Research Note

ANTICARSIA GEMMATALIS HÜBNER (LEPIDOPTERA: NOCTUIDAE): A NEW PEST ATTACKING PIGEON PEA IN PUERTO RICO

The larvae of the velvet bean caterpillar, Anticarsia gemmatalis, has been found in Puerto Rico defoliating plants of the Papilionaceae group only: Arachis hypogea 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). 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. In the tropics, where those crops are cultivated, 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.

The color of the larvae varies from dull to olive-brown or black with dark lines bordered by whitish ones running the length of the body (fig. 1). The head is yellow orange. These caterpillars can feed up to 3 weeks and pupate 2 inches below the surface of the soil for 10 days. The adults are light brown to black to block 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. It is possible to have 3 generations per season.

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

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.\(^7\)