

Kachen Soofon 2007: Vegetable Soybean Pest Management. Master of Science (Entomology),
Major Field: Entomology, Department of Entomology. Thesis Advisor:
Mr. Surachate Jamornmarn, Ph.D. 97 pages.

Field experiments of pest management were conducted to control insect pests in vegetable soybean cv. AGS 292 production at Asian Vegetable Research and Development Center, Amphur Kamphaeng Saen, Nakorn Pathom province during 26 July 2006 to 2 October 2006 and National Corn and Sorghum Research Center, Amphur Pakchong, Nakorn Ratchasima province during 6 August 2006 to 9 October 2006. The investigation was carried out with RCBD arrangement with 4 replications using two insect pests control methods and untreated control method compared with conventional insect pests control method. The data were evaluated based on cost of insect pests control and pod yield. The best method in decreased cost of insect pests control and increased pod quantity and quality demonstrated in 2-cypermethrin 35% EC and 2-acetamiprid 20% SP 4 times alternate spray and 2 times alternate spray after plant 30 days old with methomyl 40% SP and acetamiprid 20% SP. All sprays were done when insect pests infestation were higher than or equal to economic thresholds and neem seed extract application when plant was 50 and 58 days old. Cost of insect pests control obtained from this method was the lowest and yield obtained from this method was the highest but yield was not significant from method of seeds treated with imidacloprid 70% WS and 4 times alternate spray with 2-cypermethrin 35% EC and 2-acetamiprid 20% SP, followed by 2 time alternate spray after plant 30 days old with methomyl 40% SP and acetamiprid 20% SP. All sprays were done when insect pests infestation were higher than or equal to economic thresholds plus neem seed extract application when plant was 50 and 58 days old and conventional method of carbaryl 85% WP spray when plant was 7 to 8 days old, lambda-cyhalothrin 2.5% EC spray when plant was 14 to 15 days old, chlorfluazuron 5% EC and dinotefuran 10% WP sprays when plant was 21 to 22 days old and 35 to 37 days, chlorfluazuron 5% EC spray when plant was 50 days old and dinotefuran 10% WP spray when plant was 58 days old. In these field experiments of insect pests management were considered to provide an effective insect pests control program. This program estimate of reduced use chemicals, more ecology friendly, decreasing risk of chemical take up in farmers and consumers and also reducing production cost to increase return of farmer.

Student's signature

Thesis Advisor's signature

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