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Insecticidal activities of extracts of three lichen species on *Sitophilus granarius* (L.) (Coleoptera: Curculionidae)

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Four different concentrations of extracts obtained from three lichen species (*Lecanora muralis* (Schreb.) Rabenh., *Letharia vulpina* (L.) Hue, and *Peltigera rufescens* (Weiss) Humb) were tested against adults of *Sitophilus granarius* (L.) in Petri dishes. After treatments, mortalities of the adults were determined after 24, 48, and 96 h. Expectedly, higher concentration and longer exposure time resulted in higher *S. granarius* mortality. Mortalities 96 h after treatments with the highest concentration (20 mg/ml) of extracts of *L. vulpina*, *P. rufescens*, and *L. muralis* were determined as 100, 100, and 86.86%, respectively. However, there were no dead insects in the control group. Values of LC₅₀ after 96 h for *L. muralis*, *L. vulpina*, and *P. rufescens* extracts were 0.666, 0.505, and 0.328 mg/ml, respectively.

Keywords:

granary weevil; insecticidal effect; lichen extract

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