

Botany 2023 - Abstract Submission Topics

For Sections and Societies as appropriate. To include BSA, ABLS, ASPT, AFS, IAPT, SHC

- <u>Anatomy and Morphology</u> (Development and Structure, BSA) Studies on the form and structure of organisms and their specific structural features, both external and internal, including developmental morphology.
- <u>Biodiversity Informatics</u> (Systematics, ASPT, BSA, IAPT, SHC) Computerized handling of biodiversity information, including taxonomic, biogeographic, and phylogenetic data.
- <u>Biogeography</u> (Systematics, ASPT, BSA, IAPT, SHC) Analysis of geographic distributions of populations, species or higher-level lineages in space and time.
- <u>Botanical History</u> (Historical, BSA) Studies of botanically related science, medicine, technology and their interactions with society in an historical context.
- <u>Bryology and Lichenology</u> (Bryo and Lichenology, ABLS, BSA) Studies in any discipline that involve bryophytes and/or lichens as the primary research organisms. Bryophyte- and lichen-themed submissions under Bryology and Lichenology will reach the broadest possible audience.
- <u>Comparative Genomics/Transcriptomics</u> (Genetics, BSA) Studies that compare evolution of the genomes, transcriptomes or proteomes between lineages or species. Specifically illustrating gene order, presence/absence, regulatory sequences, and other -omic structural landmarks, and not phylogenomics goals.
- <u>Conservation Biology</u> (Ecology, BSA) Identification or preservation of biodiversity in threatened plant communities and populations
- <u>Crops and Wild Relatives</u> (Economic Botany, BSA) The study of domestication, improvement, and diversity in traits and interactions across food and fodder crops and their wild relatives.
- Ecology (Ecology, BSA) Biotic and abiotic relationships in plant species, communities, and populations
- <u>Ecophysiology</u> (Physiology, BSA) Research concerning how plants respond physiologically to the environment.
- <u>Education and Outreach</u> (Teaching, BSA) Talks that promote and improve formal and informal instruction in botany, as well as botanical learning within and beyond the academic and research communities.

- <u>Ethnobotany</u> (Economic Botany, BSA) Any study of the relationships between plants and people around the world, including historic and contemporary plant uses and knowledge systems.
- <u>Evo-Devo</u> (Development and Structure, BSA) Studies that compare the developmental processes of different organisms to infer the ancestral relationships between them and how developmental processes evolved. Includes studies of changes in the genes controlling development.
- <u>Functional Genetics/Genomics</u> (Genetics, BSA) Studies of inheritance of genes and their function and behavior within a breeding system or population using classical Mendelian genetics. Including cytology, QTL, heterozygosity, genotyping, phenotyping, and other inheritance pattern measures.
- <u>Herbarium Digitization</u> (Systematics, ASPT, BSA, IAPT, SHC) Processes and progress on computerization of herbarium specimen data and specimen images for public databases.
- <u>Hybrids and Hybridization</u> (Genetics, ASPT, BSA, IAPT, SHC) Studies that specifically explore the speciation boundary and evolutionary history between naturally or synthetically produced hybrids and the process of hybridization.
- <u>Macroevolution</u> (Systematics, ASPT, BSA, IAPT, SHC) Patterns and products of evolution at or above the species level.
- <u>Molecular Ecology</u> (Ecology, BSA) Studies that examine the evolution, diversity, or adaptation of plant traits from a molecular perspective.
- <u>Mycology</u> (Mycology, BSA) Papers addressing any aspect of fungal biology.
- <u>Paleobotany</u> (Paleobotany, BSA) The study of the evolution of plants, algae, and fungi, principally involving the use of fossils.
- <u>Phylogenomics</u> (Systematics, ASPT, BSA, IAPT, SHC) Clarification of evolutionary relationships using large data sets spanning genomes, including developing analytical methods and progress with plant groups.
- <u>Phytochemical</u> (Phytochemical Section All Societies) Studies that involve aspects of plant biochemistry, such as chemical ecology, metabolomics, chemotaxonomy, biochemical evolution, biochemical responses to biotic and abiotic stress and natural products chemistry.
- <u>Physiology</u> (Physiology, BSA) Research in all areas of traditional plant physiology as well as those that involve global-scale, plant processes.
- <u>Population Genetics/Genomics</u> (Genetics, BSA) Studies that use any molecular data type to explore principles of population genetics and the microevolution of those populations in time and space.
- <u>Pteridology</u> (Pteridology, AFS, BSA) Studies in any discipline that involve ferns and/or lycophytes as the primary research organisms. Fern- and lycophyte-themed submissions under Pteridology will reach the broadest possible audience.

- <u>Reproductive Processes</u> (Ecology, BSA) Pollination, fertilization, and clonality in plants and fungi
- <u>Symbioses: Plant, Animal, and Microbe Interactions</u> (Ecology, BSA) Relationship between plants, animals, and microbes
- <u>Systematics</u> (Systematics, ASPT, BSA, IAPT, SHC) Characterization of populations, species or higher-level lineages, nomenclature or typification of such groups, or analysis of evolutionary relationships among them. (Note other topics covering specific plant taxa.)
- <u>Tropical Biology</u> (Tropical Biology, BSA) Contributions that involve plants of the tropics in any disciplinary area of botany, promoting interactions among members working in tropical areas around the world.