

Section VII
Foliage & Seed Insects

PERFORMANCE OF COLORADO POTATO BEETLE
REARED ON DIFFERENT HOST PLANTS

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Colorado potato beetles, *Leptinotarsa decemlineata* (Say), were reared in the laboratory on potato, *Solanum tuberosum* L., or hairy nightshade, *S. sarrachoides* Sendt. Larval development and feeding rates were measured, and performances of adults were evaluated. Results indicated that larvae consumed more potato foliage than nightshade in terms of dry weight. Developmental rate was higher for larvae fed potato than for those fed nightshade. Mortality was similar on the two hosts. Pupae and adults obtained from larvae that were reared on nightshade were significantly heavier than those from larvae reared on potatoes. There was no significant effects of rearing host on adult female longevity. Fecundity, however, was higher for the beetles fed nightshade than those fed potatoes.

In conclusion, CPB developed slower but reached larger size, and thus laid more eggs when fed nightshade. Beetles fed potato ate more, developed faster, but were smaller and deposited fewer eggs.