

The study of non-chemical pesticide control on *Aphis gossypii* and *Thrips tabaci*¹

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Abstract

Tobacco extracts, Rice hull vinegar, bamboo distillation, chile distillation, chile extracts, soapberry extracts, neem oil, and camphor oil were tested to control *Aphis gossypii* and *Thrips tabaci*. The mortality was counted after treatment. Results revealed that the mortality of cotton aphids treated with tobacco extracts of 10%, 4%, 2%, 1.3%, and 1% concentration was higher than 99% at 72 hours after treatment. On the other hand, mortality of *Thrips tabaci* treated with 1% soapberry, 1% and 0.4% camphor oil, and 2% tobacco extracts were 91.7%, 88.8%, 84.9% and 94.4%, respectively. In field trial, the mixture of 0.4% neem oil and 1% soapberry with 1% tobacco extracts could reduce the *Thrips tabaci* density effectively.

Key words: Non-chemical pesticide, tobacco extracts, soapberry, camphor Oil, neem oil, rice hull vinegar, bamboo vinegar, *Aphis gossypii*, *Thrips tabaci*.

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