

XXVI. TWO NEW SPECIES OF RAGMUS¹
FROM SOUTH INDIA.

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(Plate XXVII).

In the course of investigation into the infection of young cotton bolls by bacteria the two species of *Ragmus* described below were discovered. They are common on both "country" and Cambodia cotton during most of the season (December to August), but become scarce about the end of June. Both species, besides being plant feeders, kill and feed on one another and on Thrips, Aphids and Mites. They are however primarily plant feeders.

***Ragmus morosus*, n. sp.**

(Plate xxvii, figs. 1, 2).

This species is closely allied to *R. importunitas*, Dist. and *R. pellucidus*, Dist. General colour dorsally pale to dark ochraceous. Some specimens are virescent and the green colour of the abdominal segments shows through the hemelytra. This is much more noticeable in living than in dry specimens. There is some green colouration on the head and the anterior border of the pronotum. Ventrally virescent.

Antennae.—First joint, partially and entirely black; second joint black at the base, otherwise pale ochraceous; shorter and thicker than in *R. importunitas*, slightly thickened distally; third joint much longer than half the second joint; third and fourth joints, both pale ochraceous.

Head.—Between the eyes narrow and pilose. Eyes black, often reddish-brown in living specimens.

Pronotum.—Virescent anteriorly.

Legs.—Spotted with pitchy black. This is much more marked in the last pair. First pair almost entirely without spots. Tibiae spinulose but more longly spinulose on last pair.

Length.—1.75–2 mm.

Food plants.—Cotton (*Crotalaria juncea*), Cholam (*Andropogon sorghum*), Gingelly (*Sesamum indicum*).

Localities.—Coimbatore, Samalkota (Madras Presidency).

Type.—In the collection at Agricultural College, Coimbatore.

Ragmus morosus was first found sucking young cotton bolls, but it will attack and kill Thrips, Aphids and Mites. When con-

¹ Capsidae. Div. Camtotylaria.

fined in a tube with others of the same species it will kill them, especially if they are already injured. It feeds readily on boll-extract-agar medium. One specimen was seen sucking what appeared to be the remains of a small lepidopterous larva. It is suspected together with the other species of being instrumental in introducing pathogenic bacteria into young bolls and causing premature boll fall.

Ragnus flavomaculatus, n. sp.

(Plate xxvii, fig. 3).

Colour virescent, head pronotum scutellum and hemelytra with large yellow spots arranged as follows:—

Head.—Anteriorly a \cap -shaped marking, on the vertex an irregular spot by each eye.

Pronotum.—Six spots. Two anteriorly, four along the posterior margin.

Scutellum.—Two spots. Some specimens show two spots on mesonotum.

Wings.—Hemelytra with ten conspicuous spots, seven on the corium, three on the clavus. Clavus, corium and cuneus obscurely spotted dark brown.

Antennae.—Black spot near distal end of first joint; base of second joint and base of third black. Second joint not so thick as in *R. morosus*. Third joint slightly longer than half the second joint. In some specimens the distal end of the fourth joint is fuscous.

Head.—Between the eyes narrow as in *R. morosus* and hairy; on the vertex two irregularly shaped yellow spots bordering the eyes.

Legs.—Last pair of legs have the femora conspicuously spotted with black as in *R. morosus* and other species of the genus, and in addition a rosette of five spots at distal end. First and middle pair obscurely spotted. Tarsi spinulose but more strongly so on last pair of legs.

Wings.—Hemelytra with ten conspicuous yellow spots as described above. Posterior margin of the cuneus spotted with black. A triangular black spot half way between cuneus and tip of membrane. Tip of membrane fuscous. Cells of membrane outlined fuscous.

Length.—2 mm.

Food plants.—Cotton bolls and leaves (*Andropogon sorghum*). Will attack and feed on Aphis and Thrips.

Locality.—Coimbatore (Madras Presidency).

Type.—In collection at Agricultural College, Coimbatore.

Found associated with *R. morosus* on cotton bolls. It was not found on ginglyly. Persists throughout most of the cotton season but had practically disappeared by the end of June.

I wish to express my indebtedness to Dr. G. A. K. Marshall for comparing these two species with types of the other species of the genus at the British Museum and to Mr. B. P. Uvarov for drawing up a list of the chief differences found.