

## Research Note

### ANTICARSIA GEMMATALIS HÜBNER (LEPIDOPTERA: NOCTUIDAE): A NEW PEST ATTACKING PIGEON PEA IN PUERTO RICO<sup>1</sup>

The larvae of the velvet bean caterpillar, *Anticarsia gemmatalis*, has been found in Puerto Rico defoliating plants of the Papilionaceae group only: *Arachis hypogaea* L. (peanuts), *Glycine max* (L.) (soybean), *Medicago sativa* L. (alfalfa), *Mucuna deeringiana* (Bort) Merr (velvetbean), *Pueraria phaseoloides* (Roxb.) Benth (tropical kudzu), *P. hirsuta* Shneid (kudzu vine), *Sesbania grandiflora* (L.) Pers (gallito) and *Vigna unguiculata* (L.) Walp (cowpea).<sup>2</sup> It has also been reported as a key defoliator in the southern states of the United States and in South America attacking basically the same group of plants.<sup>3,4</sup> In the tropics, where those crops are cultivated,<sup>3,5</sup> it is considered as a minor pest of pulses, including pigeon pea. Recently, it was found that *A. gemmatalis* can be reared with success in pigeon pea.<sup>6</sup>

The color of the larvae varies from dull to olive-brown or black with dark lines bor-

dered by whitish ones running the length of the body (fig. 1). The head is yellow orange.<sup>4,7</sup> These caterpillars can feed up to 3 weeks and pupate 2 inches below the surface of the soil for 10 days.<sup>8</sup> The adults are light brown to black to black nocturnal moths, with black lines running across the wings. The eggs are tiny and round. Deposited on the underside of leaves, they hatch in 4 days.<sup>7,8</sup> It is possible to have 3 generations per season.<sup>8</sup>

*Anticarsia gemmatalis* was first observed in Puerto Rico attacking pigeon pea (*Cajanus cajan* Millsp.) in commercial fields in Santa Isabel and in an experimental plot with cv PR-147 in Fortuna and Juana Díaz. The larvae found during November and December 1987 were defoliating the pigeon pea plant and occasionally eating the flower buds. The attack at Fortuna lasted from 4 to 6 days; 30 to 40% of the plants from the check plots were affected. The larvae attack

<sup>1</sup>Manuscript submitted to Editorial Board 30 June 1989.

<sup>2</sup>Martorell, Luis F., 1976. Annotated Food Plant Catalog of the Insects of Puerto Rico. Agric. Exp. Stn. Univ. P. R.

<sup>3</sup>Hills, Dennis, 1975. Agricultural Insect Pests of the Tropics and Their Control. Cambridge University Press, New York.

<sup>4</sup>Westcott, Cynthia, 1973. The Gardeners Bug Book. 4th ed, Doubleday & Company, Inc., New York.

<sup>5</sup>Morton, Julia F., Roger E. Smith, M. A. Lugo-López and R. Abrams, 1982. Pigeonpeas (*Cajanus cajan* Millsp.): A valuable Crop of the Tropics. Spec. Publ. Dep. Agron., Univ. P. R., Mayagüez, P. R.

<sup>6</sup>López, J. D. Jr., S. L. Jones and V. S. House, 1982. Species of *Trichogramma* parasitising eggs of *Heliothis* spp. and some associated pests in central Texas. *Southwest. Entomol.* 7 (2): 87-93.

<sup>7</sup>Pedigo, Larry P., 1989. Entomology and Pest Management. Macmillan Publishing Company. New York.

<sup>8</sup>Davidson, Ralph H. and Williams F. Lyon, 1979. Insect Pests of Farm, Garden and Orchard. 7th ed, John Wiley & Sons, New York.

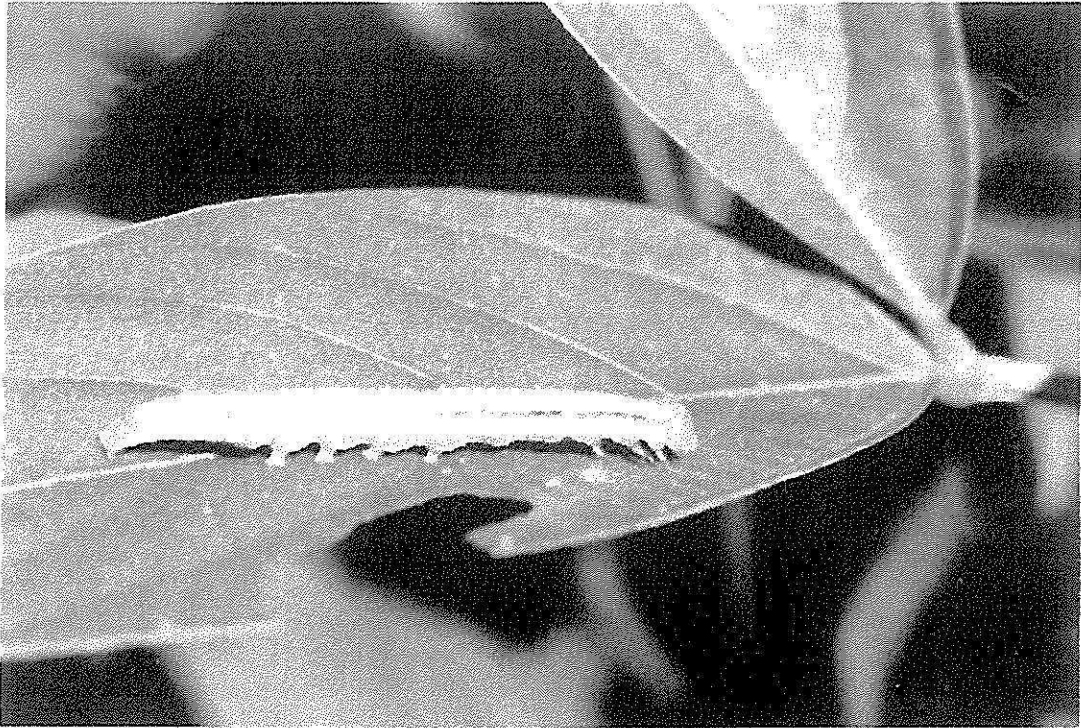


FIG 1.—Larvae of *Anticarsia gemmatalis* affecting pigeon pea.

young leaves first, then move on to feed on older leaves. All tissues on the leaves are eaten except the veins. Older larvae often attack stems of host plants. Where outbreaks occur, entire fields can be defoliated in 5 to 7 days.<sup>7</sup>

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