

SPECIAL ISSUE CALL FOR PAPERS: AJB and APPS

Approaches to the Study of Quantitative Fitness-Related Traits

We are excited to announce a call for papers for two companion special issues to be published in the Botanical Society of America's journals, the *American Journal of Botany* (AJB) and *Applications in Plant Sciences* (APPS). "**Approaches to the Study of Quantitative Fitness-Related Traits**" will examine the components, process, and outcome of natural selection in wild plant species. Topics to be covered could include estimates of the variance components and heritability of fitness-related traits and the genetic covariance between them, measures of phenotypic selection under field or greenhouse conditions, and the direct and indirect effects of climate change and other environmental stressors on evolutionary processes in wild populations.



These special issues are being organized by Guest Editors **Susan Mazer** and **Eugenio Larios** [University of California, Santa Barbara], and **Ann Sakai** and **Stephen Weller** [University of California, Irvine].

A primary goal of the AJB special issue is to highlight the potential for the study of pedigreed and randomly sampled populations to detect the potential for selection to cause evolutionary change in quantitative functional traits and in mean individual fitness. Beyond the scope of this special issue are studies that identify QTLs and other candidate genes that may be the target of natural selection, use genomic information to detect evolutionary patterns among populations and taxa, focus on one or more polymorphic discrete (categorical) traits, or are primarily theoretical. Ideally, readers of this issue will come away with new perspectives on the process of natural selection and its capacity to cause evolutionary change in plants, and on how quantitative studies of fitness may be used to examine this process.

For APPS, the goal is to highlight newly developed, innovative tools and protocols used in the study of quantitative traits. This could include, for example, techniques to efficiently measure fitness-related traits in the field or greenhouse, approaches to calculate heritability coefficients or genetic covariances, and broadly applicable protocols to quantify phenotypic selection. Reviews of currently available approaches used for the quantitative study of fitness-related traits are especially welcome.

How to submit: Authors interested in contributing to these special issues should email a proposal that includes a tentative title, tentative author list, preferred journal (AJB or APPS), and a 200–300-word abstract to Amy McPherson at ajb@botany.org. The deadline for proposal submission is **April 30, 2021**. Proposals will be reviewed by the Editors-in-Chief and Guest Editors. Authors will be notified by **May 14, 2021**, as to whether their proposal was accepted. Proposal submissions from early-career researchers are particularly encouraged.

Authors whose proposals are accepted should submit their manuscript by **January 10, 2022**. Note that acceptance of a proposal does not guarantee the eventual acceptance of the manuscript, as all manuscripts will be rigorously peer-reviewed and held to the standards of the journals.

AJB is a hybrid journal, with an option for Open Access. APPS is a fully Open Access journal; reduced [article publication charges](#) (at the BSA member rate) are available for papers accepted for publication in the special issue. See the Author Guidelines for details on journal scope, article types, and manuscript preparation: [AJB](#) and [APPS](#).

Questions? Contact the AJB Managing Editor and Director of Publications, Amy McPherson, at ajb@botany.org, or the APPS Managing Editor, Beth Parada, at apps@botany.org.