

FLORAL ASSOCIATION COMMUNITIES OF THE POTENTIAL INVASIVE WEED, *LANTANA CAMARA* L. *SENSU LATO*, IN KANCHANABURI, THAILAND

KAMONWAN KRITASAMPAN 5337756 SCEB/M

M.Sc. (ENVIRONMENTAL BIOLOGY)

THESIS ADVISORY COMMITTEE: EKGACHAI JERATTHITIKUL, D.Sc., SOMPOAD SRIKOSAMATARA, Ph.D., SANAE JITKLANG, Ph.D.

ABSTRACT

*Lantana camara* L. is an important invasive plant species in many regions around the world. Efficient reproductive characteristics and pollination by insects seems to be of major importance to its spread and invasion into new areas. Therefore, this study aims to explore population parameters (population size and density) and percent coverage of *L. camara*, taxonomy of flower-visiting animals, and their activities during their visit. Field work was conducted at Mahidol University, Kanchanaburi Campus, Sai Yok District, Kanchanaburi Province, Thailand with eleven intercept lines, and a total of three kilometers baseline for measuring *L. camara* patch sizes and acquisition of total areas. Animal communities' surveys were conducted bimonthly throughout a year (Nov 2013-Dec 2014) based on twelve-hour daytime observations. Results showed that *L. camara* distribution possibly varied across habitat selection. The largest value of estimated population size was 4,759 shrubs, but some lines had no shrubs across lines. The estimated population density was  $37 \pm 1,140$  shrubs per ha, and *L. camara* cover was 1.63% in relation to total area. For flower-visiting animals, a total of 27 taxonomic groups of arthropods and one bird species were recorded visiting and/or living on flowers/inflorescences of *L. camara*. Bees and adult butterflies showed the highest frequencies of visits, 32% and 28% respectively. While, lace bugs spent the longest time on flowers of *L. camara* for both total visiting time and length of time per visit. For small arthropods extracted from the inflorescences, thrips and mites were the most frequently found animals in all surveys. Moreover, thrips were found in large numbers and in significantly higher numbers during the dry season (Nov-Dec 2013, and 2014) than in the wet season. Several groups of associated animals found here were noted as potential pollinators, such as bees, butterflies, and thrips. Whereas, other phytophagous groups, such as hemipterans and mites, could possibly be used as biological control agents of *L. camara*.

KEY WORDS: BIOLOGICAL CONTROL AGENTS / DIVERSITY / INVASIVE SPECIES /  
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62 pages