A new species of Aleyrodidae from Jugoslavia.

(Homoptera.)

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Trialeurodes klemmi n. sp.

(Pupa case) In dry specimens, whitish, slightly pale yellowish on the margin and the median area, with long waxy filaments on the whole margin, which are directed outwards. Elliptic, broadest on the basal part of abdomen, somewhat narrowed anteriorly, very slightly or scarcely constricted on the cephalothorax, slightly indented at the hind end, about 1.4 times as long as wide, depressed thin. Mid-thoracic suture and transverse suture between the thorax and abdomen distinct, nearly reaching the row of submarginal papillae; thoracic segments not defined; basal 6 abdominal segments faintly discernible on the median area, without markings; the 7 th abdominal segment not well defined from the 8 th, with a pair of transverse sclerotised parts near the anterior margin. Dorsum with many conical papillae arranged in a single row near the margin, which are rather large, much narrowed on the distal part, sharply pointed apically, nearly as long as wide, in contact with each

other, equal in size, directed outwards, 7 or 8 of them occupying a space of about 0.092 mm; other papillae wanting; a pair of very small setae present on the basal abdominal segment and also near the vasiform orifice and near the hind end: dorsum reticulate except on the marginal area and sometimes except also on the submarginal area, the reticulations are formed by very thin lines and may be due to dermal secretions, but not to dermal sculptures; submarginal area sometimes with many small oval, elongate, or irregular translucent markings. Thoracic tracheal folds faintly or hardly discernible; the combs indis-



Fig. 1. Trialeurodes klemmi n. sp. Pupa case.

tinct, scarcely differentiated. Caudal furrow narrow, not distinct, longer than the vasiform orifice, without markings. Margin more sclerotised, without setae discernible; marginal teeth very small, indistinct, much wider than long, broadly rounded on the distal margin, about 14 of them occupying a space of 0.092 mm. Vasiform orifice triangular, almost as long as wide, rounded at the apical part, slightly notched at the hind end, rather large, in some specimens a very small marginal tubercle-like structure discernible at the hind end; the anterior marginal area defined from the 8 th abdominal segment. Operculum narrowed towards the rounded apex, a little constricted basally, wider than long, occupying more than half the orifice. Lingula slightly knobbed, not or a little exposed, with 2 slight constrictions on the knobbed part.

Pupa case 0.83 mm long, 0.6 mm wide; marginal waxy filament 0.32 mm; segmented area of abdomen about 0.194 mm wide; vasiform orifice including margin 0.06 mm wide; caudal furrow 0.092 mm long, operculum 0.037 mm wide, dorsal papilla 0.014 mm long.

Host plant: Laurus nobilis L. (attacked both surface of the leaf).
Many specimens were collected by Dr. M. Klemm at Rab, Jugo-

slavia, 22. September 1938.

This species is characterised by the presence of submarginal papillae in a dense single row. Resembles *Trialeurodes ricini* Misra and *T. tentaculata* Bemis, but easily differentiated from the former by the absence of pore-like dots near the bases of submarginal papillae, the lingula not reaching the hind end of the vasiform orifice, the last pair of dorsal setae being smaller and more closely placed, and by the smaller marginal crenulations; and from the latter by the denser row of submarginal dapillae, which are more close to the margin. Differs from *T. packardi* Morrill in the wider pupa case, the vasiform orifice not surrounded by ridges, the margin with no long setae etc.; and from *T. vaporariorum* Westw. in the structure and distribution of dorsal papillae.

The cotypes are in the Deutsches Entomologisches Institut, Berlin-Dahlem, and the author's collection.

Zwei neue Arten der Gattung Parmaschema Heller.

(Coleoptera: Notiophygidae.) Von Hans John, Deutsches Entomologisches Institut, Berlin-Dahlem. (Mit 2 Tafeln.)

Heller macht in seiner ausführlichen Beschreibung der Gattung Parmaschema (Philippine Journ. Sci., 7, 106–108, 1912) auf die Verwandtschaft aufmerksam, die Parmaschema Heller mit Holophygus Sharp verbindet und Herr Dr. Günther vom Dresdener Tierkunde-Museum war so liebenswürdig, mir für diese Arbeit die Type Hellers auszuleihen. Inzwischen konnte ich (Arb. morphol. taxon. Ent., 7, 71–75, 1940) über eine neue Species von Holophygus berichten und feststellen, daß Holophygus in auffälliger Weise Merkmale von Notiophygus und Parmaschema in sich vereinigt. Arrow hat neuerdings die Gattung Parafallia