Special Issue

Ecological and Molecular Interactions between Insects and Fungi

Message from the Guest Editors

Fungi and insects share common traits: they both possess chitin-based exteriors, and they both are heterotrophic. Fungi represent a feeding resource for mycophagous insects, while many fungi are entomopathogenic and exploit insects as a nutrient substrate. However, coevolution led to a continuum of relationships between these organisms which, far from being merely antagonistic, also involve mutualism. Studies displaying how fungi can play a positive role by directly affecting insect pest development or inducing plant resistance and defense reactions have in turn stimulated the awareness that actually their interactions can go beyond these basic effects, and involve more strict developmental relationships which call for further insights. This Special Issue has been conceived to set up a collection of contributions examining the outcome of ecological and molecular interactions between insects and fungi. resulting from observations concerning agroecosystems and forest contexts, and from the analysis of the available literature referring to specific associations.

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"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

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