

Note

Impact of the fungal pathogen, SPFG, on the *Salvinia molesta* Mitchell biological control agent, *Cyrtobagous salviniae* (Coleoptera: Curculionidae)

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In summary, a series of experiments were conducted to assess the effect of the fungal pathogen SPFG on *C. salviniae*, a biological control agent for giant salvinia. SPFG was applied as a hyphal suspension and has great potential for the management of giant salvinia with almost complete control occurring in 24 to 48 h. It apparently causes only limited mortality when applied by itself to the salvinia weevil, although increased mortality occurred when used in conjunction with an adjuvant.⁶ In addition, weevils reacted quickly to its application, with rapid movement away from the treated plant material. Additional research is needed that includes effects of the fungus on immature weevil stages, application of the fungus at more-realistic levels, and an understanding of the mechanisms behind the observed toxic effects of surfactants. In addition, although the present study provided some evidence for the compatibility between *C. salviniae* and SPFG, there are questions remaining regarding SPFG formulation and application rate, *C. salviniae* dispersal, and outcomes from entire waterbody-scale trials.

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- ⁶Silwet® L77 adjuvant, PhytoTech Labs, Lenexa, KS 66215.
- ⁷Petri dish, Thermo Fisher Scientific, Waltham, MA 02451.
- ⁸Model I30VL environmental chamber, Percival Scientific, Perry, IA 50220.
- ⁹Glad plastic storage containers, Clorox, Oakland, CA 94612.
- ¹⁰Statistica software, version 13, TIBCO Software Inc., Palo Alto, CA 94304.