yield attributable to fallow season treatments. Overall tomato yield from fumigant/fungus-treated plots was statistically similar to yields achieved in the fumigant/herbicide-treated plots.

**Development of *Mycoleptodiscus terrestris* as a bioherbicide for management of the submersed macrophyte, *Hydrilla verticillata***

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The indigenous fungal pathogen *Mycoleptodiscus terrestris* (Mt) has shown significant potential for use as a bioherbicide for management of the invasive aquatic macrophyte *Hydrilla verticillata*. Liquid culture fermentation methods have been developed that yield stable, effective bioherbicidal propagules of Mt. Under appropriate nutritional conditions, aerated Mt cultures produce high concentrations of vegetative biomass that differentiates to form compact hyphal aggregates that we have termed microsclerotia. Eight-day-old cultures yielded more than \(5 \times 10^6\) microsclerotia/litre with 50–90% surviving air-drying to less than 4% moisture. Dried Mt microsclerotia germinated both vegetatively and sporogenically upon rehydration, thus improving their potential to infect and kill hydrilla. Sporogenic germination was first evident on the microsclerotia as sporodochia followed rapidly with spore production by day 4 yielding approximately \(1.8 \times 10^6\) spores/g dried formulation. By day 12, spore counts had increased 10 fold. Applied to hydrilla in 55 litre aquaria, dried Mt formulation reduced hydrilla above ground biomass up to 99% compared to untreated controls.

**TAME Melaleuca: the areawide management evaluation of Melaleuca***

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*Melaleuca quinquenervia* (common name melaleuca or paper-bark tree) is a myrtaceous tree of Australian origin that has become a noxious weed in Florida, outcompeting native plants and rangeland grasses on approximately 200,000 ha of agricultural, riparian and wetland systems. Melaleuca infestations degrade south Florida’s native wildlife habitat, grazing lands and vital waterways that significantly contribute to fisheries productivity, act as nursery sites for fish and crustaceans, regulate run-off quantity and quality, mitigate flooding, and control erosion. Nearly $25 million has been spent over the past decade in managing melaleuca infestations, yet the weed continues to proliferate, particularly on private lands. The areawide management evaluation of Melaleuca, or TAME Melaleuca, is a multi-agency effort recently established by the US Department of Agriculture’s Agricultural Research Service (USDA–ARS) to demonstrate and promote practical, integrated melaleuca management strategies with an emphasis on biological control. In the course of this five-year project, research and demonstration sites will be set up in varied habitats in southern Florida where public and private landowners are highly motivated to manage melaleuca. Project activities include assessing melaleuca’s nonindigenous geographic distribution, the impacts of control tactics and the socio-economic factors associated with current and proposed control tactics; researching impacts of control tactics on the weed, interactions among biological control agents, and non-target effects of tactics; and technology transfer. By partnering with federal, state, local and private land managers on these goals, TAME Melaleuca intends to develop a sustainable and integrated melaleuca control program for the long-term control of this invasive weed.