

A NEW SPECIES OF GENUS TRIALEURODES COCKERE FORM
IRAQ
(HOMOPTERA, ALEYRODIDAE)*

*I. M. Al and **M.S .Abdaul

*Department of plant protection, College of Agriculture. University of
Baghdad.

**Iraq Natural History Museum. University of Baghdad, Baghdad, Iraq.

ABSTRACT

Trialeurodes irakensis sp. n. is describe and illustrated from Iraq. *T.vaporariorurn* (westwood) is reported and for the first time for the Iraqi fauna. A ke to species of *Trialeurodes* found in Iraq is presented.

INTRODUCTION

During an extensive survey of whiteflies (Homoptera. Aleyrodidae) in the middle of Iraq, four species belonging to the genus *Trialeurodes* Cockerel were noticed amongst the collection. Tow of which *T.rara* Singh. 1931 and *Tricini* (Misra. 1924) have been reported for Iraq by mound and Halsey (1978). The third species *T.vaporartiorunni* (westwood. 1856) has not been reported so far from this .country. The present work records for the first time the occurrence of this species from Iraq. The fourth species compared with allied species of the genus *Trialeurodes* proved that it is quite distinct from all other species and is described here as a new species.

TRJALEURODES IRAKENSIS sp. n.

(Text-fig. 1)

Pupal case. Colour, yellowish white with dark brown pigment on dorsal side. Body. oval in shape, surrounded by waxy filament. Length, 0.69-0.72mm. Breadth, 0.45-0.47mm.

Margin. Smoothly crenulate; thoracic tracheal pores apparently indicated by a few differentiated marginal teeth. Submarginal papillae all equal in size, usually arranged in a single row: small poores present beneath each papilla.

Dorsal surface. Logitudinal molting suture nearly reaches middle of dorsal disc. Transversal molting bends posteriorly, then directed anteriorly area. Abdomen with eight visible segments:

vasiform orifice in shape, lateral with tooth-like ridges: operculum rectangular in shape. occupies half vasiform orifice: lingual exposed, lingual tip clearly lobed with paired terminal setae. sometime extending well beyond posterior margin of orifice. Three pairs of major setae. on cephalic region, first and eight abdominal segment.

Ventral surface. Meso-and metathoracic legs each with one pair or more of small setae: prothoracic leg with one setae.

*part of a master's thesis submitted by the first author in 1988 to the college of Agriculture, University of Baghdad

Inheritance of dark head

Specimens studied. Iraq: Baghdad. one pupal case (Holotype) on *Hibiscus rosasinensis*.
3.iv.1987: three pupal case (paratype) on *Hibiscus rosasinensis*. and 3.iv.1987. (Leg Al-Malo).
The types were deposited in Iraq Natural History Museum.

Trialeurodes irakensis sp. n. is closely allied to *T ricini* but differs from it by the following character: operculum rectangular in shape fills half or less than of vasiform orifice: lingula exposed and extending up to tip of vasiform orifice or more.

Trialeurodes vaporariorum (westwood. 1856)

Specimens studied. Iraq: Baghdad, three pupal cases. on *Citrus* spp. 24.iii.1987: kardala, six pupa cases, on *Citrus* spp., 24.v.1987 Diyala. three pupal cases, on *Citrus* spp.iv.1987: (Leg. Al-Malo).

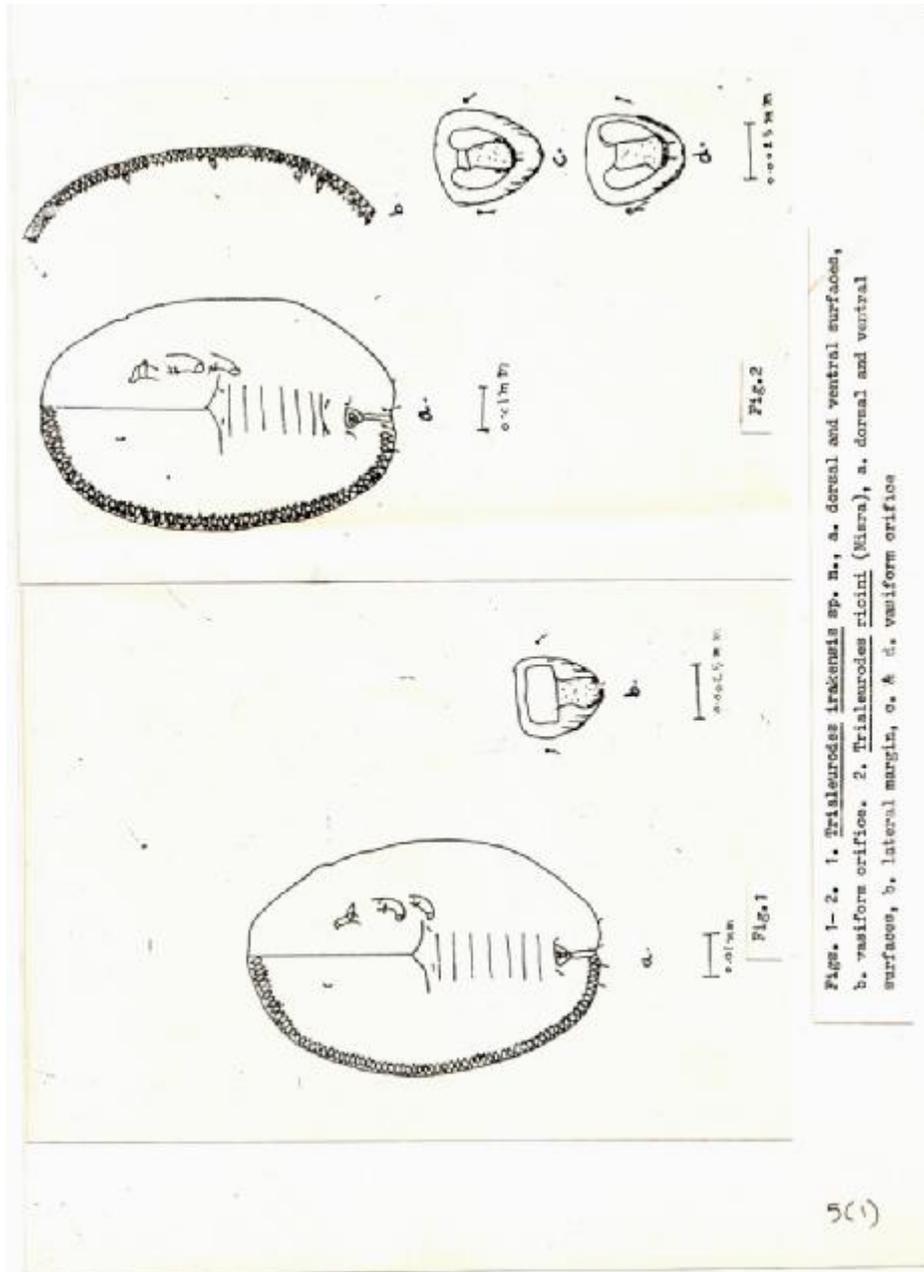
According to Mound and Halsey (1978) arid literature cited, this species has not been recorded so far from Iraq. Therefore, the present specimens constitute the first report of its occurrence in this country.

The following key may separate the four species of *Trialeurodes* found in Iraq:

1. Submarginal papillae all equal in size, usually arranged in single row (Figs.1,2)..... 2
- Submarginal papillae not equal in size, and not arranged in a single row (Figs.3,4)..... 3
- 2- Operculum rectangular in shape fills half or less than half of vasiform orifice: lingula exposed and extended up to tip of vasiform orifice or more (Figs.1) ... *T. irakensis* sp. n.
- Operculum cordate or subcircular in shape fills more than half of vasiform orifice, and exposing subapical of lingula (Figs. 2) *T ricini* (Misra. 1924)
3. Subdorsal papillae rounded in shape, not more than three pairs. Submarginal papillae nearly triangular in shape, with shape tip (Fig. 3)..... *I rara* Singh.1931
- Subdorsal papillae large and rounded in shape, usually four pairs or more (Fig.4)..... *T. vaporariorum* (westwood. 1856)

LITERATURE CITED

- Al-Malo. I. M. 1988. Taxonomic studies on whiteflies (Homoptera. Aleyrodidae) in the middle of Iraq. M. SC. thesis submitted to the College of Agriculture. University of Baghdad.
- Misra. C. S. 1924. The citrus whitefly, *Dialeurodes citri* in India and its parasite, together with the life history of *Aleurodes ricini* n. sp. Rep. Proc. ent. Meet. India, 12:1-Pusa 1923:129-135.
- Mound, L. A. and Halsey, S. H. 1978. Whitefly of the world. British Museum (Natural History) and John and Sons, Chichester- New York — Brisbane — Toronto. 34Opp.
- Sing. K. 1931. A contribution towards our knowledge of the Aleyrodidae (Whiteflies) of India. Mem. Dep. Agric. 98.
- Westwood, J. O. 1856. The new *Aleyrodes* of the greenhouse. *Gdnr's Chron.* 1856:852pp.



Figs. 1-2. 1. *Trialeurodes irakensis* sp. n., a. dorsal and ventral surfaces, b. vasiform orifice. 2. *Trialeurodes ricini* (Mirza), a. dorsal and ventral surfaces, b. lateral margin, c. & d. vasiform orifice

Inheritance of dark head

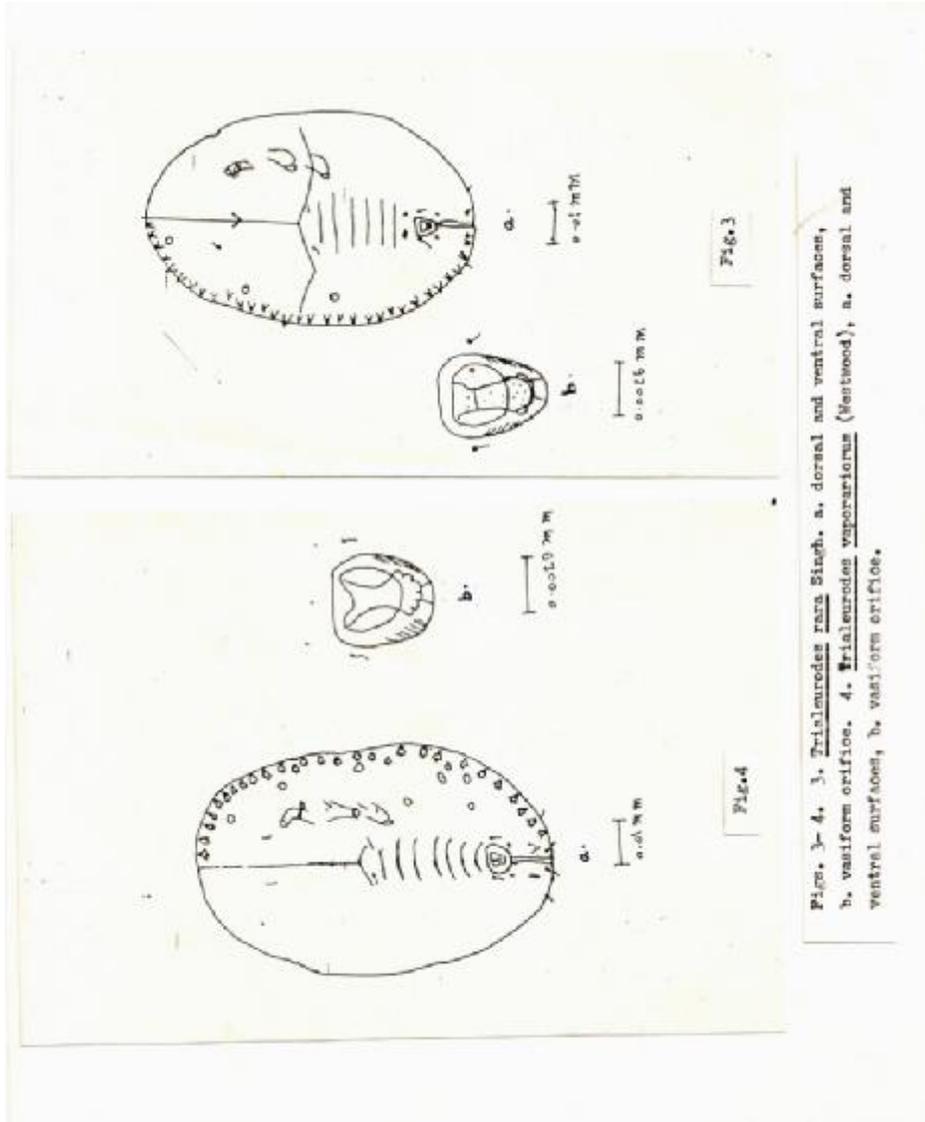


Fig. 3-4. 3. *Trialeurodes rara* Singh. a. dorsal and ventral surfaces, b. vasiform orifices. 4. *Trialeurodes vaporariorum* (Westwood), a. dorsal and ventral surfaces, b. vasiform orifices.

B . M . Al - Chalabi

Bull. Iraq nat. Hist. Mus.
(2000) 9 (2): 19-23