World Academy of Science, Engineering and Technology International Journal of Biological and Ecological Engineering Vol:14, No:05, 2020

The Order Russulales of Basidiomycota: Systematics, Ecology and Chemotaxonomy

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Abstract : The secondary metabolites of Russulales (one of the main orders of phylum Basidiomycota), have been studied. They are mainly terpenoids, with sesquiterpenes being the most common ones, but also triterpenoids and prenylated phenols have been isolated. We found that classes of specific compounds seem to be often allied to systematic groupings, so that they may have chemotaxonomic significance. Moreover, the ecological implications of such metabolites, as well as their biological activities, are discussed. Lately, we have focused our attention on the anti-arthropod activity of Russula metabolites, in particular on the toxicity against mites and other crop pests.

Keywords: chemotaxonomy, fungi, insecticidal activity, russulales, terpenoids

Conference Title: ICMFE 2020: International Conference on Mycology and Fungal Ecology

Conference Location: Rome, Italy Conference Dates: May 04-05, 2020