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Nematophagous Fungi

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Message from the Guest Editors

In recent decades, significant concerns have emerged about the biological control potential of nematophagous fungi against nematode pests. Usually, this fungal group grows saprophytic fungi and will enter parasitic growth under the influence of nutrient starvation or nematodes. Their vegetative mycelia can be modified into trapping organs that capture and digest nematode preys. Around 160 species have been identified so far, and an increasing number of scientists have grown interested in developing environmentally friendly biological control agents to control the population of plant parasitic nematodes. However, the practical application of these nematophagous microorganisms is still limited, partly due to their relatively low effectiveness and inconsistency in agricultural and forest environments. To date, studies using *Arthrobotrys oligospora* and *Arthrobotrys flagrans* as models of nematophagous fungi have identified pathways associated with autophagy, endocytosis, G-protein signaling, ubiquitination, and other pathways implicated in the regulation of lifestyle changes in these fungi.





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Message from the Editor-in-Chief

The worldwide impact of infectious disease is incalculable. The consequences for human health in terms of morbidity and mortality are obvious and vast but, when infections of animals and plants are also taken into account, it is hard to imagine any other disease that has such a significant impact on our lives—on healthcare systems, on agriculture and on world economics. *Pathogens* is proud to continue to serve the international community by publishing high quality studies that further our understanding of infection and have meaningful consequences for disease intervention.

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