The microsporidium, *Thelohania solenopsae*, as a potential biological control agent for the imported fire ants, *Solenopsis invicta* and *Solenopsis richteri*.

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The microsporidium, *Thelohania solenopsae*, is being studied in Argentina for use as a biological control agent for the imported fire ants, *Solenopsis invicta* and *Solenopsis richteri*. The results to date have been promising and indicate that this pathogenic protozoan may offer potential for reducing the size of fire ant populations in the U.S. Laboratory studies showed that healthy colonies lived longer than infected ones. After 12 weeks of artificial rearing, 50% of the healthy colonies died versus 93% of the infected ones. Individual workers separated from healthy colonies and kept in complete starvation lived, on average, 26% longer than infected workers under the same conditions (4.1 vs. 3.3 days). The difference in survival was higher in major than minor workers.

In field studies in Argentina, the size of infected colonies was smaller than noninfected ones and the overall density of the infected populations declined by more than 80%. The number of immature reproductives was less in infected colonies and the most common myrmecophile in both infected and healthy colonies was the hemipteran, *Neoblissus parasitaster*.

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