

# Scope for Integrated Management of the Leucaena Psyllid, *Heteropsylla cubana* by Using Resistant Plant Varieties and the Predator, *Curinus coeruleus*

Jutharat Attajarusit<sup>1</sup> and Pimolporn Nanta<sup>2</sup>

<sup>1</sup>Institute of Agricultural Technology, Suranaree University of Technology, Nakhon Ratchasima 30000, Thailand

E-mail: jutharat@ccs.sut.ac.th

<sup>2</sup>Entomology and Zoology Division, Department of Agriculture, Bangkok 10900, Thailand

## Abstract

An experiment was carried out to examine the scope for integrated management of the leucaena psyllid, *Heteropsylla cubana* by using resistant plant varieties and release of the exotic coccinellid predator, *Curinus coeruleus*. During the outbreak season, November 1990 to March 1991, three potentially resistant leucaena varieties from Hawaii along with the native Thai variety were tested by releasing the predator on to infested caged plants at Petchabun province in Thailand. Results showed that K x I hybrid (hybrid between *Leucaena diversifolia* K156 and *L. pallida*) was highly resistant to the leucaena psyllid in contrast with the native Thai variety of *L. leucocephala* which was highly susceptible. *L. leucocephala* variety K636 was the next most susceptible, followed by *L. leucocephala* variety K584. Release of the predator, *Curinus coeruleus* at a density of ten adults per m<sup>2</sup> reduced the pest density. The results suggest the feasibility of integrating the use of resistant varieties and release of the predator for leucaena psyllid management. However, more studies under farm conditions are needed.

**Keywords:** biological control, *Leucaena* psyllid, resistant varieties