Table 1.—Effect of antifeeding compound AC-24055 on feeding of larvae and adults of the Philippine lady beetle.

	Area of tomato leaves eaten (in cm^2) [a]					
	3rd-stage larvae		4th-stage larvae		adult	
Concentration	24 hr after feeding	48 hr after feeding	24 hr after feeding	48 hr after feeding	24 hr after feeding	48 hr after feeding
.0625%	0.08 a	0.12 a	0.21 a	0.26 a	0.01 a	0.03 a
.03125%	.09 a	.17 a	.36 a	.39 a	.03 a	.03 a
.0156%	1.79 b	2.93 b	1.38 b	2.11 b	2.00 b	4.77 b
.0078%	2.08 bc	3.06 b	2.72 c	4.54 c	2.34 b	4.99 b
Control	2.57 c	3.19 b	2.86 c	4.92 c	2.32 b	4.89 b

[a] Values followed by the same letter are not significantly different at the 1% level of confidence by Duncan's Multiple range test. Each column has been analyzed separately.

Data in Table 1 show that under laboratory conditions AC-24055 was effective in protecting the leaf area of tomatoes treated with a concentration as low as 0.03125%. However this study was conducted in confined areas of petri dishes, the grubs and adults were forced to remain on the treated surfaces. But in the field the beetles might avoid the treated leaves at still lower concentrations.

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Predation by *Blattisocius keegani*[1] on Egg Masses of *Diaprepes abbreviatus*[2] in the Laboratory[3]

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An egg parasite, *Tetrastichus haitiensis* Gahan, recently has been considered a possible biological-control agent for the so-called sugarcane rootstalk borer weevil, *Diaprepes abbreviatus* (L.), a recently introduced pest of citrus in Florida (Woodruff 1968). Therefore, a colony of the parasites has been maintained on eggs of *D. abbreviatus* at the Citrus Root Weevil Laboratory, Apopka, Fla.

D. abbreviatus egg masses are obtained from field-collected adult weevils which are held in 2×2×2-ft screen cages and provided green bean foliage for food. Eggs are deposited in masses between wax-paper strips attached to the top of the cage (Wolcott 1933). The wax-paper strips are removed from the cages and separated, exposing one side of the egg mass. The masses are then exposed to the parasites for oviposition.

Dark circles on the chorion of both hatched and unhatched eggs were first thought to result from host feeding by *T. haitiensis*. However, several mites were observed later on eggs which had been exposed to the parasites for oviposition. These mites were identified by H. A. Denmark and confirmed by Dr. E. E. Lindquist, Taxonomy Section, Canadian Department of Agriculture, as *Blattisocius keegani* Fox, a known predator of the eggs and young larvae of moths in laboratory colonies (Nesbitt 1951, Stein 1960). Muma (1961) collected this mite from citrus. Also, Barker (1967) found that nymphs and adults of *B. keegani* fed readily on eggs of beetles of the genera *Cryptolestes*, *Tribolium*, *Trogoderma*, and *Oryzaephilus*.

We studied the effect of *B. keegani* upon eggs of *D. abbreviatus*. Two egg masses (0–24 hr old) of *D. abbreviatus* were collected at random from the laboratory colony; 1 mass of 43 eggs was exposed to 9 adult *B. keegani* of unknown age, and the other of 98 eggs was held as control; both were observed 1 or 2 times daily for 2 weeks.

One day after the eggs were exposed to *B. keegani*, several small black spots were visible on 4 eggs; the control showed no similar spots. After 2 days, the spots on the eggs had become large dark circles (Fig. 1), and a small hole in the chorion was seen in some of the circles. No mites were observed feeding, but after 2 days, 18 exposed eggs had one or more dark circles. No mite eggs were observed, possibly because the mites preferred to remain in the small spaces between the weevil eggs or between the egg mass and the wax paper and

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[1] Acarina: Blattisocidae.

[2] Coleoptera: Curculionidae.

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