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TWO NEW SPECIES OF GENUS *ACULOPS* IN EGYPT
(ERIOPHYOIDEA : ERIOPHYIDAE)

BY

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ABSTRACT

Two new species of the genus *Aculops* are described. *A. zaheri*, sp. n., was found on *Lycopersicon esculentum* infesting leaves, stems and fruits; and *A. nilotica*, sp. n., on *Mentha microphylla* infesting leaves but preferring the lower surface.

RÉSUMÉ

Description de deux nouvelles espèces du genre *Aculops*. *A. zaheri* sp. n. infeste les feuilles, les tiges et les fruits de *Lycopersicon esculentum*; *A. nilotica*, sp. n. infeste de préférence la face inférieure des feuilles de *Mentha microphylla*.

ERIOPHYINAE

*Aculops zaheri* sp. n.
(Fig. 1)

This new species resemble *Aculops lycopersici* (M.) (Keifer, 1966 and Jeppson et al, 1975) (= *Vasates lycopersici* (Massee) Lamb, 1953), but differs in having shield disc limited by a line from each tubercle extending forward to form a semicircular arch; median line absent; anterior sides with prominent dots and dashes intermingled with wavy faint lines; genital coverflap with 12 irregular furrows.

*Female.* — 203-220.5 μ long, 60-77 μ wide; spindleform, narrowed posteriorly; light yellow in color. Rostrum about 22 μ long, curved downward obliquely. Shield 53 μ long, 73 μ wide, with slight anterior lobe, subtriangular, disc limited by a line from each tubercle extending forward to form a semicircular arch; median line absent; incomplete admedian and submedian lines, admedian lines connecting with each other posteriorly forming vas shape, submedian lines uniting by a transverse curved line near rear margin but undulating and converging distally forming nearly U-shaped; six oblique lines connecting the semicircular arch with the anterior part of shield; anterior sides with prominent dots and dashes intermingled with wavy faint lines.

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Fig. 1: *Aculops zaheri* sp. n.
(V) Ventral view of mite; DA) Dorsal view of anterior section of shield; D) Dorsal view of mite; F) Featherclaw; GFI) Female genitalia and coxae; SP) Side view of posterior section of mite; ES) Side skin structure; L) Left legs.
Forelegs 36 µ long; femur 11 µ long; genu 6.5 µ long, seta 32 µ long; tibia 7.5 µ long, seta 4 µ long; tarsus 8 µ long, outside seta 27 µ long. Claw 8 µ long, slight curved with knob at tip. Axis of featherclaw undivided, 4-rayed and shorter than claw. Hindlegs 34 µ long; femur 11 µ long; genu 6 µ long, seta 8 µ long; tibia 6 µ long, without seta; tarsus 8 µ long, outside seta 26 µ long. Claw 8 µ long, curved with knob at tip. Axis of featherclaw undivided, 4-rayed shorter than claw. Sternal ridge forked; Anterior сохае partly contiguous, two setae each, сохае setae 1 little further apart than setae II which located at posterior third of sternal ridge; posterior сохае contiguous with anterior ones, and with single seta, seta measuring 47 µ long; setae of сохае 1 & II arising from obvious tubercles; сохае blank. Tergites much wider than sternites, 26 tergites and about 69 sternites present; a slight subdorsal ridge on dorsum sides faiding out posteriorly; posterior margins of sternites beset with round microtubercles. Lateral thanosomal seta 30 µ long, on about sternite 6; 1st ventral seta 70 µ long, on sternite 24; 2nd ventral seta 23 µ long, on sternite 41; 3rd or telosomal seta 30 µ long, on about sternite 65. The thanosome with 21 tergites and 64 sternites. Telosome with 5 rings. About the last 10 rings with elongate microtubercles ventrally. Caudal seta about 60 µ long; accessory seta absent. Female genitalia 15 µ long, 28 µ wide, with 12 irregular furrows which are either longitudinal or curved; genitalia bowl-shaped, seta about 15 µ long.

**Male.** — Not seen on slides.

*Type locality:* Kafr Saad, Dumyat (North coast), collected May 25, 1973.

*Host:* *Lycopersicon esculentum* Mill. (Solanaceae).

*Relation to host:* This mite was noticed wandering on both sides of leaves, branches and fruits of tomato plants in association with the *Aculops lycopersici* (Massee), which is also known as a noxious pest on other solanaceous plants. Symptoms accompanied by both mites were browning and curling of the leaves as well as russetting of the fruits.

*Type material:* The holotype and paratype were kept in the collection of Acarology Research Unit, National Research Centre, Cairo, Egypt.

*Aculops nilotica* sp. n. 

(Fig. 2)

This new species is close to *Aculops pelekassi* (Keifer) (KEIFER, 1966) (= *Aculus pelekassi* Keifer, 1959). In the latter one the shield has incomplete median line and complete admedian sinuate lines; the apex as well as the midpoint of the median line connected with the admedian lines by two pairs of antero-exterior lines dividing the admedian into three subequal parts; clear lateral lines designing cells along the shield edge. Genital seta long (45.6 µ) and surpassing the first ventral seta.

*Aculops nilotica* sp. n. presents incomplete median and admedian sinuate lines; the apex of the median line connected with the admedian by one pair of antero-exterior sinuate lines to form nearly an inverted pyriform shape; antero-lateral sides with obscure broken lines and dashes. Genital seta short (15 µ) and not surpassing the first ventral seta.

Both species have 4-rayed undivided featherclaws.

**Female.** — 145-202.5 µ long, 55-67.5 µ wide, spindleform; light yellow to yellowish white in color. Rostrum about 23 µ long, curved downward. Shield 37 µ long, 62 µ wide, subtriangular and slightly projecting over the rostrum; with incomplete median line gently sinuate
and absent in the front two thirds, the apex of the line connected with admedians by one pair of antero-exterior sinuous lines to form an inverted pyriform shape; incomplete sinuous admedian lines, starting from front of a semicircular transverse line extending to the rear; antero-lateral sides with obscure broken lines and dashes; 2-3 rows of microtubercles on each postero-lateral sides. Dorsal tubercles 25 μ apart, on rear margin; the seta 25 μ long, directed posteriorly and slightly diverging. Forelegs 32 μ long; femur 10 μ long; genu 5 μ long, seta 24 μ long; tibia 7 μ long, seta 3.5 μ long; tarsus 7 μ long, outside seta about 23 μ long. Claw 9.5 μ long, loosely curved, with slight knob at tip. Featherclaw 4-rayed. Hindlegs 28.5 μ long; femur 10 μ long; genu 4.5 μ long, seta 9 μ long; tibia 5.5 μ long, without seta; tarsus 6 μ long, outside seta about 22 μ long. Claw 8.5 μ long, loosely curved, with slight knob at tip. Featherclaw 4-rayed. Two setae on anterior coxae, coxal setae I wider apart than setae II which located at near base of sternal fork; posterior coxae contiguous with anterior one, with single seta, of 44 μ long. Coxae I with few stariations and larger in size. Coxae II blank. Tergites much wider than sternites, 39 tergites and about 61 sternites present. Abdomen with microtubercles on sternites.
only; microtubercles similar in size and beadlike, located on posterior margins. Lateral thanosomal seta 14 μ long, above and infront of genital seta, on about sternite 6; 1st ventral seta 37 μ long, on sternite 23; 2nd ventral seta 15 μ long, on sternite 38; 3rd ventral or telosomal seta 25 μ long, on about sternite 57. The thanosome with 34 rings dorsally and 56 ventrally. Telosome with 5 rings, with fine striations ventrally. Caudal and accessory setae arise from a slight lobe behind the last tergite. Caudal seta about 47 μ long; accessory seta 3 μ long. Female genitalia 10 μ long, 21 μ wide, with 14 irregular furrows which are either longitudinal or curved; seta 15 μ long, arising from large tubercle.

**MALE.** — 162.5 μ long, 55 μ wide. Male genitalia 11 μ long, 18 μ wide; seta about 12 μ long.

**Host:** Mentha microphylla C. Koch (Labiatae).

**Relation to host:** The mites are vagrant between the dense compound hairs on the lower surfaces of new and well developed leaves of wild mint plants (horse mint) causing rustlike discoloration known as russetting.

**Type material:** The holotype, allotype and paratypes were kept in the collection of Acarology Research Unit, National Research Centre, Cairo, Egypt.

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**References**


*Paru en Mai 1980.*