TWO NEW SPECIES OF APHELINIDAE [HYM. : CHALCIDOIDA]
PARASITIC ON ACAUDALEYRODES RHACHIPORA
[HOM. : ALEYRODIDAE] FROM INDIA

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Descriptions are given of one new species of *Encarsia* Foerster and one of *Eretmocerus* HaldeMan. The 2 species were reared from the whitefly *Acaudaleyrodes rhachipora* (Singh) which infests *Prosopis juliflora* and other plants in Rajasthan, India.

During investigations on the parasites of the whitefly *Acaudaleyrodes rhachipora* (Singh) infesting *Prosopis juliflora* D. C., and other plants in Rajasthan two very interesting and undescribed species belonging to the Aphelinid genera *Encarsia* Foerster and *Eretmocerus* HaldeMan were reared in the laboratory. The two species are described and illustrated below.

*Encarsia* Foerster 1878

Type-species : *Encarsia tricolor* Foerster.

The name *Encarsia* as used here is in accordance with DeSantis (1948) and Ferriere (1965).

The new species of *Encarsia* described below apparently belongs to a group characterised by having a 4-segmented funicle and two segmented club, narrow fore wings with long marginal fringe and a fairly large area on the disc around the stigmal vein devoid of setae. To this group belong *E. parvella* Silv., *E. nipponica* Silv., *E. pergandiella* How. and probably also *Prospaltella citrofila* Silv. In the last named species the antennal formula is 1, 1, 4, 2 (Silvestri, 1927). However, it is not considered wise to transfer this species to *Encarsia* for the reasons given below.

It is interesting to note that in the shape, discal setation and longish marginal fringe the aforementioned species resemble some of the species presently in *Aspidiotiphagus* How., *A. latipennis* Comp. and also *Prospaltella* Ashm. (*P. nupta* Silv., *P. inserens* Silv., *P. explorata* Silv., and *P. diaspidicola* Silv.), but they differ in the conformation of antennal segments. The presence of such intermediate species suggests the possibility of uniting these 3 genera into a single genus, but to follow such a course would result not only in the suppression of well-established generic names but would also upset the nomenclature of several economically important species representing a vast body of published work. Compere (1936), confronted with a similar situation said: "The differences between *Aneristus* and *Prococcophagus* are just about as great as
those between *Coccophagus* and *Aneristus*, *Coccophagoides* and *Trichaporus*, *Trichaporus* and *Prospaltella*, *Prospaltella* and *Aspidiotiphagus*, etc. The writer believes that these generic groups should be maintained even though intermediate species occur."

**Encarsia acaudaleyrodis** sp. n. (fig. 1-10)

**FEMALE.** Length 0.47-0.63 mm. Head dorsum yellow with face and genae pallid, labrum reddish-brown, 2 brownish bars behind lateral ocelli, a faint brown spot on each side of occipital foramen; thorax yellow with sides and venter pallid; collar of pronotum except in middle, axillae in major part, sides of metanotum, propodeum except in middle and laterad of spiracles, brownish; mesoscum yellow to more or less dusky, slightly shiny in later case; gaster yellow with pale venter; 1st tergite (morphologically the 3rd abdominal tergite) always brownish, rest of dorsum occasionally very faintly dusky and slightly shiny; tips of mandibles brownish; antennae pale yellow, more or less suffused with dusky; legs including coxae pallid; wings hyaline.

Head dorsum (fig. 1) with the frontovertex nearly 3 times wider than dorsal eye width; ocelli arranged in obtuse triangle, POL equal to OOL; malar space 2/3 eye length and with a distinct subocular suture; head, in frontal aspect (fig. 2), 1/3 wider than high; antennal sockets placed near to facial margin and spaced by a distance equal to the major diameter of a socket; mandibles with 2 teeth and a dorsal truncation; dorsum and front finely reticulate and sparsely setose; eyes glabrous; antenna as shown in figure 3; pedicel distinctly longer than FI; FI and FII subequal and each clearly shorter than FIII; club with apical segment longer than basal.

Thorax (fig. 4) with the mesonotum bearing 2 pairs of setae; mesoscutum and scutellum with fine hexagonal reticulations.

Fore wing (fig. 5) with the longest marginal fringe slightly longer than 1/2 width of disc; costal cell with a single row of short setae; disc sparsely setose with basal 1/3 and a fairly large area about stigmal vein devoid of setae; hind wing (fig. 6) with the marginal fringe much longer than width of disc.

Legs normal; middle tibial spur less than 1/2 of corresponding basitarsus (fig. 7).

Gaster longer than thorax (27-31 : 18-20); ovipositor, as seen through the derm, extends from middle of 3rd segment; ovipositor longer than middle tibia; gonostylus (= 3rd valvula) a little longer than basitarsus of middle leg (fig. 7, 8); in dry specimens the gaster is about as long as thorax and the ovipositor appears to extend from near the base of the gaster.

**MALE.** Length 0.45-0.52 mm. Similar to female except in body colour, antennal structure and sex characters.

Body more extensively dark brown; the band on sides of occipital foramen prominent; pronotum completely and mesoscutum except posteriorly, dark brown; gaster dark brown, 10th tergum and sometimes 8th tergum, testaceous yellow; antenna (fig. 9) with funicle segments elongate, pedicel slightly shorter than FI; club with 2 segments; genitalia (fig. 10) without digiti and with the phallus strongly exerted.

Holotype ♀, India : Rajasthan, Sardar Samand, 1.1974 (M. HAYAT), ex *Acaudaleyrodes rhachipora* (Singh) (det. B. V. DAVID), on *Prosopis juliflora*.

Paratypes. India : Same data as holotype (200 ♀♀, 88 ♂♂).

Further material studied but not included as types is as follows : India : Rajasthan, Jodhpur, XII.1973 (M. HAYAT), ex *A. rhachipora*, on *Tephrosia* sp. (4 ♀♀, 22 ♂♂); Jodhpur, XI.1974 (N. S. RATHORE), ex *A. rhachipora*, on *Lawsonia inermis* (45 ♀♀, 6 ♂♂).