



Dr. Prakai Thephan

Interdisciplinary research emphasizing on *Bacillus thuringiensis* and its control of insect pest



Research Program

1. Development of *Bacillus thuringiensis* powder by freeze dye process.
2. Application of *Bacillus thuringiensis* JC590 Thai strain for controlling teak stem borer and persistence of its spore on teak bark.
3. Application of *Bacillus thuringiensis* JC590 Thai strain for controlling Agarwood leaf eating (*Heortia vitessoides*, O. Lepidoptera: F. Crambidae).
4. Exclusion of exotoxin from Thai *Bacillus thuringiensis* by PCR technique
5. Detection of *cry* gene in *Bacillus thuringiensis* Thai strain toxic to Coleoptera and Diptera by PCR technique.
6. Diversity of beneficial insect and insect pest at the orchard in Rayong Province.
7. Population density of thrip in peanut cultivation and efficacy of insecticide for controlling insect pest.

Publications

- Thephan, P.**, S. Chowpongpan and S. Kaewsompong. 2012. Thai *Bacillus thuringiensis* a Promising Biopesticide against *Plutella xylostella* L. 2nd International Symposium of Bio-Pesticides and Ecotoxicological Network. 33-38.
- Thephan, P.**, S. Kaewsompong and J. Chanpaisaeng. 2011. Characterization of Thai *Bacillus thuringiensis* JCPT121 as Promising Biopesticide against Diamondback Moth (*Plutella xylostella* L.). Thai Journal of Agricultural Science .44(1): 61-70.
- Thephan, P.**, S. Kaewsompong and J. Chanpaisaeng*. 2008. Isolation, Toxicity and Detection of *cry* gene in *Bacillus thuringiensis* Isolated in Krabi Province, Thailand. Songklanakarin J. Sci. Technol. 30(15): 597-601.
- Chanpaisaeng, J., **P. Thephan** and S. Kaewsompong. 2007. Effects of Gamma Irradiation of *Bacillus thuringiensis* to efficiency on *Spodoptera* spp. and tolerance of UV ray. Agricultural Sci. J. (3): 279-285. (In Thai)