EGGPLANT: Solanum melongena L. 'Classic'
Colorado potato beetle (CPB); Leptinotarsa decemlineata (Say)
Potato flea beetle (FFB); Epitrix cucumeris (Harris)

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EGGPLANT: HYDRATED LIME AS AN INSECT REPELLENT, 1991: 'Classic' eggplant was transplanted 31 May, in Storrs, Connecticut. Plots consisted of 30 plants, 2 ft apart in 3 rows of 10 plants each. Rows were 4 ft apart. Three treatments were replicated 3 times in a randomized complete block design. Asana + Butacide and hydrated lime were applied on 31 May, 7, 14, 21, 28 Jun, 4, 12, and 19 Jul. Upper and lower leaf surfaces of all plants were sprayed with water immediately prior to applying treatments. Water and Asana applications were made with a 3 gal CO₂ backpack sprayer operating at 25 psi and delivering 40 gal/acre. Plants were sprayed from the top and from each side, by hand with a single hollow cone nozzle. Hydrated lime was applied with a crank-style duster at 50 lb/acre. All data were collected from the 10 plants in the center row of each plot with the exception of GPA which were counted on 5 leaves on each of 4 center row plants. Plants were rated for percent defoliation at fruit set on 26 Jul. Fruit was harvested, counted and weighed on 9, 16, 23, 29 Aug, 6, 13, and 20 Sep.

Populations of CPB were high while FFB and GPA populations were low during this study. Although higher in numbers, CPB in Asana + Butacide plots did not feed as voraciously as in other treatments. Defoliation was significantly higher and yield was lower in hydrated lime and untreated check plots compared with plots treated with Asana + Butacide. Based on counts, hydrated lime appeared to repel FFB but not CPB or GPA. No phytotoxicity was observed.

Means within columns followed by the same letter are not significantly different (P = 0.05; LSD).

All data were transformed by square root (X + 0.5) except % defoliation which was transformed by arcsine [square root (X/100)]; untransformed data are presented.

EGGPLANT: Solanum melongena L. 'Harris Special'

Colorado potato beetle; Leptinotarsa decemlineata (Say)

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EGGPLANT, COLORADO POTATO BEETLE CONTROL, 1992: 'Harris Special' eggplant transplants were planted in 90 ft rows on 15 May. Each treatment consisted of 10 rows of 10 plants, separated by 5 ft buffers, replicated 3 times in a randomized complete block design. Each plot was sprayed with a low-pressure boom sprayer delivering 50 gal/acre at 36 psi. Treatments were applied 22 and 31 Jul; 7 and 15 Aug. Weekly counts were made from all plants for the total number of eggmass, small and large larvae, adults, and number of flowers and fruit. Data were transformed using √x + 1 before analysis of variance and comparison of means.

Treatment with M-Trak reduced small larva densities on all dates. The reduction in the number of small larvae also caused declines in egg, large larvae, and adult densities. Plants treated with M-Trak produced more flowers and fruit than untreated controls due to reduced feeding pressure.
Date | Treatment | Rate | Eggs | Larvae | Adults | Flowers | Fruits
---|---|---|---|---|---|---|---
29 Jul | M-Trak | 4 qt | 1.90a | 2.40a | 0.18a | 2.54a | 1.49ba | 0.46b
 | Control | | 5.67b | 9.82b | 0.71b | 3.62b | 1.09a | 0.13a
5 Aug | M-Trak | 4 qt | 1.15a | 7.39a | 0.09a | 1.94a | 1.54b | 1.54b
 | Control | | 1.55a | 32.13b | 1.48b | 1.99a | 1.16a | 0.16a
12 Aug | M-Trak | 4 qt | 0.02a | 0.01a | 0.03a | 0.59a | 0.78b | 0.78b
 | Control | | 0.12b | 11.48b | 2.78b | 0.78b | 0.01a | 0.01a
19 Aug | M-Trak | 4 qt | 0.01a | 0.00a | 0.00a | 1.58a | 0.85b | 0.85b
 | Control | | 0.13b | 0.16b | 0.30b | 1.93b | 0.45a | 0.45a

Means within columns followed by the same letter are not significantly different (P = 0.05; DMRT).

**GARDEN EGG**: *Solanum intergrifolium* (Poir) 'Legon 18'
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**CONTROL OF GARDEN EGG LEAF SKELETONIZER, GHANA, 1990**: Evaluation of insecticides for the control of the garden egg leaf skeletonizer was carried out at the experimental farm of the University of Ghana, Legon, Ghana. The experiment was laid out in a randomized complete block design with four replicates. Each replicate consisted of five main plots, four treated and one control (untreated). Individual plots consisted of five rows with each row containing five plants planted at a spacing of 60 cm × 60 cm. Adequate soil moisture content was ensured by irrigating when necessary with a sprinkler. Spraying was effected when plants were six weeks old, and data taken on insect counts every week thereafter, for three weeks. Data were transformed by $VX^2 + 0.5$ for ANOVA though reported means are that of actual count. A knapsack sprayer (TECNOMA® tl6P) was employed in insecticidal treatments. A pretreatment survey indicated insects were distributed randomly with damage to leaves very severe.

Apart from malathion which recorded less than 50% control, all other insecticides gave controls of more than 70% during the first two weeks after treatment, with dichlorvos being the most lethal. Phytotoxicity was not observed.

**EVALUATION OF WOOD-ASH FOR GARDEN EGG BORER AND LEAFMINER CONTROL, GHANA, 1990**: Wood-ash from cocoa tree was evaluated in the field for efficacy in control of pests of garden eggs. The experiment, which was carried out in a randomized complete block design, had four replicates with each consisting of five main plots, i.e. four treated and one untreated. Individual plots consisted of four rows with each row containing three plants at a spacing of 60 cm × 60 cm. Treatments commenced two weeks after transplanting and were carried out at a bi-weekly interval until plants were twelve weeks old. Dimethoate 20 EC was used at a rate of 80 g Al/ha to assess the efficacy of the ash. Treatments consisted of $T_0 =$ untreated; $T_1 =$ Ash used throughout period of study; $T_2 =$ Ash used till 4 weeks i.e. when flower formation commenced, and dimethoate used for remainder of study; $T_3 =$ dimethoate used throughout period of study. The ash was hand sprinkled as water suspension at a rate of 80 g/acre. Data on insect counts were transformed by $\sqrt{X} + 0.5$ while those on percentages were transformed by arcsin $VX$.

On the whole, the ash served as an antifeedant to leafminers. However, differences between treatments were not significant for insect infestations. There was no observance of phytotoxicity.