THESIS

POTENTIAL OF ANTHOCORID BUG, *WOLLASTONIELLA ROTUNDA* YASUNAGA & MIYAMOTO (HEMIPTERA: ANTHOCORIDAE) FOR BIOLOGICAL CONTROL OF *THRIPS PALMI* KARNY (THYSANOPTERA: THRIPIDAE)

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Tewee Maneerat 2007: Potential of Anthocorid Bug, *Wollastoniella rotunda* Yasunaga & Miyamoto (Hemiptera: Anthocoridae) for Biological Control of *Thrips palmi* Karny (Thysanoptera: Thripidae). Master of Science (Entomology), Major Field: Entomology, Department of Entomology. Thesis Advisor: Associate Professor Wiwat Suasa-ard, Ph.D. 72 pages.

The biology and biological life table of *Wollastoniella rotunda* Yasunaga and Miyamoto were done for evaluated prey preference. Using 4 species of preys, *Thrips palmi* Karny larvae, *Corcyra cephalonica* (Stainton) eggs, *Tetranychus* sp. adults and *Maconellicoccus hirsutus* (Green) crawlers. The investigations revaled that the net reproductive rate of increase (R_o) were 6.7067, 0.1400, 9.3533 and 0, the capacity for increase (r_c) were 0.0641, - 0.0760, 0.0535 and 0, the finite rate of increase (λ) were 1.0662, 0.9971, 1.0550 and 0 and the cohort generation time (T_c) were 29.6750, 25.8571, 41.7819 and 0 days when fed with *T. palmi*. *C. cephalonica, Tetranychus* sp. and *M. hirsutus*, respectively. It indicated that *T. palmi* larvae and *Tetranychus* sp. adults were suitable preys for rearing of *W. rotunda*. The efficacy study was revealed that 4 adults of *W. rotunda* could control 100 larvae of *T. palmi* in 5 days. It indicated that *W. rotunda* was promissing natural enemies for control *T. palmi*.

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