. & Mendez, C. 2016. Comparison of the mineral nutrition of the ferns *Cyathea aurea*, *C. delgadii*, *Dicranopteris flexuosa* and *Pteridium arachnoideum* in la Gran Sabana, Venezuela. *Interciencia* 41(4): 273-283.
487. Oliveira, L. M. de, Gress, J., De, J., Rathinasabapathi, B., Marchi, G., Chen, Y. & Ma, L. Q. 2016. Sulfate and chromate increased each other's uptake and translocation in As-hyperaccumulator *Pteris vittata*. *Chemosphere* 147: 36-43.
488. Oliveira, V. B., Zuchetto, M., Oliveira, C. F., Paula, C. S., Duarte, A. F. S., Miguel, M. D. & Miguel, O. G. 2016. Effect of different extraction techniques on the yield, antioxidant activity, total dosages, and profile by HPLC-DAD of *Dicksonia sellowiana* (Presl.) Hook., Dicksoniaceae. *Revista Brasileira de Plantas Mediciniais* 18(1): 230-239.
489. Oliveros-Bastidas, A., Calcagno-Pissarelli, M. P., Naya, M., Avila-Nunez, J. L. & Alonso-Amelot, M. E. 2016. Human gastric cancer, *Helicobacter pylori* and bracken carcinogens: a connecting hypothesis. *Medical Hypotheses* 88: 91-99.
490. Oliwa, J., Kornas, A. & Skoczowski, A. 2016. Morphogenesis of sporotrophophyll leaves in *Platyterium bifurcatum* depends on the red/far-red ratio in the light spectrum. *Acta Physiologiae Plantarum* 38(10): e247.
491. Oplustil, S., Psenicka, J., Simunek, Z. & Libertín, M. 2016. Floras of clastic and peat-forming Pennsylvanian wetlands: Are they different? A case study from the Upper Radnice coal (Late



- Duckmantian), Kladno Coalfield, Czech Republic. Spanish Journal of Paleontology 31(1): 145-180.
492. Oralls, D. G., Osborn, A. R. & Tessier, J. T. 2016. Potential influence of Salamanders and coarse woody debris on the distribution of *Dryopteris intermedia* in a Hardwood Forest. Northeastern Naturalist 23(1): 151-162.
493. Oyston, J. W., Hughes, M., Gerber, S. & Wills, M. A. 2016. Why should we investigate the morphological disparity of plant clades? Annals of Botany 117(5): 859-879.
494. Pabon-Mora, N. & Gonzalez, F. 2016. *Nephtopteris* out of the clouds: molecular evidence places the enigmatic *N. maxonii* (Pteridaceae) within the *Jamesonia* clade. Brittonia 68(1): 83-92.
495. Palacios-Rios, M., Arana, M. D. & Marquez, G. 2016. Revision of monotypic genus *Llavea* (Cryptogrammoideae: Pteridaceae). Anales del Jardin Botanico de Madrid 73(2): e044.
496. Pallag, A., Jurca, T., Pasca, B., Sirbu, V., Honiges, A. & Costuleanu, M. 2016. Analysis of phenolic compounds composition by HPLC and assessment of antioxidant capacity in *Equisetum arvense* L. extracts. Revista de Chimie 67(8): 1623-1627.
497. Pallos, J., Araujo Goes-Neto, L. A., Costa, J. M., Souza, F. S. de & Pietrobon, M. R. 2016. Lycophytes and ferns of Serra do Itauajuri, municipality of Monte Alegre, Pará, Brazil. Rodriguesia 67(4): 997-1009.
498. Panneerselvam, C., Murugan, K., Roni, M., Aziz, A., Suresh, U., Rajaganesh, R., Madhiyazhagan, P., Subramaniam, J., Dinesh, D., Nicoletti, M., Higuchi, A., Alarfaj, A. A., Munusamy, M. A., Kumar, S., Desneux, N. & Benelli, G. 2016. Fern-synthesized nanoparticles in the fight against malaria: LC/MS analysis of *Pteridium aquilinum* leaf extract and biosynthesis of silver nanoparticles with high mosquitocidal and antiplasmodial activity. Parasitology Research 115(3): 997-1013.
499. Parrado, C., Mascaraque, M., Gilaberte, Y., Juarranz, A. & Gonzalez, S. 2016. Fernblock (*Polypodium leucotomos* extract): molecular mechanisms and pleiotropic effects in light-related skin conditions, photoaging and skin cancers, a review. International Journal of Molecular Sciences 17(7): e1026. [*Phlebodium aureum*, sunblock]
500. Parris, B. S. 2016. Botany of some of the islands in the eastern Bay of Islands, northern New Zealand a 2<sup>nd</sup> update. Auckland Botanical Society Journal 70: 155-178.
501. Parris, B. S. 2016. Two new combinations in grammitid ferns (Polypodiaceae): *Prosaptia hornei* and *Radiogrammitis setulifera*. The Fern Gazette 20(4): 163-164.
502. Parris, B. S. 2016. Two updates for grammitid ferns (Polypodiaceae) on the 'Ferns of Thailand' website. The Fern Gazette 20(4): 156.
503. Patel, R. N. K., Patel, S. K. & Rajput, K. S. 2016. Reporting *Adiantum capillus-veneris* L. and *Thelypteris prolifera* (Retz.) C. F. Reed as new record for Gujarat state together with molecular identity. Indian Fern Journal 33(1-2): 69-80.
504. Paterson, N. W., Mangerud, G., Cetean, C. G., Mork, A., Lord, G. S., Klausen, T. G. & Morkved, P. T. 2016. A multidisciplinary biofacies characterisation of the late Triassic (late Carnian-Rhaetian) Kapp Toscana Group on Hopen, Arctic Norway. Palaeogeography Palaeoclimatology Palaeoecology 464: 16-42.
505. Pattemore, G. A. 2016. Megaflora of the Australian Triassic-Jurassic: A taxonomic revision. Acta Palaeobotanica 56: 121-182.
506. Paul, A. 2016. Anthony Clive Jermy (1932-2014). American Fern Journal 106(2): 147-151.

507. Peeters, E. T. H. M., Neefjes, R. E. M. & van Zuidam, B. G. 2016. Competition between free-floating plants is strongly driven by previously experienced phosphorus concentrations in the water column. *Plos One* 11(9): e0162780.[*Azolla filiculoides*]
508. Pereira, A. L. & Carrapico, F. 2016. An extra sheath around the heterocysts of *Anabaena azollae* from the aquatic macrophyte *Azolla filiculoides* Lamarck. *Botany Letters* 163(4): 449-451.
509. Pérez Carro, F. J. & Fernández Areces, M. P. 2016. Two new hybrid from *Dryopteris guanchica*: *D. × cantabrica* and *D. × ronald-vianensis*. *Flora Montiberica* 63: 64-81.
510. Perez-de La Fuente, R., Delclos, X., Penalver, E. & Engel, M. S. 2016. A defensive behavior and plant-insect interaction in Early Cretaceous amber - The case of the immature lacewing *Hallucinochrysa diogenesi*. *Arthropod Structure & Development* 45(2): 133-139.
511. Perez-Garcia, O. & Castillo, R. F. del. 2016. The decline of the itinerant milpa and the maintenance of traditional agrobiodiversity: crops and weeds coexistence in a tropical cloud forest area in Oaxaca, Mexico. *Agriculture Ecosystems & Environment* 228: 30-37.[indicator species, *Pteridium*]
512. Perrie, L. R. & Brownsey, P. J. 2016. *Asplenium lepidotum*, a new fern species from New Zealand allied to *Asplenium oblongifolium* and *Asplenium obtusatum*. *New Zealand Journal of Botany* 54(3): 377-391.[new species]
513. Perrie, L. R., Shepherd, L. D., Brownsey, P. J., Larrain, J., Shaw, B., Thouvenot, L. & Konrat, M. von. 2016. Rediscovery and reinstatement of the New Caledonian endemic filmy fern *Hymenophyllum pumilio* Rosenst. *New Zealand Journal of Botany* 54(1): 1-10.
514. Peterffy, O., Calner, M. & Vajda, V. 2016. Early Jurassic microbial mats-A potential response to reduced biotic activity in the aftermath of the end-Triassic mass extinction event. *Palaeogeography Palaeoclimatology Palaeoecology* 464: 76-85.
515. Petter, G., Wagner, K., Wanek, W., Delgado, E. J. S., Zotz, G., Cabral, J. S. & Kreft, H. 2016. Functional leaf traits of vascular epiphytes: vertical trends within the forest, intra- and interspecific trait variability, and taxonomic signals. *Functional Ecology* 30(2): 188-198.
516. Piirainen, M., Salo, P., Skyten, R. & Velmala, S. 2016. Accessions to the Botanical Museum of the Finnish Museum of Natural History, University of Helsinki, in 2015. *Memoranda Societatis pro Fauna et Flora Fennica* 92: 152-155.
517. Pimsuwan, S., Hongthong, P., Krangpanich, P. & Suwanpinta, C. 2016. The effect of fertilizer on growth of staghorn fern at seedling stage. *International Journal of GEOMATE* 11(6): 2879-2882.[*Platyserium coronarium*]
518. Pincheira-Ulbrich, J., Hernandez, C. E., Saldana, A., Pena-Cortes, F. & Aguilera-Benavente, F. 2016. Assessing the completeness of inventories of vascular epiphytes and climbing plants in Chilean swamp forest remnants. *New Zealand Journal of Botany* 54(4): 458-474.[*Hymenophyllaceae*]
519. Pinson, J. B. & Schuettpelz, E. 2016. Unraveling the origin of the Appalachian gametophyte, *Vittaria appalachiana*. *American Journal of Botany* 103(4): 668-676.
520. Playford, G. 2016. Mississippian palynoflora from the northern Perth Basin, Western Australia: systematics and stratigraphical and palaeogeographical significance. *Journal of Systematic Palaeontology* 14(9): 731-770.
521. Poliakova, A. & Behling, H. 2016. Pollen and fern spores recorded in recent and late Holocene marine sediments from the Indian Ocean and Java Sea in Indonesia. *Quaternary International* 392: 251-314.

522. Ponce, M. & Scataglini, A. 2016. Do two South American species of *Cheilanthes* (Pteridaceae) traditionally linked to the *Cheilanthes marginata* group, belong to *Gaga*? *Phytotaxa* 257(2): 149-157. [*Cheilanthes hieronymi*, *Cheilanthes poeppigiana*]
523. Pongkai, P., Zhang, L. B. & Pollawatn, R. 2016. A new species of *Hypodematium* (Polypodiaceae, Hypodematioideae) from a limestone cave in Thailand. *Phytotaxa* 286(3): 193-197. [*Hypodematium boonkerdii*]
524. Pouteau, R., Meyer, J. Y., Blanchard, P., Nitta, J. H., Terorotua, M. & Taputuarai, R. 2016. Fern species richness and abundance are indicators of climate change on high-elevation islands: evidence from an elevational gradient on Tahiti (French Polynesia). *Climatic Change* 138(1-2): 143-156.
525. PPG I (Schuettpepelz, E., Schneider, H., Smith, A. R., Hovenkamp, P., Prado, J., Rouhan, G., Salino, A., Sundue, M., Almeida, T. E., Parris, B., Sessa, E. B., Field, A. R., Gasper, A. L. de, Rothfels, C. J., Windham, M. D., Lehnert, M., Dauphin, B., Ebihara, A., Lehtonen, S., Schwartsburd, P. B., Metzgar, J., Zhang, L. B., Kuo, L. Y., Brownsey, P. J., Kato, M., Arana, M. D., Assis, F. C., Barker, M. S., Barrington, D. S., Chang, H. M., Chang, Y. H., Chao, Y. S., Chen, C. W., Chen, D. K., Chiou, W. L., Dittrich, V. A. O., Duan, Y. F., Dubuisson, J. Y., Farrar, D. R., Fawcett, S., Galan, J., Goes-Neto, L. A. D., Grant, J. R., Grusz, A. L., Haufler, C., Hauk, W., He, H., Hennequin, S., Hirai, R. Y., Huiet, L., Kessler, M., Korall, P., Labiak, P. H., Larsson, A., Leon, B., Li, C. X., Li, F. W., Link-Perez, M., Liu, H. M., Lu, N. T., Meza-Torres, E. I., Miao, X. Y., Moran, R., Mynssen, C. M., Nagalingum, N., Øllgaard, B., Paul, A. M., Pereira, J. B. D., Perrie, L. R., Ponce, M., Ranker, T. A., Schulz, C., Shinohara, W., Shmakov, A., Sigel, E. M., Souza, F. S. de, Sylvestre, L. D., Testo, W., Triana-Moreno, L. A., Tsutsumi, C., Tuomisto, H., Valdespino, I. A., Vasco, A., Viveros, R. S., Weakley, A., Wei, R., Weststrand, S., Wolf, P. G., Yatskievych, G., Xu, X. G., Yan, Y. H., Zhang, L., Zhang, X. C. & Zhou, X. M.) 2016. A community-derived classification for extant lycophytes and ferns. *Journal of Systematics and Evolution* 54(6): 563-603.
526. Prada, C., Galan, J., Saiz, P., Passarelli, L., Ciciarelli, M. & Rolleri, C. H. 2016. Diagnostic characters of sporogenous fronds and sporangia of *Blechnum* L. (Blechnaceae). *Iheringia Serie Botanica* 71(2): 161-174.
527. Prado, C., Chocobar Ponce, S., Pagano, E., Prado, F. E. & Rosa, M. 2016. Differential physiological responses of two *Salvinia* species to hexavalent chromium at a glance. *Aquatic Toxicology* 175: 213-221.
528. Prado, J. & Moran, R. C. 2016. Monograph of the West Indian fern genus *Polystichopsis* (Dryopteridaceae). *Brittonia* 68(1): 1-24.
529. Prasad, S. M., Kumar, S., Parihar, P. & Singh, R. 2016. Interactive effects of herbicide and enhanced UV-B on growth, oxidative damage and the ascorbate-glutathione cycle in two *Azolla* species. *Ecotoxicology and Environmental Safety* 133: 341-349.
530. Pratt, P. D., Makinson, J. R., Purcell, M. F. & Rayamajhi, M. B. 2016. The suitability of select ferns as hosts for *Archips machlopiis* (Lepidoptera: Tortricidae). *Florida Entomologist* 99(3): 572-573. [*Lygodium microphyllum*]
531. Prebble, M., Whitau, R., Meyer, J. Y., Sibley-Punnett, L., Fallon, S. & Porch, N. 2016. Abrupt late Pleistocene ecological and climate change on Tahiti (French Polynesia). *Journal of Biogeography* 43(12): 2438-2453.

532. Pressel, S., Bidartondo, M. I., Field, K. J., Rimington, W. R. & Duckett, J. G. 2016. Pteridophyte fungal associations: current knowledge and future perspectives. *Journal of Systematics and Evolution* 54(6): 666-678.
533. Prokopuk, M. S. 2016. New record of *Azolla caroliniana* in water bodies of Kiev. *Hydrobiological Journal* 52(2): 54-58.
534. Prospere, K., McLaren, K. P. & Wilson, B. 2016. Characterizing the status (disturbed, hybrid or novel) of swamp forest fragments in a Caribbean Ramsar wetland: the impact of anthropogenic degradation and invasive plant species. *Environmental Management* 58(4): 655-681.
535. Pryer, K. M., Huiet, L., Li, F. W., Rothfels, C. J. & Schuettpelz, E. 2016. Maidenhair ferns, *Adiantum*, are indeed monophyletic and sister to shoestring ferns, vittarioids (Pteridaceae). *Systematic Botany* 41(1): 17-23.
536. Quamar, M. & Bera, S. K. 2016. Pollen analysis of spider web samples from Korba District, Chhattisgarh (central India): an aerobiological aspect. *Aerobiologia* 32(4): 645-655.
537. Rabelo, L. S. & Schwartsburd, P. B. 2016. Schizaeales (Filicopsida, Tracheophyta) of Vicosa, Minas Gerais, Brazil, with special reference to hybrids. *Brittonia* 68(4): 379-396.
538. Rahaman, S., Singh, P. K., Basu, P., Gupta, S., Basu, M. & Ganguli, S. 2016. Isolation and computational characterization of glutathione peroxidase gene from an aquatic fern - *Salvinia molesta*. *International Letters of Natural Sciences* 51: 58-62.
539. Rajaganesh, R., Murugan, K., Panneerselvam, C., Jayashanthini, S., Aziz, A., Roni, M., Suresh, U., Trivedi, S., Rehman, H., Higuchi, A., Nicoletti, M. & Benelli, G. 2016. Fern-synthesized silver nanocrystals: towards a new class of mosquito oviposition deterrents? *Research in Veterinary Science* 109: 40-51.
540. Rajagopal, P. K. & Bhat, K. G. 2016. An updated account of pteridophytes of Karnataka. *Indian Fern Journal* 33(1-2): 119-141.
541. Rajesh, K. D., Subramani, V., Annamalai, P., Nakulan V, R., Narayanaperumal, J. & Solomon, J. 2016. *In vitro* study of trematocidal action of *Dicranopteris linearis* (Burm.f.) Underw. extracts against *Gastrothylax crumenifer*. *Biomedicine and Pharmacotherapy* 84: 2042-2053.
542. Rakotondrainibe, F. & Jouy, A. 2016. Revision of the genus *Deparia* Hook. & Grev. (Pteridophyta, Athyriaceae) from Madagascar: three new species, a new synonymy and putative hybrids. *Candollea* 71(2): 357-371.[*Deparia florensiae*, *D. longipilosa*, *D. septentrionalis*]
543. Rakotondrainibe, F. & Jouy, A. 2016. Taxonomical and nomenclatural novelties in the genus *Pteris* L. (Pteridaceae) from Madagascar. *Adansonia* 38(1): 15-28.[new species, *Pteris janssenii*, *P. pseudowoodwardioides*, *P. rasoloheryana*, *P. rugosa*]
544. Rakotondrainibe, F., Duhem, B., Reeb, C. & Smith, A. R. 2016. The genus *Hypodematium* Kunze (Hypodematiaceae) from Madagascar: two species of which one is newly described. *Adansonia* 38(2): 159-164.[*Hypodematium delicatulum*, new species]
545. Raman, G., Choi, K. S. & Park, S. 2016. Phylogenetic relationships of the fern *Cyrtomium falcatum* (Dryopteridaceae) from Dokdo Island based on chloroplast genome sequencing. *Genes* 7(12): e115.
546. Ramirez-Barahona, S., Barrera-Redondo, J. & Eguiarte, L. E. 2016. Rates of ecological divergence and body size evolution are correlated with species diversification in scaly tree ferns. *Proceedings of the Royal Society B-Biological Sciences* 283(1834): e20161098.

547. Rana, D. & Masoodi, U. R. H. 2016. Threat categorization and conservation prioritization of floristic diversity in the Indian Himalayan region: A state of art approach from Shimla water catchment wildlife sanctuary. *Vegetos* 29(SI): 1-10.
548. Randrianarison, A., Schlaepfer, R., Mills, R., Herve, D., Razanaka, S., Rakotoarimanana, V., Carriere, S. M. & Buttler, A. 2016. Linking historical land use to present vegetation and soil characteristics under slash-and-burn cultivation in Madagascar. *Applied Vegetation Science* 19(1): 40-52.
549. Ranil, R. H. G., Beneragama, C. K., Pushpakumara, D. K. N. G. & Wijesundara, D. S. A. 2016. Ornamental pteridophytes: an underexploited opportunity for the Sri Lankan floriculture industry. *Journal of the National Science Foundation of Sri Lanka* 43(4): 293-301.
550. Ranil, R. H. G., Fraser-Jenkins, C. R., Pushpakumara, D. K. N. G., Wijesundara, D. S. A. & Parris, B. S. 2016. The endemic pteridophyte flora of Sri Lanka: taxonomy, geographical distribution and conservation status. *Indian Fern Journal* 33(1-2): 1-36.
551. Ranker, T. A. 2016. What do we know about Hawaiian ferns and lycophytes? *Journal of Systematics and Evolution* 54(6): 626-637.
552. Ravi, B. X. 2016. *In vitro* polyembryony induction in a critically endangered fern, *Pteris tripartita* Sw. *Asian Pacific Journal of Reproduction* 5(4): 345-350.
553. Ray, P. & Craven, K. D. 2016. *Sebacina vermifera*: a unique root symbiont with vast agronomic potential. *World Journal of Microbiology & Biotechnology* 32(1): e16.
554. Reddy, S. G. E. & Kumari, A. 2016. Seasonal incidence of aphid, *Amphorophora ampullata* Bukton (Homoptera: Aphididae) on fern, *Hypolepis polypodioides* (Blume) Hook. (Hypolepidaceae) from Western Himalaya. *Archives of Phytopathology and Plant Protection* 49(13-14): 335-342.
555. Reid, J. L., Chaves-Fallas, J. M., Holl, K. D. & Zahawi, R. A. 2016. Tropical forest restoration enriches vascular epiphyte recovery. *Applied Vegetation Science* 19(3): 508-517.
556. Renner, S. S., Grimm, G. W., Kapli, P. & Denk, T. 2016. Species relationships and divergence times in beeches: new insights from the inclusion of 53 young and old fossils in a birth-death clock model. *Philosophical Transactions of the Royal Society B-Biological Sciences* 371(1699): e20150135. [Osmundaceae]
557. Rensing, S. A. 2016. Genomes and evolution of charophytes, bryophytes, lycophytes and ferns. Academic Press Ltd-Elsevier Science Ltd: London. 322 pp.
558. Resmi, S., Thomas, V. P. & Sreenivas, V. K. 2016. Stipe anatomical studies on selected pteridophytes of south India. *Acta Botanica Hungarica* 58(1-2): 167-176.
559. Richa, G., Amit, K., Soni, A. B. & Bharti, S. 2016. Effect of mild thermal treatment and pH in quality of minimally processed *Marsilea vestita* leaves. *Research Journal of Chemistry and Environment* 20(2): 17-23.
560. Riefner Jr, R. E. & Smith, A. R. 2016. *Pteris multifida* (Pteridaceae) rediscovered in southern California (USA), with a key to species and notes on escaped cultivars. *Journal of the Botanical Research Institute of Texas* 10(2): 517-526.
561. Riegel, W. & Wilde, V. 2016. An early Eocene *Sphagnum* bog at Schoningen, northern Germany. *International Journal of Coal Geology* 159: 57-70.
562. Ringaile-Voicik, R. & Naujalis, J. R. 2016. Presence of juvenile club moss (Lycopodiaceae) sporophytes and gametophytes in relation to vegetation cover in dry pine forests. *American Fern Journal* 106(4): 242-257.

563. Roberts, M. W., D'amato, A. W., Kern, C. C. & Palik, B. J. 2016. Long-term impacts of variable retention harvesting on ground-layer plant communities in *Pinus resinosa* forests. *Journal of Applied Ecology* 53(4): 1106-1116.
564. Rocha-Uriarte, L., Becker, D. F. P., Graeff, V., Koch, N. M. & Schmitt, J. L. 2016. Functional patterns and species diversity of epiphytic vascular spore-producing plants in riparian forests with different vegetation structure from southern Brazil. *Plant Ecology and Evolution* 149(3): 261-271.
565. Rodrigues, J. P. V., Pereira-Colavite, A. & Mello, R. L. 2016. Catalogue of the Teratomyzidae (Diptera, Opomyzoidea) of the World. *Zootaxa* 4205(3): 275-285.
566. Roelfsema, M. R. G. & Hedrich, R. 2016. Do stomata of evolutionary distant species differ in sensitivity to environmental signals? *New Phytologist* 211(3): 767-770.
567. Romero, E. J., Archangelsky, S. & Passalia, M. G. 2016. Two new angiosperm leaf morphotypes from the Anfiteatro de Ticó Formation (mid-Aptian) Santa Cruz Province, Argentina. *Review of Palaeobotany and Palynology* 235: 148-156.
568. Rosales, E., Meijide, I., Tavares, T., Pazos, M. & Sanroman, M. A. 2016. Grapefruit peelings as a promising biosorbent for the removal of leather dyes and hexavalent chromium. *Process Safety and Environmental Protection* 101: 61-71.[*Pteris vittata*]
569. Rosso, J. Q. D. 2016. Use of *Polypodium leucotomas* extract in clinical practice: a primer for the clinician. *Journal of Clinical and Aesthetic Dermatology* 9(5): 37-42.[*Phlebodium aureum*]
570. Rozefelds, A. C., Dettmann, M. E., Clifford, H. T. & Lewis, D. 2016. Macrofossil evidence of early sporophyte stages of a new genus of water fern *Tecaropteris* (Ceratopteridoideae: Pteridaceae) from the Paleogene Redbank Plains Formation, southeast Queensland, Australia. *Alcheringa* 40(1): 1-11.
571. Runk, K., Pihkva, K., Liira, J. & Zobel, K. 2016. Selection of source material for introduction of the locally rare and threatened fern species *Asplenium septentrionale*. *Plant Ecology & Diversity* 9(2): 167-173.
572. Sa, N. D., Absy, M. L. & Soares, E. A. A. 2016. Late Holocene paleoenvironments of the floodplain of the Solimoes River, Central Amazonia, based on the palynological record of Lake Cabaliana. *Acta Botanica Brasilica* 30(3): 473-485.
573. Sagasti, A. J., Massini, J. G., Escapa, I. H., Guido, D. M. & Channing, A. 2016. *Millerocaulis zamuneræ* sp. nov. (Osmundaceae) from Jurassic, geothermally influenced, wetland environments of Patagonia, Argentina. *Alcheringa* 40(4): 456-474.
574. Saggoo, M. I. S. & Kaur, M. 2016. Irregular meiotic behaviour in maidenhair fern *Adiantum capillus-veneris* L. from Northwest India. *Cytologia* 81(1): 77-82.
575. Saleem, F., Khan, M. T. J., Saleema, H., Azeem, M., Ahmed, S., Shahid, N., Gill, M. S. A., Nadeem, F., Ali, T., Altaf, H. & Mehmood, W. 2016. Phytochemical, antimicrobial and antioxidant activities of *Pteris cretica* L. (Pteridaceae) extracts. *Acta Poloniae Pharmaceutica* 73(5): 1397-1403.
576. Salino, A. & Arruda, A. J. 2016a. Flora of the cangas of the Serra dos Carajás, Pará, Brazil: Lygodiaceae. *Rodriguesia* 67(5): 1163-1164.
577. Salino, A. & Arruda, A. J. 2016b. Flora of the cangas of the Serra dos Carajás, Pará, Brazil: Cyatheaceae. *Rodriguesia* 67(5): 1145-1147.
578. Salino, A. & Arruda, A. J. 2016c. Flora of the cangas of the Serra dos Carajás, Pará, Brazil: Oleandraceae. *Rodriguesia* 67(5): 1165-1166.

579. Salino, A. & Arruda, A. J. 2016d. Flora of the cangas of the Serra dos Carajás, Pará, Brazil: Dennstaedtiaceae. *Rodriguesia* 67(5): 1149-1150.
580. Salino, A., Almeida, T. E. & Smith, A. R. 2016. New combinations in Neotropical Thelypteridaceae. *Phytokeys* 57: 11-50.
581. Salino, A., Leroy, C. J., Moura, L. C. & Moura, I. O. 2016. Four new species of the fern genus *Goniopteris* C. Presl (Thelypteridaceae) from Brazilian Atlantic Forest. *Phytotaxa* 255(3): 249-258.[*Goniopteris seidleri*, *G. smithii*, *G. subdimorpha*, *G. windischii*]
582. Sanchez-Gonzalez, A., Alvarez-Zuniga, E. & Lopez-Mata, L. 2016. Diversity and distribution patterns of ferns and lycophytes in a cloud forest in Mexico. *Revista Chapingo Serie Ciencias Forestales y del Ambiente* 22(3): 235-253.
583. Sanchez-Martinez, M. A. & Londono, G. A. 2016. Nesting behavior of three species of *Chlorospingus* (*C. flavigularis*, *C. flavopectus*, and *C. parvirostris*) in Southeastern Peru. *Wilson Journal of Ornithology* 128(4): 784-793.
584. Sanchez-Viveros, G., Ruvalcaba-Sil, J. L., Ferrera-Cerrato, R., Alarcon, A. & Xoconostle-Cazares, B. 2016. Changes in elemental content in fronds of *Azolla filiculoides* due to arsenic accumulation. *Plant Biosystems* 150(6): 1332-1340.
585. Sanin, D. & Torrez, V. 2016. Two new records for Colombia of *Psilotum nudum* (Psilotaceae) from the Magdalena Valley and in the Andean Amazonian foothills. *The Fern Gazette* 20(4): 157-162.
586. Sanin, D., Gomez-Cruz, A. D. & Moreno-Sanchez, M. 2016. Fossils of *Thelypteris* subg. *Meniscium* in Miocene deposits of the Cauca Valley, Colombia. *Brittonia* 68(2): 195-201.
587. Santos, C., Ferreira, P., Sousa, H., Ribeiro, J., Santos, M., Net, T., Oliveira, P. A., Medeiros, R., Vilanova, M. & Costa, R. M. G. da. 2016. Ptaquiloside from bracken (*Pteridium* spp.) inhibits tumour-infiltrating CD8(+) T cells in HPV-16 transgenic mice. *Food and Chemical Toxicology* 97: 277-285.
588. Sanusi, R. A. M., Hamid, H. A. & Nuruddin, A. A. 2016. Stable isotope ratio ( $\delta C-13$ ) responses of *Platyserium bifurcatum* at different light intensity levels. *Asia Life Sciences* 25(1): 507-513.
589. Saxena, A., Singh, K. J., Murthy, S., Chandra, S. & Goswami, S. 2016. Spore tetrads, possible indicators of intense climatic regimes: case study from an early Permian stratum of Singrauli Coalfield, Son-Mahanadi Basin, India. *Geological Magazine* 153(3): 426-437.
590. Scanu, G. G., Kustatscher, E. & Pittau, P. 2016. New insights into the Middle Jurassic floras of Sardinia (Italy) - The Miccolis Collection at the Museo di Storia Naturale of Venice, Italy. *Bollettino della Societa Paleontologica Italiana* 55(1): 29-45.
591. Schallenberg-Rudinger, M. & Knoop, V. 2016. Coevolution of organelle RNA editing and nuclear specificity factors in early land plants, In: Rensing, K. A. (ed.). *Genomes and evolution of charophytes, bryophytes, lycophytes and ferns*. Academic Press Ltd-Elsevier Science Ltd: London, pp. 37-93.
592. Schneider, H. & Schuettpelez, E. 2016. Systematics and evolution of lycophytes and ferns. *Journal of Systematics and Evolution* 54(6): 561-562.
593. Schneider, H. 2016. Tempo and mode in the evolution of morphological disparity in the Neotropical fern genus *Pleopeltis*. *Biological Journal of the Linnean Society* 118(4): 929-939.
594. Schneider, H. 2016. The ghost of the Cretaceous terrestrial revolution in the evolution of fern-sawfly associations. *Journal of Systematics and Evolution* 54(2): 93-103.

595. Schneider, H., Schmidt, A. R. & Heinrichs, J. 2016. Burmese amber fossils bridge the gap in the Cretaceous record of polypod ferns. *Perspectives in Plant Ecology Evolution and Systematics* 18: 70-78.
596. Schuettpelz, E., Chen, C. W., Kessler, M., Pinson, J. B., Johnson, G., Davila, A., Cochran, A. T., Huiet, L. & Pryer, K. M. 2016. A revised generic classification of vittarioid ferns (Pteridaceae) based on molecular, micromorphological, and geographic data. *Taxon* 65(4): 708-722.
597. Schwartzburd, P. B. & Prado, J. 2016. A taxonomic revision of the South American species of *Hypolepis* (Dennstaedtiaceae), Part II. *American Fern Journal* 106(1): 1-53.
598. Schwartzburd, P. B., Miranda, C. V. & Prado, J. 2016. *Oleandra* (Oleandraceae) in the Brazilian Atlantic Forest. *American Fern Journal* 106(3): 191-205.
599. Schwartzburd, P. B., Oliveira, M. H., Joner, D. C., Loyola, R. & Prado, J. 2016. Additions to the taxonomy of the *Hypolepis rugosula* complex (Dennstaedtiaceae) in Africa: corrections, two new subspecies and new distribution maps. *Folia Geobotanica* 51(4): 373-381.
600. Schwerbrock, R. & Leuschner, C. 2016. Air humidity as key determinant of morphogenesis and productivity of the rare temperate woodland fern *Polystichum braunii*. *Plant Biology* 18(4): 649-657.
601. Sebesta, N., Richards, J. & Taylor, J. 2016. The effects of heat on spore viability of *Lygodium microphyllum* and implications for fire management. *Southeastern Naturalist* 15: 40-50.
602. Seegets-Villiers, D. E. & Wagstaff, B. E. 2016. Morphological variation of stratigraphically important species in the genus *Pilosisporites* Delcourt & Sprumont, 1955 in the Gippsland Basin, southeastern Australia. *Memoirs of Museum Victoria* 74: 81-91.
603. Sen, K. & Mukhopadhyay, R. 2016. Indian cheilanthoid fern - a numerical taxonomic approach. *Bangladesh Journal of Plant Taxonomy* 23(2): 133-142.
604. Senar Lluch, R. & Mesa Romeu, D. 2016. New populations of *Phyllitis sagittata* and *Phyllitis scolopendrium* to Valencian flora. *Flora Montiberica* 63: 8-12.
605. Seral, A. & Galán, J. M. G. 2016. Gametophytic phase of *Doryopteris triphylla* (Pteridaceae, Polypodiopsida). *Botanica Complutensis* 40: 63-70.
606. Seral, A., Flores-Bavestrello, A. & Galán, J. 2016. Gametophyte development and reproduction of two Chilean fern species, *Blechnum arcuatum* (Blechnaceae) and *Pteris semiadnata* (Pteridaceae). *Gayana Botanica* 73(2): 346-354.
607. Sessa, E. B. & Der, J. P. 2016. Evolutionary genomics of ferns and lycophytes, In: Rensing, S. A. (ed.). *Genomes and evolution of charophytes, bryophytes, lycophytes and ferns*. Academic Press Ltd-Elsevier Science Ltd: London, pp. 215-254.
608. Sessa, E. B., Testo, W. L. & Watkins, J. E. 2016. On the widespread capacity for, and functional significance of, extreme inbreeding in ferns. *New Phytologist* 211(3): 1108-1119.
609. Shaheen, S., Iqbal, Z., Ijaz, F., Alam, J. & Rahman, I. U. 2016. Floristic composition, biological spectrum and phenology of Tehsil Havelian, District Abbottabad, Kp, Pakistan. *Pakistan Journal of Botany* 48(5): 1849-1859.
610. Shalimov, A. P. & Shmakov, A. I. 2016. Spore morphology of *Polypodium aleuticum* A.E. Bobrov (Polypodiaceae) and related species. *Biological Bulletin of Bogdan Chmelnitskiy Melitopol State Pedagogical University* 6(2): 28-33.
611. Shaltout, K. H., Hosni, H. A., El-Kady, H. F., El-Beheiry, M. A. & Shaltout, S. K. 2016. Composition and pattern of alien species in the Egyptian flora. *Flora* 222: 104-110.



612. Shang, H., Wang, Y., Zhu, X. F., Zhao, G. H., Wang, F. H., Lu, J. M. & Yan, Y. H. 2016. Likely allopatric origins of *Adiantum x meishanianum* (Pteridaceae) through multiple hybridizations. *Journal of Systematics and Evolution* 54(5): 528-534.
613. Shang, J. Z., Xiang, L., Wang, Y. & Chen, L. Q. 2016. Progress on sex determinant regulation mechanism in ferns. *Acta Horticulturae Sinica* 43(9): 1776-1790.
614. Shao, W., Yang, L. H. & Zhou, X. L. 2016. Taxonomic significance of venation pattern in *Pyrrosia*. *Plant Science Journal* 34(2): 191-199.
615. Sharma, A. & Uniyal, S. K. 2016. Heavy metal accumulation in *Pyrrosia flocculosa* (D. Don) Ching growing in sites located along a vehicular disturbance gradient. *Environmental Monitoring and Assessment* 188(10): e547.
616. Sharma, B. D. & Purohit, S. N. 2016. Reproduction biology of some leptosporangiate homosporous ferns of Rajasthan, India. *Indian Fern Journal* 33(1-2): 107-118.
617. Sharma, J. G., Kumar, A., Saini, D., Targay, N. L., Khangembam, B. K. & Chakrabarti, R. 2016. *In vitro* digestibility study of some plant protein sources as aquafeed for carps *Labeo rohita* and *Cyprinus carpio* using pH-Stat method. *Indian Journal of Experimental Biology* 54(9): 606-611.
618. Sharma, P. & Samant, S. S. 2016. Diversity of pteridophytes in the surroundings and dam submergence areas of hydroelectric projects in Kullu district of Himachal Pradesh, Indian Himalaya. *Forestry Ideas* 22(2): 127-136.
619. Shen, W. H., Tan, Z. Q., He, Q. F., Peng, Y. H., Zheng, W. & He, F. 2016. Species composition and diversity characteristics of *Excentrodendron* Hsienmu-dominated communities in southwestern Guangxi, China. *Chinese Journal of Ecology* 35(5): 1204-1211.
620. Shinozaki, J., Hiruta, M., Okada, T. & Masuda, K. 2016. Migrated hopene synthases from *Colysis pothifolia* and identification of a migration switch controlling the number of 1,2-hydrate and methyl shifts. *Chembiochem* 17(1): 65-70.
621. Shukla, A. K., Upadhyay, S. K., Mishra, M., Saurabh, S., Singh, R., Singh, H., Thakur, N., Rai, P., Pandey, P., Hans, A. L., Srivastava, S., Rajapure, V., Yadav, S. K., Singh, M. K., Kumar, J., Chandrashekar, K., Verma, P. C., Singh, A. P., Nair, K. N., Bhadauria, S., Wahajuddin, M., Singh, S., Sharma, S., Omkar, Upadhyay, R. S., Ranade, S. A., Tuli, R. & Singh, P. K. 2016. Expression of an insecticidal fern protein in cotton protects against whitefly. *Nature Biotechnology* 34(10): 1046-1051.
622. Sigel, E. M. 2016. Genetic and genomic aspects of hybridization in ferns. *Journal of Systematics and Evolution* 54(6): 638-655.
623. Silva, J. B. 2016. A vegetation overview on rocky outcrops in Brazil. *Oecologia Australis* 20(4): 451-463.
624. Silvera, K. & Lasso, E. 2016. Ecophysiology and crassulacean acid metabolism of tropical epiphytes, In: Goldstein, G. & Santiago, L. S. (ed.). *Tropical tree physiology: adaptations and responses in a changing environment*. Springer: Dordrecht, pp. 25-43.
625. Singh, L. J., Kumar, B., Kholia, B. S. & Joshi, P. 2016. *Diplazium proliferum*: An addition to the Indian pteridophytic flora from little Andaman. *Journal of Japanese Botany* 91(1): 57-60.
626. Singh, S. K., Dubey, N. K. & Srivastava, G. K. 2016. The microspore morphology of some species of *Selaginella* (Selaginellaceae) from India. *Palynology* 40(2): 216-229.
627. Singh, S., Waman, A. A., Bohra, P., Gautam, R. K. & Roy, S. D. 2016. Conservation and sustainable utilization of horticultural biodiversity in tropical Andaman and Nicobar Islands, India. *Genetic Resources and Crop Evolution* 63(8): 1431-1445.

628. Singh, W. R., Kalamdhad, A. S. & Singh, J. 2016. The preferential composting of water fern and a reduction of the mobility of potential toxic elements in a rotary drum reactor. *Process Safety and Environmental Protection* 102: 485-494.
629. Sinha, T. & Ahmaruzzaman, M. 2016. Indigenous north eastern India fern mediated fabrication of spherical silver and anisotropic gold nano structured materials and their efficacy for the abatement of perilous organic compounds from waste water-A green approach. *RSC Advances* 6(25): 21076-21089.
630. Sita, Srivastava, M. & Srivastava, G. K. 2016. Morpho-anatomical studies of ligule and labium of *Isoetes coromandelina* L. in India. *Indian Fern Journal* 33(1-2): 37-46.
631. Skourti-Stathaki, E., Clauson-Kaas, F., Brandt, K. K., Rasmussen, L. H. & Hansen, H. C. B. 2016. Dissipation of pterisin B in acid soils - Tracking the fate of the bracken fern carcinogen ptaquiloside. *Chemosphere* 165: 453-459.
632. Slater, S. M. & Wellman, C. H. 2016. Middle Jurassic vegetation dynamics based on quantitative analysis of spore/pollen assemblages from the Ravenscar Group, North Yorkshire, UK. *Palaeontology* 59(2): 305-328.
633. Smith, A. R., Weststrand, S. & Korall, P. 2016. *Selaginella pectinata* resurrected - the correct name for an unusual endemic spike moss from Madagascar. *American Fern Journal* 106(2): 131-134.
634. Smith, L. M. & Cherry, R. P. 2016. Hibernation ecology of an isolated population of bog turtles, *Glyptemys muhlenbergii*. *Copeia* 104(2): 475-481.[*Osmundastrum cinnamomeum*]
635. Smith, M. C., Lake, E. C. & Wheeler, G. S. 2016. Oviposition choice and larval performance of *Neomusotima conspurcatalis* on leaflet types of the invasive fern, *Lygodium microphyllum*. *Entomologia Experimentalis et Applicata* 160(1): 11-17.
636. Socolsky, C., Salamanca, E., Gimenez, A., Borkosky, S. A. & Bardon, A. 2016. Prenylated acylphloroglucinols with leishmanicidal activity from the fern *Elaphoglossum lindbergii*. *Journal of Natural Products* 79(1): 98-105.
637. Song, U., Kim, D. W., Waldman, B. & Lee, E. J. 2016. From phytoaccumulation to post-harvest use of water fern for landfill management. *Journal of Environmental Management* 182: 13-20.[*Azolla japonica*]
638. Sosa, V., Ornelas, J. F., Ramirez-Barahona, S. & Gandara, E. 2016. Historical reconstruction of climatic and elevation preferences and the evolution of cloud forest-adapted tree ferns in Mesoamerica. *Peerj* 4: e2696.
639. Soti, P. G. & Jayachandran, K. 2016. Effect of exotic invasive old world climbing fern (*Lygodium microphyllum*) on soil properties. *Journal of Soil Science and Plant Nutrition* 16(4): 930-940.
640. Sotiriou, P., Giannoutsou, E., Panteris, E., Apostolakis, P. & Galatis, B. 2016. Cell wall matrix polysaccharide distribution and cortical microtubule organization: two factors controlling mesophyll cell morphogenesis in land plants. *Annals of Botany* 117(3): 401-419.[*Asplenium nidus*]
641. Srivastava, S., Singh, M. & Paul, A. K. 2016. Arsenic bioremediation and bioactive potential of endophytic bacterium *Bacillus pumilus* isolated from *Pteris vittata* L. *International Journal of Advanced Biotechnology and Research* 7(1): 77-92.
642. Su, L. H., Li, Y. P., Li, H. M., Dai, W. F., Liu, D., Cao, L. & Li, R. T. 2016. Anti-inflammatory prenylated flavonoids from *Helminthostachys zeylanica*. *Chemical and Pharmaceutical Bulletin* 64(5): 497-501.

643. Su, L., Zhao, W., Zhang, J., Yang, Y., Guo, Y., Fan, Q. & Liao, W. 2016. Analyses on community characteristics and its relict and conservation of *Cathaya argyrophylla* at Bamianshan in Hu'nan Province. *Journal of Plant Resources and Environment* 25(4): 76-86.
644. Sujarwo, W., Arinasa, I. B. K., Caneva, G. & Guarrera, P. M. 2016. Traditional knowledge of wild and semi-wild edible plants used in Bali (Indonesia) to maintain biological and cultural diversity. *Plant Biosystems* 150(5): 971-976.
645. Sujatha, S. & Sara, S. C. 2016. *In vitro* life cycle and quantitative analysis of DNA on sporophytic and gametophytic tissues of *Phymatosorus scolopendria* (Burm.f.) Pic. Ser. *Indian Fern Journal* 33(1-2): 164-174.
646. Sundari, D., Hananto, M. & Suharjo. 2016. Heavy metal in food ingredients in oil refinery industrial area, Dumai. *Buletin Penelitian Sistem Kesehatan* 19(1): 55-61.[Indonesian, English summary]
647. Sundue, M. & Poinar, G. 2016. An extinct grammitid fern genus from Dominican amber, with revision of *Grammitis succinea*. *Review of Palaeobotany and Palynology* 233: 193-198.
648. Sundue, M. & Testo, W. L. 2016. *Parapolystichum novoguineensis* (comb. nov.; Dryopteridaceae) from New Guinea. *Phytotaxa* 243(2): 193-196.
649. Sutan, N. A., Fierascu, I., Fierascu, R. C., Manolescu, D. S. & Soare, L. C. 2016. Comparative analytical characterization and *in vitro* cytogenotoxic activity evaluation of *Asplenium scolopendrium* L. leaves and rhizome extracts prior to and after Ag nanoparticles phytosynthesis. *Industrial Crops and Products* 83: 379-386.
650. Suzuki, R. O., Kenta, T., Sato, M., Masaki, D. & Kanai, R. 2016. Continuous harvesting of a dominant bracken alters a cool-temperate montane grassland community and increases plant diversity in Nagano, Japan. *Ecological Research* 31(5): 639-644.
651. Syaefudin, S., Juniarti, A., Rosiyana, L., Setyani, A. & Khodijah, S. 2016. Nanoparticles of *Selaginella doederleinii* leaf extract inhibit human lung cancer cells A549 C3 - IOP Conference Series: Earth and Environmental Science 39: e012029.
652. Szmeja, J., Galka-Kozak, A., Styszynska, A. & Marsz, A. 2016. Early spring warming as one of the factors responsible for expansion of aquatic fern *Salvinia natans* (L.) All. in the Vistula delta (south Baltic Sea coast). *Plant Biosystems* 150(3): 532-539.
653. Ta, C. A. K. & Arnason, J. T. 2016. Mini review of phytochemicals and plant taxa with activity as microbial biofilm and quorum sensing inhibitors. *Molecules* 21(1): e29.
654. Taft, J. B. 2016. Are small, isolated prairie remnants effectively smaller than they look and getting smaller? *Journal of the Torrey Botanical Society* 143(3): 207-223.[edge effects]
655. Takuno, S., Ran, J. H. & Gaut, B. S. 2016. Evolutionary patterns of genic DNA methylation vary across land plants. *Nature Plants* 2(2): e15222.
656. Tanaka, T. & Sato, T. 2016. Contemporary patterns and temporal changes in alien plant species richness along an elevational gradient in central Japan. *Plant Ecology and Evolution* 149(2): 177-188.
657. Taylor, W. C., Moran, R. C. & Brunton, D. F. 2016. Isoetaceae. In: Naczi, R. (ed.) *Manual of the Vascular Plants of the Northeastern United States*. New York Botanical Garden Press, Bronx, USA. 9p.
658. Testo, W. & Sundue, M. 2016. A 4000-species dataset provides new insight into the evolution of ferns. *Molecular Phylogenetics and Evolution* 105: 200-211.

659. Thomas, A., Prashob Peter, K. J. & Chandramohanakumar, N. 2016. A profiling of anti-tumour potential of sterols in the mangrove fern *Acrostichum aureum*. *International Journal of Pharmacognosy and Phytochemical Research* 8(11): 1828-1832.
660. Thomson, J. A. 2016. Free axial lobes: an important diagnostic character in *Pteridium* (Dennstaedtiaceae). *Telopea* 19: 193-200.
661. Thrippleton, T., Bugmann, H., Kramer-Priewasser, K. & Snell, R. S. 2016. Herbaceous understorey: an overlooked player in forest landscape dynamics? *Ecosystems* 19(7): 1240-1254.
662. Tian, N., Wang, Y. D., Dong, M., Li, L. Q. & Jiang, Z. K. 2016. A systematic overview of fossil Osmundalean ferns in China: diversity variation, distribution pattern, and evolutionary implications. *Palaeoworld* 25(2): 149-169.
663. Tiwari, S., Sarangi, B. K. & Thul, S. T. 2016. Identification of arsenic resistant endophytic bacteria from *Pteris vittata* roots and characterization for arsenic remediation application. *Journal of Environmental Management* 180: 359-365.
664. Tognella, M. M. P., Soares, M. L. G., Cuevas, E. & Medina, E. 2016. Heterogeneity of elemental composition and natural abundance of stable isotopes of C and N in soils and leaves of mangroves at their southernmost West Atlantic range. *Brazilian Journal of Biology* 76(4): 994-1003.[*Acrostichum danaeifolium*]
665. Tomei, E. J. & Wolniak, S. M. 2016. Kinesin-2 and kinesin-9 have atypical functions during ciliogenesis in the male gametophyte of *Marsilea vestita*. *BMC Cell Biology* 17: e29.
666. Tomei, E. J. & Wolniak, S. M. 2016. Transcriptome analysis reveals a diverse family of kinesins essential for spermatogenesis in the fern *Marsilea*. *Cytoskeleton* 73(3): 145-159.
667. Torre, J. B. B. de la, Claveria, R. J. R., Perez, R. E. C., Perez, T. R. & Doronila, A. I. 2016. Copper uptake by *Pteris melanocaulon* Fee from a copper-gold mine in Surigao del Norte, Philippines. *International Journal of Phytoremediation* 18(5): 435-441.
668. Tosens, T., Nishida, K., Gago, J., Coopman, R. E., Cabrera, H. M., Carriqui, M., Laanisto, L., Morales, L., Nadal, M., Rojas, R., Talts, E., Tomas, M., Hanba, Y., Niinemets, U. & Flexas, J. 2016. The photosynthetic capacity in 35 ferns and fern allies: mesophyll CO<sub>2</sub> diffusion as a key trait. *New Phytologist* 209(4): 1576-1590.
669. Troccoli, A., Subbotin, S. A., Chitambar, J. J., Janssen, T., Waeyenberge, L., Stanley, J. D., Duncan, L. W., Agudelo, P., Uribe, G. E. M., Franco, J. & Inserra, R. N. 2016. Characterisation of amphimictic and parthenogenetic populations of *Pratylenchus bolivianus* Corbett, 1983 (Nematoda: Pratylenchidae) and their phylogenetic relationships with closely related species. *Nematology* 18: 651-678.[*Nephrolepis exaltata*]
670. Troia, A. & Lansdown, R. 2016. The first confirmed population of the globally endangered *Pilularia minuta* (Marsileaceae) in Sicily. *Webbia* 71(2): 283-286.
671. Troia, A., Pereira, J. B., Kim, C. & Taylor, W. C. 2016. The genus *Isoetes* (Isoetaceae): a provisional checklist of the accepted and unresolved taxa. *Phytotaxa* 277(2): 101-145.
672. Tsutsumi, C., Chen, C. W., Larsson, A., Hirayama, Y. & Kato, M. 2016. Phylogeny and classification of Davalliaceae on the basis of chloroplast and nuclear markers. *Taxon* 65(6): 1236-1248.
673. Tsutsumi, C., Uemura, K., Yatabe-Kakugawa, Y., Tsukagoshi, M. & Kato, M. 2016. A comparative morphological study of pinnules in the Cenozoic *Osmunda* subgenus *Osmunda* (Osmundaceae): implications for its historical biogeography and phylogeny. *International Journal of Plant Sciences* 177(5): 449-457.

674. Tu, X., Xu, X. H., Zhang, Y., Ruan, Q. F., Gao, H. L. & Yuan, C. Y. 2016. Study on ecological environment and accompanying plants' community characteristics study of wild *Panax japonicus* in Enshi. *China Journal of Chinese Materia Medica* 41(9): 1596-1601.
675. Tuomisto, H., Moulatlet, G. M., Balslev, H., Emilio, T., Figueiredo, F. O. G., Pedersen, D. & Ruokolainen, K. 2016. A compositional turnover zone of biogeographical magnitude within lowland Amazonia. *Journal of Biogeography* 43(12): 2400-2411.
676. Tuovinen, T. S., Kasurinen, A., Haikio, E., Tervahauta, A., Makkonen, S., Holopainen, T. & Juutilainen, J. 2016. Transfer of elements relevant to nuclear fuel cycle from soil to boreal plants and animals in experimental meso- and microcosms. *Science of the Total Environment* 539: 252-261.[*Dryopteris carthusiana*]
677. Turner, B. L., Geoghegan, J., Lawrence, D., Radcliff, C., Schmook, B., Vance, C., Manson, S., Keys, E., Foster, D., Klepeis, P., Vester, H., Rogan, J., Chowdhury, R. R., Schneider, L., Dickson, R. & Ogenva-Himmelberger, Y. 2016. Land system science and the social-environmental system: the case of Southern Yucatan Peninsular Region (SYPR) project. *Current Opinion in Environmental Sustainability* 19: 18-29.[*Pteridium*]
678. Ueda, Y. 2016. Final-stage site-selective acylation for the total synthesis of natural glycosides. *Journal of the Pharmaceutical Society of Japan* 136(12): 1631-1639.[*Pteridium*]
679. Unida, S. & Patruno, S. 2016. The palynostratigraphy of the Upper Maiolica, Selli Level and the Lower Marne a Fucoidi units in the proposed Barremian/Aptian (Lower Cretaceous) GSSP stratotype at Gorgo a Cerbara, Umbria-Marche Basin, Italy. *Palynology* 40(2): 230-246.
680. Uprety, Y., Lacasse, A. & Asselin, H. 2016. Traditional uses of medicinal plants from the Canadian boreal forest for the management of chronic pain syndromes. *Pain Practice* 16(4): 459-466.[*Lycopodium obscurum*, *Matteuccia struthiopteris*, *Pteridium aquilinum*]
681. Vaganov, A. V., Shmakov, A. I. & Friesen, N. 2016. Synopsis of the genus *Anopteris* (Pteridophyta, Pteridaceae). *Biosystems Diversity* 24(2): 495-500.
682. Vajda, V., Fernandez, M. D. P., Villanueva-Amadoz, U., Lehsten, V. & Alcala, L. 2016. Dietary and environmental implications of Early Cretaceous predatory dinosaur coprolites from Teruel, Spain. *Palaeogeography Palaeoclimatology Palaeoecology* 464: 134-142.
683. Vajda, V., Linderson, H. & McLoughlin, S. 2016. Disrupted vegetation as a response to Jurassic volcanism in southern Sweden, In: Kear, B. P., Lindgren, J., Hurum, J. H., Milan, J. & Vajda, V. (ed.). *Mesozoic biotas of Scandinavia and its Arctic territories*. Geological Society: Bath, pp. 127-147.
684. Valdespino, I. A. 2016. Novelties in *Selaginella* (Selaginellaceae - Lycopodiophyta), with emphasis on Brazilian species. *Phytokeys* 57: 93-133.
685. van der Burgh, J. & van Konijnenburg-van Cittert, J. H. A. 2016. The Kimmeridgian flora of Segelhorst, northern Germany (Niedersachsen). *Documenta Naturae* 198: 1-35.
686. van der Ent, A., Erskine, P., Mulligan, D., Repin, R. & Karim, R. 2016. Vegetation on ultramafic edaphic 'islands' in Kinabalu Park (Sabah, Malaysia) in relation to soil chemistry and elevation. *Plant and Soil* 403(1-2): 77-101.
687. van Kempen, M. M. L., Smolders, A. J. P., Bogemann, G. M., Lamers, L. P. M. & Roelofs, J. G. M. 2016. Interacting effects of atmospheric CO<sub>2</sub> enrichment and solar radiation on growth of the aquatic fern *Azolla filiculoides*. *Freshwater Biology* 61(5): 596-606.
688. van Konijnenburg-van Cittert, J. H. A., Kustatscher, E., Pott, C., Schmeissner, S., Dütsch, G. & Krings, M. 2016. New data on *Selaginellites coburgensis* from the Rhaetian of Wüstenwelsberg

- (Upper Franconia, Germany). Neues Jahrbuch für Geologie und Palaeontologie, Abhandlungen 280(2): 177-181.
689. Vasco, A., Smalls, T. L., Graham, S. W., Cooper, E. D., Wong, G. K. S., Stevenson, D. W., Moran, R. C. & Ambrose, B. A. 2016. Challenging the paradigms of leaf evolution: Class III HD-Zips in ferns and lycophytes. *New Phytologist* 212(3): 745-758.
690. Vasheka, O., Puglielli, G., Crescente, M. F., Varone, L. & Gratani, L. 2016. Anatomical and morphological leaf traits of three evergreen ferns (*Polystichum setiferum*, *Polypodium interjectum* and *Asplenium scolopendrium*). *American Fern Journal* 106(4): 258-268.
691. Vaz, F. C., Tereso, J. P., Lemos, P. P. & Abranches, P. B. 2016. Estudo arqueobotânico do castro de cidadelhe (Mesão frio): Resultados preliminares. *Estudos do Quaternario* 2016(15): 59-69.[*Pteridium aquilinum*, Portuguese]
692. Vera, E. I. & Cesari, S. N. 2016. Marattiaceae synangia from the lower Cretaceous of Antarctica. *Review of Palaeobotany and Palynology* 235: 6-10.
693. Verma, D. K., Hasan, S. H. & Banik, R. M. 2016. Photo-catalyzed and phyto-mediated rapid green synthesis of silver nanoparticles using herbal extract of *Salvinia molesta* and its antimicrobial efficacy. *Journal of Photochemistry and Photobiology B-Biology* 155: 51-59.
694. Vermeij, G. J. 2016. Plant defences on land and in water: Why are they so different? *Annals of Botany* 117(7): 1099-1109.
695. Viana, P. L., Mota, N. F. D. O., Gil, A. D. S. B., Salino, A., Zappi, D. C., Harley, R. M., Ilkiu-Borges, A. L., Secco, R. D. S., Almeida, T. E., Watanabe, M. T. C., Dos Santos, J. U. M., Trovo, M., Maurity, C. & Giulietti, A. M. 2016. Flora of the cangas of the Serra dos Carajás, Pará, Brazil: History, study area and methodology. *Rodriguesia* 67(5): 1107-1124.
696. Vijisha, P. & Rajesh, K. P. 2016. Pteridophyte flora of Aralam Wildlife Sanctuary, Kerala - A preliminary analysis. *Cryptogam Biodiversity and Assessment* 1(1): 71-74.
697. Villasenor, J. L. 2016. Checklist of the native vascular plants of Mexico. *Revista Mexicana de Biodiversidad* 87(3): 559-902.
698. Vries, J., Fischer, A. M., Roettger, M., Rommel, S., Schlupepmann, H., Brautigam, A., Carlsbecker, A. & Gould, S. B. 2016. Cytokinin-induced promotion of root meristem size in the fern *Azolla* supports a shoot-like origin of euphyllophyte roots. *New Phytologist* 209(2): 705-720.
699. Wada, M. 2016. Chloroplast and nuclear photorelocation movements. *Proceedings of the Japan Academy Series B-Physical and Biological Sciences* 92(9): 387-411.[*Adiantum capillus-veneris*]
700. Wagner, R. H. & Alvarez-Vazquez, C. 2016. A reappraisal of *Pecopteris miltonii* (Artis) Brongniart, a mid-Westphalian (Early-Mid Pennsylvanian) fern. *Proceedings of the Yorkshire Geological Society* 61: 37-53.
701. Wahid, F., Khan, T., Shehzad, O., Shehzad, A. & Kim, Y. Y. 2016. Phytochemical analysis and effects of *Pteris vittata* extract on visual processes. *Journal of Natural Medicines* 70(1): 8-17.
702. Wan, X. M., Lei, M. & Chen, T. B. 2016. Interaction of As and Sb in the hyperaccumulator *Pteris vittata* L.: changes in As and Sb speciation by XANES. *Environmental Science and Pollution Research* 23(19): 19173-19181.
703. Wang, B., Wu, F. Z., Xiao, S., Yang, W. Q., Justine, M. F., He, J. Y. & Tan, B. 2016. Effect of succession gaps on the understory water-holding capacity in an over-mature alpine forest at the upper reaches of the Yangtze River. *Hydrological Processes* 30(5): 692-703.

704. Wang, B., Xia, F. Y., Engel, M. S., Perrichot, V., Shi, G. L., Zhang, H. C., Chen, J., Jarzembowski, E. A., Wappler, T. & Rust, J. 2016. Debris-carrying camouflage among diverse lineages of Cretaceous insects. *Science Advances* 2(6): e1501918.
705. Wang, C. J., Wan, J. Z., Zhang, Z. X. & Zhang, G. M. 2016. Identifying appropriate protected areas for endangered fern species under climate change. *Springerplus* 5: e904.
706. Wang, C. X. & Yan, Y. H. 2016. A case of background matching in the caterpillars of *Xenotrachea* (Lepidoptera, Noctuidae) with the fronds of *Polypodioides amoena* (Polypodiaceae). *American Fern Journal* 106(3): 223-226.
707. Wang, F. H., Lu, J. M., Wen, J., Ebihara, A. & Li, D. Z. 2016. Applying DNA barcodes to identify closely related species of ferns: a case study of the Chinese *Adiantum* (Pteridaceae). *Plos One* 11(9): e0160611.
708. Wang, Q. S. Y., Zheng, C. Y., Zhang, X. Y., Zeng, F. X. & Xing, J. 2016. Impacts of nitrogen addition on foliar nitrogen and phosphorus stoichiometry in a subtropical evergreen broad-leaved forest in Mount Wuyi. *Chinese Journal of Plant Ecology* 40(11): 1124-1135.[*Woodwardia japonica*]
709. Wang, S. Y., Kuo, Y. C., Hong, A., Chang, Y. M. & Kao, C. M. 2016. Bioremediation of diesel and lubricant oil-contaminated soils using enhanced landfarming system. *Chemosphere* 164: 558-567.[*Cyathea*, fern chips]
710. Wang, W. Z., Tong, W. S., Li, Y., Gao, R., Zhang, L. G. & Chang, Y. 2016. *De novo* transcriptome sequencing and comparative analysis of differentially expressed genes in *Dryopteris fragrans* under temperature stress. *Pakistan Journal of Botany* 48(3): 885-898.
711. Wang, X. X., Long, W. X., Schamp, B. S., Yang, X. B., Kang, Y., Xie, Z. X. & Xiong, M. H. 2016. Vascular epiphyte diversity differs with host crown zone and diameter, but not orientation in a tropical cloud forest. *Plos One* 11(7): e0158548.
712. Wang, X., Fang, X., Gan, H., Jiang, W. & Wu, M. 2016. Electrochemical determination of ternatin in ternate grape fern herb based on the graphene-Au nanocomposite. *International Journal of Electrochemical Science* 11(11): 9369-9378.[*Botrychium ternatum*]
713. Wang, Y., Wang, X. & Wang, Y. 2016. Discussion on age of "Sailiyakedaban Group" in southern Yecheng, South Xinjiang, NW China. *Earth Science - Journal of China University of Geosciences* 41(7): 1099-1109.
714. Warren, J. M., Simmons, M. P., Wu, Z. Q. & Sloan, D. B. 2016. Linear plasmids and the rate of sequence evolution in plant mitochondrial genomes. *Genome Biology and Evolution* 8(2): 364-374.
715. Watkins, J. E., Churchill, A. C. & Holbrook, N. M. 2016. A site for sori: ecophysiology of fertile-sterile leaf dimorphism in ferns. *American Journal of Botany* 103(5): 845-855.
716. Wei, R. & Zhang, X. C. 2016. *Athyrium sessilipinnum*: a new lady fern (Athyriaceae) from southern China. *Brittonia* 68(4): 440-447.[new species]
717. Weigand, A. & Lehnert, M. 2016. The scaly tree ferns (Cyatheaceae-Polypodiopsida) of Brazil. *Acta Botanica Brasilica* 30(3): 336-350.
718. Wen, J., Nie, Z. L. & Ickert-Bond, S. M. 2016. Intercontinental disjunctions between eastern Asia and western North America in vascular plants highlight the biogeographic importance of the Bering land bridge from late Cretaceous to Neogene. *Journal of Systematics and Evolution* 54(5): 469-490.

719. Weststrand, S. & Korall, P. 2016. A subgeneric classification of *Selaginella* (Selaginellaceae). American Journal of Botany 103(12): 2160-2169.
720. Weststrand, S. & Korall, P. 2016. Phylogeny of Selaginellaceae: there is value in morphology after all! American Journal of Botany 103(12): 2136-2159.
721. Wheeler, A. & Götz, A. E. 2016. Palynofacies patterns of the Highveld coal deposits (Karoo Basin, South Africa): clues to reconstruction of palaeoenvironment and palaeoclimate. Acta Palaeobotanica 56(1): 3-15.
722. Whitney, C. W., Min, V. S., Giang, L. H., Can, V. V., Barber, K. & Lanh, T. T. 2016. Learning with elders: human ecology and ethnobotany explorations in Northern and Central Vietnam. Human Organization 75(1): 71-86.
723. Williams, E. W., Farrar, D. R. & Henson, D. 2016. Cryptic speciation in allotetraploids: lessons from the *Botrychium matricariifolium* complex. American Journal of Botany 103(4): 740-753.
724. Williams, E., Theis, Z. & Hoess, C. 2016. Identifying a cryptic *Adiantum* population through DNA barcoding. American Fern Journal 106(2): 135-142.
725. Wongphakdee, S., Boonkerd, T. & Pollawatn, R. 2016. *Tectaria kehdingiana* (Kuhn) M.G. Price (Tectariaceae), a lesser-known species from Peninsular Thailand. Songklanakarin Journal of Science and Technology 38(5): 575-579.
726. Wu, G. L., Kuo, T. H., Tsay, T. T., Tsai, I. J. & Chen, P. J. 2016. Glycoside hydrolase (GH) 45 and 5 candidate cellulases in *Aphelenchoides besseyi* isolated from bird's-nest fern. Plos One 11(7): e0158663. [*Asplenium nidus*, nematodes]
727. Xavier, G. S. A., Selvaraj, P. & John, N. 2016. Impact of phytoecdysone fractions of the ferns *Cyclosorus interruptus*, *Christella dentata* and *Nephrolepis cordifolia* on the biology of *Spodoptera litura* (Fab.). Journal of Biopesticides 9(2): 125-134.
728. Xie, S. P., Li, B. K., Zhang, S. H., Shao, Y., Wu, J. Y. & Sun, B. N. 2016. First megafossil record of *Neolepisorus* (Polypodiaceae) from the late Miocene of Yunnan, Southwest China. Palaeontologische Zeitschrift 90(2): 413-423.
729. Xu, X. G. & Zhang, L. B. 2016. *Pleocnemia siamensis* (Dryopteridaceae), a new fern species from southern Thailand. Phytotaxa 289(1): 88-92.[new species]
730. Xu, Y., Dai, X. L., Liu, B. D. & Wang, Q. X. 2016. Cloning, expression, and characterization of Fe-SOD from *Isoetes sinensis*. Genetics and Molecular Research 15(4): e15047131.
731. Xue, J. Z. & Basinger, J. F. 2016. *Melvillipteris quadriseriata* gen. et sp nov., a new plant assigned to Rhacophytalea from the Upper Devonian (Famennian) of Arctic Canada. Geological Magazine 153(4): 601-617.
732. Yadav, R. K., Tripathi, K., Ramteke, P. W., Varghese, E. & Abraham, G. 2016. Salinity induced physiological and biochemical changes in the freshly separated cyanobionts of *Azolla microphylla* and *Azolla caroliniana*. Plant Physiology and Biochemistry 106: 39-45.
733. Yahaya, N. H., Stech, M., Zonneveld, B. J. M. & Hovenkamp, P. H. 2016. What is *Nephrolepis 'bostoniensis'*? Unravelling the origin of *Nephrolepis* hybrids and cultivars with molecular data. Scientia Horticulturae 204: 153-160.
734. Yamamoto, T., Tsuda, Y., Mori, G. M., Cruz, M. V., Shinmura, Y., Wee, A. K. S., Takayama, K., Asakawa, T., Yamakawa, T., Suleiman, M., Nunez-Farfan, J., Webb, E. L., Watano, Y. & Kajita, T. 2016. Development and characterization of 27 microsatellite markers for the mangrove fern, *Acrostichum aureum* (Pteridaceae). Applications in Plant Sciences 4(9): e1600042.



735. Yan, M. X., Wan, M. L., He, X. Z., Hou, X. D. & Wang, J. 2016. First report of Cisuralian (early Permian) charcoal layers within a coal bed from Baode, North China with reference to global wildfire distribution. *Palaeogeography Palaeoclimatology Palaeoecology* 459: 394-408.
736. Yanez, A., Marquez, G. J. & Morbelli, M. A. 2016. Spore morphology and ultrastructure of Dennstaedtiaceae from Paranaense phytogeographic province I.: genus *Dennstaedtia*. *Review of Palaeobotany and Palynology* 224: 181-194.
737. Yanez, A., Marquez, G. J. & Morbelli, M. A. 2016. Palynological analysis of Dennstaedtiaceae taxa from the Paranaense phytogeographic province that produce trilete spores II: *Microlepis spelunca* and *Pteridium arachnoideum*. *Anais da Academia Brasileira de Ciencias* 88(2): 877-890.
738. Yang, L., Chen, Y., Huang, Y., Wang, J. & Wen, M. 2016. Mixed allelopathic effect of *Eucalyptus* leaf litter and understorey fern in South China. *Journal of Tropical Forest Science* 28(4): 436-445.[*Dicranopteris dichotoma*]
739. Yang, P., Lu, T., Qiu, Z., Chen, P., Peng, Y. & Tan, X. 2016. Analyses on ecological characteristics and endangered reason of endangered plant *Petrocosmea qinlingensis*. *Journal of Plant Resources and Environment* 25(3): 90-95.[competition, plant communities]
740. Yang, S. X., Li, J., Liu, K. B., Li, R. H., Wen, Z. H., Ye, S. Y., Yi, S. & Chen, X. H. 2016. Pollen-spore distribution in the surface sediments of the western Bohai Sea, China. *Quaternary International* 392: 213-223.
741. Yang, X. Y., Long, Z. C., Gichira, A. W., Guo, Y. H., Wang, Q. F. & Chen, J. M. 2016. Development of microsatellite markers in the tetraploid fern *Ceratopteris thalictroides* (Parkeriaceae) using RAD tag sequencing. *Genetics and Molecular Research* 15(1): e15017550.
742. Yao, H. K., Duan, J. Y., Zhang, C. P., Li, Y. & Liu, C. Y. 2016. Coumaric acid glucosides from the Chinese fern *Polypodium hastatum*. *Chemistry of Natural Compounds* 52(4): 669-671.
743. Yepes, A., Sierra, A., Nino, L. M., Lopez, M., Garay, C., Vargas, D., Cabrera, E. & Barbosa, A. 2016. Biomass and total carbon in oak forests of southern Colombian Andes: contributions to the REDD plus project-wide approach. *Revista de Biología Tropical* 64(1): 399-412.
744. Yousaf, B., Amina, Liu, G., Wang, R., Qadir, A., Ali, M. U., Kanwal, Q., Munir, B., Asmatullah & Abbas, Z. 2016. Bisphenol A exposure and healing effects of *Adiantum capillus-veneris* L. plant extract (APE) in bisphenol A-induced reproductive toxicity in albino rats. *Environmental Science and Pollution Research* 23(12): 11645-11657.
745. Yu, R. P., Cheng, X. Y., Zhang, G. F., Li, H. & Gui, M. 2016. Observation on gametophyte development and apogamy of the endangered fern *Cibotium barometz*. *Plant Physiology Journal* 52(8): 1305-1311.
746. Zarate-Cruz, G. S., Zavaleta-Mancera, H. A., Alarcón, A. & Jimenez-Garcia, L. F. 2016. Phytotoxicity of ZnO nanoparticles on the aquatic fern *Azolla filiculoides* Lam. *Agrociencia* 50(6): 677-691.
747. Zeiger, C., Rodrigues da Silva, I. C., Mail, M., Kavalenka, M. N., Barthlott, W. & Hölscher, H. 2016. Microstructures of superhydrophobic plant leaves - Inspiration for efficient oil spill cleanup materials. *Bioinspiration and Biomimetics* 11(5): e056003.
748. Zeng, W. W. & Lai, L. S. 2016. Characterization of the mucilage extracted from the edible fronds of bird's nest fern (*Asplenium australasicum*) with enzymatic modifications. *Food Hydrocolloids* 53: 84-92.

749. Zhan, J., Li, T., Yu, H., Zhang, X. & Zhao, L. 2016. The influence of humic substance on Cd accumulation of phytostabilizer *Athyrium wardii* (Hook.) grown in Cd-contaminated soils. *Environmental Science and Pollution Research* 23(18): 18524-18532.
750. Zhang, J. L., Liu, F. Z. & Gui, G. F. 2016. Spatio-temporal variation of vegetation and analysis of its driving factors in Changbai Mountain National Nature Reserve. *Acta Ecologica Sinica* 36(12): 3525-3536.
751. Zhang, K. M., Shen, Y., Fang, Y. M. & Liu, Y. 2016. Changes in gametophyte physiology of *Pteris multifida* induced by the leaf leachate treatment of the invasive *Bidens pilosa*. *Environmental Science and Pollution Research* 23(4): 3578-3585.
752. Zhang, K. M., Shen, Y., Zhou, X. Q., Fang, Y. M., Liu, Y. & Ma, L. Q. 2016. Photosynthetic electron-transfer reactions in the gametophyte of *Pteris multifida* reveal the presence of allelopathic interference from the invasive plant species *Bidens pilosa*. *Journal of Photochemistry and Photobiology B-Biology* 158: 81-88.
753. Zhang, L., Schuettpelz, E., Rothfels, C. J., Zhou, X. M., Gao, X. F. & Zhang, L. B. 2016. Circumscription and phylogeny of the fern family Tectariaceae based on plastid and nuclear markers, with the description of two new genera: *Draconopteris* and *Malaifilix* (Tectariaceae). *Taxon* 65(4): 723-738.[new genus]
754. Zhang, S., Xia, W., Yang, X. & Zhang, T. 2016. Inhibition effect of aquaculture water of *Salvinia natans* (L.) All. on *Microcystis aeruginosa* PCC7806. *Journal of Hygiene Research* 45(1): 81-86.
755. Zhang, Y., Wu, X., Yang, Y., Zhang, C., Guo, W. & Song, W. 2016. Early Cretaceous plant fossils and their paleoenvironment in Longjiang basin on the eastern slope of middle Da Hinggan Mountains. *Geological Bulletin of China* 35(6): 856-865.
756. Zhang, Z., He, Z. W., Xu, S. H., Li, X. N., Guo, W. X., Yang, Y. C., Zhong, C. R., Zhou, R. C. & Shi, S. H. 2016. Transcriptome analyses provide insights into the phylogeny and adaptive evolution of the mangrove fern genus *Acrostichum*. *Scientific Reports* 6: e35634.
757. Zhao, C. F., Kwak, M. & Xiang, Q. P. 2016. Isolation and characterization of microsatellite markers in the *Lepisorus clathratus* complex (Polypodiaceae). *Applications in Plant Sciences* 4(10): e1600069.
758. Zhao, H. G. & Dong, S. Y. 2016. A new hybrid of *Tectaria* (Tectariaceae) from southern China. *Phytotaxa* 266(3): 213-218.
759. Zhao, L. N., Li, J. Y., Liu, H. Y. & Qin, H. N. 2016. Distribution, congruence, and hotspots of higher plants in China. *Scientific Reports* 6: e19080.
760. Zhao, L., Li, T. X., Zhang, X. Z., Chen, G. D., Zheng, Z. C. & Yu, H. Y. 2016. Pb uptake and phytostabilization potential of the mining ecotype of *Athyrium wardii* (Hook.) grown in Pb-contaminated soil. *Clean-Soil Air Water* 44(9): 1184-1190.
761. Zhao, L., Li, T., Yu, H., Zhang, X. & Zheng, Z. 2016. Effects of [S,S]-ethylenediaminedisuccinic acid and nitrilotriacetic acid on the efficiency of Pb phytostabilization by *Athyrium wardii* (Hook.) grown in Pb-contaminated soils. *Journal of Environmental Management* 182: 94-100.
762. Zhao, L., Li, T., Zhang, X., Chen, G., Zheng, Z. & Yu, H. 2016. Rhizosphere characteristics of Pb phytostabilizer *Athyrium wardii* (Hook.) involved in Pb accumulation. *Environmental Earth Sciences* 75(6): e463.
763. Zhao, R. R., Yang, W. L. & Zhang, G. M. 2016. A study of chromosome and gametophyte development in *Pellaea connectens* C. Chr. *Phytotaxa* 266(3): 206-212.

764. Zheleznova, O. S., Chernykh, N. A., Grachev, V. A., Baeva, Y. I. & Tobratov, S. A. 2016. Accumulation of  $^{137}\text{Cs}$  and  $^{40}\text{K}$  by plants of forest ecosystems: the estimation of plant species factor. Case study: mixed forests of the east European plain. *Research Journal of Pharmaceutical, Biological and Chemical Sciences* 7(6): 547-560. [*Pteridium aquilinum*]
765. Zheng, H. D. & Zhuang, W. Y. 2016. Two new species of *Crocicreas* (Helotiaceae, Ascomycota) revealed by morphological and molecular data. *Phytotaxa* 272(2): 149-156.
766. Zhou, M. Q., Wu, Q. Y., Han, Y. T. & Wang, K. W. 2016. Secondary metabolites of *Pteridium revolutum* and their immunosuppressive activity. *Chemistry of Natural Compounds* 52(6): 1147-1150.
767. Zhou, N., Wang, Y. D., Li, L. Q. & Zhang, X. Q. 2016. Diversity variation and tempo-spatial distributions of the Dipteridaceae ferns in the Mesozoic of China. *Palaeoworld* 25(2): 263-286.
768. Zhou, X., Sun, L. G., Chu, Y. X., Xia, Z. H., Zhou, X. Y., Li, X. Z., Chu, Z. D., Liu, X. J., Shao, D. & Wang, Y. H. 2016. Catastrophic drought in East Asian monsoon region during Heinrich event 1. *Quaternary Science Reviews* 141: 1-8.
769. Zhu, A. D., Guo, W. H., Gupta, S., Fan, W. S. & Mower, J. P. 2016. Evolutionary dynamics of the plastid inverted repeat: the effects of expansion, contraction, and loss on substitution rates. *New Phytologist* 209(4): 1747-1756.
770. Zhu, S. D., Li, R. H., Song, J., He, P. C., Liu, H., Berninger, F. & Ye, Q. 2016. Different leaf cost-benefit strategies of ferns distributed in contrasting light habitats of sub-tropical forests. *Annals of Botany* 117(3): 497-506.
771. Zhu, X. W., Mao, S. Y., Wu, N. Y., Jia, G. D., Sun, Y. G., Guan, H. X. & Wu, D. D. 2016. Detection and indication of 1,3,4-C<sub>27-29</sub> triol in the sediment of northern South China Sea. *Science China-Earth Sciences* 59(6): 1187-1194. [*Azolla*]
772. Zotz, G. 2016. *Plants on plants - the biology of vascular epiphytes*. Springer, Cham, pp. 282.
773. Zotz, G., Weichgrebe, T., Hapfatz, H. & Einzmann, H. J. R. 2016. Measuring the terminal velocity of tiny diaspores. *Seed Science Research* 26(3): 222-230.
774. Zumkeller, S. M., Knoop, V. & Knie, N. 2016. Convergent evolution of fern-specific mitochondrial group II intron atp1i361g2 and its ancient source paralogue rps3i249g2 and independent losses of intron and RNA editing among Pteridaceae. *Genome Biology and Evolution* 8(8): 2505-2519.
775. Zuo, Z. Y., Dong, S. Y. & Li, Y. Y. 2016. The *Alsophila costularis* in Mt. Yunkai. *Life World* 2016(12): 76-77. [Chinese]
776. Zuo, Z. Y., Wu, S. Y. & Dong, S. Y. 2016. A survey on the Cyatheaceae in Baichong Nature Reserve in Yangchun, Guangdong, South China. *Subtropical Plant Science* 45(3): 248-254. [Chinese, English abstract]



## A

- Abbas, Z., 744  
 Abbasi, S. A., 272  
 Abbasi, T., 272  
 Abdel-Azeem, A. M., 1  
 Abdelfattah, I., 165  
 Abraham, G., 732  
 Abranches, P. B., 691  
*Abrodictyum franceae*, 153  
*Abrodictyum pseudorigidum*, 153  
*Abrodictyum rigidum*, 153  
 abscisic acid, 415, 472  
 absorption, 395  
 Absy, M. L., 572  
 Abu Hamad, A. M. B., 2  
 Achaegakwo, C. A., 27  
*Acrostichum*, 450, 756  
*Acrostichum aureum*, 400, 659, 734  
*Acrostichum danaeifolium*, 664  
 actinomycetes, 429  
*Actinorhabdospora filicis*, 429  
 Adak, M. K., 137  
 Ade, A. B., 397  
 Adekanmbi, O. H., 172  
 Adekola, F. A., 132  
 Adhikari, P., 3  
*Adiantopsis alata*, 360  
*Adiantopsis aurea*, 360  
*Adiantopsis hickeyi*, 360  
*Adiantopsis scalariformis*, 360  
*Adiantum*, 51, 262, 288, 316, 413, 535, 707, 724  
*Adiantum capillus-veneris*, 1, 61, 315, 430, 454, 503, 574, 699, 744  
*Adiantum latifolium*, 378  
*Adiantum philippense*, 294  
*Adiantum raddianum*, 259  
*Adiantum x meishanianum*, 612  
 adsorbents, 26, 53, 132  
 adsorption, 32, 33, 161, 317, 440, 568  
 aerobiology, 215, 536, 773  
 Africa, 37, 154, 160, 264, 363, 385, 393, 454, 485, 599, 611, 721  
 agriculture, 313  
 Agudelo, P., 669  
 Aguiar, G., 486  
 Aguilera-Benavente, F., 518  
 Ahmad, N., 481  
 Ahmaruzzaman, M., 629  
 Ahmed, I., 53  
 Ahmed, S., 575  
 Aho, K., 220  
 Aidar, M. P. M., 479  
 Akcay, Ü., 25  
 Akinbile, C. O., 4  
 Alam, J., 609  
 Alarcon, A., 584  
 Alarcón, A., 746  
 Alarfaj, A. A., 498  
 Alaska, 424  
 Albanian, 27  
 Alcalá, L., 682  
 Alekseev, A., 5  
 Alekseeva, T., 5  
 Alekseeva, V., 5  
 Aletrari, E., 82  
 Alfaro, F. D., 119  
 Alford, M. H., 419  
 Alfredsson, H., 6  
 algae, 131  
 Ali, B., 176  
 Ali, M. U., 744  
 Ali, T., 575  
 alien species, 611, 656  
 allelopathy, 272, 283, 352, 481, 738, 751, 752, 754  
 Allen, D. E., 7  
 allergies, 13  
 Allison, G., 123  
 allopatry, 612  
 allopolyploids, 399  
 Alm, T., 8  
 Almeida, T. E., 9, 10, 24, 120, 197, 525, 580, 695  
 Alonso-Amelot, M. E., 489  
 alpine forests, 703  
*Alsophila costularis*, 775  
*Alsophila spinulosa*, 286  
*Alsophila weidenbrueckii*, 344  
 Altaf, H., 575  
 Altai mountains, 232  
 Altenhovel, C., 59  
 Alvarez-Vazquez, C., 700  
 Alvarez-Zuniga, E., 582  
 Alves, M., 188  
 Amazonia, 462, 572, 585, 675  
 amber, 510, 595, 647  
 Ambrose, B. A., 11, 689  
 Amina, 744  
 Amireh, B., 2, 236  
 Amit, K., 559  
 Amorim, A. M., 197  
 Amorim, B. S., 188  
 Amoroso, V. B., 12, 157, 326  
*Amphorophora ampullata*, 554  
*Anabaena azollae*, 508  
 anatomy, 198, 307, 480  
 Andaman Islands, 627  
 Andersen, F., 13  
 Andes, 444, 743  
 Andrade, J. C., 441  
 Andrade, J. M. D., 14  
 Andrade, L. S. de, 129  
 Angeles, G., 307  
 Angelica, R. S., 21  
 Anggeraini, D., 169  
 Angielczyk, K. D., 37  
 Angiolini, C., 335  
*Angiopteris evecta*, 397  
 Annamalai, P., 541  
*Anogramma chaerophylla*, 381, 382  
*Anogramma leptophylla*, 242  
 Ansari, A. A., 433  
 Antarctica, 275, 329, 428, 692  
 antibiotics, 90, 169, 203, 281, 334, 468, 575, 636  
 anti-inflammatory, 90, 269  
 antimony, 702  
 Antony, R., 15  
 ants, 164, 471  
 aphids, 554  
 apogamy, 745  
 apomixis, 159, 225  
 apospory, 15  
 Apostolakos, P., 640  
 Appel, J., 105  
 aquaporin, 250  
 aquatic ferns, 431, 433, 460, 478, 507, 533, 538, 628, 637, 652, 687, 746  
*Arachniodes*, 15  
 Araki, T., 16  
 Arana, M. D., 17, 18, 19, 411, 495, 525  
 Araujo Stapelfeldt, D. M. de, 440  
 Araujo Goes-Neto, L. A., 497  
 Araujo, J. M. de, 198  
 Araujo, M. B., 407  
 Araujo, R. N., 21  
 Araujo, T. O., 86, 198  
 Araya, H., 16  
 Araya, T. Z., 22  
 Arcanjo-Silva, S., 86  
 Archangelsky, S., 567  
 Archer, S. G., 416  
 Archibald, S. B., 408  
 Archidona-Yuste, A., 22  
 Arctic, 235, 300, 418, 504, 683, 731  
 Arens, N. C., 244  
 Arevalo, J. R., 166

- Argentina, 17, 18, 19, 88, 111, 143, 217, 279, 280, 369, 381, 401, 402, 403, 406, 451, 567, 573
- Argentina, M., 369
- Arinasa, I. B. K., 644
- Armsworth, P. R., 273
- Arnason, J. T., 653
- Arruda, A. J., 457, 458, 576, 577, 578, 579
- arsenate, 147
- arsenic, 86, 87, 147, 176, 181, 198, 241, 271, 278, 359, 367, 476, 482, 487, 584, 641, 663, 702
- arsenite, 250
- Artigas Vilches, R., 23
- Asakawa, T., 734
- ascomycetes, 227, 765
- Asevedo, L., 434
- Ashley, G. M., 394
- Ashtone, L. A., 121
- Asia, 3, 255, 588, 718
- Asis, F. C., 24
- Askerov, A. M., 25
- Aslam, Z., 476
- Asmatullah, 744
- Aspleniaceae, 457
- Asplenium*, 78, 238, 303, 424, 690
- Asplenium adiantum-nigrum*, 214
- Asplenium australasicum*, 748
- Asplenium ceterach*, 211
- Asplenium lepidotum*, 512
- Asplenium nidus*, 145, 146, 164, 640, 726
- Asplenium oblongifolium*, 512
- Asplenium obtusatum*, 512
- Asplenium pifongiae*, 350
- Asplenium sagittatum*, 427
- Asplenium scolopendrium*, 649, 690
- Asplenium septentrionale*, 571
- Asplenium trichomanes*, 424
- Asselin, H., 680
- Assis, F. C., 401, 525
- Asuquo, E. D., 26
- Atallah, N. M., 415
- Atamov, V., 48
- Athayde, F. D., 321
- Athyriaceae, 327
- Athyrium koryoense*, 3
- Athyrium multidentatum*, 362
- Athyrium sessilipinum*, 716
- Athyrium wardii*, 749, 760, 761, 762
- Atlantic forest, 188, 197, 200, 205, 461, 475, 581, 598
- Atta-Peters, D., 27
- Australia, 194, 301, 341, 505, 520, 570, 602
- Avila-Nunez, J. L., 471, 489
- Avilla, L. S., 434
- Aximoff, I., 28
- Aya-Ay, A. M., 29
- Azarpira, H., 32
- Azeem, M., 575
- Azevedo, A. A., 86
- Aziz, A., 498, 539
- Aziz, H. A., 4
- Azolla*, 33, 93, 284, 313, 393, 408, 529, 698
- Azolla caroliniana*, 533, 732
- Azolla filiculoides*, 32, 76, 165, 174, 264, 320, 507, 508, 584, 687, 746
- Azolla japonica*, 637
- Azolla microphylla*, 732
- Azolla pinnata*, 4, 137, 317, 433
- ## B
- Bach, H., 90
- Bacillus pumilus*, 641
- background matching, 706
- bacteria, 6, 105, 429, 663
- Baer, A., 30
- Baeva, Y. I., 764
- Bai, L., 107
- Bai, L. N., 31
- Balarak, D., 32, 33
- Baldwin, J. W., 34
- Bali, 644
- Balslev, H., 675
- Bamford, M. K., 485
- Bandeira, J., 21
- Bangladesh, 97
- Banik, R. M., 693
- Banks, J. A., 415
- Banks, S. C., 54
- Barbacka, M., 35
- Barbe, M., 36
- Barber, K., 722
- Barbolini, N., 37
- Barbosa, A., 743
- Barboza, G. E., 88, 451
- barcoding, 108, 724
- Bardon, A., 636
- Barker, M. S., 38, 525
- Barlocher, F., 101
- Baroncelli, R., 67
- Barral, A., 39
- Barreda, V. D., 341
- Barrera-Redondo, J., 546
- Barreto, R. W., 227, 228
- Barrington, D. S., 451, 525
- Barros, M. A. de, 434
- Barth, O. M., 434
- Barthlott, W., 40, 747
- Barufi, J. B., 191
- Baselga, A., 407
- Basham, E. W., 139
- Bashforth, A. R., 41, 42, 144
- Bashir, S., 476
- basidiomycetes, 553
- Basile, A., 134
- Basinger, J. F., 731
- Baskaran, X., 43
- Basri, K. H., 481
- Basu, M., 538
- Basu, P., 538
- Bateman, R. M., 44
- Batista, J. A. N., 10
- Batke, S. P., 45, 162
- Batten, D. J., 46, 453
- Bauer, D. S., 47
- Bauret, L., 153
- Baykal, H., 48
- Bazrafshan, E., 33
- Beauvais, M. P., 49
- Bechtel, A., 435
- Beck, J., 121
- Beck, S. G., 201
- Becker, D. F. P., 564
- Bedini, G., 50
- Beeretz, L., 59
- Behling, H., 521
- Belgium, 39
- Bendik, N. F., 51
- Benelli, G., 498, 539
- Beneragama, C. K., 549
- Bera, S., 448
- Bera, S. K., 536
- Bergeron, Y., 36
- Bering land bridge, 718
- Berlinger, M., 57
- Berman, B., 52
- Bermuda, 263
- Berninger, F., 770
- Berrueta, P. C., 382
- Berta, G., 87
- Bertin, A., 69
- Bettinardi, M. L., 120
- Bezeng, B. S., 264
- Bhadauria, S., 621
- Bhadra, B. N., 53
- Bhandari, J. B., 333
- Bhandawat, A., 324
- Bharti, S., 559

- Bhat, K. G., 540  
 Bhattacharya, M. K., 468  
 Bianchini, E., 94  
 Bibi, I., 476  
 Bidartondo, M. I., 532  
*Bidens pilosa*, 751, 752  
 Bienaime, D., 75  
 biochemistry, 16, 299, 333, 473, 620, 732  
 biodiesel, 76, 459  
 biogenetic law, 477  
 biogeography, 98, 167, 218, 232, 295, 327, 718, 759  
 biological control, 392, 530  
 biomarkers, 394  
 biomass, 123, 133, 440, 743  
 biomechanics, 182, 369  
 biomimetics, 40, 306, 747  
 biosorption, 145, 146  
 biotechnology, 621  
 bird nests, 34, 583  
 bisphenol A, 744  
 Bissell, J. K., 202  
 Blair, D. P., 54  
 Blanchard, P., 524  
 Blanchard, W., 54  
 Blanchette, R., 257  
 Blechnaceae, 204, 206  
*Blechnum*, 14, 142, 374, 526  
*Blechnum arcuatum*, 606  
*Blechnum brasiliense*, 14  
*Blechnum occidentale*, 217  
 Blume, F., 55  
 Bluthgen, N., 164  
 Boardman, D. R., 56  
 Boatwright, J. S., 264  
 Boch, S., 57  
 Boer, H. J. de, 58  
 Bogemann, G. M., 687  
 Bohnert, T., 59  
 Bohra, P., 627  
*Bolbitis occidentalis*, 444  
 Bolivia, 119  
 Bomfleur, B., 111, 417  
 Bona, M., 60  
 Bonari, G., 50  
 Bonavita, S., 61  
 Bonfante, P., 208  
 Boonkerd, T., 480, 725  
 boreal forests, 36, 252, 680  
 boreal plants, 676  
 Borkosky, S. A., 636  
 Bostock, P. D., 190  
 botanical gardens, 85, 445, 446, 657  
*Botrychium*, 136  
*Botrychium matricariifolium*, 723  
*Botrychium multifidum*, 410  
*Botrychium ternatum*, 712  
 Bottacci, A., 335  
 Bouchardon, J. L., 482  
 Boudrie, M., 62, 63, 64, 65, 125, 126  
 Bourgeois, B., 66  
 Bouzon, Z. L., 191  
 Bowman, J. L., 285  
 Bowring, S. A., 118  
 Boyce, C. K., 473  
 Braga, D. P. P., 120  
 Braga, J. M. A., 28  
 Braganca, C. A. D., 67  
 branching, 253  
 Brandt, A. J., 68  
 Brandt, K. K., 631  
 Brassil, T., 337  
 Brautigam, A., 698  
 Bravin, M. N., 482  
 Bravo, L. A., 192  
 Bravo, S., 69  
 Brazil, 21, 28, 47, 56, 67, 94, 120, 129, 130, 131, 133, 186, 188, 189, 197, 200, 218, 230, 254, 321, 332, 389, 391, 398, 431, 455, 456, 457, 458, 461, 475, 479, 497, 537, 564, 576, 577, 578, 579, 581, 598, 623, 664, 684, 695, 717  
 Brehm, G., 121  
 Bridgewater, A., 123  
 Brigham, L. A., 247  
 Brijithlal, N. D., 378  
 Briones, O., 374  
 Britton, M. R., 72  
 Britton-Harper, Z. J., 195  
 Brock, J. M. R., 73  
 Brodersen, C. R., 74  
 Brodrigg, T. J., 75, 405, 415  
 Broennimann, O., 407  
 Brouwer, P., 76  
 Brown, W. D., 77  
 Brownsey, P. J., 78, 79, 80, 81, 512, 513, 525  
 Brummitt, N., 82  
 Bruna, C., 69  
 Brunton, D. F., 657  
 bryophytes, 36, 233, 407, 557, 591, 607  
 Buenos Aires, 381  
 Bugmann, H., 661  
 Bühle, L., 123  
 Burnard, D., 83  
 Burns, A. M., 261  
 Burns, B. R., 73  
 Bussmann, R., 361  
 Buttler, A., 548  
 Byng, J. W., 112  
 Bytebier, B., 339
- ## C
- Cabral, F. N., 120  
 Cabral, J. S., 515  
 Cabrera, E., 743  
 Cabrera, H. M., 668  
 Cacharani, D. A., 401  
 cadmium, 26, 84, 749  
 caesium, 764  
 Caetano, J., 84  
 Caffaratti, S., 395  
 Cai, C., 415  
 Cajamarca, F. A. S., 84  
 Calcagno-Pissarelli, M. P., 471, 489  
 California, 30, 261, 560  
 Calner, M., 514  
 camouflage, 704  
 Campbell, G., 483  
 Campbell, L. M., 85  
 Campos, N. V., 86  
*Campyloneurum densifolium*, 346  
 Can, V. V., 722  
 Canada, 251, 408, 680, 731  
 cancer, 489, 499, 651  
 Canessa, R., 187  
 Caneva, G., 644  
 Cantalapedra-Navarrete, C., 22  
 Cantamessa, S., 87  
 Cantero, J. J., 88  
 Cantrill, D. J., 428  
 Cantu-Ayala, C. M., 166  
 Cao, J. G., 89  
 Cao, L., 642  
 Cao, W., 106  
 Cao, Y., 367  
 Cao, Z. Y., 106  
 Caparelli, K. F., 50  
 Caramez, R. B., 120  
 Carboniferous, 370, 469, 473  
 carcinogens, 323, 489, 631  
 Cardenas, A. V. C., 90  
 Cardenas, G. G., 91, 92  
 Carlozzi, P., 93  
 Carlsbecker, A., 698  
 Carpenter, E., 336  
 Carrapico, F., 508  
 Carriere, S. M., 548  
 Carriqui, M., 668

- Carswell, F. E., 193  
 Caruso, R., 124  
 Carvalho, E. S., 94  
 Carvalho, I. S., 189  
 Cascales-Minana, B., 95, 450  
 Cascante-Marin, A., 45  
 Cassar, L. F., 427  
 Cassis, G., 466, 467  
 Castillo, P., 22  
 Castillo, R., 69  
 Castillo, R. F. del, 511  
 Castillo-Batista, A. P. del, 138  
 Catala, M., 170  
 Catterall, C. P., 96  
 Cazedebat, M., 39  
 Ceja-Romero, J., 423  
 cell wall, 640  
 Cenozoic, 318, 341, 673  
 Central America, 45, 638  
*Ceradenia maackii*, 332  
*Ceratopteris richardii*, 219, 220, 373  
*Ceratopteris thalictroides*, 741  
 Ceron, K., 230  
 Cesari, S. N., 692  
 Cetean, C. G., 504  
 Chabrol, L., 65  
*Chaetomium globosum*, 1  
 Chaity, F. R., 97  
 Chakrabarti, R., 617  
 Chakraborty, T., 448  
 Chambers, S. M., 98  
 Chandanshive, V. V., 99  
 Chandra, S., 589  
 Chandramohanakumar, N., 659  
 Chandrashekar, K., 621  
 Chang, H., 426  
 Chang, H. M., 525  
 Chang, Y., 100, 326, 350, 358, 525, 710  
 Chang, Y. F., 376  
 Chang, Y. H., 100, 326, 350, 525  
 Chang, Y. M., 709  
 Channing, A., 406, 573  
 Chao, Y. S., 149, 525  
 charcoal, 735  
 Chase, M., 336  
 Chatterjee, R., 212  
 Chauvet, E., 101  
 Chauvignat, A. M., 62  
 Chavel, E. E., 36  
 Chaves-Fallas, J. M., 555  
 Chear, N. J. Y., 102  
*Cheilanthes hieronymi*, 522  
*Cheilanthes marginata*, 522  
*Cheilanthes poeppigiana*, 522  
 chemistry, 104, 115, 437, 678, 742, 766,  
 766,  
 Chen, C. T., 260  
 Chen, C. W., 103, 525, 596, 672  
 Chen, D. K., 525  
 Chen, F., 285  
 Chen, G., 762  
 Chen, G. D., 760  
 Chen, J., 704  
 Chen, J. C., 260  
 Chen, J. L., 240  
 Chen, J. M., 741  
 Chen, L., 285  
 Chen, L. L., 358  
 Chen, L. Q., 613  
 Chen, M., 106  
 Chen, M. H., 383  
 Chen, N. H., 104  
 Chen, P., 739  
 Chen, P. J., 726  
 Chen, T. B., 702  
 Chen, W. P., 31  
 Chen, X., 105, 285  
 Chen, X. H., 740  
 Chen, Y., 241, 487, 738  
 Chen, Y. S., 106, 250, 367  
 Chen, Z., 107  
 Chen, Z. D., 106  
 Chen, Z. Y., 368  
 Cheng, T., 108  
 Cheng, X. Y., 745  
 Chernykh, N. A., 764  
 Cherry, R. P., 634  
 Chile, 187, 451, 518, 606  
 China, 46, 107, 231, 239, 348, 354, 355, 361, 365, 368, 383, 386, 387, 388, 426, 470, 474, 619, 662, 703, 713, 716, 728, 735, 738, 740, 755, 758, 759, 767, 771, 776  
 Chinnappa, C. H., 109  
 Chiou, W. L., 326, 327, 350, 525  
 Chitambar, J. J., 669  
 Chlachula, J., 110  
 chlorophyll fluorescence, 297  
 chloroplast, 253, 310, 316, 672  
 chloroplast genome, 545  
 Chochinov, A. V., 370  
 Chocobar Ponce, S., 527  
 Choi, K. S., 545  
 Choi, Y. H., 267  
 Choo, T. Y. S., 111  
 Chowdhury, R. R., 677  
*Christella dentata*, 727  
 Christenhusz, M. J. M., 20, 112, 114, 180  
 chromate, 487  
 chromium, 395, 527, 568  
 chromosome numbers, 465  
 Chu, Y. X., 768  
 Chu, Z. D., 768  
 Chua, S. C., 113  
 Chung, S. W., 106  
 Churchill, A. C., 715  
*Cibotium barometz*, 745  
 Ciciarelli, M., 526  
 ciliogenesis, 665  
 Cisneros, J. C., 129  
 Citadini-Zanette, V., 230  
 Clark, J., 114  
 classification, 10, 204, 206, 365, 525, 596, 672, 719  
*Clathropteris meniscioides*, 111  
 Clauson-Kaas, F., 115, 116, 483, 631  
 Claveria, R. J. R., 667  
 Cleal, C. J., 95  
 Cleary, D. F. R., 117  
 Clifford, H. T., 570  
 climate change, 264, 313, 353, 524, 531, 705  
 climatic regimes, 589  
 cloud forest, 138, 511, 582, 638, 711  
 Clyde, W. C., 118  
 Clymans, W., 6  
 Coan, A. I., 47  
 Cobb, E. D., 477  
 Coca-Salazar, A., 119  
 Cochran, A. T., 596  
 Coelho, F. V. D., 475  
 Coelho, M. N., 197  
 Coelho, R. L. G., 120  
 Coetzee, J. A., 393  
 coevolution, 591  
 Coles, S. J., 437  
 Colletta, G. D., 120  
 Colombia, 155, 585, 586, 743  
 Colwell, R. K., 121  
*Colysis pothifolia*, 620  
 community assembly, 68  
 Comparini, D., 243  
 competition, 66, 94, 193, 436, 507, 739  
 compost, 628  
 Conceicao, D. M. da, 129  
 Condack, J. S., 451  
 Conley, D., 6  
 Conord, C., 482



- conservation, 12, 82, 180, 396, 534, 547, 550, 552, 571, 627, 643, 670, 705
- Cook, J. G., 122
- Cook, R. C., 122
- Cooper, E. D., 689
- Coopman, R. E., 668
- Copeland, A., 263
- copper, 667
- coprolites, 682
- Corazza, M. Z., 84
- Corcuera, L. J., 192
- Coritico, F. P., 12
- Cornut, J., 101
- Corton, J., 123
- Costa Rica, 22, 287, 289
- Costa, C. S. B., 421
- Costa, J. G. M., 441
- Costa, J. M., 497
- Costa, M. F. B., 120
- Costa, R. M. G. da, 587
- Costa, R. M. S., 124
- cost-benefit strategies, 770
- Costuleanu, M., 496
- cotton, 621
- Coutinho, H. D. M., 441
- Crandall-Stotler, B. J., 285
- crassulacean acid metabolism, 624
- Craven, K. D., 553
- Cremers, G., 63, 125, 126
- Crescente, M. F., 690
- Cretaceous, 2, 39, 46, 109, 118, 155, 160, 189, 234, 235, 236, 244, 255, 256, 275, 329, 449, 510, 594, 595, 679, 682, 692, 704, 718, 755
- Crocicreas*, 765
- Cross, R., 127
- Crous, P. W., 67, 227, 228
- Cruz, M. V., 734
- cryopreservation, 191, 396
- cryptic speciation, 723
- Cryptogramma crispera*, 425
- Cuevas, E., 664
- Cuevas-Guzman, R., 442
- Cullen, E., 128
- cultivation, 548
- Cunha, S., 461
- Curlango-Rivera, G., 247
- cyanobacteria, 105
- cyanobionts, 732
- Cyathea*, 245, 281, 343, 345
- Cyathea abrapatriciana*, 343
- Cyathea aurea*, 486
- Cyathea chimaera*, 343
- Cyathea delgadii*, 486
- Cyathea lepifera*, 260
- Cyathea oreopteroides*, 343
- Cyatheaceae, 343, 484, 577, 717, 776
- Cyclosorus*, 470
- Cyclosorus interruptus*, 727
- Cyrtomium falcatum*, 276, 545
- Cystopteridaceae, 298
- Cystopteris*, 62
- Cystopteris dickieana*, 62
- Cystopteris fragilis*, 298
- cytokinin, 698
- cytology, 203, 211, 574, 640, 665
- Czech Republic, 491
- ## D
- da Conceicao, D. M., 129
- da Silva, D. A., 130
- da Silva, L. C., 198
- da Silveira, R. R., 131
- Dada, O. A., 132
- Dai, W. F., 642
- Dai, X. F., 89
- Dai, X. L., 89, 730
- Damas, K., 149
- Damdinsuren, O., 298
- Damm, U., 67
- Danelli, M. F., 133
- D'Apolito, C., 474
- D'Aquino, L., 134
- Das, S., 135
- Daud, N. M., 481
- Dauphin, B., 136, 525
- Davallia griffithiana*, 333
- Davalliaceae, 672
- Daviero-Gomez, V., 39
- Davila, A., 596
- Davis, R. W., 122
- Davis, S. D., 261
- Davitt, J., 336
- De, A. K., 137
- De, J., 487
- Deans, R. M., 405
- Dearman, K. M., 147
- Deblauwe, V., 154
- decomposition, 6, 272, 628
- deer, 3, 173, 252
- defense, 247, 471
- Deka, M., 294
- Dekker, S. C., 58
- del Castillo-Batista, A. P., 138
- del Pliego, P. G., 139
- Delclos, X., 510
- Delfini, C. F., 120
- Delgado, E. J. S., 515
- Delorme, Q., 140
- Delpratt, J., 312
- Deng, C., 299
- Deng, C. Y., 31
- Deng, T., 426
- Deng, X. B., 314
- Deng, Y., 314
- Denk, T., 556
- Dennstaedtia*, 736
- Dennstaedtiaceae, 79, 157, 301, 579, 597, 599, 660, 737
- Deparia*, 327
- Deparia florensiae*, 542
- Deparia longipilosa*, 542
- Deparia septentrionalis*, 542
- Der, J. P., 607
- dermatitis, 13
- desiccation, 69, 192, 297, 378
- Deska, J., 55
- Desmophlebium*, 464
- Desneux, N., 498
- Destefano, S., 173
- detoxification, 99
- Dettmann, M. E., 570
- developmental biology, 11, 372
- Devi, K., 141
- Devi, R. K., 142
- Devonian, 5, 731
- Dey, N., 137
- Deyholos, M., 336
- Dhaouadi, H., 238
- Di Pasquo, M., 143
- Di Stefano, J., 194
- diatoms, 237
- Diaz, A., 287
- Dickson, R., 677
- Dicksoniaceae, 488
- Dicranopteris dichotoma*, 107, 366, 738
- Dicranopteris flexuosa*, 486
- Dicranopteris linearis*, 296, 297, 541
- Diez, J. B., 95, 450
- Diez, J. J., 404
- dimorphism, 72, 715
- Din, Z. U., 283
- Dinesh, D., 498
- Diniz, D., 421
- Diodonopteris*, 387
- Diogo, I. J. S., 120
- Diplazium laffanianum*, 263
- Diplazium proliferum*, 625
- Dipteridaceae, 111, 767

- diseases, 67  
disjunctions, 718  
dispersal, 36  
Dissanayake, D., 145, 146  
disturbance, 171, 337, 380, 432, 534, 615  
Dittrich, V. A. O., 204, 206, 525  
Ditusa, S. F., 147  
divergence times, 556  
diversification, 546  
diversity, 12, 48, 49, 59, 88, 91, 92, 109, 117, 121, 123, 124, 163, 166, 171, 205, 268, 295, 302, 321, 363, 404, 407, 423, 439, 518, 524, 547, 564, 571, 582, 618, 619, 627, 644, 650, 656, 662, 681, 711, 759, 767  
DNA barcoding, 707, 724  
DNA methylation, 655  
Dokdo Island, 545  
Dokovic, N., 435  
Dolci, D., 50  
Dominguez-Rodrigo, M., 394  
Donaldson, L., 148  
Dong, J. L., 386  
Dong, M., 662  
Dong, S. Y., 149, 326, 758, 775, 776  
Dongare, M., 152  
Dongare, M. M., 242  
Donnison, I. S., 123  
Dorken, V. M., 379  
Doronila, A. I., 667  
*Doryopteris triphylla*, 605  
Dos Santos, J. U. M., 695  
Doweld, A. B., 150  
*Draconopteris*, 753  
Dragunski, D. C., 84  
Drake, A. F., 437  
Drapeau, P., 36  
Dray, F. A., 393  
Droissart, V., 154  
drought, 30, 74, 261, 768  
*Drymoglossum heterophyllum*, 209  
*Drynaria quercifolia*, 97  
Dryopteridaceae, 18, 159, 239, 326, 338, 339, 348, 364, 377, 409, 443, 444, 451, 455, 528, 545, 648, 729  
*Dryopteris*, 25, 326  
*Dryopteris* × *cantabrica*, 509  
*Dryopteris* × *ronald-vianensis*, 509  
*Dryopteris affinis*, 159  
*Dryopteris carthusiana*, 676  
*Dryopteris championii*, 104  
*Dryopteris dilatata*, 210  
*Dryopteris fragrans*, 358, 710  
*Dryopteris intermedia*, 492  
Du, C., 151  
Du, Z. Y., 106  
Duan, J. Y., 742  
Duan, Y. F., 525  
Duarte, A. F. S., 488  
Dubal, K., 152  
Dubey, N. K., 626  
Dubuisson, J. Y., 153, 154, 525  
Duckett, J. G., 532  
Duhem, B., 544  
Dumais, J., 369  
Duncan, L. W., 669  
Dussan, C. M., 155  
Dutra, T. L., 56  
Dütsch, G., 688  
dyes, 568  
Dzul-Kifli, S. C., 481
- ## E
- Earp, C., 156  
earthworms, 210  
Ebihara, A., 153, 157, 276, 327, 465, 484, 525, 707  
Eble, C. F., 41, 42, 144  
Ebuele, V. O., 158  
ecological niche, 399  
ecology, 35, 73, 634, 722  
ecophysiology, 72, 187, 624, 715  
Ecuador, 444  
edge effects, 654  
Edger, P. P., 336  
edible plants, 323, 644, 748  
Edwards, D. P., 139  
Eguiarte, L. E., 546  
Egypt, 237, 611  
Einmann, H. J. R., 773  
Eisenlohr, P. V., 205  
Ekrt, L., 159  
El Atfy, H., 2, 160, 236  
El Mokni, R., 238  
*Elaphoglossum lindbergii*, 636  
*Elaphoglossum mickeliorum*, 409  
El-Beheiry, M. A., 611  
El-Deen, G. E. S., 161  
Eler, K., 224  
elevational gradients, 302, 475, 656  
Elias, G. A., 230  
elk, 122  
El-Kady, H. F., 611  
Elliott-Kingston, C., 162  
Ellis, C., 52  
Ellison, A. M., 163  
Ellwood, M. D. F., 164  
Elmets, C., 52  
Elnagar, A. H., 147  
El-Shafai, S. A., 165  
Eltelet, S. A. M., 237  
embolism, 74  
Emery, N. C., 98  
Emilio, T., 675  
Encina-Dominguez, J. A., 166  
endemism, 197  
Endo, G., 271  
endophytes, 663  
endozoochory, 57  
Engel, M. S., 510, 704  
Engemann, K., 167  
Enquist, B. J., 167  
Entner-Doudoroff pathway, 105  
Eocene, 308, 426, 470, 561  
epidermis, 58, 183  
epiphytes, 45, 59, 187, 197, 200, 295, 319, 376, 388, 389, 417, 423, 515, 518, 555, 564, 624, 711, 772  
*Equisetum*, 128, 183, 184  
*Equisetum* × *lofotense*, 185  
*Equisetum arvense*, 6, 496  
*Equisetum ramosissimum*, 454  
*Equisetum scirpoides*, 379  
*Equisetum variegatum*, 379  
Ermilov, S. G., 168  
Erskine, P., 686  
Erwin, 169  
Esaete, J., 171  
Escapa, I., 155  
Escapa, I. H., 111, 406, 573  
Espadas-Gil, F., 340  
Esteban, S., 170  
Estrada-Castillon, E., 166  
ethnobotany, 29, 361, 468, 644, 722  
Europe, 23, 335, 375, 379  
evolution, 40, 114, 226, 253, 310, 349, 443, 472, 473, 546, 557, 591, 592, 593, 594, 607, 638, 655, 658, 689, 714, 756, 769, 774  
Ewin, T. A. M., 39  
*Excentrodendron*, 619  
extinction, 118, 474, 514  
Eycott, A. E., 171  
Ezike, D. N., 172
- ## F
- Fabrin, T. M. C., 390

- Facey, J., 392  
 facilitation, 436  
 Fagundes, I. C., 120  
 Fahnrich, B., 105  
 Faidi, K., 238  
 Faison, E. K., 173  
 Falconieri, D., 238  
 Fallon, S., 531  
 Fan, D. D., 368  
 Fan, Q., 643  
 Fan, W. S., 769  
 Fan, Z. X., 376  
 Fang, J. Y., 269  
 Fang, X., 712  
 Fang, X. M., 426  
 Fang, Y. M., 751, 752  
 Farahpour-Haghani, A., 174  
 Farfan-Santillan, N., 175  
 Farghaly, L. M., 1  
 Farooq, M. A., 176  
 Farouji, A. E., 177  
 Farrar, D. R., 178, 246, 525, 723  
 Farsani, E. A., 430  
 fatty acids, 290  
 Faure, O., 482  
 Fawcett, S., 179, 525  
 Fawzy, M. E., 165  
 Fay, M. F., 180  
 Fayiga, A. O., 181  
 Fayle, T. M., 121, 164  
 Feilich, K., 182  
*Felisacus*, 467  
 Fenech, S., 427  
 Fenton, N. J., 36  
 Feoktistov, D. S., 183, 184, 185  
 Fernandes, R. S., 186  
 Fernández Areces, M. P., 509  
 Fernandez, M. D. P., 682  
 Fernandez, R., 187  
 Fernandez-Gonzalez, F., 407  
 Fernblock, 52, 499  
 Ferreira, D. M. C., 188  
 Ferreira, E. P., 189  
 Ferreira, M. A. P., 120  
 Ferreira, N. N., 189  
 Ferreirinha, P., 587  
 Ferrer, J., 450  
 Ferrera-Cerrato, R., 584  
 fertilization, 89  
 fertilizer, 517  
 Fiedler, K., 121  
 Field, A. R., 190, 525  
 Field, K. J., 532  
 Fierascu, I., 649  
 Fierascu, R. C., 649  
 Figueiredo, F. O. G., 675  
 Figueroa-Rangel, B. L., 138  
*Filicicoris*, 466  
 Filipin, E. P., 191  
 Finland, 516  
 Finlayson, B., 368  
 fire management, 385, 601  
 Fisch, S. T. V., 133  
 Fischer, A. M., 698  
 Fischer, M., 57  
 Fischer, S., 310  
 fish, 93  
 Flajzman, K., 224  
 Flament, G., 126  
 flavonoids, 642  
 Flexas, J., 668  
 Flores, T. B., 120  
 Flores-Bavestrello, A., 192, 606  
 Flores-Lara, Y., 247  
 Florida, 270, 530  
 Florido, F. G., 120  
 floristics, 7, 19, 23, 25, 45, 48, 50, 63, 79, 80, 81, 88, 120, 138, 166, 168, 174, 185, 188, 196, 197, 200, 202, 231, 234, 237, 255, 256, 258, 274, 279, 280, 287, 321, 322, 328, 355, 363, 371, 375, 402, 403, 408, 419, 423, 426, 427, 431, 439, 442, 455, 456, 457, 458, 462, 497, 503, 518, 533, 540, 550, 576, 577, 578, 579, 604, 609, 611, 623, 625, 671, 695, 696, 697, 728  
 Flower, R. J., 237  
 Fontenot, E. B., 147  
 food chains, 676  
 Forbes, A. S., 193  
 Fordyce, A., 194  
 forest fragments, 534  
 forest management, 224, 463  
 forest plantations, 193, 268  
 forest regeneration, 201  
 forests, 96, 113, 139, 163, 200, 303, 321, 462, 563, 770  
 Forister, M. L., 121  
 Forzza, R. C., 197  
 fossils, 37, 129, 255, 470, 556, 595, 662, 755  
 Foster, D., 173, 677  
 Foster, D. R., 173  
 Foster, W. A., 164  
 Fowler, M., 437  
 France, 62, 64, 65, 125  
 Francis, J. E., 428  
 Franco, J., 669  
 Franks, P. J., 58, 195  
 Fraser, M. D., 123  
 Fraser-Jenkins, C., 304  
 Fraser-Jenkins, C. R., 15, 196, 550  
 Freckleton, R. P., 139  
 Freeman, K. H., 394  
 Freitas, L., 197  
 Freitas-Silva, L., 86  
 Freitas-Silva, L. de, 198  
 Freund, F. D., 199  
 Friesen, N., 681  
 Fritsch, P. W., 12  
 From, M., 263  
 Fu, J., 285  
 Fu, J. T., 270  
 Fu, J. W., 241, 367  
 Fukami, T., 68  
 functional groups, 54, 167, 171, 515, 564  
 fungi, 131, 227, 228, 242, 245, 397, 532, 553, 765  
 Furtado, S. G., 200  
 Furukawa, Y., 291  
*Fusarium*, 397
- ## G
- Gabriel-y-Galan, J. M., 214  
*Gaga*, 522  
 Gago, J., 668  
 Gai, Y. H., 347  
 Galan, J., 525, 526  
 Galatis, B., 640  
 Galka-Kozak, A., 652  
 Gallego Roig, J. J., 23  
 Gallegos, S. C., 201  
 Gambale, E., 134  
 gametophytes, 15, 191, 219, 246, 298, 484, 519, 562, 605, 606, 665, 745, 751, 763  
 Gan, H., 712  
 Gandara, E., 638  
 Ganger, M. T., 202  
 Ganguli, S., 538  
 Gao, H. L., 674  
 Gao, N. N., 203  
 Gao, R., 710  
 Gao, T. G., 106  
 Gao, X. F., 338, 339, 753  
 Garay, C., 743  
 Garcia-Cortes, H., 170  
 Garcia-Plazaola, J. I., 192  
 gardens, 180  
 gas exchange, 58, 128, 162, 340, 405, 472, 566

- Gasper, A. L. de, 204, 205, 206, 525  
*Gastrothylax crumenifer*, 541  
 Gaut, B. S., 655  
 Gautam, R. K., 627  
 Gautam, R. P., 288  
 Ge, Y. C., 207  
 Geiger, D., 415  
 genetic diversity, 276  
 genetics, 61, 207, 262, 309, 324, 336, 351, 358, 390, 425, 465, 538, 622, 666, 730, 741, 769  
 genome size, 136  
 genomics, 31, 226, 356, 557, 591, 607, 622, 714, 774  
 Genre, A., 208  
 Geoghegan, J., 677  
 George, M., 209  
 Geraskina, A. P., 210  
 Gerber, S., 493  
 Geringer, M. A., 415  
 Germany, 330, 561, 685, 688  
 germination, 214, 374  
 Gerrienne, P., 95  
 Gershenzon, J., 285  
 Gestri, G., 50  
 Ghana, 27  
 Gholave, A. R., 99  
 Ghoreishi, L., 211  
 Ghosh, A. K., 212  
 Giacosa, J. P. R., 381, 382  
 Giang, L. H., 722  
 Giannoutsou, E., 640  
 Gibby, M., 60, 114, 213  
 Gichira, A. W., 741  
 Gil, A. D. S. B., 695  
 Gilaberte, Y., 499  
 Gill, M. S. A., 575  
 Gill, R., 433  
 Gill, R. A., 176  
 Gill, S. S., 433  
 Gillespie, B. M., 261  
 Gilroy, J. J., 139  
 Gimenez, A., 636  
 Gissi, D. S., 258  
 Giudice, G. E., 381, 382  
 Giulietti, A. M., 695  
 Glasspool, I. J., 474  
 Gleicheniaceae, 175, 249, 484  
 glossopodia, 199  
 Glowienka, J. M. O., 326  
 glycosides, 678  
*Glyptemys muhlenbergii*, 634  
 Goes-Neto, L. A. D., 525  
 gold, 284, 294, 629  
 Goldstein, G., 624  
 Golovneva, L. B., 256  
 Gomez, B., 39  
 Gomez-Cruz, A. D., 586  
 Gomez-Garay, A., 214  
 Gomez-Noguez, F., 215  
 Gomez-Rubio, V., 407  
 Goncalves Junior, A. C., 84  
*Goniopteris seidleri*, 581  
*Goniopteris smithii*, 581  
*Goniopteris subdimorpha*, 581  
*Goniopteris windischii*, 581  
 Gonnelli, V., 335  
 Gonsalves, L., 337  
 Gonzalez, F., 216, 494  
 Gonzalez, G. E., 217  
 Gonzalez, S., 499  
 Gonzatti, F., 218, 389  
 Goodnoe, T. T., 219, 220  
 Gorrer, D., 382  
 Goswami, H. K., 221  
 Goswami, S., 589  
 Gotelli, N. J., 121  
 Gottlieb, J. E., 222  
 Götz, A. E., 721  
 Gould, S. B., 698  
 Govindwar, S. P., 99  
 Grabovsky, A. A., 256  
 Grachev, V. A., 764  
 Graeff, V., 564  
 Graham, S. W., 285, 336, 689  
 Grall, A., 153, 363  
 grammitid ferns, 501, 502  
*Grammitis succinea*, 647  
 Grant, J., 136  
 Grant, J. R., 525  
 grasslands, 28  
 Gratani, L., 690  
 grazing, 335  
 Grebenc, T., 224  
 green walls, 243  
 Greenwood, D. R., 408  
 Gress, J., 487  
 Grewe, F., 309, 310  
 Grimm, G. W., 556  
 Grimm, J., 223  
 Groot, M. de, 224  
 Grund, S. P., 202  
 Grusz, A. L., 225, 226, 525  
 Gu, Q., 384  
 Gu, Y., 353  
 Gualtieri, S. C. J., 283  
 Guan, D. X., 241, 367  
 Guan, H. X., 771  
 Guangdong, 776  
 Guangxi, 619  
 Guarrera, P. M., 644  
 Guatimosim, E., 227, 228  
 Guedes, G. M. M., 441  
 Guenni, O., 74  
 Guerriero, G., 229  
 Gui, G. F., 750  
 Gui, M., 745  
 Guianas, 63, 360  
 Guido, D. M., 406, 573  
 Guimaraes, E. F., 197  
 Guisan, A., 407  
 Guislon, A. V., 230  
 Guizhou, 231, 474  
 Gujarat, 503  
 Guo, J., 106  
 Guo, W., 755  
 Guo, W. H., 769  
 Guo, W. X., 756  
 Guo, Y., 643  
 Guo, Y. H., 741  
 Guo, Z., 151  
 Guo, Z. Y., 231, 361  
 Gupta, S., 538, 769  
 Gureyeva, I. I., 183, 184, 185, 232  
 Gurung, C., 333  
 Gutekunst, K., 105  
 Guy, B., 482  
 Guzman, R. C., 138  
 Guzman-Hernandez, L., 442
- ## H
- habitat, 51, 101, 260, 289, 291, 337, 394, 399, 420  
 Hadad, H. R., 395  
 Haeckel, 477  
 Haig, D., 233  
 Haikio, E., 676  
 Hajirezaei, M. R., 105  
 Halamski, A. T., 234, 235  
 halophytes, 88, 119  
 Hamad, A. M. B. A., 236  
 Hamdan, M. A., 237  
 Hamid, H. A., 588  
 Hammami, S., 238  
 Han, M., 470  
 Han, M. Q., 239  
 Han, P., 240  
 Han, S. H., 3  
 Han, Y. H., 241  
 Han, Y. T., 766  
 Hananto, M., 646  
 Hanba, Y., 668  
 Hande, P. R., 242  
 Hans, A. L., 621

- Hansen, H. C. B., 115, 116, 483, 631
- Happatz, H., 773
- Hara, A., 243
- Hara, Y., 243
- Harhen, B., 483
- Harley, R. M., 695
- Harris, E. B., 244
- Harris-Valle, C., 245
- Hartley, A. J., 416
- Hasan, S. H., 693
- Hasbun, R., 69
- Hassan, F. A., 237
- Haufler, C., 525
- Haufler, C. H., 246
- Haugaasen, T., 139
- Hauk, W., 525
- Haulton, G. S., 463
- Hausman, J. F., 229
- Hawaii, 77, 551
- Hawes, M. C., 247
- Hawksworth, D. L., 248
- Haworth, M., 162
- He, F., 619
- He, H., 338, 339, 525
- He, J. F., 207
- He, J. Y., 703
- He, P. C., 770
- He, Q. F., 619
- He, S., 357
- He, S. Y., 352
- He, X. Y., 387
- He, X. Z., 249, 387, 735
- He, Z. W., 756
- He, Z. Y., 250
- heavy metals, 209, 325, 400, 433, 615, 646, 676
- Hebda, R. J., 251
- Hedrich, R., 415, 566
- Heenan, P. B., 68
- Hegde, S., 333
- Hegland, S. J., 252
- Hein, A., 253
- Heinrichs, J., 595
- Helicobacter pylori*, 489
- Helminthostachys zeylanica*, 269, 642
- hemiepiphytism, 179
- Hemiptera, 140
- Hemp, A., 363
- Hennequin, S., 10, 153, 154, 525
- Henriques, A. T., 14
- Hensen, I., 201
- Henson, D., 723
- herbaria, 124, 125, 516
- herbicides, 137, 460, 529
- herbivory, 3, 57, 122, 173, 252, 331, 335, 420, 463
- Heringer, G., 254
- Herman, A. B., 255, 256
- Hernandez, C. E., 518
- Hernandez, L. R., 90
- Herrera, F., 486
- Herve, D., 548
- heterocysts, 508
- Heteroptera, 466, 467
- Hettterscheid, W., 266
- Heyes, D., 437
- Hibbett, D., 257
- Hicock, S. R., 251
- Hidalgo, O., 114
- Higgins, M. A., 462
- Higuchi, A., 498, 539
- Hill, J. P., 219, 220
- Hill, M. P., 393
- Hilton, J., 44, 474
- Himachal Pradesh, 618
- Himalayas, 347
- Hirai, R. Y., 258, 259, 525
- Hirayama, Y., 484, 672
- Hiruta, M., 620
- Histiopteris incisa*, 301
- history, 138, 251, 339, 341, 347, 368
- Ho, Y. W., 260
- Hodgson, E., 123
- Hoess, C., 724
- Hoffmann, M., 223
- Hofstetter, R. W., 278
- Holbrook, N. M., 715
- Holdgate, G. R., 318
- Holl, K. D., 555
- Holmlund, H. I., 261
- Holocene, 110, 237, 353, 521, 572
- Holopainen, T., 676
- Hölscher, H., 747
- Holtum, J. A. M., 190
- Honduras, 45
- Hong, A., 709
- Hong, L. Y., 361
- Hongthong, P., 517
- Honiges, A., 496
- horticulture, 243, 549, 733
- Hosni, H. A., 611
- hotspots, 363, 759
- Hou, C. J., 262
- Hou, X. D., 735
- Houser, D. C., 263
- Hoveka, L. N., 264
- Hovenkamp, P., 265, 266, 267, 304, 525
- Hovenkamp, P. H., 733
- Howell, C. J., 268
- Hradsky, B. A., 194
- Hsieh, H. L., 269
- Hsu, T. C., 350
- Hu, B. Z., 358
- Hu, Y. H., 376
- Huang, H., 207
- Huang, J., 388
- Huang, J. G., 356
- Huang, J. H., 286
- Huang, Q., 388
- Huang, S. Q., 270
- Huang, X. C., 366
- Huang, X. J., 104
- Huang, Y., 271, 738
- Huang, Y. L., 260
- Huang, Y. M., 350
- Hughes, M., 493
- Huiet, L., 259, 525, 535, 596
- Huner, N. P. A., 192
- Hung, H. C., 350
- Huperzia*, 190
- Huperzia serrata*, 372
- Hurum, J. H., 235, 300, 418, 683
- Husband, B. C., 38
- Hussain, N., 272
- hybridizations, 612, 622
- hybrids, 537, 542, 733
- hydathodes, 87
- hydraulic architecture, 307, 405
- hydroponics, 271
- Hymenophyllaceae, 17, 80, 153, 154, 192, 518
- Hymenophyllum dentatum*, 69
- Hymenophyllum pumilio*, 513
- Hymenophyllum senterreanum*, 154
- Hymenoptera, 270
- hyperaccumulation, 147, 181, 241, 271, 278, 367, 476, 487, 702
- hyphomycetes, 101
- Hypodematium boonkerdii*, 523
- Hypodematium crenatum*, 242
- Hypodematium delicatulum*, 544
- Hypolepis*, 597
- Hypolepis polypodioides*, 554
- Hypolepis rugosula*, 599

## I

- Iacona, G., 273
- Iannuzzi, R., 56, 129
- Ibrahim, Z., 481

Ibrahim, K., 481  
 Ibrahim, M. I. A., 237  
 Ibrahim, N., 481  
 Ickert-Bond, S., 425  
 Ickert-Bond, S. M., 718  
 identification software, 223  
 Iglesias, A., 275  
 Ijaz, F., 609  
 Ilkiu-Borges, A. L., 695  
 Illinois, 41, 42, 144, 370  
 Imai, R., 276  
 Imaichi, R., 484  
 Imbeau, L., 36  
*in vitro*, 97, 209, 382, 541, 552, 617, 645  
 inbreeding, 608  
 India, 15, 109, 196, 212, 242, 293, 305, 325, 333, 397, 400, 422, 439, 448, 468, 503, 536, 540, 547, 558, 574, 589, 603, 616, 618, 625, 626, 627, 629, 630, 645  
 indicator species, 511, 524  
 Indonesia, 59, 117, 521, 644  
 Inoue, C., 271  
 insecticides, 127, 270, 621  
 insects, 77, 392, 466, 554, 565, 594, 621, 704, 706, 727  
 Inserra, R. N., 669  
 invasive species, 264, 273, 352, 393, 460, 529, 530, 534, 635, 639  
 invertebrates, 278, 449  
 Iqbal, M. C. M., 145, 146  
 Iqbal, S. S., 145, 146  
 Iqbal, Z., 609  
 Iran, 174, 177, 211, 303  
 Ireland, 483  
 Irwin, L. L., 122  
 Isbell, J. L., 428  
 Islam, F., 176  
 Ismail, B. S., 481  
 Isoetaceae, 657  
*Isoetes*, 199, 671  
*Isoetes coromandelina*, 630  
*Isoetes sinensis*, 730  
*Isoetes tamaulipana*, 447  
 isotopes, 588, 664  
 Italy, 328, 330, 331, 590, 670, 679  
 ITS region, 108  
 Ivanauskas, N. M., 120  
 Ivanov, A. G., 192  
 Iwansyah, A. C., 319  
 Iwase, J., 243

## J

Jactel, H., 404  
 Jaffe, B. D., 278  
 Jaimez, D. G., 279, 280, 401  
 Jalaeian, M., 174  
*Jamesonia*, 494  
 Janakiraman, N., 281  
 Jansen, B., 318  
 Jansen, S., 307  
 Janssen, T., 669  
 Japan, 274, 276, 291, 292, 465, 650, 656, 678, 699  
 Jarzembowski, E. A., 704  
 Jarzynka, A., 282  
 Jasper, A., 2, 160, 236  
 Jatoba, L. D., 283  
 Javed, M. T., 476  
 Jayachandran, K., 639  
 Jayanthi, J., 478  
 Jayashanthini, S., 539  
 Jenjittikul, T., 480  
 Jenkins, M. A., 463  
 Jeon, B. H., 99  
 Jeyathilakan, N., 142  
 Jha, A. K., 284  
 Jhung, S. H., 53  
 Ji, J. X., 292  
 Jia, G. D., 771  
 Jia, Q., 285  
 Jiang, B., 286  
 Jiang, L., 104  
 Jiang, S. Q., 104  
 Jiang, W., 712  
 Jiang, Z. K., 662  
 Jimenez, J. E., 287  
 Jimenez-Garcia, L. F., 746  
 Jin, C. S., 426  
 Jin, J. H., 470  
 Jin, X. H., 106  
 Joe, L. S., 481  
 John, N., 727  
 Johnson, G., 596  
 Johnson, K. R., 118  
 Johnson, M., 281, 288  
 Jolley, D. W., 416  
 Joner, D. C., 599  
 Jones, M. M., 118, 289  
 Jordan, 236  
 Jordan, G. J., 341  
 Jorgensen, P. M., 167  
 Josekumar, V. S., 209  
 Joshi, P., 625  
 Jourdan, H., 140  
 Jouy, A., 542, 543

Juarez, P., 287  
 Juarez, Z. N., 90  
 Juarranz, A., 499  
 Jumali, M. H. H., 481  
 Junges, F., 461  
 Juniarti, A., 651  
 Jurassic, 35, 111, 282, 328, 406, 416, 417, 453, 505, 514, 573, 590, 632, 683  
 Jurca, T., 496  
 Justine, M. F., 703  
 Juutilainen, J., 676

## K

Kabanov, P., 5  
 Kaewsuwan, S., 290  
 Kajihara, K., 291  
 Kajita, T., 734  
 Kakishima, M., 292  
 Kalamdhad, A. S., 628  
 Kale, M., 152, 293  
 Kalimantan, 117  
 Kalinin, P., 5  
 Kalita, S., 294  
 Kamau, P. W., 363  
 Kanai, R., 650  
 Kandimalla, R., 294  
 Kang, Y., 711  
 Kanwal, Q., 744  
 Kao, C. M., 709  
 Kao, T. T., 326  
 Kapli, P., 556  
 Kar, R., 212  
 Kar, S., 468  
 Kardol, P., 314  
 Karger, D. N., 295, 302  
 Karim, N. H. A., 481  
 Karim, R., 686  
 Karnataka, 400, 540  
 Karoo, 721  
 Kasurinen, A., 676  
 Katakai, A. C., 294  
 Kato, J., 298  
 Kato, M., 525, 672, 673  
 Kaur, M., 574  
 Kavalenka, M. N., 747  
 Kavitha, C. H., 296, 297  
 Kawakami, S., 298  
 Kawakami, S. M., 298  
 Kawano, T., 243  
 Kazemitabar, S. K., 303  
 Ke, L. L., 299  
 Kear, B. P., 235, 300, 418, 683  
 Keighery, G., 301

- Kellar, P. R., 263  
 Kelly, D. L., 45  
 Kenrick, P., 257  
 Kenta, T., 650  
 Kerala, 696  
 Kern, C. C., 563  
 Kessler, M., 121, 295, 302, 342, 525, 596  
 Ketterer, M. E., 278  
 Keys, E., 677  
 Khalid, S., 163  
 Khalil, W. F., 1  
 Khan, M., 88, 319  
 Khan, M. T. J., 575  
 Khan, T., 701  
 Khanalipour, M., 303  
 Khangembam, B. K., 617  
 Khatun, M., 97  
 Khaw, K. Y., 102  
 Khine, P. K., 304  
 Khodayari, H., 177  
 Khodijah, S., 651  
 Kholia, B. S., 625  
 Khullar, S. P., 305  
 Kim, C., 671  
 Kim, D. W., 637  
 Kim, G. R., 3  
 Kim, J. H., 306  
 Kim, T. W., 3  
 Kim, Y. Y., 701  
 Kirkman, K. P., 385  
 Kitching, R. L., 121  
 Klausen, T. G., 504  
 Klepeis, P., 677  
 Klepsch, M., 307  
 Klimes, P., 121  
 Kluge, J., 121, 295, 302, 304  
 Klymiuk, A. A., 308  
 Knepprath, N. E., 428  
 Knie, N., 309, 310, 774  
 Knight, J. A., 311  
 Knoop, V., 253, 309, 310, 591, 774  
 Koch, N. M., 564  
 Kodym, A., 312  
 Kollah, B., 313  
 Köllner, T. G., 285  
 Kondo, K., 298  
 Kong, D. L., 314  
 Kong, S. G., 315, 316  
 Konrat, M. von, 513  
 Kooh, M. R. R., 317  
 Korall, P., 525, 633, 719, 720  
 Korasidis, V. A., 318  
 Kormin, F., 319  
 Kornas, A., 490  
 Kosesakal, T., 320  
 Kotoky, J., 294  
 Kotze, D. C., 385  
 Koutecky, P., 159  
 Kraft, N., 167  
 Krajewski, L., 370  
 Kramer-Priewasser, K., 661  
 Krangpanich, P., 517  
 Kreft, H., 59, 515  
 Kreft, S., 323  
 Kreutz, C., 321  
 Krings, M., 688  
 Krishnakumar, G., 400  
 Kristanc, L., 323  
 Krol, M., 192  
 Krupyanko, A. A., 110  
 Kulen, O., 320  
 Kumar, A., 617  
 Kumar, B., 625  
 Kumar, J., 621  
 Kumar, S., 498, 529  
 Kumar, V., 324  
 Kumari, A., 325, 554  
 Kuntz, J., 120  
 Kuo, L. Y., 157, 326, 327, 350, 351, 525  
 Kuo, T. H., 726  
 Kuo, Y. C., 709  
 Kushiro, T., 16  
 Kustatscher, E., 328, 331, 590, 688  
 Kutnar, L., 224  
 Kutschera, U., 477  
 Kvacek, J., 234, 235, 328, 329  
 Kvacek, Z., 330  
 Kwak, M., 757  
 Kyaw, M., 304
- L**
- Laanisto, L., 668  
 Labandeira, C. C., 331  
 Labiak, P. H., 332, 443, 525  
 labium, 630  
 Lacasse, A., 680  
 Laflamme, M., 370  
 Lahiri, I., 333  
 Lahmann, M., 437  
 Lai, C. S., 102  
 Lai, H. Y., 334  
 Lai, J. C. Y., 334  
 Lai, L. S., 748  
 Lai, X. H., 368  
 Lai, Y. J., 240  
 Lake Cabaliana, 572  
 Lake, E. C., 635  
 Lal, B., 325  
 Lamers, L. P. M., 687  
 land management, 483  
 land use, 548  
 Landi, M., 335  
 Landry, B., 174  
 Landry, M., 263  
 Lane, T. S., 336  
 Lang, M., 312  
 Lange, A., 307  
 Lanh, T. T., 722  
 Lansdown, R., 670  
 Lanza, G. R., 433  
 Larrain, J., 513  
 Larsen, C., 17  
 Larsson, A., 285, 525, 672  
 Lasso, E., 624  
 Lastrucci, L., 335  
 latitudinal gradients, 295, 389, 407  
 Lavoie, C., 49  
 Law, B., 337  
 Lawrence, D., 677  
 Lawrence, H. M., 416  
 Lawson, T., 162  
 Le Pechon, T., 338, 339  
 leaching, 87  
 lead, 118, 146, 161, 340, 440, 760, 761, 762  
 leaf color, 559  
 leaf dimorphy, 715  
 leaf evolution, 689  
 leaf litter, 738  
 leaf traits, 515, 690  
 Leal-Alvarado, D. A., 340  
 Lecuyer, C., 39  
 Ledford, C. J., 360  
 Lee, D. E., 341  
 Lee, E. J., 637  
 Lee, J. W., 3  
 Lee, T. H., 269  
 Lee, W. G., 68, 73, 341  
 Leebens-Mack, J. H., 336  
 Legay, S., 229  
 Lehnert, M., 342, 343, 344, 345, 525, 717  
 Lehsten, V., 682  
 Lehtonen, S., 91, 92, 525  
 Lei, L., 108  
 Lei, M., 702  
 Leitch, I. J., 114  
 Lekson, V. M., 261  
 Lemos, P. P., 691  
 Leon, B., 346, 525  
 Leopold, D. R., 68  
 Lepidoptera, 174, 530, 706

- Lepisorus clathratus*, 757  
*Lepisorus spicatus*, 412  
*Leptogryllus elongatus*, 77  
 Leroy, C. J., 581  
 Lesotho, 454  
 Leuschner, C., 600  
 Lewis, D., 570  
 Li, B. K., 728  
 Li, C., 384  
 Li, C. H., 108  
 Li, C. X., 347, 348, 525  
 Li, D. Z., 707  
 Li, F. F., 361  
 Li, F. W., 285, 349, 350, 351, 525, 535  
 Li, G., 285  
 Li, G. Q., 104  
 Li, H., 745  
 Li, H. L., 106  
 Li, H. M., 642  
 Li, J., 46, 352, 372, 740  
 Li, J. H., 106  
 Li, J. Q., 361  
 Li, J. Y., 759  
 Li, K., 353  
 Li, L., 372  
 Li, L. Q., 354, 355, 662, 767  
 Li, M. H., 106  
 Li, N., 356  
 Li, Q., 357  
 Li, R. H., 740, 770  
 Li, R. Q., 106  
 Li, R. T., 642  
 Li, S., 376  
 Li, S. S., 358  
 Li, T., 153, 749, 761, 762  
 Li, T. X., 760  
 Li, X. N., 756  
 Li, X. Z., 768  
 Li, Y., 292, 710, 742  
 Li, Y. L., 104  
 Li, Y. P., 642  
 Li, Y. Y., 356, 372, 775  
 Li, Z. Y., 231  
 Lian, O. B., 251  
 Liao, W., 643  
 Liao, X. Y., 359  
 Liao, Y. Y., 106  
 Libertín, M., 491  
 Liboni, A. P., 120  
 Liebanas, G., 22  
 life cycles, 233, 246, 645  
 light habitats, 770  
 light responses, 588  
 light spectrum, 490  
 ligule, 630  
 Liira, J., 571  
 Lim, L. B. L., 317  
 Lim, L. H., 317  
 limestone, 523  
 limnology, 116  
 Lin, B., 299  
 Lin, C. F., 269  
 Lin, C. Y., 100  
 Lin, G., 383  
 Lin, L., 106  
 Lin, L. Y., 359  
 Lin, X., 384  
 Lind, C., 415  
 Lindenmayer, D. B., 54  
 Linderson, H., 683  
 Lindgren, J., 235, 300, 418, 683  
*Lindsaea lancea*, 461  
*Lindsaea novoguineensis*, 149  
*Lindsaea subobscura*, 149  
 Lindsaeaceae, 79  
 Lindsay, S., 103, 304  
 Link-Perez, M., 525  
 Link-Perez, M. A., 360  
 lipids, 76  
 Lippok, D., 201  
 Liu, B., 106, 361  
 Liu, B. D., 299, 730  
 Liu, C. Y., 742  
 Liu, D., 642  
 Liu, D. M., 362  
 Liu, F., 474  
 Liu, F. Z., 750  
 Liu, G., 744  
 Liu, H., 353, 770  
 Liu, H. M., 106, 114, 363, 364, 365, 525  
 Liu, H. Y., 100, 759  
 Liu, J., 207  
 Liu, J. G., 383  
 Liu, K. B., 740  
 Liu, L. T., 366  
 Liu, Q., 203  
 Liu, Q. J., 366  
 Liu, T., 336  
 Liu, W. Y., 376  
 Liu, X., 367  
 Liu, X. J., 768  
 Liu, Y., 239, 368, 751, 752  
 Liu, Y. C., 55  
 Liu, Z. J., 106  
 Liu, Z. S., 355  
 Llamas, P. M., 170  
*Llavea*, 495  
 Llorens, C., 369  
 Locatelli, E. R., 370  
 Loek, L. H., 371  
 Londono, G. A., 34, 583  
 Long, C. L., 361  
 Long, H., 372  
 Long, W. X., 711  
 Long, Z. C., 741  
 Longino, J. T., 121  
 Lopes, N. P., 14  
 Lopez, M., 743  
 Lopez, R. A., 373  
 Lopez-Mata, L., 582  
 Lopez-Romero, J. M., 374  
 Lopez-Tirado, J., 375  
 Lord, G. S., 504  
 Lorenzo, E., 216  
*Loxsona*, 156  
 Loyola, R., 599  
 Lozano-Garcia, S., 138  
 Lu, A. M., 106  
 Lu, H. Z., 376  
 Lu, J., 474  
 Lu, J. M., 612, 707  
 Lu, L. M., 106  
 Lu, N. T., 377, 525  
 Lu, P. F., 100  
 Lu, S. G., 347, 376  
 Lu, T., 739  
 Lu, T. M., 306  
 Lubaina, A. S., 378  
 Lubienski, M., 379  
 Ludwig, T. G., 360  
 Luke, D., 380  
 Luna, M. L., 381, 382  
 Luo, C. X., 383  
 Luo, J., 367  
 Luo, P., 384  
 Luo, X., 384  
 Luoto, M., 407  
 Luvuno, L. B., 385  
 Luxembourg, 322  
 lycophytes, 12, 83, 190, 205, 207, 218, 302, 321, 342, 365, 423, 445, 479, 525, 551, 557, 562, 582, 591, 592, 607, 689  
*Lycopodium chinense*, 3  
*Lycopodium clavatum*, 16, 434  
*Lycopodium obscurum*, 680  
 Lygodiaceae, 576  
*Lygodium flexuosum*, 481  
*Lygodium japonicum*, 243  
*Lygodium microphyllum*, 273, 352, 392, 530, 601, 635, 639  
*Lygodium venustum*, 441



## M

- Ma, F. J., 386  
 Ma, H., 384  
 Ma, J., 387  
 Ma, J. Y., 347  
 Ma, L. Q., 241, 367, 487, 752  
 Ma, M., 250  
 Ma, S. M., 387  
 Ma, W. Z., 376  
 Ma, X., 359  
 Ma, Z., 388  
 Machado, F. C., 129  
 Machado, L., 218  
 Machado, L. S., 389  
 Machado, S. A., 390  
 Macias, F. A., 283  
 Maciel, J. R., 188  
 Maciel, S., 391  
*Macrothelypteris oligophlebia*, 240  
 Madagascar, 542, 543, 544, 548, 633  
 Madeira, P. T., 392, 393  
 Madhiyazhagan, P., 498  
 Madrinan, S., 155  
 Mady, M., 65  
 Magill, C. R., 394  
 Mahdavi, Y., 33  
 Mahvi, A. H., 33  
 Mail, M., 40, 747  
 Maine, 395  
 Maine, M. A., 395  
 Makhlof, N. A., 1  
 Makinson, J. R., 530  
 Makkonen, S., 676  
 Makowka, A., 105  
 Makowski, D., 396  
*Malaiifilix*, 753  
 malaria, 498  
 Malaysia, 481, 686  
 Mali, A. M., 397  
 Mallmann, I. T., 398  
 Maltese islands, 427  
 Mangerud, G., 504  
 mangroves, 659, 664  
*Manihot esculenta*, 352  
 Manolescu, D. S., 649  
 Manson, S., 677  
 Manzanera, J. A., 214  
 Mao, B. Z., 176  
 Mao, S. Y., 771  
 Marattiaceae, 692  
 Marcal, W. S., 130  
 Marchant, D. B., 399  
 Marchi, G., 487  
 Marcuse-Kubitza, A., 167  
 Mardones, D., 187  
 Marinsek, A., 224  
 Marmottant, P., 75  
 Marquardt, J., 114  
 Marquez, G., 216, 495, 737  
 Marquez, G. J., 736, 737  
*Marsilea*, 666  
*Marsilea owambo*, 150  
*Marsilea vera*, 150  
*Marsilea vestita*, 559, 665  
 Marsileaceae, 670  
 Marsilobo, S., 400  
 Marsz, A., 652  
 Martin, A. D., 26  
 Martin, F., 208  
 Martin, L., 214  
 Martin, W. F., 105  
 Martinetto, E., 330  
 Martinez, C., 155  
 Martinez, N. C. L., 289  
 Martinez, O. G., 279, 280, 401, 402, 403  
 Martin-Garcia, J., 404  
 Martins, S. C. V., 405  
 Marugami, M., 16  
 Masaki, D., 650  
 Mascaraque, M., 499  
 Masoodi, U. R. H., 547  
 Masseran, N., 481  
 Massini, J. G., 406, 573  
 Massola, N. S., 67  
 Masuda, K., 620  
 Mateo, R. G., 407  
 Mathewes, R. W., 408  
 Mathews, S., 349  
 mating systems, 159, 225, 233, 246, 276, 373, 606, 608, 613, 616  
*Matonia braunii*, 35  
 Matos, F. B., 409  
 Matowicka, B., 410  
 Matsumoto, A., 429  
 Matsumoto, S., 276  
*Matteuccia struthiopteris*, 267, 335, 680  
 Maul, D. P., 392  
 Maunsell, S. C., 121  
 Maurity, C., 695  
 Mazerolle, M. J., 36  
 Mazumdar, J., 411, 412, 413, 414  
 Mazumdar, K., 135  
 McAdam, S. A. M., 415  
 McArthur, A. D., 416  
 McBurney, L. M., 54  
 McCain, C. M., 121  
 McLaren, K., 380  
 McLaren, K. P., 534  
 McLoughlin, S., 417, 418, 683  
 McNair, D. M., 419  
 McPeak, R. H., 420  
 Medeanic, S., 421  
 Medeiros, R., 587  
 medicinal plants, 97, 102, 141, 221, 240, 269, 288, 323, 334, 362, 441, 454, 468, 488, 569, 642, 651, 680  
 Medina, E., 664  
 Mediterranean, 187  
 Meena, K., 422  
*Megalastrum*, 18, 19  
 Mehltreter, K., 215, 307  
 Mehmood, W., 575  
 Mei, S. Q., 31  
 Meijide, A., 59  
 Meijide, I., 568  
 Melkonian, M., 336  
 Mello, F. N. A., 120  
 Mello, R. L., 565  
*Melvillipteris quadriseriata*, 731  
 Memon, A., 320  
 Mendez, C., 486  
 Mendonca, J. N., 14  
 Mendoza-Ruiz, A., 175, 423, 447  
 Meng, Z., 106  
*Meniscium*, 586  
*Meniscium delicatum*, 186  
 Menzel, F., 164  
 Mesa Romeu, D., 604  
 Mesoamerica, 45, 638  
 mesophyll CO<sub>2</sub> diffusion, 668  
 Mesozoic, 235, 300, 418, 683, 767  
 metal accumulators, 86, 357, 400, 615, 749  
 metal sorption, 26  
*Metathelypteris flaccida*, 100  
*Metaxya*, 91, 92  
 methods, 396  
 Metzgar, J., 525  
 Metzgar, J. S., 424  
 Mexico, 138, 166, 423, 442, 447, 511, 582, 677, 697  
 Meyer, J. Y., 524, 531  
 Meza Torres, E. I., 401, 525  
 Miao, X. Y., 525  
 Miao, Y. F., 426  
 microbial biofilm, 653  
*Microcystis aeruginosa*, 754  
 microhabitat, 194  
*Microlepidia spelunca*, 737

- microsatellite markers, 324, 734,  
     741, 757  
 Mifsud, S., 427  
 Mighri, Z., 238  
 Miguel, M. D., 488  
 Miguel, O. G., 488  
 Mikula, A., 396  
 Milan, J., 235, 300, 418, 683  
*Milesina dryopteridis*, 292  
 Mille, C., 140  
 Miller, M. F., 428  
*Millerocaulis zamunerae*, 573  
 Mills, B., 257  
 Mills, R., 548  
 Min, V. S., 722  
 Minas Gerais, 254, 537  
 Mingma, R., 429  
 mining, 433, 760  
 Miocene, 485, 586, 728  
 Miraj, S., 430  
 Miranda, C. V., 431, 598  
 Miridae, 466, 467  
 Miroshnik, N. V., 432  
 Mishra, M., 621  
 Mishra, V. K., 433  
 Mississippi, 419  
 Mississippian, 44, 520  
 Misstear, B., 483  
 Misumi, S. Y., 434  
 mites, 168  
 mitochondria, 61, 310, 714  
 Mitrovic, D., 435  
 Miyauchi, K., 271  
 Mizuno, T., 436  
 modelling, 453  
 Mohammad, R. H., 437  
 Mohanan, N., 15  
 Mohandas, S., 438  
 Mohanty, S. R., 313  
 Molinillo, J. M. G., 283  
 Momohara, A., 436  
*Monachosorum arakii*, 157  
 Mondal, S., 439  
 Mongolia, 249  
 Moniri, M. H., 211  
 monsoon, 768  
 Moraes Ferreira, R. de, 440  
 Mora-Guzman, E., 245  
 Morais-Braga, M. F. B., 441  
 Morales, L., 668  
 Morales-Arias, J. G., 442  
 Moran, R., 246, 525  
 Moran, R. C., 409, 443, 444, 445,  
     446, 464, 528, 657, 689  
 Morbelli, M. A., 736, 737  
 More, S., 448  
 Moreau, J. D., 449  
 Moreno, C., 216  
 Moreno, V. S., 120  
 Moreno-Chacon, M., 187  
 Moreno-Dominguez, R., 450  
 Moreno-Sanchez, M., 586  
 Morero, R. E., 451  
 Mori, G. M., 734  
 Morimoto, J., 291  
 Morita, N., 484  
 Mork, A., 504  
 Morkved, P. T., 504  
 Morozov, S. Y., 452  
 morphogenesis, 490, 600, 640  
 morphology, 91, 92, 190, 191, 199,  
     296, 333, 338, 493, 526, 593,  
     610, 626, 660, 673, 690, 720,  
     736, 747, 765  
 morphometry, 215  
 morphotypes, 567  
 Morris, P. H., 453  
 Morrison, L., 483  
 Mortara, S. R., 197  
 Morueta-Holme, N., 167  
 Moses, J., 121  
 Moshelion, M., 472  
 mosquito deterrents, 539  
 Mostafapour, F. K., 32  
 Mota, N. F. D. O., 695  
 Moteetee, A., 454  
 Moulatlet, G. M., 462, 675  
 Moura, I. O., 455, 456, 457, 581  
 Moura, L. C., 458, 581  
 Moutte, J., 482  
 movement, 194, 316  
 Mower, J. P., 769  
 Mraz, P., 136  
 Mubarak, M., 459  
 mucilage, 748  
 Mudge, C. R., 460  
 Muhlhauser, P., 203  
 Mukhopadhyay, R., 221, 603  
 Muller, A., 461  
 Müller, K., 223  
 Mulligan, D., 686  
 Mulligan, M., 82  
 Munir, B., 744  
 Munkacsi, A., 83  
 Munoz, J., 407  
 Munoz, N., 143  
 Munusamy, M. A., 498  
 Muralidhara-Rao, D., 43  
 Murata, Y., 243  
 Muro, J., 462  
 Murray, B. D., 463  
 Murtaza, B., 476  
 Murtaza, G., 476  
 Murthy, S., 589  
 Murugaiyah, V., 102  
 Murugan, K., 296, 297, 378, 498,  
     539  
 Mustapha, M. A., 481  
 Myanmar, 304  
 mycorrhiza, 208, 245, 342, 417, 484  
 Mynssen, C. M., 464, 525
- N**
- Nadal, M., 668  
 Nadeem, F., 575  
 Nag, A., 324  
 Nagalingum, N., 525  
 Nair, K. N., 621  
 Najeeb, U., 176  
 Nakamatsu, N. A., 261  
 Nakamura, F., 291  
 Nakato, N., 157  
 Nakulan V, R., 541  
 Namyatova, A., 466  
 Namyatova, A. A., 467  
 nanoparticles, 43, 132, 284, 294,  
     498, 539, 629, 649, 651, 693,  
     746  
 Napier, M., 427  
 Narayanaperumal, J., 541  
 Nasr, F. A., 165  
 Nath, K., 468  
 natural history, 7  
 Naugolnykh, S. V., 469, 470  
 Naujalis, J. R., 562  
 Nawaz, M. F., 476  
 Naya, M., 471, 489  
 Neefjes, R. E. M., 507  
 Negin, B., 472  
 Neinhuis, C., 40  
 Nelsen, M. P., 473  
 Nelson, W. J., 41, 42, 144  
 nematodes, 22, 669, 726  
*Neolepisorus*, 728  
*Neomusotima conspurcatalis*, 635  
*Neostromboceros albicomus*, 392  
*Nephtopteris maxonii*, 494  
*Nephrolepis*, 391  
*Nephrolepis biserrata*, 481  
*Nephrolepis 'bostoniensis'*, 733  
*Nephrolepis cordifolia*, 134, 727  
*Nephrolepis exaltata*, 13, 23, 669  
 Neraudeau, D., 449  
 Neregato, R., 474

- Nervo, M. H., 475  
 Net, T., 587  
 Netherlands, 70, 71  
 Neto, A. C. R., 120  
 Neto, L. M., 197, 200  
 Neto, M. A. O., 120  
 New Caledonia, 140, 513  
 new combinations, 501  
 new family, 464  
 new fern insects, 140, 466  
 new fern mites, 168  
 new genus, 56, 387, 753  
 New Guinea, 149, 344, 648  
 new hybrids, 185, 379, 509, 542, 612, 758  
 new species, 149, 153, 154, 168, 186, 239, 304, 332, 343, 344, 348, 350, 360, 377, 403, 409, 444, 447, 512, 523, 542, 543, 544, 581, 716, 729  
 new subspecies, 599  
 New York, 85, 445, 446, 657  
 New Zealand, 73, 78, 79, 80, 81, 83, 156, 268, 341, 500, 512, 513  
 Newman, L., 433  
 Ng, S. F., 334  
 Nguyen, D. T., 377  
 Niazi, N. K., 476  
 Nichols, D. S., 415  
 Nick, P., 203  
 Nicobar Islands, 627  
 Nicoletti, M., 498, 539  
 Nie, Z. L., 718  
 Nierop, K. G. J., 76  
 Nigeria, 485  
 Niinemets, U., 668  
 Niklas, K. J., 477  
 Nino, L. M., 743  
 Nishida, K., 668  
 Nithya, T. G., 478  
 nitrogen, 219, 220, 708  
 Nitta, J. H., 524  
 Niu, Y. T., 106  
 Nnamani, C. V., 172  
 Noben, S., 121  
 Noblin, X., 369  
 Nobrega, G. A., 479  
 Nogueira, A. C. R., 21  
 nomenclature, 20, 63, 103, 126, 150, 156, 346, 360, 411, 412, 414, 451, 543, 633  
 nonylphenol, 170  
 Noorani, M. S. M., 481  
 Nopun, P., 480  
 Nor, M. M., 481  
 Normand, S., 407  
 Nornasuha, Y., 481  
 North America, 199, 718  
 Norton, D. A., 193  
 Norway, 8, 418, 504  
*Nothoperanema*, 326  
 Novotny, V., 121  
 Nunes-Freitas, A. F., 28  
 Nunes-Nesi, A., 86  
 Nunez, C. O., 88  
 Nunez-Farfan, J., 734  
 Nunez-Lopez, N. M., 442  
 Nur-E-Alam, M., 437  
 Nuruddin, A. A., 588  
 Nurul Ain, M. B., 481  
 nutrient content, 219, 220  
 nutrients, 286, 486, 584
- O**
- oak forests, 743  
 Oaxaca, 511  
 Obeidy, C., 482  
 Oberbauer, T. A., 420  
 obituary, 213, 265, 266, 506  
 Odebunmi, E. O., 132  
 O'Driscoll, C., 483  
 Ogenva-Himmelberger, Y., 677  
 Ogundipe, O. T., 172  
 Ogunrinde, T. A., 4  
 Ogura-Tsujita, Y., 484  
 Oh, H. S., 3  
 oil spill cleanup, 747  
 Okada, T., 620  
 Okajima, K., 315  
 Okitsu, S., 436  
 Olayiwola, M. A., 485  
*Oleandra*, 598  
 Oleandraceae, 578  
 Oligocene, 330, 450  
 Olivares, E., 486  
 Oliveira, A. V., 390  
 Oliveira, C. F., 488  
 Oliveira, D. B., 120  
 Oliveira, J. A. de, 198  
 Oliveira, L. M. de, 487  
 Oliveira, M. H., 599  
 Oliveira, P. A., 587  
 Oliveira, V. B., 488  
 Oliveros-Bastidas, A., 489  
 Oliwa, J., 490  
 Ollgaard, B., 525  
 Olvera-Vargas, M., 138  
 Omkar, 621  
 ontogeny, 372  
 Ophioglossaceae, 136, 410  
 Oplustil, S., 491  
 Oralls, D. G., 492  
 Oria-de-Rueda, J. A., 404  
 ornamental ferns, 549  
 Ornelas, J. F., 638  
 Orozco-Segovia, A., 215  
 Osborn, A. R., 492  
*Osmunda*, 330, 673  
*Osmunda claytoniana*, 305  
*Osmunda japonica*, 89  
*Osmunda regalis*, 396  
 Osmundaceae, 330, 484, 556, 573, 673  
 Osorio, G., 69  
 Otaghvari, A. M., 303  
 Otaka, J., 16  
 Otano, N. N., 143  
 Overbeck, G. E., 475  
 Oyston, J. W., 493
- P**
- Pabon-Mora, N., 494  
 Paciencia, M., 479  
 Pacyna, G., 35  
 Padilla, W. P., 22  
 Padovani, G., 93  
 Pagano, E., 527  
 Pakistan, 48, 240, 609, 710  
 Palacios-Rios, M., 495  
*Palaebotrychium*, 469  
 palaeontology, 155, 212  
 Palafox-Rodriguez, M., 245  
 Palchetti, V., 88  
 Paleocene, 118  
 paleoclimate, 426  
 paleontology, 37, 39, 41, 42, 144, 160, 189, 216, 234, 235, 236, 237, 244, 249, 251, 255, 257, 275, 282, 300, 308, 311, 318, 328, 329, 331, 341, 353, 354, 355, 370, 383, 386, 394, 406, 408, 416, 417, 428, 435, 448, 449, 450, 453, 469, 473, 485, 491, 504, 505, 514, 531, 561, 570, 572, 573, 586, 589, 632, 647, 662, 673, 679, 682, 685, 688, 691, 692, 700, 704, 718, 728, 735, 740, 767  
 Paleozoic, 387, 473  
 Palik, B. J., 563  
 palinology, 175  
 Pallag, A., 496  
 Pallos, J., 497

- Palomares-Rius, J. E., 22  
 palynoflora, 235  
 palynology, 46, 131, 215, 237, 248,  
 353, 354, 355, 383, 387, 421,  
 426, 448, 453, 474, 485, 520,  
 521, 536, 567, 572, 626, 647,  
 679, 692, 721, 736, 737, 740  
 Pan, A. D., 383  
 Pan, M., 151  
*Panax japonicus*, 674  
 Pandey, P., 621  
 Panneerselvam, A., 142  
 Panneerselvam, C., 498, 539  
 Panteris, E., 640  
*Parapolystichum*, 648  
 Parihar, P., 529  
 Parimelazhagan, T., 43  
 Park, S., 545  
 Park, S. M., 3  
 Parkeriaceae, 741  
 Parra, M. J., 69  
 Parrado, C., 499  
 Parris, B. S., 500, 501, 502, 550  
 Paruya, D. K., 448  
 Parveen, I., 437  
 Pasca, B., 496  
 Passalia, M. G., 567  
 Passarelli, L., 526  
 Passos, C. D., 14  
 Patagonia, 111, 406, 573  
 Patel, M., 123  
 Patel, N. R., 348  
 Patel, R. N. K., 503  
 Patel, S. K., 503  
 Paterson, I. D., 393  
 Paterson, N. W., 504  
 Patil, S., 152  
 Patil, S. M., 99  
 Patil, V. B., 397  
 Patra, A. K., 313  
 Patrino, S., 679  
 Pattermore, G. A., 505  
 Paul, A., 506  
 Paul, A. K., 641  
 Paul, A. M., 213, 525  
 Paula, C. S., 488  
 Paulsen, E., 13  
 Pavone, P., 124  
 Pazos, M., 568  
 peatland, 318  
*Pecluma*, 24, 401  
*Pecopteris apicalis*, 311  
*Pecopteris miltonii*, 700  
 Pedersen, D., 675  
 Pedro, M. C., 395  
 Peet, R. K., 167  
 Peeters, E. T. H. M., 507  
*Pellaea connectens*, 763  
 Pellerin, S., 49  
 Pellicer, J., 114  
 Pena, E., 486  
 Pena-Cortes, F., 518  
 Penalver, E., 510  
 Peng, J., 46  
 Peng, Q. Z., 372  
 Peng, Y., 739  
 Peng, Y. H., 336, 619  
 Pennsylvania, 202  
 Pennsylvanian, 41, 42, 144, 216,  
 491, 700  
 Pereira, A. A., 129  
 Pereira, A. L., 508  
 Pereira, J. B., 671  
 Pereira, J. B. D., 525  
 Pereira, J. B. S., 332  
 Pereira-Colavite, A., 565  
 Pérez Carro, F. J., 509  
 Perez, R. E. C., 667  
 Perez, T. R., 667  
 Perez-de La Fuente, R., 510  
 Perez-Garcia, B., 175, 215, 423  
 Perez-Garcia, O., 511  
 Permian, 21, 56, 95, 129, 249, 331,  
 387, 428, 474, 589, 735  
 Perret, A. J., 460  
 Perrichot, V., 704  
 Perrie, L., 83  
 Perrie, L. R., 78, 79, 80, 81, 512,  
 513, 525  
 Perry, G. L. W., 73  
 Peru, 34, 343, 409, 583  
 Peruzzi, L., 50  
 Peterffy, O., 514  
 Peters, S. E., 473  
 Petitpierre, B., 407  
*Petrocosmea qinlingensis*, 739  
 Petter, G., 515  
 phenoles, 496  
 phenology, 461, 609  
 Philippines, 12, 29, 667  
*Phlebodium aureum*, 499, 569  
*Phlegmariurus*, 190  
 phosphate, 241  
 phosphorus, 158, 220, 507, 708  
 photobiology, 699  
 photochrome, 430  
 photoreceptors, 349  
 photosynthesis, 340, 668  
*Phyllitis sagittata*, 604  
*Phyllitis scolopendrium*, 604  
*Phylloglossum*, 190  
 phylogenetics, 10, 24, 31, 83, 91,  
 92, 106, 114, 149, 190, 253, 259,  
 303, 326, 338, 339, 347, 364,  
 365, 443, 452, 467, 493, 535,  
 545, 669, 672, 673, 720, 753,  
 756  
*Phymatosorus scolopendria*, 645  
 physiology, 31, 135, 137, 191, 192,  
 307, 340, 378, 405, 415, 430,  
 472, 490, 527, 566, 624, 668,  
 699, 732, 745, 751  
 phytochemistry, 142, 152, 293, 319,  
 333, 394, 437, 496, 575, 620,  
 653, 659, 701, 742, 748, 766  
 phytoecdysone, 727  
 phytoremediation, 4, 134, 135, 271,  
 320, 325, 395, 433, 476, 641,  
 667  
 phytostabilization, 760, 761, 762  
 Pienkowski, G., 35  
 Pierini, B., 50  
 Pietrobon, M. R., 497  
 Pihkva, K., 571  
 Piirainen, M., 516  
*Pilosisorites*, 602  
*Pilularia minuta*, 670  
 Pimenta, J. A., 94  
 Pimsuwan, S., 517  
 Pincheira-Ulbrich, J., 518  
 pine forests, 562  
 Pinson, J. B., 519, 596  
 Pintos, B., 214  
 Piras, A., 238  
 Pires, J. C., 38, 336  
 Pise, N. M., 397  
 Pittau, P., 590  
 Pittermann, J., 30, 74, 261  
*Pityrogramma calomelanos*, 86  
 Plagiogyriaceae, 484  
 plant communities, 133, 177, 202,  
 230, 380, 398, 432, 463, 475,  
 563, 619, 643, 650, 656, 674,  
 675, 686, 739  
 plant defences, 694  
 plant growth, 241, 367  
 plant-insect interactions, 417  
 plant-soil interactions, 289, 639  
 plasmids, 714  
 Platel, J. P., 449  
*Platyserium bifurcatum*, 490, 588  
*Platyserium coronarium*, 517  
 Playford, G., 520  
 Pleistocene, 110, 131, 531  
*Pleocnemia siamensis*, 729

- Pleopeltis*, 593  
*Pleopeltis bradeorum*, 179  
*Pleopeltis lepidopteris*, 191  
*Pleopeltis polylepis*, 90  
 Pliego, P. G. del, 139  
 Plotkin, A. A. B., 163  
 Poinar, G., 647  
 Poland, 35, 282  
 polar forests, 428  
 Poliakova, A., 521  
 Polisel, R. T., 120  
 Pollawatn, R., 523, 725  
 pollution, 400  
 Polonia, 410, 652  
 Polsakiewicz, M., 253  
 polyembryony, 552  
 Polynesia, 524, 531  
 polyploidy, 38, 136, 298, 327, 425, 723  
 Polypodiaceae, 24, 179, 191, 279, 304, 332, 346, 401, 412, 501, 502, 523, 610, 706, 728, 757  
*Polypodium*, 52  
*Polypodium aleuticum*, 610  
*Polypodium hastatum*, 742  
*Polypodium interjectum*, 690  
*Polypodium leucotomas*, 569  
*Polypodium leucotomos*, 52, 499  
*Polypodoides amoena*, 706  
*Polystichopsis*, 528  
*Polystichum*, 74, 239, 338, 451  
*Polystichum arcuatum*, 239  
*Polystichum braunii*, 600  
*Polystichum clarinervium*, 348  
*Polystichum crassirachis*, 239  
*Polystichum membranifolium*, 239  
*Polystichum multispinosum*, 239  
*Polystichum munitum*, 74  
*Polystichum paraobliquum*, 239  
*Polystichum paucicarpum*, 239  
*Polystichum quangbinhense*, 377  
*Polystichum serratissimum*, 239  
*Polystichum setiferum*, 690  
 Ponce, M., 18, 20, 522, 525  
 Ponce, M. M., 17, 19  
 Pongkai, P., 523  
 population genetics, 98  
 Porcedda, S., 238  
 Porch, N., 531  
 Portugal, 691  
 potassium, 764  
 Pott, C., 688  
 Potts, M. D., 113  
 Poulin, M., 66  
 Pouteau, R., 524  
 Prada, C., 214, 217, 526  
 Prado, C., 527  
 Prado, F. E., 527  
 Prado, J., 18, 19, 47, 258, 259, 402, 479, 525, 528, 597, 598, 599  
 Prasad, K., 284  
 Prasad, S. M., 529  
 Prashob Peter, K. J., 659  
 Prati, D., 57  
 Pratt, P. D., 392, 530  
 Prebble, M., 531  
 Pressel, S., 532  
 Prete, M. C., 84  
 Price, C. A., 58  
 Price, F. D., 273  
 primers, 108  
 Prioli, A. J., 390  
 Prioli, S., 390  
 Priyantha, N., 145, 146  
 productivity, 600  
 Proite, K., 10  
 Prokopuk, M. S., 533  
*Pronephrium megacuspis*, 270  
 propagation, 312, 396  
*Prosaptia hornei*, 501  
 Prospere, K., 534  
 prostatitis, 240  
 protein production, 165  
 proteins, 373, 452, 478, 617  
 Pryer, K. M., 246, 259, 351, 535, 596  
 Psenicka, J., 491  
*Psilotum nudum*, 585  
 ptaquiloside, 115, 116, 483, 587, 631  
 Pteridaceae, 60, 103, 259, 278, 360, 382, 403, 411, 413, 425, 456, 494, 495, 522, 535, 543, 560, 570, 575, 596, 605, 606, 612, 681, 707, 734, 774  
*Pteridium*, 116, 130, 201, 323, 471, 483, 489, 511, 587, 631, 650, 660, 677, 678  
*Pteridium aquilinum*, 123, 158, 437, 471, 498, 680, 764  
*Pteridium arachnoideum*, 283, 486, 737  
*Pteridium esculentum*, 194, 312  
*Pteridium revolutum*, 766  
*Pteris*, 15, 43, 292, 402, 413, 543  
*Pteris cretica*, 324, 384, 438, 575  
*Pteris ensiformis*, 290  
*Pteris fauriei*, 292  
*Pteris janssenii*, 543  
*Pteris melanocaulon*, 667  
*Pteris multifida*, 411, 560, 751, 752  
*Pteris pseudowoodwardioides*, 543  
*Pteris rasoloheryana*, 543  
*Pteris rugosa*, 543  
*Pteris semiadnata*, 606  
*Pteris sotae*, 403  
*Pteris tripartita*, 552  
*Pteris vittata*, 87, 147, 181, 241, 247, 250, 271, 278, 357, 359, 367, 482, 487, 568, 641, 663, 701, 702  
*Pteris x psuedosefuricola*, 274  
 Puglielli, G., 690  
 Pulvirenti, S., 124  
 Purcell, M. F., 530  
 Purohit, S. N., 616  
 Pushpakumara, D. K. N. G., 549, 550  
 Pyralidae, 174  
*Pyrrrosia*, 614  
*Pyrrrosia flocculosa*, 615
- ## Q
- Qadir, A., 744  
 Qiao, M., 31  
 Qin, H. N., 759  
 Qin, P., 207  
 Qin, X. D., 352  
 Qiu, Z., 739  
 quality control, 559  
 Quamar, M., 536  
 Quaternary, 110, 237, 368, 521, 740, 768  
 Queensland, 570  
 Quilghini, G., 335  
 quorum sensing inhibitors, 653
- ## R
- Rabelo, L. S., 537  
 Radel, C., 677  
*Radiogrammitis setulifera*, 501  
 radioisotopes, 676, 764  
 Ragunathan, M. G., 478  
 Rahaman, S., 538  
 Rahman, I. U., 609  
 Rahman, M. S., 97  
 Rai, P., 621  
 Rai, U. N., 325  
 rainforests, 73, 341, 388  
 Rajaganesh, R., 498, 539  
 Rajagopal, P. K., 540  
 Rajanikanth, A., 109

- Rajapure, V., 621  
Rajasthan, 422, 616  
Rajesh, K. D., 541  
Rajesh, K. P., 696  
Rajesh, N. V., 142  
Rajkumar, S. D., 288  
Rajput, K. S., 503  
Rakotoarimanana, V., 548  
Rakotondrainibe, F., 542, 543, 544  
Ramage, B. S., 113  
Ramalho, A. J., 10  
Raman, G., 545  
Ramezani, J., 118  
Ramirez-Andreotta, M., 247  
Ramirez-Barahona, S., 546, 638  
Ramos, M., 486  
Ramos, R. R. C., 189  
Ramteke, P. W., 732  
Ramwell, C., 116, 483  
Ran, J. H., 106, 655  
Rana, D., 547  
Ranade, S. A., 621  
Randi, A. M., 191  
Randrianarison, A., 548  
Rane, N. R., 99  
Ranil, R. H. G., 549, 550  
Ranker, T. A., 525, 551  
Rao, N. K., 334  
Rao, Y. V., 109  
Rasmussen, L. H., 631  
Rasol, N. H. A., 481  
Rathinasabapathi, B., 367, 487  
Ravi, B. X., 552  
Ravon, A. L., 449  
Ray, P., 553  
Rayamajhi, M. B., 530  
Razanaka, S., 548  
recolonization, 66  
Reddy, S. G. E., 554  
rediscovery, 513, 560  
Reeb, C., 544  
regeneration, 28, 96, 201, 207  
Regina, T. M. R., 61  
Rehman, H., 539  
Reichart, G. J., 76  
Reid, J. L., 555  
Reinio, J., 171  
Rembold, K., 59  
remote sensing, 462  
Rempe, C. S., 336  
Renner, S. S., 556  
Rensing, K. A., 591  
Rensing, S. A., 557  
Renzaglia, K. S., 373  
Repin, R., 686  
reproduction, 159, 222, 233, 246, 276, 373, 415, 552, 606, 608, 613, 616, 665  
Resmi, S., 558  
restoration, 312, 555  
resurrection fern, 69  
rhizomes, 8, 240, 308, 362, 417, 437, 480, 649  
rhizosphere, 242, 482  
Riano, K., 374  
Ribeiro, J., 587  
rice, 273, 368  
Richa, G., 559  
Richards, J., 601  
Rico, C., 74  
Riegel, W., 561  
Riemann, M., 203  
Rigon, J., 120  
Rimgaile-Voicik, R., 562  
Rimington, W. R., 532  
Rio Grande do Sul, 218  
riparian forests, 39, 66, 170, 230, 398, 404, 564  
Ritchie, E. G., 194  
RNA editing, 253, 310, 591, 774  
Robert, Y., 114  
Roberts, M. W., 563  
Rocha-Urriarte, L., 564  
Rocker, C., 84  
Rodrigues da Silva, I. C., 747  
Rodrigues, E., 283  
Rodrigues, J. P. V., 565  
Rodrigues, R. R., 120  
Rodriguez, E., 143  
Rodriguez-Hernandez, J. L., 442  
Roelfsema, M. R. G., 566  
Roelofs, J. G. M., 687  
Roettger, M., 105, 698  
Rogan, J., 677  
Rojas, N., 369  
Rojas, R., 668  
Rolleri, C. H., 217, 526  
Roma-Marzio, F., 50  
Romero, E. J., 567  
Rommel, S., 698  
Roni, M., 498, 539  
Roos, M., 266  
root symbiont, 553  
roots, 22, 151, 247, 314, 663, 698  
Rosa, M., 527  
Rosales, E., 568  
Rosas-Perez, I., 215  
Rosiyana, L., 651  
Rosso, J. Q. D., 569  
Rothfels, C. J., 226, 285, 336, 350, 351, 525, 535, 753  
Rouhan, G., 327, 464, 525  
Rousk, J., 6  
Roy, S. D., 627  
Rozeffelds, A. C., 570  
Ruan, J. L., 240  
Ruan, Q. F., 674  
Rubio, M. A. K., 14  
Rudall, P. J., 128  
*Rumohra adiantiformis*, 292  
Runk, K., 571  
Ruokolainen, K., 289, 462, 675  
Russell, S. J., 24  
Russia, 5, 183, 184, 185, 232, 256, 469  
rust fungi, 292  
Rust, J., 704  
Ruvalcaba-Sil, J. L., 584  
Rybczynski, J. J., 396  
Rydgren, K., 252
- ## S
- Sa, N. D., 572  
Saavedra, F., 201  
Saenz-Carbonell, L., 340  
Saga, Y., 16  
Sagasti, A. J., 573  
Saggoo, M. I. S., 574  
Saha, U. K., 181  
Saini, D., 617  
Saito, K., 16  
Saiz, P., 526  
Sajnovic, A., 435  
Sakata, R., 243  
Sakoda, A., 484  
Salaeh, A., 290  
Salamanca, E., 636  
Saldana, A., 187, 518  
Saleem, F., 575  
Saleema, H., 575  
salinity, 421  
Salino, A., 9, 10, 24, 120, 186, 197, 204, 205, 206, 254, 455, 456, 457, 458, 525, 576, 577, 578, 579, 580, 581, 695  
Sallam, H., 160  
Salo, P., 516  
*Salvinia*, 390, 440, 460, 527  
*Salvinia cucullata*, 135  
*Salvinia herzogii*, 395  
*Salvinia minima*, 340  
*Salvinia molesta*, 84, 99, 264, 272, 459, 478, 538, 693

- Salvinia natans*, 652, 754  
 Sam, K., 121  
 Sam, L., 121  
 Samant, S. S., 618  
 Sánchez, G., 395  
 Sanchez, M., 321  
 Sanchez-Arias, M. D., 245  
 Sanchez-Arreola, E., 90  
 Sanchez-Gonzalez, A., 582  
 Sanchez-Martinez, M. A., 583  
 Sanchez-Rodriguez, E. V., 442  
 Sanchez-Viveros, G., 584  
 Sandel, B., 167  
 Sanin, D., 585, 586  
 Sanroman, M. A., 568  
 Santa Catarina, 230  
 Santamaria, J. M., 340  
 Santana-Michel, F. J., 442  
 Santiago, L. S., 624  
 Santoro, A., 158  
 Santos, C., 587  
 Santos, K. K. A., 441  
 Santos, M., 587  
 Santos, R., 230  
 Sanusi, R. A. M., 588  
 Sao Paulo, 47, 120  
 Saqib, Z. A., 476  
 Sara, S. C., 645  
 Saraiva, A. A. F., 441  
 Sarangi, B. K., 663  
 Sardina, L. J., 311  
 Sardinia, 328, 590  
 Sato, M., 650  
 Sato, T., 656  
 Sauer, K. E., 261  
 Saunders, M. R., 463  
 Saurabh, S., 621  
 Saveri, C., 335  
 sawflies, 594  
 Saxena, A., 589  
 Scanu, G. G., 328, 590  
 Scataglini, A., 522  
 Schallenberg-Rudinger, M., 591  
 Schamp, B. S., 711  
 Scheffers, B. R., 139  
 Schlaepfer, R., 548  
 Schleuning, M., 201  
 Schluepmann, H., 76, 698  
 Schmeissner, S., 688  
 Schmidt, A. R., 595  
 Schmidt, E. C., 191  
 Schmitt, J. L., 398, 461, 564  
 Schmook, B., 677  
 Schneider, H., 10, 24, 114, 363, 364, 525, 592, 593, 594, 595  
 Schneider, L., 677  
 Schneller, J. J., 246  
 Schonheit, P., 105  
 Schreiber, K., 105  
 Schuettpeitz, E., 103, 226, 246, 259, 519, 525, 535, 592, 596, 753  
 Schulz, C., 47, 525  
 Schwartsburd, P. B., 227, 228, 431, 525, 537, 597, 598, 599  
 Schwerbrock, R., 600  
 Scotland, 44  
 Seabolt, M. H., 360  
 seasonality, 321  
*Sebacina vermifera*, 553  
 Sebesta, N., 601  
 Secco, R. D. S., 695  
 sediments, 383, 485, 521, 740  
 seed bank, 94  
 Seegets-Villiers, D. E., 602  
 Seeram, N. P., 384  
*Selaginella*, 47, 254, 422  
*Selaginella caffrorum*, 454  
*Selaginella doederleinii*, 651  
*Selaginella kraussiana*, 207  
*Selaginella pectinata*, 633  
 Selaginellaceae, 446, 626, 684, 719, 720  
*Selaginellites coburgensis*, 688  
 Seleteng Kose, L., 454  
*Selliguea kachinensis*, 304  
 Selosse, M. A., 101  
 Selvaraj, P., 727  
 Sen, K., 221, 603  
 Senar Lluch, R., 604  
 Sepulveda, F., 69  
 Seral, A., 605, 606  
 Serbia, 435  
 Serrano, J. M., 39  
 Sessa, E. B., 246, 360, 525, 607, 608  
 Setyani, A., 651  
 sex determination, 220, 613  
 shade, 66, 291  
 Shaheen, S., 609  
 Shahid, M., 476  
 Shahid, N., 575  
 Shaija, A., 459  
 Shakoor, M. B., 476  
 Shalimov, A. P., 610  
 Shaltout, K. H., 611  
 Shaltout, S. K., 611  
 Shang, H., 364, 612  
 Shang, J. Z., 613  
 Shao, D., 768  
 Shao, L., 474  
 Shao, W., 614  
 Shao, Y., 728  
 Shapiro, A. M., 121  
 Sharma, A., 615  
 Sharma, B. D., 616  
 Sharma, H., 324  
 Sharma, J. G., 617  
 Sharma, K. K., 294  
 Sharma, P., 618  
 Sharma, R. K., 324  
 Sharma, S., 621  
 Shaw, B., 513  
 Shczepetov, S. V., 256  
 Sheahan, J., 483  
 Shehzad, A., 701  
 Shehzad, O., 701  
 Shen, H. L., 250  
 Shen, W. H., 619  
 Shen, Y., 751, 752  
 Sheng, J. W., 362  
 Shepherd, L., 83  
 Shepherd, L. D., 513  
 Shi, G. L., 704  
 Shi, L., 250  
 Shi, P. L., 359  
 Shi, S. H., 756  
 Shi, X. M., 376  
 Shibila, T., 288  
 Shiha, M. A., 237  
 Shinmura, Y., 734  
 Shinohara, W., 327, 525  
 Shinozaki, J., 620  
 Shmakov, A., 525  
 Shmakov, A. I., 610, 681  
 Shukla, A. K., 621  
 Shukla, R., 433  
 Sibley-Punnett, L., 531  
 Sichuan, 354, 355  
 Sicily, 670  
 Siddique, K. H. M., 176  
 Sidor, C. A., 37  
 Sierra, A., 743  
 Sigel, E. M., 525, 622  
 silica, 6  
 silicon, 229  
 Silva, D. A. da, 130  
 Silva, J. B., 623  
 Silva, L. C. da, 198  
 Silveira, R. R. da, 131  
 Silvera, K., 624  
 Silvers, M. A., 147  
 Silvestri, L., 143  
 Simmons, M. P., 714  
 Simunek, Z., 491  
 Singh, A. P., 621

- Singh, H., 621  
 Singh, J., 628  
 Singh, K. J., 589  
 Singh, L. J., 625  
 Singh, M., 641  
 Singh, M. K., 621  
 Singh, P. K., 538, 621  
 Singh, R., 529, 621  
 Singh, S., 621, 627  
 Singh, S. K., 288, 626  
 Singh, W. R., 628  
 Singley, S. B. N., 419  
 Sinha, T., 629  
 Sirbu, V., 496  
 Sissel, B. N., 51  
 Sita, 630  
 Skoczowski, A., 490  
 Skourti-Stathaki, E., 631  
 Skyten, R., 516  
 Slater, S. M., 632  
 Sloan, D. B., 714  
 Smalls, T. L., 689  
 Smirnov, S. V., 298  
 Smith, A. P., 147  
 Smith, A. R., 10, 204, 206, 259, 525, 544, 560, 580, 633  
 Smith, L. M., 634  
 Smith, M. C., 635  
 Smith, R. M. H., 37  
 Smolders, A. J. P., 687  
 Snell, R. S., 661  
 Snene, A., 238  
 Soare, L. C., 649  
 Soares, E. A. A., 572  
 Soares, M. L. G., 664  
 Sobral-Souza, C. E., 441  
 Socolsky, C., 636  
 Soga, M., 291  
 soils, 181, 476, 631, 664, 686, 709, 749, 761  
 Sokolova, A. B., 255  
 Solis-Magallanes, A., 442  
 Solomon, J., 541  
 Solovyev, A. G., 452  
 Soltis, D. E., 106, 336, 399  
 Soltis, P. S., 106, 399  
 Somvanshi, R., 438  
 Song, C., 384  
 Song, J., 770  
 Song, L., 376  
 Song, U., 637  
 Song, W., 755  
 Soni, A. B., 559  
 Sonnichsen, F. D., 105  
 sori, 715  
 Sosa, V., 638  
 Soti, P. G., 639  
 Sotiriou, P., 640  
 Sousa, H., 587  
 South Africa, 264, 385, 393, 721  
 South Korea, 3  
 Souza, F. S. de, 497, 525  
 Souza, M. D. P. de, 440  
 Souza, P. A., 131  
 Souza, T. M., 441  
 Souza, V. C., 120  
 Spain, 216, 311, 682  
 species loss, 163  
 spermatogenesis, 666  
*Spodoptera litura*, 727  
 spore dispersal, 182, 369  
 spore mass, 215  
 spore tetrads, 589  
 spore viability, 601  
 spores, 131, 143, 172, 183, 214, 298, 299, 368, 434, 521, 737, 773  
 sporogenesis, 159  
 sporophylls, 526  
 Sreenivas, V. K., 558  
 Sri Lanka, 549, 550  
 Sridhar, K. R., 101  
 Srivastava, G. K., 626, 630  
 Srivastava, M., 630  
 Srivastava, S., 621, 641  
 Srivastava, S. K., 288  
 Stachowski, K., 415  
 Stadmark, J., 6  
 staghorn fern, 490, 517, 588  
 Staiano, M., 134  
 Stamey, M., 425  
 Stanley, J. D., 669  
 starch, 151, 267  
 stasis, 114  
 Staton, M. E., 336  
 Stech, M., 733  
 Steele, T. N., 147  
 Stehmann, J. R., 197  
 Steinhage, V., 223  
*Stenochlaena palustris*, 102, 169  
*Stenopelmus rufinasus*, 393  
 sterols, 659  
 Stevens, L. G., 44  
 Stevenson, D., 336  
 Stevenson, D. W., 285, 689  
 Stewart, C. N., 336  
*Stigmatopteris*, 443  
 stipe anatomy, 558  
 stoichiometry, 220, 708  
 Stojanovic, K., 435  
 stomata, 128, 162, 340, 405, 566  
 stomatal conductance, 472  
 stomatal control, 195  
 Stöver, B., 223  
 stress, 75, 86, 192, 297, 710  
 Strobel, B. W., 115, 116  
 Strullu-Derrien, C., 418  
 Stützel, T., 47  
 Styszynska, A., 652  
 Su, J. X., 106  
 Su, L., 642, 643  
 Su, L. H., 642  
 Suarez, G. M., 407  
 Subbotin, S. A., 669  
 Subramani, V., 541  
 Subramaniam, J., 498  
 substitution rates, 769  
 subtropical rain forest, 475  
 succession, 27, 318, 353, 703  
 Suchithra, T. V., 459  
 Suharjo, 646  
 Sujarwo, W., 644  
 Sujatha, S., 645  
 Sukul, S., 439  
 Sule, B., 149  
 Suleiman, M., 734  
 sulfate, 487  
 Sun, B. N., 386, 728  
 Sun, J. M., 426  
 Sun, L. G., 768  
 Sun, M., 106  
 Sun, Q. L., 368  
 Sun, Y. G., 771  
 sunblock, 499  
 Sundari, D., 646  
 Sundue, M., 179, 525, 647, 648, 658  
 Suresh, U., 498, 539  
 Suryani, 169  
 Sussmilch, F. C., 415  
 Sutan, N. A., 649  
 Suwanpinta, C., 517  
 Suzuki, A., 484  
 Suzuki, H., 16  
 Suzuki, R. O., 650  
 Suzuki, T., 243  
 Svalbard, 418  
 Svenning, J. C., 167, 407  
 swamp forests, 389, 534  
 Sweden, 235, 417, 683  
 Swetha, K., 478  
 Syaefudin, S., 651  
 Syfert, M. M., 82  
 Sylvestre, L. D., 525  
 Sylvestre, L. S., 464  
 synangia, 692



systematics, 9, 157, 206, 520, 525,  
535, 537, 542  
Szmeja, J., 652

## T

Ta, C. A. K., 653  
Tabor, N. J., 37  
Taft, J. B., 654  
Tahiti, 524, 531  
Taiwan, 100, 260, 350  
Takahashi, Y., 429  
Takaichi, H., 243  
Takase, I., 440  
Takayama, K., 734  
Takezaki, H., 436  
Takuno, S., 655  
Talavera-May, C., 340  
Talts, E., 668  
Tamashiro, J. Y., 120  
Tan, B., 703  
Tan, X., 739  
Tan, X. X., 106  
Tan, Z. Q., 619  
Tanaka, K., 429  
Tanaka, T., 656  
Tanentzap, A. J., 68  
Tang, L. J., 286  
*Taphrina*, 15  
Taputuarai, R., 524  
Tarai, S., 448  
Targay, N. L., 617  
Tarley, C. R. T., 84  
Tavares, T., 568  
taxonomy, 18, 46, 79, 80, 81, 111,  
153, 204, 345, 401, 424, 550,  
597, 598, 599, 614, 671, 681  
Taylor, J., 601  
Taylor, W. C., 657, 671  
*Tectaria*, 758  
*Tectaria kehdingiana*, 725  
*Tectaria macrodonta*, 127  
*Tectaria polymorpha*, 152  
Tectariaceae, 753  
Tejedor, A., 343  
Telford, R. J., 171  
temperate forests, 224  
Tereso, J. P., 691  
Tereszczuk, J., 69  
Terorotua, M., 524  
terpenes, 285  
terpenoids, 104, 384  
Tertychna, O. V., 432  
Tervahauta, A., 676  
Tessier, J. T., 492

Testo, W., 190, 525, 658  
Testo, W. L., 608, 648  
Texas, 560  
Thailand, 480, 502, 523, 725, 729  
Thakur, N., 621  
Theis, Z., 724  
Thelypteridaceae, 10, 81, 100, 186,  
258, 270, 413, 458, 580, 581  
*Thelypteris*, 586  
*Thelypteris dentata*, 293  
*Thelypteris kunthii*, 375  
*Thelypteris prolifera*, 503  
Thiel, D., 55  
Thomas, A., 659  
Thomas, V. P., 558  
Thomson, J. A., 660  
Thoss, V., 158, 437  
Thouvenot, L., 513  
Thrippleton, T., 661  
Thul, S. T., 663  
Tian, N., 662  
Tibet, 426  
Timoshok, E. E., 232  
Tintino, S. R., 441  
Tipping, P. W., 393  
tissue culture, 312, 396  
Tiwari, S., 663  
Tizzard, G. J., 437  
Tjitrosoedirdjo, S. S., 59  
Tobratov, S. A., 764  
Tognella, M. M. P., 664  
Tomas, M., 668  
Tomei, E. J., 665, 666  
Tomiczak, K., 396  
Tommasi, F., 134  
Tong, W. S., 710  
topography, 416  
Torre, J. B. B. de la, 667  
Torrez, V., 585  
Torrice, M., 119  
Tosens, T., 668  
Tosolini, A. M. P., 318  
toxicology, 438, 587  
Traiperm, P., 480  
transcriptomics, 226, 366, 666, 710,  
756  
transpiration, 415  
tree ferns, 73, 161, 193, 343, 344,  
473, 546, 638, 717, 775, 776  
trematodicide, 541  
Triana-Moreno, L. A., 525  
Triassic, 331, 354, 355, 386, 418,  
504, 505, 514  
*Trichoneuron*, 364  
Tripathi, K., 732

Trivedi, S., 539  
Troccoli, A., 669  
Troia, A., 670, 671  
Troitsky, A. V., 452  
tropical forests, 96, 113, 139, 289,  
380  
Trovo, M., 47, 695  
Tsai, I. J., 726  
Tsay, T. T., 726  
Tsuda, Y., 276, 734  
Tsukagoshi, M., 673  
Tsutsumi, C., 525, 672, 673  
Tu, S. H., 100  
Tu, X., 674  
tubercles, 381  
Tuli, R., 621  
Tuomisto, H., 91, 92, 289, 462, 525,  
675  
Tuovinen, T. S., 676  
Turkey, 48, 60  
Turner, A., 69  
Turner, B. L., 677  
turtles, 634

## U

Ueda, Y., 678  
Uemura, K., 673  
Uhl, D., 2, 160, 236  
Ukraine, 432  
Ulrich, A. S., 203  
ultrastructure, 128, 183, 184, 191,  
736  
Unal, M., 320  
understorey plants, 173, 289, 661,  
703, 738  
ungulates, 463  
Unida, S., 679  
United Kingdom, 7, 44, 483, 632,  
700  
Uniyal, S. K., 615  
Upadhyay, R. S., 621  
Upadhyay, S. K., 621  
Upreti, Y., 680  
urban ecology, 49, 173, 291  
Uribe, C. A. M., 139  
Uribe, G. E. M., 669  
USA, 30, 144, 202, 244, 261, 270,  
370, 419, 420, 424, 445, 446,  
530, 560, 657  
UV, 529

## V

Vaganov, A. V., 681

- Vajda, V., 235, 300, 418, 514, 682, 683
- Valdespino, I. A., 254, 525, 684
- van der Bank, M., 264
- van der Burgh, J., 685
- van der Ent, A., 686
- van der Werf, A., 76
- van Doninck, J., 462
- van Geel, B., 248
- van Kempen, M. M. L., 687
- van Konijnenburg-van Cittert, J. H. A., 328, 685, 688
- van Zuidam, B. G., 507
- Vanasse, A., 66
- Vance, C., 677
- Vanderpoorten, A., 407
- Vandvik, V., 171
- Varela, R. M., 283
- Vargas, D., 743
- Varghese, E., 732
- Varone, L., 690
- Vasantha, S., 142
- Vasco, A., 11, 464, 525, 689
- Vasheka, O., 690
- Vaz, F. C., 691
- vegetation dynamics, 632
- Velazquez-Montes, E., 175
- Velmala, S., 516
- venation patterns, 614
- Veneklaas, E. J., 58
- Venezuela, 486
- Vera, E. I., 692
- Veracruz, 423
- Verma, D. K., 693
- Verma, P. C., 621
- Verma, S., 305
- Vermeij, G. J., 694
- vermicompost, 272
- Vester, H., 677
- Viana, P. L., 695
- Victoria, 602
- Vieira, S. A., 133
- Vietnam, 377, 722
- Vigila, A. V. G., 43
- Vijisha, P., 696
- Vilanova, M., 587
- Villanueva-Amadoz, U., 682
- Villarreal-Quintanilla, J. A., 166
- Villasenor, J. L., 166, 697
- Villca, H., 119
- Violle, C., 167
- Virillo, C. B., 120
- Vittaria appalachiana*, 98, 178, 519
- vittarioid ferns, 596
- Viveros, N., 187
- Viveros, R. S., 525
- Vodrazka, R., 329
- volatile compounds, 352
- volcanism, 683
- Vries, J. de, 698

## W

- Wachendorf, M., 123
- Wada, M., 316, 699
- Wadhvani, P., 203
- Waeyenberge, L., 669
- Wagner, K., 515
- Wagner, R. H., 700
- Wagner-Cremer, F., 58
- Wagstaff, B. E., 318, 602
- Wahajuddin, M., 621
- Wahid, F., 701
- Waldman, B., 637
- Wallace, M. W., 318
- Wallace, R. W., 147
- Waman, A. A., 627
- Wan, J. Z., 705
- Wan, M. L., 735
- Wan, T., 363
- Wan, X. M., 702
- Wanek, W., 515
- Wang, B., 703, 704
- Wang, C. J., 705
- Wang, C. N., 326, 327
- Wang, C. X., 706
- Wang, F. H., 612, 707
- Wang, G. C., 104
- Wang, H., 100, 357, 388, 476
- Wang, H. F., 386
- Wang, H. M., 358
- Wang, J., 249, 735, 738
- Wang, J. J., 314
- Wang, K., 270
- Wang, K. W., 766
- Wang, L., 151, 470
- Wang, M. P., 364
- Wang, Q., 89, 292
- Wang, Q. F., 106, 741
- Wang, Q. J., 386
- Wang, Q. S. Y., 708
- Wang, Q. X., 730
- Wang, R., 744
- Wang, S. H., 362
- Wang, S. J., 249, 387, 474
- Wang, S. Y., 709
- Wang, W., 106, 710
- Wang, W. Z., 710
- Wang, X., 712
- Wang, X. M., 106
- Wang, X. Q., 106
- Wang, X. X., 711
- Wang, Y., 612, 613, 713
- Wang, Y. D., 354, 355, 662, 767
- Wang, Y. H., 768
- Wang, Z. W., 363
- Wang, Z. X., 386
- Wangu, X., 121
- Wappler, T., 331, 704
- Warren, J. M., 714
- Washington, 420
- wastewater treatment, 4, 93, 165, 317
- Watanjansabe, A. H. Q., 130
- Watanabe, M. T. C., 695
- Watano, Y., 276, 734
- water transport, 74
- Watkins, J. E., 72, 246, 608, 715
- Waycott, M., 190
- Weakley, A., 525
- Webb, E. L., 734
- Webster, C. R., 463
- Wee, A. K. S., 734
- Wei, R., 231, 525, 716
- Wei, X. P., 364
- Weichgrebe, T., 773
- Weigand, A., 717
- Wellman, C. H., 632
- Wen, J., 707, 718
- Wen, M., 738
- Wen, Q., 366
- Wen, Z. H., 740
- Wenzel, A., 59
- West Bengal, 439
- West India, 528
- Westbrook, J., 369
- Weston, D. J., 285
- Weststrand, S., 525, 633, 719, 720
- wetlands, 4, 385, 491
- Wheeler, A., 721
- Wheeler, C., 139
- Wheeler, G., 392
- Wheeler, G. S., 635
- Wheeler, J. K., 30
- Whitau, R., 531
- whitefly, 621
- Whitney, C. W., 722
- Wijesinghe, W., 145, 146
- Wijesundara, D. S. A., 549, 550
- Wilde, V., 561
- Williams, E., 724
- Williams, E. W., 723
- Wills, M. A., 493
- Wilson, B., 380, 534
- Wiltshire, P. E. J., 248

Windham, M. D., 246, 525  
 Windisch, P. G., 218, 389, 475  
 Windslow, P., 474  
 Winslow, J. R., 460  
 Wisner, S., 167  
 Wolf, P. G., 525  
 Wolniak, S. M., 665, 666  
 Wong, G. K. S., 285, 336, 689  
 Wongphakdee, S., 725  
 Wood, K. R., 327  
 Woodcock, P., 139  
*Woodwardia japonica*, 708  
 Wu, D. D., 771  
 Wu, F. L., 426  
 Wu, F. Z., 703  
 Wu, G. L., 726  
 Wu, H. F., 314  
 Wu, J. Y., 728  
 Wu, M., 712  
 Wu, N. Y., 771  
 Wu, Q. Y., 766  
 Wu, S. D., 106  
 Wu, S. Y., 776  
 Wu, X., 755  
 Wu, Y., 376  
 Wu, Z. Q., 714  
 Wu, Z. Y., 359

**X**

Xavier, G. S. A., 727  
*Xenotrachea*, 706  
 Xia, F. Y., 704  
 Xia, W., 754  
 Xia, Z. H., 768  
 Xiang, K. L., 106  
 Xiang, L., 613  
 Xiang, Q. P., 757  
 Xiang, R., 383  
 Xiao, L. W., 483  
 Xiao, S., 703  
 Xie, D. Y., 372  
 Xie, S. P., 728  
 Xie, Y., 285  
 Xie, Y. L., 336  
 Xie, Z. X., 711  
 Xing, J., 708  
 Xinjiang, 713  
 Xiong, M. H., 711  
 Xiong, W., 285  
 Xoconostle-Cazares, B., 584  
 Xu, C., 108  
 Xu, H. H., 270  
 Xu, J., 384  
 Xu, L., 207

Xu, L. C., 368  
 Xu, S. H., 756  
 Xu, W. B., 364  
 Xu, W. X., 250  
 Xu, X. G., 525, 729  
 Xu, X. H., 674  
 Xu, X. L., 376  
 Xu, Y., 730  
 Xue, J. Z., 731  
 Xue, P. P., 240  
 xylem, 74

**Y**

Yaacob, W. Z. W., 481  
 Yadav, B. L., 422  
 Yadav, R. K., 732  
 Yadav, S. K., 621  
 Yahaya, N. H., 733  
 Yamakawa, T., 734  
 Yamamoto, T., 734  
 Yamaura, Y., 291  
 Yamazaki, M., 16  
 Yan, G. J., 176  
 Yan, H. L., 250  
 Yan, M. X., 735  
 Yan, S. K., 267  
 Yan, X. L., 359  
 Yan, Y. H., 364, 525, 612, 706  
 Yanez, A., 381, 382, 736, 737  
 Yang, C. H., 262  
 Yang, G. M., 241  
 Yang, L., 614, 738  
 Yang, L. L., 106  
 Yang, M. X., 383  
 Yang, P., 739  
 Yang, Q., 347  
 Yang, S. H., 269  
 Yang, S. X., 740  
 Yang, T., 106  
 Yang, W. L., 763  
 Yang, W. Q., 703  
 Yang, X., 240, 357, 754  
 Yang, X. B., 711  
 Yang, X. Y., 741  
 Yang, Y., 643, 755  
 Yang, Y. C., 756  
 Yans, J., 39  
 Yao, H. K., 742  
 Yao, Z. M., 231  
 Yatabe-Kakugawa, Y., 673  
 Yatskievych, G., 525  
 Ye, J. F., 106  
 Ye, Q., 770  
 Ye, S. Y., 740

Yearsley, J. M., 162  
 Yepes, A., 743  
 Yessoufou, K., 264  
 Yi, S., 740  
 Yousaf, B., 744  
 Yu, F. H., 376  
 Yu, H., 749, 761, 762  
 Yu, H. Y., 760  
 Yu, J., 336  
 Yu, R. P., 745  
 Yu, T. T., 299  
 Yuan, C. Y., 674  
 Yuksel, B., 320  
 Yunnan, 728  
 Yusoff, M. F. M., 481

**Z**

Zahawi, R. A., 555  
 Zain, C. R. C. M., 481  
 Zainuddin, Z., 481  
 Zaki, S. M., 1  
 Zambia, 37  
 Zanin, A., 197  
 Zappi, D. C., 695  
 Zarate-Cruz, G. S., 746  
 Zavaleta-Mancera, H. A., 746  
 Zeiger, C., 747  
 Zeng, F. X., 708  
 Zeng, H., 314  
 Zeng, M. H., 207  
 Zeng, W. W., 748  
 Zhan, J., 749  
 Zhang, C., 755  
 Zhang, C. P., 742  
 Zhang, D. J., 362  
 Zhang, F. T., 386  
 Zhang, G. F., 745  
 Zhang, G. M., 705, 763  
 Zhang, G. Q., 106  
 Zhang, H. C., 704  
 Zhang, H. R., 231  
 Zhang, H. Y., 250  
 Zhang, J., 643  
 Zhang, J. B., 106  
 Zhang, J. L., 750  
 Zhang, K. M., 751, 752  
 Zhang, L., 525, 710  
 Zhang, L. B., 239, 338, 339, 348, 377, 523, 525, 729, 753  
 Zhang, L. G., 710  
 Zhang, L. J., 106  
 Zhang, L. L., 383  
 Zhang, S., 43, 299, 356, 754  
 Zhang, S. H., 728

- Zhang, S. Z., 106, 114, 363  
Zhang, T., 754  
Zhang, W. F., 362  
Zhang, X., 749, 761, 762  
Zhang, X. C., 231, 364, 525, 716  
Zhang, X. N., 240  
Zhang, X. Q., 767  
Zhang, X. Y., 708  
Zhang, X. Z., 760  
Zhang, Y., 108, 285, 336, 674, 755  
Zhang, Y. B., 104  
Zhang, Z., 756  
Zhang, Z. X., 270, 705  
Zhao, C. F., 757  
Zhao, G. H., 612  
Zhao, H. G., 758  
Zhao, H. L., 106  
Zhao, L., 749, 760, 761, 762  
Zhao, L. N., 759  
Zhao, R. R., 763  
Zhao, W., 643  
Zheleznova, O. S., 764  
Zheng, C. C., 356  
Zheng, C. Y., 708  
Zheng, H. D., 765  
Zheng, R., 31  
Zheng, W., 619  
Zheng, Z., 761, 762  
Zheng, Z. C., 760  
Zhong, C. R., 756  
Zhou, M. Q., 766  
Zhou, N., 355, 767  
Zhou, R. C., 756  
Zhou, S. L., 106, 108, 364  
Zhou, W. J., 176  
Zhou, X., 614  
Zhou, X. M., 338, 339, 525, 753  
Zhou, X. Q., 752  
Zhou, X. Y., 768  
Zhu, A. D., 769  
Zhu, S. D., 770  
Zhu, X. F., 612  
Zhu, X. W., 771  
Zhu, Y., 336  
Zhu, Y. G., 250  
Zhuang, C., 388  
Zhuang, W. Y., 765  
Ziaja, J., 35  
Zimmerman, E. A., 202  
Zivotic, D., 435  
Zobel, K., 571  
Zoccola, A., 335  
Zonneveld, B. J. M., 733  
zoochory, 36  
Zorrilla, J. M., 39  
Zotz, G., 295, 515, 772, 773  
Zuchetto, M., 488  
Zumkeller, S. M., 774  
Zuo, Z. Y., 149, 775, 776

---

Patrick J. Acock	Phylogeny of <i>Asplenium</i> and most aspects of <i>Equisetum</i> research
Ruth Aguraiuja	Population biology and restoration ecology of endangered fern species
Victor B. Amoroso	Botany; Economic ferns; Histochemical studies (medicinal ferns); Philippine <i>Cycas</i> ; Morphology and taxonomy
Sayuri Ando	Fern sporophyte development
Raju Antony	Systematic studies of <i>Selaginella</i> ; Ferns and conservation of ferns
Naomi Arcand	Ecology and biogeography of tree ferns
Ralph C. Archer	Fern horticulture
Nan Crystal Arens	Ecology of tree ferns
Monanjali Bandyopadhyay	Phyto-geography; Ecology; Fern lore; Ethnobotany
Yasmin S. Baksh-Comeau	Vascular flora of Trinidad and Tobago
Julie F. Barcelona	Philippine ferns/floristics; Ecology and conservation; <i>Odontosoria</i> systematics; Philippine <i>Rafflesia</i>
Wilfried H. Bennert	Ferns and lycopods
Subir Bera	Animal interaction with pteridophytes and its co-evolutionary significance
Kamlesh Bhakuni	Biodiversity, taxonomy and morphology of Central Himalayan ferns
Rodica Bercu	Histo-anatomy of ferns
Michel Boudrie	Pteridophytes of France and of the Guianas (systematics, taxonomy, ecology, distribution)
Siegmar W. Breckle	Ecosystems of the Earth; Ecology of halophytes; Tropical ecology; Desert ecology
William R. Buck	Systematic bryology
Walter Bujnoch	Ferns of Central Europe, especially <i>Dryopteris affinis</i>
Manuel G. Caluff	Selaginellaceae; Lycopodiaceae; Polypodiaceae (including Grammitidaceae); Fern culture; Ecology
Jian Guo Cao	Sexual reproduction and development of fern gametophytes
James D. Caponetti	Propagation of ferns by tissue culture

---

Kalyan Chakraborti	Phyto-geography; Ecology; Fern lore; Ethnobotany
Wen-Liang Chiou	Gametophyte morphology and development; Reproductive biology; Antheridiogen; Phenology of sporophytes; Fern systematics
Maarten Christenhusz	Fern floras; Island biogeography; Botanical Journal of the Linnean Society (adjunct chief editor); Phytotaxa (founder)
Aurea M.T. Colli	Ecology and physiology
Marten W. de Boer	Pteridophytes of Bolivia and East Africa; Herbarium specimen collection
Shi-Yong Dong	<i>Tectaria</i> ; <i>Asplenium nidus</i> group; Taxonomy of Asian tropical ferns; Pteridophyte flora of Southern China
Franz G. Dunkel	Rare ferns; Ecology and population biology
Atsushi Ebihara	Speciation; Gametophytes; Hymenophyllaceae
Donald R. Farrar	Fern reproduction; <i>Botrychium</i> systematics
Kathryn Flinn	Ecology
Harald C. Frank	Tropical ferns in general; <i>Platyserium</i> ; Ant ferns; <i>Huperzia</i>
Christopher R. Fraser-Jenkins	Taxonomy; Floristics; Himalayan and all Asian pteridophytes; <i>Asplenium</i> , <i>Athyrium</i> , <i>Cheilanthes</i> , <i>Diplazium</i> , <i>Dryopteris</i> , <i>Polystichum</i> , <i>Pteris</i> ; Nepal; Sri Lanka; Assam; Flora of Pakistan; Bangladesh; China; Myanmar; Tibet; Bhutan
Stephen C. Fry	Cell wall polysaccharides and enzymes
Mary Gibby	Evolution and speciation in ferns; Fern conservation
Arthur V. Gilman	Lycopodiaceae; Ophioglossaceae; Systematics of temperate ferns and allies
Hit Kishore Goswami	Population cytogenetics of <i>Isoetes</i> and <i>Ophioglossum</i> ; Pteridophytes as medicinal plants
Gary K. Greer	Phenotypic plasticity; Polyploidy; Reproductive Ecology; Community assembly; Antheridiogen; Allelopathy
Irina I. Gureyeva	Taxonomy; Morphology; Biology of ferns of Siberia and Russia, especially taxonomy of <i>Pteridium</i> and morphology of the fern spores
Christopher H. Haufler	Patterns and processes of fern evolution; Application of chromosomal, isozymic and DNA data bases in characterizing fern species; Understanding speciation mechanisms and phylogenetic relationships; The significance of polyploidy in pteridophyte evolution

---

Andreas Hemp	Vegetation ecology
Elisabeth A. Hooper	Fern systematics; <i>Aleuritopteris</i>
Karsten Horn	Biosystematics, ecology, population biology and distribution of <i>Diphasiastrum</i> and <i>Botrychium</i> species in Europe; Bibliography of Macaronesian pteridophytes; Conservation strategies for endangered German pteridophytes; Monograph of the genus <i>Diphasiastrum</i>
Peter H. Hovenkamp	Polypodiaceae; Nephrolepidaceae; Oleandraceae; Woodsiaceae; Saccolomataceae; Ferns of Sulawesi; Flora Malesiana; Flora of China
Ana M. Ibars	Conservation; Fern spore bank; Germination
Filippo Imperato	Chemistry of flavonoids and other phenolics of ferns
Kunio Iwatsuki	Flora of East and Southeast Asia; Hymenophyllaceae; Conservation
Mirkka Jones	Determinants of plant community composition and diversity; Ecology of neotropical ferns
Masahiro Kato	Tropical fern flora; Morphological evolution of vascular plants; Speciation and adaptation of rheophytes; Evolution of apogamous ferns
Michael Kessler	Biodiversity and biogeography of tropical montane forests, including pteridophytes; Flora of Bolivian pteridophytes
Johanna H.A. van Konijnenburg-van Cittert	Evolution of fossil fern families, especially Dipteridaceae
S.P. Khullar	Fern floristics; Taxonomy; Cytology and morphology
Yves Krippel	Distribution of pteridophytes in Luxembourg
Siro Kurita	Speciation; Karyotype evolution; Systematics
Brij Lal	Inventory, conservation, and documentation of pteridophyte-associated traditional knowledge of Indian Himalayan region in particular
Marco Landi	Population ecology
Marcus Lehnert	Taxonomy, phylogeny, ecology and biogeography of pteridophytes; Special expertise in tree ferns
Ilia J. Leitch	Evolution of genome size and karyotype diversity in plants
Blanca León	Taxonomy of neotropical Polypodiaceae, Andes and Peruvian ferns
Bai-Ling Lin	Development; Hormone signaling; Genomics

---

Stuart Lindsay	Pteridophytes of Thailand, Laos and Cambodia; Vittariaceae of Southeast Asia; Gametophyte biology/ecology; Multi-access keys
David H. Lorence	Pteridophytes of Polynesia, Micronesia, Mascarenes
Kay Lynch	Propagation and conservation of Hawaiian native ferns
P.V. Madhusoodanan	Pteridophytes and bryophytes of South India; <i>Azolla</i> species and Cyanobacteria as biofertilizers
Fernando Matos	The flora of Bahia; the genus <i>Elaphoglossum</i> (Dryopteriaceae); The biology of ferns and lycophytes
Sadamu Matsumoto	Cytotaxonomic study of ferns, especially <i>Cyrtomium</i> , <i>Asplenium</i> , and <i>Pteris</i> ; Pteridophyte flora of Southern Pacific Islands, Bhutan, Taiwan
J. Mitchell McGrath	Plant breeding; Molecular cytogenetics; Gene duplication
Klaus Mehltreter	Fern ecology; Phenology; Herbivory; Interactions with insects; Invasive species
Aniceto Mendoza Ruiz	Pteridophytes of Mexico; Taxonomy, floristics, cultivation and propagation of ferns
Jordan Metzgar	<i>Cryptogramma</i> ; Phylogenetics; Polyploidy; <i>Azolla</i> ; Osmundaceae
John Mickel	Pteridoflora of Mexico; Monographic studies of <i>Anemia</i> and <i>Elaphoglossum</i>
Vlastimil Mikolas	<i>Polypodium</i> ; <i>Asplenium trichomanes</i> agg.; <i>Dryopteris</i> ; <i>Equisetum</i> and ferns of Oceania
James D. Montgomery	<i>Dryopteris</i> in North America and Mexico; Ferns of Pennsylvania and New Jersey; Ecology of <i>Botrychium</i>
Robbin C. Moran	Taxonomy, biogeography, phylogeny and evolution of ferns and lycophytes
Claudine C. Mynssen	<i>Diplazium</i> ; Brazilian flora
Narumi Nakato	Chromosomes; Polyploidy; Hybridization; Speciation
Maite Niño	Selaginellaceae; Lycopodiaceae; Polypodiaceae (including Grammitidaceae); Fern culture; Ecology
Benjamin Øellgaard	Systematics and biology of the Lycopodiaceae with special reference to neotropical Lycopodiaceae; Pteridophytes of the northern Andes, especially Ecuador; Biology; Taxonomy and diversity; Quantitative inventories of pteridophytes in sample plots in Ecuador



---

Sue Olsen	Testing ferns for hardiness and ornamental value and introducing ferns to the public
Leticia Pacheco	Systematics of <i>Diplazium</i>
Christopher Page	Biology and ecology of Pteridophyta; Biogeography; Distribution; Insular floras; Paleobotany; <i>Equisetum</i> ; Patterns, principles, processes and dynamics in pteridophyte ecosystems and their evolution
Santiago Pajarón	Reproductive biology; Population genetics; Systematics and evolution
Daniel Palmer	Hawaiian ferns
Barbara Parris	Monographic studies of Grammitidaceae; Systematics, ecology and phytogeography of Old World pteridophytes particularly in tropical and south temperate regions
Alison Paul	Pteridophyte curation; Macaronesian and European pteridophytes
James H. Peck	Pteridophyte flora of Arkansas
Ana L. Pereira	Biological activity of extracts; Plant-cyanobacteria symbioses; Phylogeny; Cyanotoxins; Proteomics; Phytoremediation; Ecotoxicology of plants by cyanotoxins
Krzysztof Piątek	Fern biogeography
Jefferson Prado	Phylogeny, nomenclature, taxonomy, and geographical distributions of Pteridaceae; Pteridoflora in Brazil
Kathleen Pryer	Phylogenetics of ferns and basal tracheophytes using morphological and molecular data; Systematics of basal fern families, especially Marsileaceae, Hymenophyllaceae, tree ferns, pteroid ferns, ontogeny and phylogeny; Morphometrics
N. Punetha	Morphology, taxonomy and biodiversity of Central Himalayan ferns and lycophytes
Anshita Raj	Phytoremediation; Arsenic; <i>Pteris vittata</i> gametophytes
K.P. Rajesh	Ecology, taxonomy and conservation of bryophytes and pteridophytes of Western Ghats
R.G.H. Ranil	Tree ferns
Tom A. Ranker	Systematics, ecology and evolution of tropical ferns
Karen Renzaglia	Morphology; Development; Reproduction; Ultrastructure
Edgardo Santiago Rivera	Tropical ferns

---

Gar W. Rothwell	Phylogeny of land plants
Kai Runk	Comparative biology and ecology of Estonian <i>Dryopteris</i> ; Cultivation of hardy ferns in Estonia, especially <i>Polystichum</i> and <i>Phyllitis scolopendrium</i> and their cultivars; Hardy East Asian fern species
Arthur E. Salgado	Taxonomy of Southeast Asian ferns; the genus <i>Asplenium</i> in the Philippines
Annette Schoelch	Construction morphology; Development of the sporophyll, sporangia, and sori in ferns; Evolution and phylogeny of ferns
Eric Schuettpelz	Evolution, diversification and systematics of pteridophytes, especially the leptosporangiate fern family Pteridaceae
David Schwartz	Cheilanthoid ferns
Kakali Sen	Evolutionary biology of ferns and lycophytes
Wen Shao	Fern embryology; Pteridophyte taxonomy; Polypodiaceae; <i>Phymatopteris</i>
B.D. Sharma	Morphology, anatomy, phytochemistry and experimental studies on pteridophytes; Paleobotany of Mesozoic and tertiary plants
Joanne M. Sharpe	Tropical and temperate fern life histories; Long-term studies of demography of tropical pteridophytes; Ecology of rheophytes and New England ferns
Judith E. Skog	Fern evolution and phylogeny, especially basal ferns - Osmundaceae, Schizaeaceae, Matoniaceae; Relationships with fossil ferns
Alan R. Smith	Phylogeny of pteridophytes; Phylogeny of Polypodiaceae/Grammitidaceae; Floristics of Mexican, Venezuelan and Bolivian ferns and allies; Phytogeography of ferns
V.K. Sreenivas	Molecular phylogeny; Taxonomy; <i>Pteris</i>
Michizo Sugai	Photocontrol of spore germination; Sex organ differentiation
John A. Thomson	Taxonomy, evolution and secondary metabolics of <i>Pteridium</i> ; Bracken fern/insect interactions
Alejandra Vasco	Neotropical pteridophyte taxonomy; <i>Elaphoglossum</i>
Olena V. Vasheka	Fern introduction, cultivation of temperate-zone ferns in Ukraine; Pteridophyte conservation
David H. Wagner	Ferns of the Pacific Northwest; <i>Polystichum</i> ; <i>Botrychium</i> ; Photomicrography

---

Florence S. Wagner	Cytology and hybridization in pteridophytes; Monograph of <i>Botrychium</i> ; Hawaiian pteridophyte flora; Cytology and paraphyses of Hawaiian pteridophytes; Bibliography of Hawaiian pteridophytes
Yasuyuki Watano	Speciation; Apogamy; Intragametophytic selfing; Allopolyploidy
James E. Watkins, Jr.	Fern ecology; Ecophysiology; Reproductive/gametophyte biology
Richard A. White	Vascular plant anatomy and morphology; Systematics and anatomy of the tree ferns (Dicksoniaceae and Cyatheaceae) and allies
Dean P. Whittier	Morphology and development of fern gametophytes; Development of gametophytes of the Ophioglossaceae, Psilotaceae and Lycopodiaceae
Kenneth A. Wilson	Hawaiian alien ferns; Pteridophyte sporangial morphology
Michael D. Windham	Cytology and phylogeny of ferns; Cheilanthoid ferns
Paul Wolf	Molecular systematics; Population genetics; Fern phylogeny; Fern genomics
George Yatskievych	Systematics of cheilanthoid ferns; Floristics of US (especially Missouri) and Mexico; Conservation
Xian-Chun Zhang	Ferns of the Himalayan region and Southeast Asia
Aurora Zlotnik	Fern anatomy; Plant stomata



Patrick J. Acock  
13 Star Lane St Mary Cray  
Kent BR5 3LJ UK  
Email: pat.acock@btinternet.com

Ruth Aguraiuja  
Kloostrimetsa Rd 52  
Tallinn 11913 ESTONIA  
Phone: [372] 606 2699  
Email: ruthaguraiuja@hotmail.com;  
ruth.aguraiuja@botaanikaed.ee

Victor B. Amoroso  
Central Mindanao University  
University Town, Musuan  
8710 Bukidnon PHILIPPINES  
Phone: [63] 917 549 5084  
Email: amorosovic@yahoo.com

Sayuri Ando  
College of Bioscience and Biotechnology  
Chubu University  
1200 Matsumoto-cho  
Kasugai Aichi JAPAN  
Phone: [81] 35 841 4047  
Email: sayuri.ando1730@gmail.com

Raju Antony  
Tropical Botanic Garden and Research Institute  
Palode Thiruvananthapuram District  
Kerala 695 562 INDIA  
Phone: [91] 949 426 9824  
Email: rajuantonytbagri@rediffmail.com

Naomi Arcand  
Department of Geography  
University of Colorado  
Boulder CO 80302 USA  
Phone: [1] 808 227 8694  
Email: naomi.arcand@gmail.com

Ralph C. Archer  
10505 Trotters Pointe Dr. Apt. 103  
Louisville KY 40241-1287 USA  
Phone: [1] 502 632 1212  
Email: ralphcarcher7@gmail.com

Nan Crystal Arens  
Department of Geoscience  
Hobart and William Smith Colleges  
Geneva NY 14456 USA  
Phone: [1] 315 781 3930  
Email: arens@hws.edu

Monanjali Bandyopadhyay  
Department of Bengali  
Vidyasagar University  
Midnapore West Bengal INDIA  
Phone: 033 2556 8943  
Email: mananjali.bandyopadhyay@gmail.com;  
drkalyanchakraborti@rediffmail.com

Yasmin S. Baksh-Comeau  
Department of Life Sciences  
University of the West Indies  
St Augustine TRINIDAD  
Phone: [868] 224 3704;  
[868] 662 2002 ext. 84499  
Email: yasmin.baksh-comeau@sta.uwi.edu

Julie F. Barcelona  
School of Biological Sciences  
University of Canterbury  
Private Bag 4800  
Christchurch 8140 NEW ZEALAND  
Phone: [011] 632 522 5846  
Email: barceljf@hotmail.com

Wilfried H. Bennert  
Plessenweg 28  
D-58256 Ennepetal GERMANY  
Phone: [49] 2333 833 493  
Email: wilfried.bennert@rub.de

Subir Bera  
Center of Advanced Studies  
Department of Botany  
University of Calcutta  
35 Ballygunge Circular Road  
Kolkata 700 019 INDIA  
Phone: [91] 033 2461 4959 ext. 297  
Email: berasubir@yahoo.co.in

Kamlesh Bhakuni  
C/O Bahadur Singh Mehta  
Roadways Workshop Pithoragarh  
P.O. Ancholi Distt Pithoragarh  
Pithoragarh 262530 Uttarkhand INDIA  
Phone: [91] 941 297 7698; [91] 596 426 4032  
Email: kammubhakuni@yahoo.com

Rodica Bercu  
Bdul Ferndinand Nr. 61  
Bl. A 7, Sc. B, Ap. 43  
900721 Constanta ROMANIA  
Email: rodicabercu@yahoo.com

Michel Boudrie  
16 Rue des Arenes  
F-87000 Limoges FRANCE  
Phone: [33] 05 55 01 20 46  
Email: michelboudrie@orange.fr

Siegmar W. Breckle  
Department of Ecology  
Wasserfuhr 24-26  
D-33619 Bielefeld GERMANY  
Phone: [49] 52 110 5513  
Email: sbreckle@gmx.de

Piet Bremer  
Roelingsbeek 1  
8033 BM Zwolle THE NETHERLANDS  
Phone: 38 4535753  
Email: p.bremer@overijssel.nl

William R. Buck  
New York Botanical Garden  
2900 Southern Blvd.  
Bronx NY 10458-5126 USA  
Phone: [1] 718 817 8624  
Email: bbuck@nybg.org

Walter Bujnoch  
Neuwiese 13  
D-54296 Trier GERMANY  
Phone: [49] 06 511 0542  
Email: wrbujnoch@onlinehome.de

Manuel G. Caluff  
Jardin de los Helechos de Santiago de Cuba  
Carretera del Caney No. 129, La Caridad  
Santiago de Cuba, CP 90400 CUBA  
Email: manolito@bioeco.ciges.inf.cu

Jian Guo Cao  
College of Life and Environmental Sciences  
Shanghai Normal University  
Shanghai 200234 CHINA  
Phone: [86] 216 432 2526  
Email: cao101@shnu.edu.cn

James D. Caponetti  
Division of Biology  
University of Tennessee  
402 Hesler  
Knoxville TN 37996-0830 USA  
Phone: [1] 865 974 0365 or 6841  
Email: jcaponet@utk.edu

Kalyan Chakraborti  
Bidhan Chandra Krishi Viswavidyalaya  
Kalyani Nadia 741235 West Bengal INDIA  
Phone: 033 2556 8943  
Email: drkalyanchakraborti@rediffmail.com;  
monanjali.bandyopadhyay@gmail.com

Wen-Liang Chiou  
Division of Forest Biology  
Taiwan Forestry Research Institute  
53 Nan-Hai Rd  
Taipei 100 TAIWAN  
Phone: [886] 2 2303 9978 ext. 2701  
Email: chiou@serv.tfri.gov.tw;  
chiouwl@gmail.com

Maarten Christenhusz  
Royal Botanic Gardens Kew  
Richmond Surrey TW9 3DS UK  
Email: m.christenhusz@kew.org;  
maartenchristenhusz@yahoo.co.uk

Aurea M.T. Colli  
180 Joao Mutinelli Porto Ferreira  
Sao Paulo State CEP 13.660.000 BRAZIL  
Phone: [55] 19 581 2683  
Email: am-colli@bol.com.br

Marten W. de Boer  
Hofbrouckerlaan 27  
2341 LM Oegstgeest THE NETHERLANDS  
Phone: [31] 71 301 4991  
Email: marten.oegst@gmail.com

Shi-Yong Dong  
South China Botanical Garden  
Chinese Academy of Sciences  
#723 Xingke Rd  
Tianhe District, Guangzhou 510650 CHINA  
Phone: [86] 20 3725 2716  
Email: dongshiyong@scib.ac.cn

Franz G. Dunkel  
Am Saupurzel 1  
D-97753 Karlstadt GERMANY  
Phone: [49] 93 539 0146  
Email: f.g.dunkel@t-online.de

Atsushi Ebihara  
Department of Botany  
National Museum of Nature and Science  
4-1-1 Amakubo  
Tsukuba 305-0005 JAPAN  
Phone: [81] 29 853 8988  
Email: ebihara@kahaku.go.jp

Donald R. Farrar  
Department of EEOB  
Iowa State University  
Bessey Hall 251  
Ames IA 50011 USA  
Email: dfarrar@iastate.edu

Kathryn Flinn  
Biology Department  
Baldwin Wallace University  
275 Eastland Rd  
Berea, OH 44017 USA  
Email: kflinn@bw.edu

Harald C. Frank  
Maria-Wart Str. 1  
80638 Munich GERMANY  
Email: hc.frank@gmx.de

Christopher R. Fraser-Jenkins  
Student Guest House Thamel  
PO Box 5555  
Kathmandu NEPAL  
Phone: [977] 1 436 5976  
Email: chrisopteris@yahoo.co.uk;  
chrisophilus@yahoo.co.uk

Stephen C. Fry  
Edinburgh ell Wall Group IMPS DBS  
University of Edinburgh  
Daniel Rutherford Bldg. The King's Bldgs  
Max Born Crescent Edinburgh EH9 3BF UK  
Phone: [44] 131 650 5320  
Email: s.fry@ed.ac.uk

Mary Gibby  
Royal Botanic Garden Edinburgh  
20A Inverleith Row  
Edinburgh EH3 5LR Scotland UK  
Email: m.gibby@rbge.org.uk

Arthur V. Gilman  
P.O. Box 82  
Marshfield VT 05658 USA  
Phone: [1] 802 426 3272  
Email: avgilman@together.net

Hit Kishore Goswami  
Retired and Visiting Professor of Botany and  
Genetics  
24 Kaushalnagar P.O. Misrod  
Bhopal (MP) 462047 INDIA  
Phone: [91] 755 280 7950;  
[91] 942 537 1765  
Email: goswami hk@yahoo.com;  
hitkishoregoswami@yahoo.in

Gary K. Greer  
Biology Department  
Grand Valley State University  
Allendale MI 49401 USA  
Phone: [1] 616 331 2813  
Email: greerg@gvsu.edu

Irina I. Gureyeva  
Krylov Herbarium  
Tomsk State University  
Prospekt Lenina 36  
Tomsk 634050 RUSSIA  
Phone: [7] 382 252 9794  
Email: gureyeva@yandex.ru;  
siberianfern@hotmail.com

Christoph Hartkopf-Froeder  
Geologischer Dienst NRW  
Postfach 100763  
D-47707 Krefeld GERMANY  
Phone: [49] 215 189 7255  
Email: hartkopf-froeder@gd.nrw.de

Christopher H. Haufler  
Department of Ecology and Evolutionary  
Biology  
University of Kansas  
Haworth Hall  
Lawrence KS 66045-2106 USA  
Phone: [1] 913 864 3255  
Email: vulgare@ku.edu

Andreas Hemp  
Department of Plant Systematics  
University of Bayreuth  
95440 Bayreuth GERMANY  
Email: andreas.hemp@uni-bayreuth.de

Nora Sue Hollis  
1932 Bluebird Way  
West Plains MO 65775-7702 USA  
Phone: [1] 417 270 0603  
Email: ferngro@att.net

Elisabeth A. Hooper  
Biology Department  
Truman State University  
100 E Normal Street  
Kirksville MO 63501-4221 USA  
Phone: [1] 660 785 4623  
Email: lhooper@truman.edu

Karsten Horn  
Buero fur angewandte Geobotanik und  
Landschaftsoekdogie (BaGL)  
Frankenstrasse 2  
D-91077 Dormitz GERMANY  
Phone: [49] 913 470 6455  
Email: info@karstenhorn-bagl.de

Peter H. Hovenkamp  
Naturalis Biodiversity Center  
P.O. Box 9514  
NL-2300 RA Leiden THE NETHERLANDS  
Phone: [31] 71 751 7213  
Email: peter.hovenkamp@naturalis.nl

Layne Huiet  
Department of Biology  
Duke University  
Box 90338  
Durham NC 27708 USA  
Phone: [1] 919 660 7317  
Email: rlh22@duke.edu

Ana M. Ibars  
Jardí Botànic de Valencia  
Universitat de Valencia  
Quart 80  
46008 Valencia SPAIN  
Phone: [34] 96 315 6800  
Email: ana.ibars@uv.es

Filippo Imperato  
Contrada Cugno delle Brece S.n.c.  
85100 Potenza ITALY  
Phone: [39] 09 716 3318  
Email: fern75phil@virgilio.it

Kunio Iwatsuki  
815-29 Kamoshida Aoba-Ku  
Yokohama 227-0033 JAPAN  
Phone: [81] 45 962 9761  
Email: iwatsuki@spa.nifty.com

Mirkka Jones  
Department of Bioscience  
Aarhus University  
Ny Munkegade 116  
8000 Aarhus DENMARK  
Phone: [358] 2 333 5635  
Email: mjones@biology.au.dk

Masahiro Kato  
Department of Botany  
National Museum of Nature and Science  
4-1-1 Amakubo  
Tsukuba 305-0005 JAPAN  
Phone: [81] 75 711 3821  
Email: sorang@kahaku.go.jp

Michael Kessler  
Systematic Botany  
University of Zurich  
Zollikerstrasse 107  
CH-8008 Zurich SWITZERLAND  
Email: michael.kessler@systbot.uzh.ch



B.S. Kholia  
Botanical Survey of India  
192 Kaulagarh Road  
Dehradun 248 195 Uttarakhand INDIA  
Email: bskholia\_bsi@yahoo.co.in

Johanna H.A. van Konijnenburg-van Cittert  
Lab of Paleobotany and Palynology  
Heidelberglaan 2  
3584 CS Utrecht THE NETHERLANDS  
Phone: [31] 30 253 2635  
Email: j.h.a.vankonijnenburg@uu.nl;  
han.konijnenburg@naturalis.nl

S.P. Khullar  
Professor Emeritus; Editor, Indian Fern Journal  
Panjab University Chandigarh-160014, India  
H. No. 1633 Sector 7-C  
Chandigarh 160 019 Punjab INDIA  
Phone: [91] 172 279 4484  
Email: sp.khullar@gmail.com

Yves Krippel  
Rue de Rollingen, 18A  
L-7475 Schoos LUXEMBOURG  
Phone: [352] 69 131 6947  
Email: yves.krippel@mnhn.lu;  
yves.krippel@naturpark-sure.lu

Siro Kurita  
Horinouchi 1288 Kikugawa  
Shizuoka Pref. 439-0006 JAPAN  
Phone: [81] 053 735 1457  
Email: shisuan@msf.biglobe.ne.jp

Brij Lal  
CSIR-Institute of Himalayan Bioresource  
Technology  
Palampur 176062, Himachal Pradesh INDIA  
Phone: [91] 981 608 6330  
Email: brijlal@ihbt.res.in;  
brijihbt@yahoo.co.in

Marco Landi  
Department of Environmental Science  
University of Siena  
G Sarfatti Via Mattioli 4  
I-53100 Siena ITALY  
Email: landi21@unisi.it

Marcus Lehnert  
Nees-Institut for Biodiversitat der Pflanzen  
Universitat Bonn  
Meckenheimer Allee 170  
D-53115 Bonn GERMANY  
Phone: [49] 0228 732268  
Email: marlehnert@yahoo.com;  
mlehnert@uni-bonn.de

Ilia J. Leitch  
Jodrell Lab  
Royal Botanic Gardens Kew  
Richmond Surrey TW9 3AB UK  
Phone: [44] 0208 332 5329  
Email: i.leitch@kew.org

Blanca León  
Plant Resources Center  
University of Texas at Austin  
100 Inner Campus Dr. Stop F0404  
Austin TX 78712-1711 USA  
Email: leon@austin.utexas.edu

Bai-Ling Lin  
Genomics Research Center  
Academia Sinica (Institute of Plant Biology,  
National Taiwan University)  
P.O. Box 1-51 Nankang  
Taipei 11599 TAIWAN  
Phone: [886] 2 2787 1256  
Email: bailing@sinica.edu.tw;  
bailing@ntu.edu.tw

Stuart Lindsay  
Gardens by the Bay  
18 Marina Gardens Drive  
Singapore 018953 SINGAPORE  
Email: stuart0lindsay@gmail.com

David H. Lorence  
National Tropical Botanical Garden  
3530 Papalina Road  
Kalaheo Kauai HI 96741 USA  
Phone: [1] 808 332 7324  
Email: lorence@ntbg.org

Kay Lynch  
Lā'au Hawai'i  
The Hawaiian Fern Project  
P.O. Box 5364  
Kāne'ohe HI 96744 USA  
Phone: [1] 808 485 9352  
Email: klynch@lava.net

P.V. Madhusoodanan  
Malabar Botanical Garden and Institute for Plant  
Sciences (MBGIPS)  
Calicut Kerala 673014 INDIA  
Phone: [91] 944 624 7014  
Email: pvmadhu@gmail.com;  
malabarbot.garden@gmail.com

Haja Maideen Kader Maideen  
School of Environmental and Natural Resource  
Sciences, FST  
Universiti Kebangsaan Malaysia  
43600 Bangi  
Selangor MALAYSIA  
Phone: [60] 38 921 3365  
Email: deen@ukm.edu.my;  
hajakader26@gmail.com

Fernando Matos  
Departamento de Botânica, Herbário UPCB  
Universidade Federal do Paraná  
Caixa Postal 19031  
81531-980, Curitiba, Paraná, BRAZIL  
Phone: [55] 41 3361 1623  
Email: fbtms@yahoo.com.br

Sadamu Matsumoto  
Emeritus Researcher, Tsukuba Botanical Garden  
National Museum of Nature and Science  
Amakubo 4-1-1  
Tsukuba 305-0005 JAPAN  
Phone: [81] 29 853 8824  
Email: matumoto@kahaku.go.jp;  
sadamu-m@nifty.com

J. Mitchell McGrath  
494D PSSB, USDA-ARS  
Michigan State University  
1066 Bogue Street  
East Lansing MI 48824-1325 USA  
Phone: [1] 517 353 0207  
Email: mitchmcg@msu.edu

Klaus Mehlreter  
Instituto de Ecologia A.C.  
Red de Ecología Funcional  
Carretera antigua a Coatepec No. 351  
El Haya Xalapa 91070 Veracruz MEXICO  
Phone: [52] 228 842 1800 ext. 4219  
Email: klaus.mehlreter@inecol.mx

Aniceto Mendoza Ruiz  
Universidad Autonoma Metropolitana-  
Iztapalapa  
Apartado Postal 55-535  
09340 Iztapalapa MEXICO  
Phone: [52] 555 804 6458  
Email: amr@xanum.uam.mx

Jordan Metzgar  
Museum of the North  
907 Yukon Dr.  
Fairbanks AK 99775 USA  
Phone: [1] 907 474 7109  
Email: jsmetzgar@alaska.edu

John Mickel  
New York Botanical Garden  
2900 Southern Blvd.  
Bronx NY 10458-5126 USA  
Phone: [1] 718 817 8636  
Email: jmickel@nybg.org

Vlastimil Mikolas  
Hanojska 4  
SK-040 13 Kosice SLOVAKIA  
Phone: [421] 90 378 4087  
Email: sorbusaria@azet.sk

James D. Montgomery  
609 La Salla Street  
Berwick PA 18603 USA  
Phone: [1] 570 759 1322  
Email: jimmm37@verizon.net

Robbin C. Moran  
New York Botanical Garden  
2900 Southern Blvd.  
Bronx NY 10458-5126 USA  
Phone: [1] 718 817 8663  
Email: rmoran@nybg.org

Claudine C. Mynssen  
Instituto de Pesquisas  
Jardim Botânico do Rio de Janeiro  
Rua Pacheco Leão 915  
Rio de Janeiro-RJ 22.460-030 BRAZIL  
Phone: [55] 213 204 2128  
Email: cmynssen@jbrj.gov.br;  
cmynssen@gmail.com

Narumi Nakato  
Narahashi 1-363  
Higashiyamato Tokyo 207-0031 JAPAN  
Email: n.nakato@eos.ocn.ne.jp

Maite Niño  
Jardín de los Helechos de Santiago de Cuba  
Carretera del Caney No. 129, La Caridad  
Santiago de Cuba, CP 90400 CUBA  
Email: maite@bioeco.ciges.inf.cu

Benjamin Øellgaard  
Institute of Biological Sciences  
Ny Munkegade bygn 540  
DK-8000 Aarhus C DENMARK  
Phone: [45] 8 942 4704  
Email: benjamin.oellgaard@biology.au.dk

Sue Olsen  
Hardy Fern Foundation  
2003 128 Ave. SE  
Bellevue WA 98005 USA  
Phone: [1] 425 747 2998  
Email: foliage@juno.com;  
hff@rhodygarden.org

Leticia Pacheco  
Departamento de Biología  
UAM-Iztapalapa  
Av. San Rafael Atlixco 186 Col. Vicentina  
09340 Mexico DF MEXICO  
Phone: [52] 55 5804 4690  
Email: pacheco@xanum.uam.mx;  
callipteris07@gmail.com

Christopher Page  
Halgarrick Lodge  
Quenchwell Road Carnon Downs  
Truro Cornwall TR3 6LN UK  
Phone: [44] 187 286 4439  
Email: pterido@hotmail.com

Santiago Pajarón  
Departamento Biología Vegetal I  
Universidad Complutense  
28040 Madrid SPAIN  
Phone: [34] 91 394 5050  
Email: spajbot@ucm.es

Daniel Palmer  
3130 Cheney Rd  
Maple City MI 49664 USA  
Phone: [1] 231 334 2520  
Email: dan.d.palmer@gmail.com

Barbara Parris  
Fern Research Foundation  
21 James Kemp Place, Kerikeri  
Bay of Islands 0230 NEW ZEALAND  
Phone: [64] 9 407 5225  
Email: barbara2parris@gmail.com

Alison Paul  
Department of Life Sciences  
The Natural History Museum  
Cromwell Road  
London SW7 5BD UK  
Phone: [44] 020 794 25756  
Email: a.paul@nhm.ac.uk

James H. Peck  
16760 Sandra St.  
Cedar Key FL 32625 USA  
Phone: [1] 501 562 6602  
Email: jhpeck@ualr.edu

Ana L. Pereira  
CIIMAR; University of Porto  
Terminal de Cruzeiros do Porto de Leixões  
Av. General Norton de Matos, s/n  
4050-123 Porto PORTUGAL  
Phone: [351] 22 340 1837  
Email: anapereira271268@yahoo.com

Krzysztof Piątek  
Jodłowa 15A  
39-225 Jodłowa POLAND  
Phone: [48] 69 306 5998  
Email: piatek@interia.eu

Jefferson Prado  
Herbario SP  
Instituto de Botanica  
Av. Miguel Estefano 3687  
CEP 04301-012 Sao Paulo SP BRAZIL  
Phone: [55] 11 5067 6088  
Email: jprado.01@uol.com.br;  
jprado@ib.usp.br

Kathleen Pryer  
Department of Biology  
Duke University  
Box 90338  
Durham NC 27708 USA  
Phone: [1] 919 660 7380  
Email: pryer@duke.edu

N. Punetha  
167 Bajethi Ward near P.G. College  
Pithoragarh 262502 Uttarkhand INDIA  
Phone: [91] 975 916 5372; [91] 596 426 4032  
Email: punethan\_bot@yahoo.co.uk

Anshita Raj  
CSIR-SRF  
National Botanical Research Institute  
Rana Pratap Marg  
Lucknow 226001 Uttar Pradesh INDIA  
Email: anshitaraj\_23@yahoo.co.in

K.P. Rajesh  
Department of Botany  
ZG College  
GA College PO  
Calicut 673 014 Kerala INDIA  
Email: kprajesh.botany@gmail.com

Sabdar Rahaman  
Department of Botany  
Bangabasi Evening College  
19 Raj Kumar Chakraborty Sarani  
Kolkata 700 009 INDIA  
Phone: [91] 98 301 62434  
Email: drsrahaman@yahoo.co.in

R.G.H. Ranil  
Faculty of Agriculture, Department of Crop  
Science  
University of Peradeniya  
Peradeniya 20400 SRI LANKA  
Email: rhgranil@gmail.com

Tom A. Ranker  
Department of Botany  
University of Hawai'i at Mānoa  
190 Maile Way Room 101  
Honolulu HI 96822 USA  
Phone: [1] 808 956 8304  
Email: ranker@hawaii.edu;  
tom.ranker@gmail.com

Karen Renzaglia  
Department of Plant Biology  
Southern Illinois University  
Mailcode 6509  
Carbondale IL 62901-6509 USA  
Phone: [1] 618 453 3224  
Email: renzaglia@siu.edu

Edgardo Santiago Rivera  
Biology Department  
University of Puerto Rico  
PO Box 1311  
Corozal PR 00783

Gar W. Rothwell  
Department of Botany and Plant Pathology  
Oregon State University  
2081 Cordley Hall  
Corvallis OR 97330 USA  
Phone: [1] 541 737 5252  
Email: rothwell@ohio.edu;  
rothwelg@science.oregonstate.edu

Germinal Rouhan  
UMR CNRS 7205, Herbar National, CP39  
Museum National d'Histoire Naturelle  
16 Rue Buffon  
F-75231 Paris Cedex 05 FRANCE  
Phone: [33] 014 079 5380  
Email: rouhan@mnhn.fr

Kai Runk  
Institute of Ecology and Earth Science  
University of Tartu  
40 Lai Str  
51005 Tartu ESTONIA  
Phone: [372] 737 6381  
Email: kai.runk@ut.ee

Yoshiaki Sakamaki  
Kamijujo 3-25-16  
Kita-Ku Tokyo 114-0034 JAPAN  
Email: sakamaki@toki.waseda.jp

Arthur E. Salgado  
Christian Brothers University  
650 East Parkway South  
Memphis TN 38104 USA  
Phone: [1] 901 321 3450  
Email: esalgado@cbu.edu

Annette Schoelch  
Langgewann 22  
D-69121 Heidelberg GERMANY  
Phone: [49] 622 141 3362  
Email: annette.schoelch@t-online.de

Eric Schuettpelz  
Department of Botany  
National Museum of Natural History;  
Smithsonian Institution  
MRC 166 PO Box 37012  
Washington DC 20013-7012 USA  
Phone: [1] 202 633 0914  
Email: schuettpelze@si.edu

David Schwartz  
9715 Chirtsey Way  
Bakersfield CA 93312-5617 USA  
Phone: [1] 661 588 4027  
Email: xericferns@aol.com

Kakali Sen  
Department of Botany  
University of Kalyani, Kalyani  
Nadia-741235 West Bengal INDIA  
Phone: [91] 974 968 3024  
Email: itskakali@gmail.com;  
itskakaliap@klyuniv.ac.in

Emily B. Sessa  
Department of Biology  
University of Florida  
521A Bartram Hall  
Gainesville FL 32611 USA  
Phone: [1] 352 392 1098  
Email: emilyseassa@ufl.edu

Wen Shao  
Shanghai Chenshan Plant Science Research  
Center  
Chinese Academy of Sciences, Chenshan  
Botanical Garden  
Shanghai 201602 CHINA  
Email: shaowen19792005@163.com

B.D. Sharma  
Kath Mandi  
Narnaul 123001 Haryana INDIA  
Phone: [91] 012 822 51427 09416745650  
Email: bdsharma14@yahoo.com

Joanne M. Sharpe  
Sharplex Services  
BO Box 499  
Edgecomb ME 04556 USA  
Email: joannesharpe@juno.com

Ajit P. Singh  
Plant Diversity, Systematics & Herbarium  
Division  
CSIR-National Botanical Research Institute  
2-Rana Pratap Marg  
Lucknow 226001 Uttar Pradesh INDIA  
Phone: [91] 0522 22 978 3233 (office);  
[91] 800 500 9371 (cell)  
Email: ajitpsingh@gmail.com

Sarvesh K. Singh  
Department of Botany  
Banaras Hindu University  
Varanasi 221005  
Uttar Pradesh INDIA  
Email: pteridologicalexpress@gmail.com;  
singhskau@gmail.com

Judith E. Skog  
Department of Environmental Science and  
Policy  
George Mason University MSN 4D4  
Manassas VA 20110 USA  
Phone: [1] 703 993 1026  
Email: jskog@gmu.edu;  
Judith.Skog@gmail.com

Alan R. Smith  
University Herbarium  
University of California  
1001 Valley Life Sci. Bldg. #2465  
Berkeley CA 94720-2465 USA  
Phone: [1] 510 643 1000  
Email: arsmith@berkeley.edu

V.K. Sreenivas  
Department of Botany  
Sri Vyasa NSS College  
Vyasagiri PO 680 623 Wadakanchery  
Thrissur-Kerala 673635 INDIA  
Email: sreenivasvk@gmail.com

Michizo Sugai  
Ebisumachi Nakatsugawa  
Gifu 508-0037 JAPAN  
Phone: [81] 57 364 8988  
Email: msugai@kc4.so-net.ne.jp

John A. Thomson  
Botanic Gardens Trust  
National Herbarium of New South Wales  
Mrs. Macquaries Road  
Sydney NSW 2000 AUSTRALIA  
Phone: [61] 29 876 4339  
Email: pteridium@bigpond.com;  
john.thomson@rbgsyd.nsw.gov.au

Alejandra Vasco  
Departamento de Botánica  
Instituto de Biología, UNAM  
Circuito Exterior s/n, Ciudad Universitaria  
A.P. 70-367 MEXICO D.F. C.P. 04510  
MEXICO  
Phone: [52] 555 622 9126  
Email: avascog@gmail.com

Olena V. Vasheka  
O.V. Fomin Botanical Garden  
Taras Shevchenko Kyiv National University  
1 Simona Petlury Str.  
Kyiv 01032 UKRAINE  
Phone: [380] 044 234 6056  
Email: vasheka\_olena@mail.ru

David H. Wagner  
Northwest Botanical Institute  
1622 Bradley Dr.  
Eugene OR97401-1904 USA  
Phone: [1] 541 344 3327  
Email: davidwagner@mac.com

Florence S. Wagner  
Department of Ecology and Evolutionary  
Biology and University Herbarium  
University of Michigan  
3600 Varsity Drive  
Ann Arbor MI 48108-2287 USA  
Phone: [1] 734 615 7753  
Email: fwagn@umich.edu

Yasuyuki Watano  
Department of Biology  
Graduate School of Science  
Chiba University  
Yayoi, Inage-ku  
Chiba-shi 263-8522 JAPAN  
Phone: [81] 43 290 2819  
Email: watano@faculty.chiba-u.jp

James E. Watkins, Jr.  
Department of Biology  
Colgate University  
13 Oak Drive  
Hamilton NY 13346 USA  
Phone: [1] 315 228 7660  
Email: jwatkins@mail.colgate.edu

Richard A. White  
Department of Biology  
Duke University  
Box 90338  
Durham NC 27708 USA  
Phone: [1] 919 660 7305  
Email: rwhite@duke.edu

Dean P. Whittier  
126 Heady Drive  
Nashville TN 37205-4414 USA  
Email: dean.p.whittier@vanderbilt.edu

Kenneth A. Wilson  
P.O. Box 39512  
Los Angeles CA 90039-0512 USA  
Phone: [1] 323 661 9021  
Email: kwilson@csun.edu

Michael D. Windham  
Department of Biology  
Duke University  
Box 90338  
Durham NC 27708 USA  
Email: mdw26@duke.edu

Paul Wolf  
Department of Biology  
Utah State University  
Logan UT 84322-5305 USA  
Phone: [1] 435 797 4034  
Email: paul.wolf@usu.edu

George Yatskievych  
Curator, TEX-LL Herbarium  
University of Texas at Austin  
Plant Resources Center, Main Bldg, Rm 127  
110 Inner Campus Dr, Stop F0404  
Austin, Tx 78712-1711 USA  
Phone: [1] 512-471-5904  
Email: george.yatskievych@austin.utexas.edu

Xian-Chun Zhang  
The National Herbarium (PE)  
Institute of Botany  
Chinese Academy of Sciences  
20 Nan Xin Cun, Xiangshan  
100093 Beijing CHINA  
Phone: [86] 106 283 6291  
Email: zhangxc@ibcas.ac.cn

Aurora Zlotnik  
Lomas Altas 108 Col. Lomas Altas  
Col. Lomas Altas Mexico D.F. 11950 MEXICO  
Email: aurz@unam.mx aurzlo@gmail.com

Gabriela Zuquim  
University of Turku  
Rajakivenkatu 16 as. 1  
Turku 20740 FINLAND  
Phone: [358] 405 121 981  
Email: gabizuquim@gmail.com