

Exposure to *Beauveria bassiana* reduces the fecundity of *Harmonia axyridis*

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Harmonia axyridis is a predatory coccinellid, native to central and eastern Asia. It has been available in many countries for use as a biological control agent of pest aphids and scale insects. In many of these countries, including the USA, *H. axyridis* has established. It is now considered an invasive alien species in many countries for a number of reasons including its impact on functional biodiversity. *Beauveria bassiana* is known to be a natural mortality agent of overwintering ladybirds and is a potential candidate for the biological control of *H. axyridis*.

In this paper we compare the susceptibility of three species of ladybird, *H. axyridis*, *Coccinella septempunctata* and *Adalia bipunctata* to *Beauveria bassiana* infection after exposure at three doses (10^5 , 10^7 , 10^9 spores per ml). In addition we assess the impact of *B. bassiana* on the fecundity of these three ladybird species. *Harmonia axyridis* is extremely resistant to *B. bassiana* infection but even low doses reduce fecundity dramatically. In comparison *C. septempunctata* and *A. bipunctata* are highly susceptible to *B. bassiana* but low doses do not reduce fecundity. We discuss these results in relation to potential for control of *H. axyridis* using *B. bassiana*.