

NEW GROUP WITH A NEW SPECIES OF THE GENUS *EOTETRANYCHUS* OUDEMANS (ACARI : TETRANYCHIDAE)

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Abstract

Currently prominent slides of the tetranychid mite collected from mandarin orange *Citrus mandurensis* Lour at Wady El Mollak village El-Sharkia Governorate were prepared. Microscopical examination pointed out that mite belongs to the genus *Eotetranychus* Oudemans , tribe Tetranychini , subfamily Tetranychinae of the family Tetranychidae. Herein the mite was drawn and identified. According to the terminology of this genus, the mite has the caudal pair of para-anals (the post anal setae) present together with having the empodium consisting of three pairs of hairs, the peritreme is strong hooked distally . The dorsal striae of the female as well as male transverse between the third pair of dorsocentral hysterosomsals and the sacralis . The dorsal setae are exceeding the distance between their bases . Genital flap with transverse striae anterior the genital opening .

Revision of the literature , it was clear that the mite morphological of the mite characters seemed to be new to the science and belonging to a new group of the genus *Eotetranychus* Oudemans .

INTRODUCTION

In 1913 Oudemans erected the genus *Eotetranychus* on the type species *Trombidium tiliarum* Herman 1804. Subsequently, various authors placed the newly discovered tetranychid species under the genus *Eotetranychus*. Oudemans, (Jeppson et al. 1975) .

Accordingly, various species which were described from different host plants in different countries seemed to have the main characteristics of this genus. Oudemans 1931 , McGregor 1943 , Pritchard and Baker 1955 , Tuttle and Baker 1968 , Meyer 1987 , Baker and Tuttle 1994, Bolland et al 1998 , Migeon et al 2004 deal with this genus .

Pritchard and Baker (1955) established six groups namely Caribbeanae, Multidigituli, Lebocerdi, Steganus, Clitus and Tiliarium group on the basis of the type of striae of the genital flap, then after, Meyer (1987) divided the species of this genus into four groups.

During the present work a tetranychid mite collected from mandarin tree *Citrus mandurensis* Lour at Wadi El-Mollak village El-Sherkia Governorate proved to represent a new species and new group of the genus *Eotetranychus* Oudemans.

GROUP Egyptianus

This group is unique in having propodosmal dorsum covered with a longitudinal median striae encircled by U-shaped. Hysterosomal dorsum ornamented by transverse striae anteriorly and arch-like ones posteriorly. Dorsocentral and dorsolateral setae being longer than the distance between their basis. Striae of the genital flap and those anterior to it being arch-like. Aedeagus with distal part of the aedeagus being narrowly short, bent upward, with small knob having a minute anterior and posterior angulation.

MATERIALS AND METHODS

During a survey of the tetranychids at Wady El Mollak village, El-Sharkia Governorate mites were collected from mandarin tree *Citrus mandurensis* Lour. The collected individuals were singly mounted in Hoyer's medium on glass slides and carefully examined, identified according to the terminology of Pritchard and Baker 1955. The mite identification assured to be a new group and new species of the genus *Eotetranychus* Oudemans.

Examination of the specimens collected showed the taxonomic values such as chelicera, palp, chaetotaxal pattern of the dorsum and ventrum in addition to those of the legs.

RESULTS AND DISCUSSION

Female : The newly emerged female usually pale reddish yet transformed to dark red when getting old. Body oval 736 μm long including the gnathosoma, 529 μm idiosoma with a broad width 425 μm . Dorsal view reticulated with striae, being longitudinal in the medial part of propodosoma , which usually encountered by u-shaped ones, with an oblique ones laterally (Fig. 1 A). Striae between D₁ and D₂ transverse, longitudinal in the median area of each of D₃ and D₄ , transverse in median area between them. Humerals nearly subequal any of the propodosomals. Dorsum bearing thirteen setae , of which 3 on propodosoma. Setae D₁ – D₃ and L₁ – L₄ exceeding the distance between them , D₄ hardly reaching the bases , D₅ (the clunals) , the humerals (h) nearly subequals any of the propodosomals. Palp with a simple long seta on the genu, tibia with two simple setae and a distinct claw , palpal tarsus having 3 simple short setae, rather distinct terminal digit and 2 solenidia (Fig. 1 B) . Peritreme sussage like anchor shaped distally , arcute just before reaching the stigma, composed of thirteen segments (Fig. 1 C) . Genito anal area with transverse stria anterior to the genital opening , bearing one pair of long genital setae , two pairs of short anals and two pairs para anals (Fig 1. D).

Leg chaetotaxal formulae as follows : caxae 2 – 2 – 1 – 1 , trochanters 1-1-1-1 , fumora 10-5-4-4 , genua 5 – 5 – 4 – 4 , tibiae 10- 7 – 6 – 7 , tarsi 14 + (2) duplex setae , 13 + (1) duplex seta – 01 – 11 , true claws pad like, each with a pair of tenent hairs . Empodial venteral element consisting of three pairs of rather long tenent hairs (Fig. 1 E) .

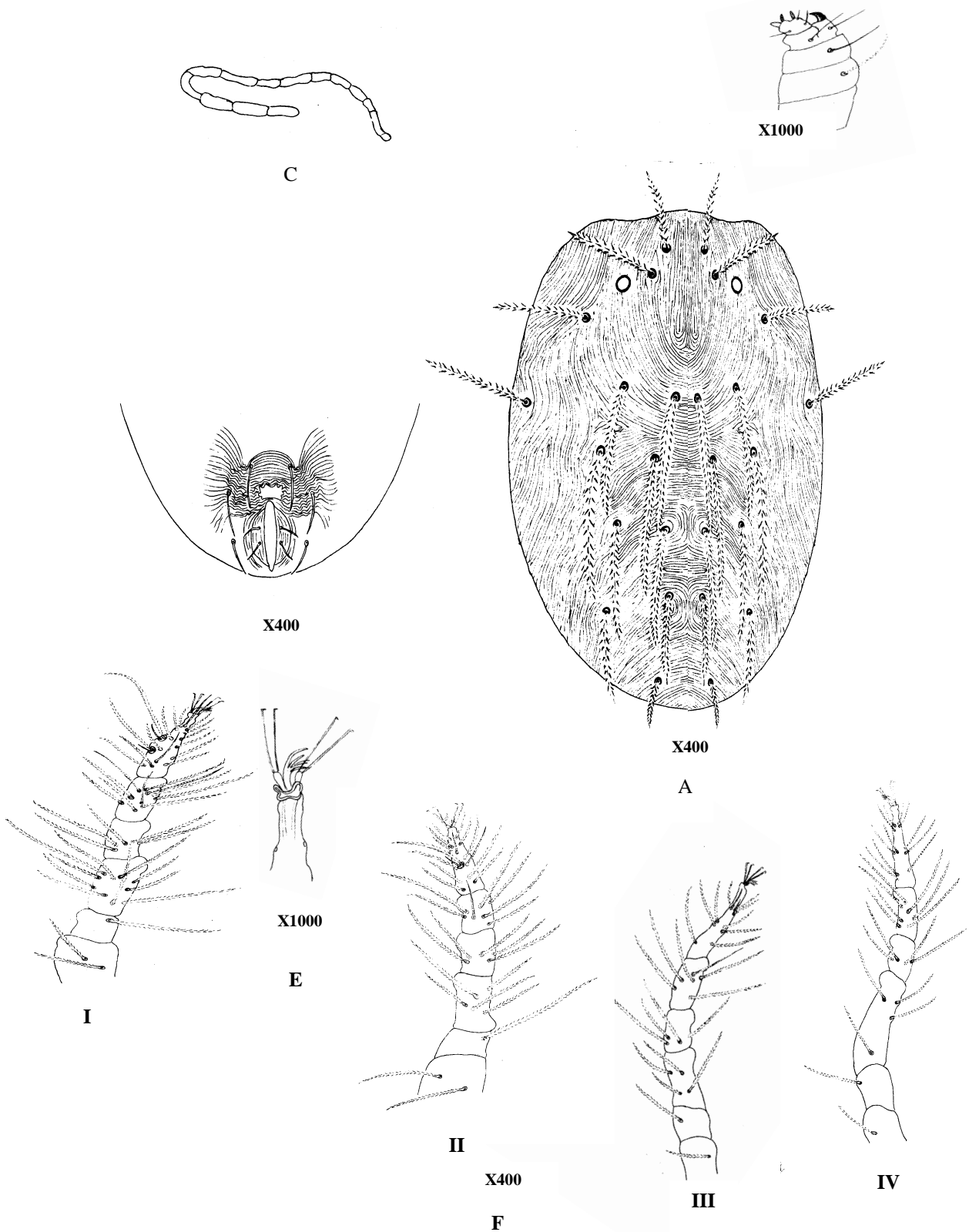


Fig. 1 *Eotetranychus egypticus* n.sp female (A) Dorsal view (B) Palp (C) Pritreme (D) Genital anal opening (E) Tarsus of leg 1 (F) legs 1 – IV

Male : Similar to the female but differs in the following characteristics. Body length $448\mu\text{m}$ including gnathosoma ($103\mu\text{m}$) and $230\mu\text{m}$ width, palpal genu with a short lanceolate finely serrate seta , tibia having a small claw and three simple setae , palpal tarsus bearing two short simple setae, terminal sensillum slender and 2 solenidia . Aedeagus turns dorsal with about right angle, knob forms an angle with the axis of the shaft, terminal knob about fourth the length of the dorsal margin of the shaft, anterior and posterior projection of the knob acute,.

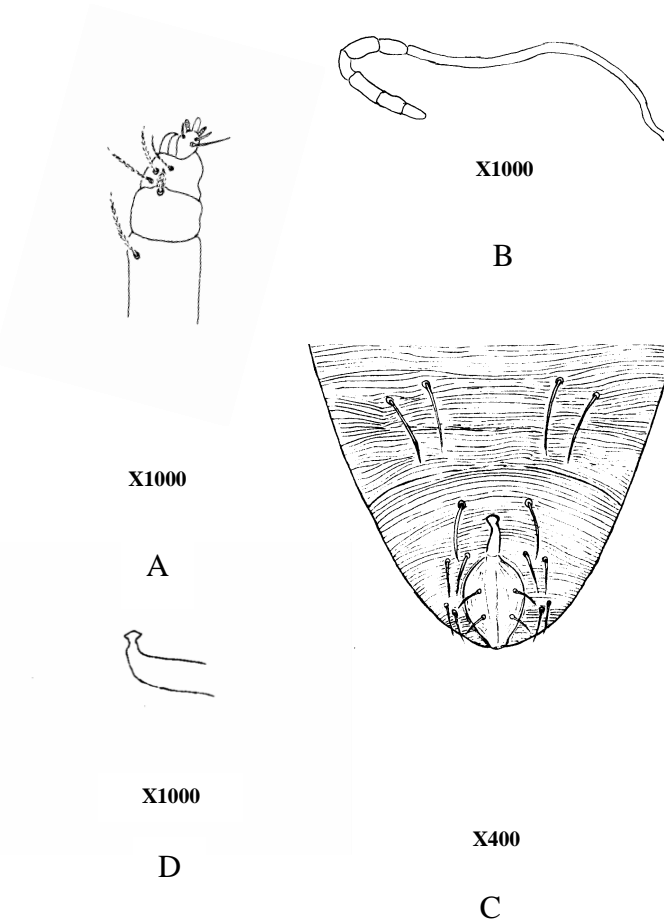


Fig. 2. *Eotetranychus egypticus* n.sp male. (A) Palp (B) Peritreme (C) Caudoventral aspect of the opisthosome (D) Aedeagus

Holotype: A female collected from *Citrus mandurensis* lour on February 21, 2007 at Wady El-Mollak El-Sharkia Governorate, by the third author and put in the collection of plant protection research.

Allotype : A male collected from the above mentioned host plant and locality.

Paratypes: Five females and five males collected from orange *Citrus ourantium* lour from the same locality, on March 23,2007 .

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مجموعة جديدة ونوع جديد من جنس

Eotetranychus Oudemans

(اكارى : تترانيكىدى)

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باكاروس يتبع فصيلة تترانيكىدى تم أخذ عينات إلى المعمل بالدقى وتم تحميل شرائح للإناث وللذكور
على جنبها وتم فحص هذه الشرائح وتصنيفها وكذا عمل مراجعة لمجاميع هذا الجنس فتمين وجود
مجموعة جديدة سميت Egyptian group ونوع جديد سمي *Eotetranychus egypticus n.sp* وتم
وصف إناث وذكور النوع الجديد .