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Some occasional pests of Jasmine

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During the last three years various insects occurring on Jasmine were studied for their importance and type of damage and their characteristic features reported in an earlier paper. (David 1958). Further observations showed that there were several other insects which were capable of infesting the crop occasionally and causing rather insignificant injury. Since these insects might flare up into prominence during certain epidemics and the record of these would serve to throw light on the host range of the insects concerned, an account of the insects is given in this paper. It may be mentioned here that excepting the leaf-miner and the horn worm, other insects are being noted on this crop for the first time.

The brown stink bug: *(Tolumnia sp.?)*

This is a pale brownish bug with variegated markings on the dorsum and a dark brown cuneus. It attains a length of about 20 mm and has the base of the 5th and 6th antennal segments white It lays white, spherical eggs with circular lids in groups of about 30 on the upper surface of the leaves. The nymph is black except for the base of the femur, middle of tibia, base of 5th antennal segment and spots on the dorsum which are white. There is a spine in front of the eye and four others on the margin of the thorax. It feeds singly in the open portion of the tender stems and makes the twig droop and wilt away in course of time. Very few nymphs develop to full stature and adults are not usually seen on the plants. It attacks all varieties intermittently throughout the year.

This insect has to be reckoned as a potential pest of the crop as it is capable of inflicting severe damage. But it has not so far been able to build up a heavy density of population. It has been noted in small numbers on other plants like *Bauhinia racemosa*, *Glyricidia sepium*, *Lantana* sp., *Mimusops hexandra* and *Triphasia aurantiola (Chinese lemon)*.

The green leaf hopper: *(Putala* sp. ?)

A green, elongate Fulgorid bug with a long snout and hyaline wings was noted on the tender leaves of *Jasminum flexile* during July and August. It rests in the midrib portion singly on the upper surface and is not easily detected because of its cryptic colouration. It jumps out quickly when approached. There were only few adults and nymphs and there was no marked injury by its feeding.

The green scale : *(Lepidosaphes* sp.*)*

Small colonies of an elongate, green scale insect was noted on the leaves of *Jaminum sambac* in the lower portions in April and May. The affected leaves were drying away from the tips and curling backwards. The infestation was a mild one limited to a few plants and the affected leaves were removed. The insect should be capable of causing severe damage if it occurs on a large scale.

The Gingelly horn worm : *(Acherontia styx* W.*)*

The white spherical eggs of the Sphingid was noted in fairly large numbers on *J. sambac* and *J. flexile* in summer from February to April and in the monsoon period from October to December. However very few caterpillars were found to attain full development possibly due to the depletion of their numbers by predators. In captivity they were able to reach full maturity and emerge as adults. Complete defoliation was noted in the portions where the caterpillars were feeding. Evidently the insect is capable of cusing some damage to the plant occasionally.

The Leaf-miner : *(Phyllocnistis* sp.*)*

Some of tender leaves in new shoots are occasionally mined in an irregular fashion by a yellow caterpillar which feeds between the epidermal layers. Usually one or, in rare cases, more caterpillars are found in a leaf but the adjacent two or three leaves get affected simultaneously. The leaves curl inwards and dry away along the burrowed portions. The caterpillar comes to the edge of the leaf for pupation in a backward fold of the leaf. The moth is a minute white one which attacks all varieties and in all seasons. The injury has so far not been severe.

The Leaf-roller : *(Eucosma* sp.*)*

This insect rolls a portion of a tender leaf backwards conically and seals it on all sides by drawing a lid over the basal portion. A single yellow caterpillar remains inside the rolled leaf and feeds on the parenchyma. It pupates in a brownish cocoon of silk in a constriction of the leaf within the roll. When the adult emerges the pupal case projects from the leaf roll through a hole. The moth is dark brown, narrow with long antennae, white legs and a fringe of yellow and black hairs on the middle of the tibiae. It appears intermittently in all seasons and in all varieties. There is, however, very little injury to the plant as even the leaf rolls do not dry away.

Shoot Webbers :

Three species of caterpillars were found to infest the tender shoots of the plants and bind the leaves together with short silk attachments. The attack resembles that of the green shoot webber, *Margaronia unionalis* H. in its early stages. The details of the insects are given below.

(a) The black and grey caterpillar : *(Psorosticha* sp. *?)* : This is a dark geyish-green caterpillar, about 10 mm in length with short white hairs on yellowish tubercles, brown head, black prothorax, legs and last abdominal segment. The pupa is brown with the posterior end tapering and the eyes black. The abdominal segments are marked with brown and yellow transverse stripes. The moth is dark brown with the forewings black with lateral white areas in the anterior half and white with black and white edge in the posterior half. The insect attacked *J. auriculatum* mainly but appeared on the others also to a small extent. It occurred in 1956 monsoon period from July to December in large numbers and affected about 50% of the shoots. But since then it has not been seen. It is evidently a sporadic pest.

(b) Brown and yellow caterpillar : *(Micraglossa* sp. *?)* : The caterpillar in this case is yellow with short hairs. The head and prothorax are pale with a dark thin line on the posterior border. It pupates in the edge of a leaf folded over on the back. The moth has brown head, a tuft of hairs on the thorax, brown and black forewing with an yellow oblique streak in the middle. The antennae have yellow and black markings. The insect is met with occasionally all through the year on all species but occurs usually in small numbers to be of any economic significance.

(c) Brown, black and green caterpillar : *(Homona* sp.*)* : This caterpillar is longer than the other two, yellowish green with pale, short hairs. The head is pale brown with a dark posterior border line and the prothorax green in the intersegmental portion with a black elliptical plate in the middle. The moth is brown with a small black curved patch in the notch in the anterior portion of the forewing. This insect occurs only on rare occasions but has been noted on all species in various seasons.

Bagworms :

A bagworm was noted producing young ones in the monsoon from June onwards and attacking the leaves of *J. sambac* and *J. flexile*. The cases were made of twigs arranged in a squarish pattern over their bodies. They ate away small holes in the leaves which dried out along the edges. The injury was not significant.

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