

## XV International Symposium on Biological Control of Weeds

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**Abstracts of talks and posters** 

## Session 3-P3 - Bioherbicides

## Fungal pathogens and their bioactive metabolites for controlling Ailanthus altissima

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Among the woody invasive alien species colonizing non-crop areas, *Ailanthus altissima* (Tree of haven) is one of the worst and most damaging weeds. It spreads everywhere in urban, suburban and natural areas creating dense stands and causing much damage including biodiversity loss. Its control is very difficult because of its fast growth, its capability of regenerating as 'suckers' from buds on the roots and stem after mechanical interventions, and its production of large numbers of seeds that are easily scattered in the environment. Within the "LIFE Alta Murgia" Project, founded by the European Commission, aimed at eradicating *A. altissima* from the Alta Murgia National Park using innovative and eco-friendly control techniques, the suitability of potential microbial biological agents were explored. Two fungal pathogens were isolated from diseased plants, identified, tested for pathogenicity and aggressiveness, and studied for the production of bioactive metabolites. The first results of the studies on the two fungal agents, including the chemical and biological characterization of the metabolites and their potential as natural herbicides, are presented.

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