

P005

Coverage of Rickia wasmannii (Ascomycota: Laboulbeniales) on Myrmica scabrinordis (Formicidae)
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In our research we are investigating the interactions between *Myrmica scabrinordis* (Hymenoptera: Formicidae) and its ectoparasitic fungus, *Rickia wasmannii* (Ascomycota: Laboulbeniales). Previous studies suggest that interactions between insects and Laboulbeniales fungi are mainly parasitism, but in the terms of *Myrmica* spp., results remain controversial. According to recent results, interaction can negatively affect the fitness of the ants, but details of the mechanism remain unclear. In our current research we are using scanning electron microscope techniques to reveal the morphological and structural details of this fungus. Based on the analysis on 20 specimens of one colony collected from NE-Hungary, the following morphological and fungus distributional properties were revealed. i. Severely infected ants are trying to get rid of the bodies of the fungus on their antennae while other anatomically inaccessible regions remain highly infected. ii. Low percentage of broken fungus filaments on the ants suggests that they do not clean each other from fungi. iii. 90 percent of the ants examined were severely affected by the fungal infection on the ocular region. iv. Scanning electron microscopy revealed that the fungus penetrated the cuticula from the internal direction in the eyes. v. Post-petiolar region of the ants examined often holds a high percentage of broken fungal bodies, possibly because of the movement of the abdomen.