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Lorryia epimekes, a new species of tydeid mite from Greece (Acari: Prostigmata)

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(With 7 figures)

A b s t r a c t

A new tydeid mite, *Lorryia epimekes* sp. n., found on an unidentified plant on Oeti mountain, Co. Phthiotis, Greece, is described and illustrated.

I n t r o d u c t i o n

During studies on the tydeid mite fauna of Greece several species new to science were found. One of these, belonging to the genus *Lorryia* Oudemans (sensu Kaźmierski 1989a) is described and illustrated here.

In the description, the setal nomenclature proposed by Kaźmierski 1989b for the idiosoma, infracapitulum (without palps) and lyrifissures and by André 1981a,b for the appendages is used. All measurements are given in micrometers (μm).

D e s c r i p t i o n o f t h e s p e c i e s

Lorryia epimekes sp. n.

FEMALE (Figs 1-6) - Dimensions of holotype (measurements in parentheses are variations in the paratypes): length of idiosoma 230 (222-251), width 130 (130-167).

Dorsum (Fig. 1) - Covered with a reticulate pattern. Meshes of reticulation irregular, vary in shape in different places: polygonal on a small area on the front of aspidosoma and between *la* and *ex*, while narrow, longitudinally elongated in the rest of aspidosoma; opisthosoma with both types of meshes. Idiosoma evidently elongate with dorsal setae not very pointed, apparently nude, really with very small serrations (Fig. 6). Sensory setae twice as long and more slender than other dorsal setae. Measurements of setae as follows: *ro* 12 (12-14), *la* 12 (12-15), *ex* 14 (12-16), *c*₁ 14 (13-17), *c*₂ 14 (14-17), *d*₁ 15 (14-18), *e*₁ 14 (14-18), *f*₁ 15 (15-19), *f*₂ 14 (14-18), *h*₁ 15 (14-18), *h*₂ 15 (15-18), *ps*₁ 12 (12-14), *bo* 37 (33-40). Lyrifissura *la* lies posteromedially to *c*₁-*c*₂ and *im* anteriorly to *e*₁.

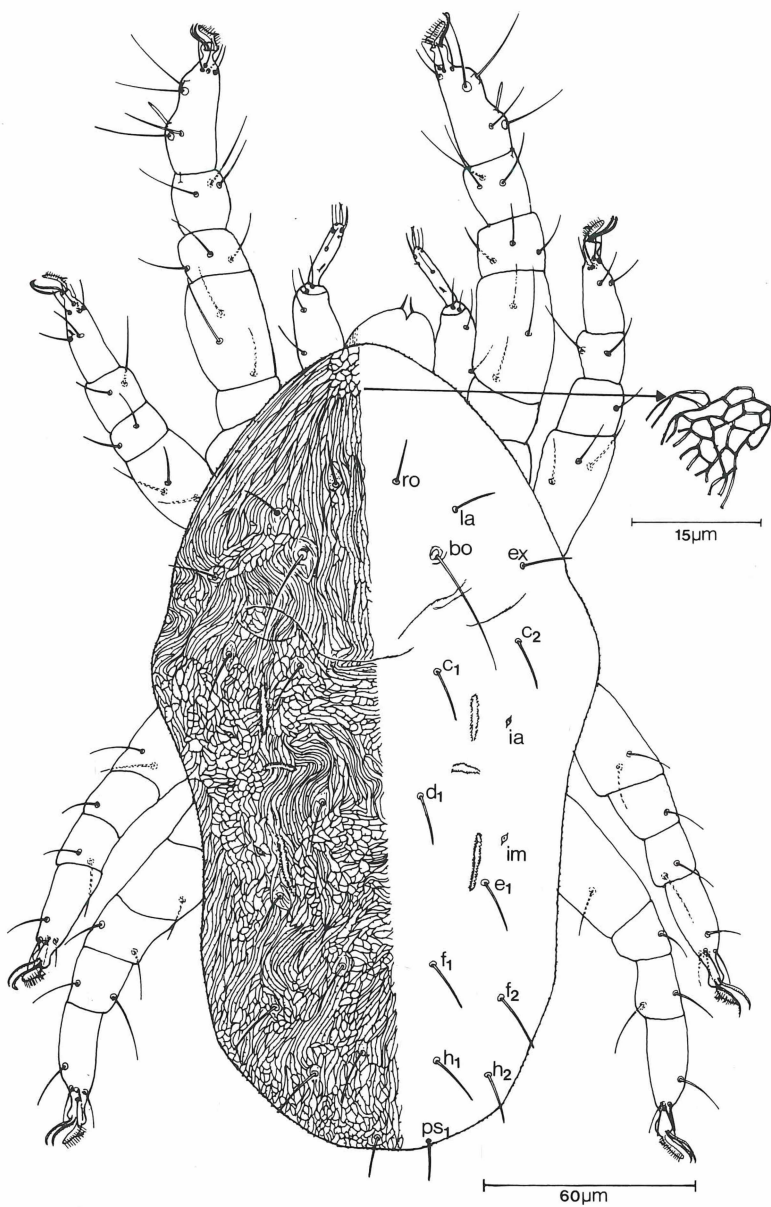


Fig. 1: *Lorryia epimekes* sp. n., female: dorsum.

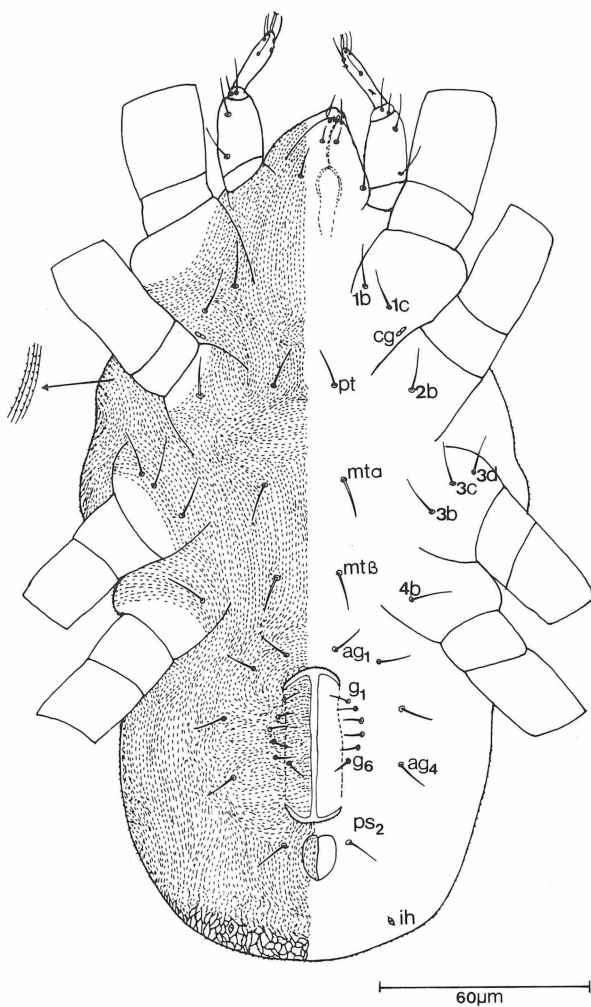


Fig. 2: *Lorryia epimekes* sp. n., female: venter.

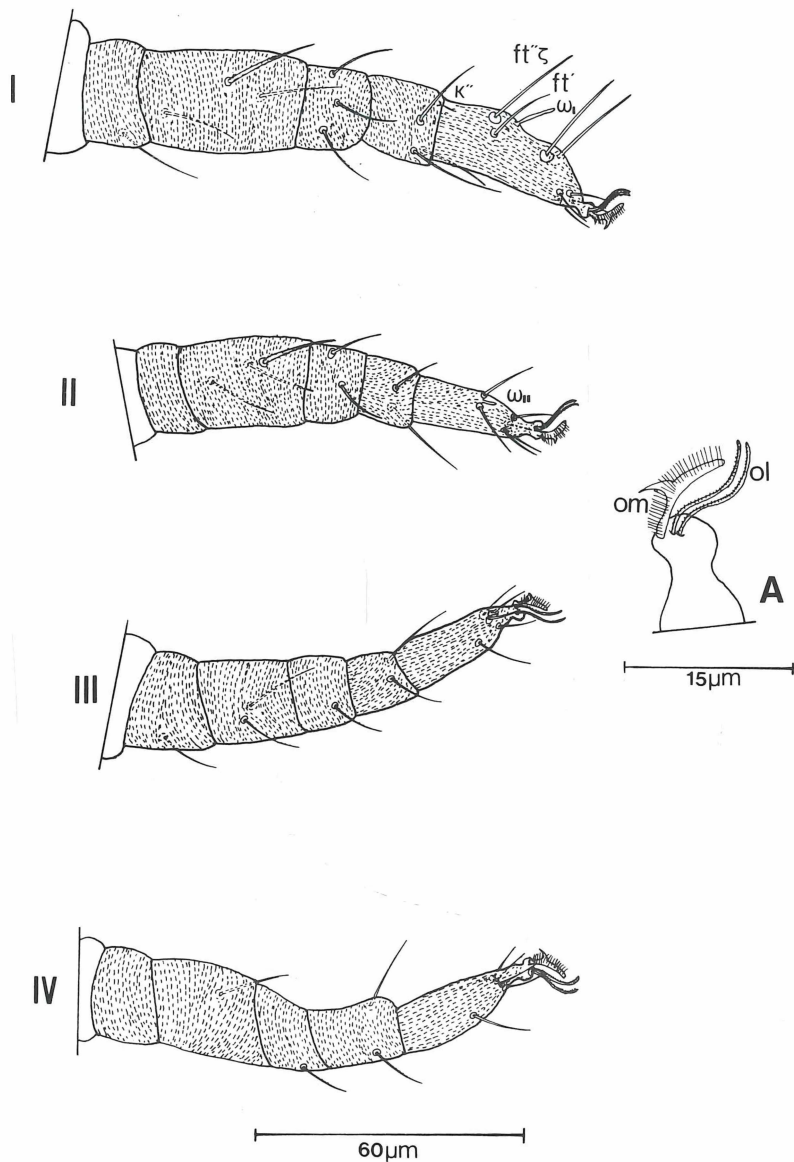


Fig. 3: *Lorryia epimekes* sp. n., female: legs I-IV; a - apotele.

V e n t e r (Fig. 2) - Finally striated; between setae *mta* and *mtβ* striae run longitudinally. Coxal gland (*cg*) 8-shaped. Genital organotaxy (0-6-4).

G n a t h o s o m a - Visible from above; cheliceral stylets slightly shorter than palptarsus (Figs 4, 5). Palp with setal formula 6(1)-2-2-0 (solenidion in parenthesis). Palpal eupathidium (*pζ*) slightly bent, narrowing towards the T-shaped tip. Measurements: cheliceral stylets 15 (12-15), palptarsus 19 (15-19), eupathidium 7 (7-9), palpal femur-genu 20, *df* 15 (12-15), *dg* 2 (11-12), *t* ' 4 (4-5), *t* '' 9 (9-11).

L e g s (Fig. 3) - Measurements of legs (from the base of the proximal setae to the end of pretarsus): I=135 (135-145), II=108 (103-121), III=101 (94-113), IV 115 (112-128). Apotele with two claws and a hairy empodium (Fig. 3a). Empodial claws (*om*) present, strongly developed. Chaetotaxy of the legs typical for the genus (sensu Kazmierski 1989): tarsi 8(1)-6(1)-5-5, tibiae 3+1-2-2-2, genua 3-2-1-1, femora 3-3-2-1, trochanters 1-0-1-0. Famulus *k* '' on tibia I forked, 3 long. Solenidion ω_1 and ω_{II} rod-like, 9 (7-9) and 3 (3-4) in length respectively. Length of tarsus I 32 (30-34), width 14 (11-12); *ft* ' 15 (14-15), *ft* '' ζ 21 (20-23).

MALE (Fig. 7) - Length of idiosoma 230 (210-236), width 147 (124-153). All features similar to female except genital region: genital organotaxy (4-6-4).

IMMATURES - Unknown.

TYPE MATERIAL - The holotype female, collected from an unidentified plant on Oeti mountain, Co. Phthiotis, Greece on 20.09.1993; allotype male, 8 female and 7 male paratypes, collected from the same host grown on summit rocks on Oeti mountain (altitude 2150 m a.s.l.), on 03.09.1995, are deposited in the Acari collection of the Laboratory of Agricultural Zoology and Entomology, Agricultural University of Athens. One female and one male paratype are deposited in the Zoological Museum Hamburg (ZMH, Reg. No. A9/96).

ETYMOLOGY - The name of the new species derives from the Greek word "επιμήκης" (= epimekes) which means "elongate".

Remarks

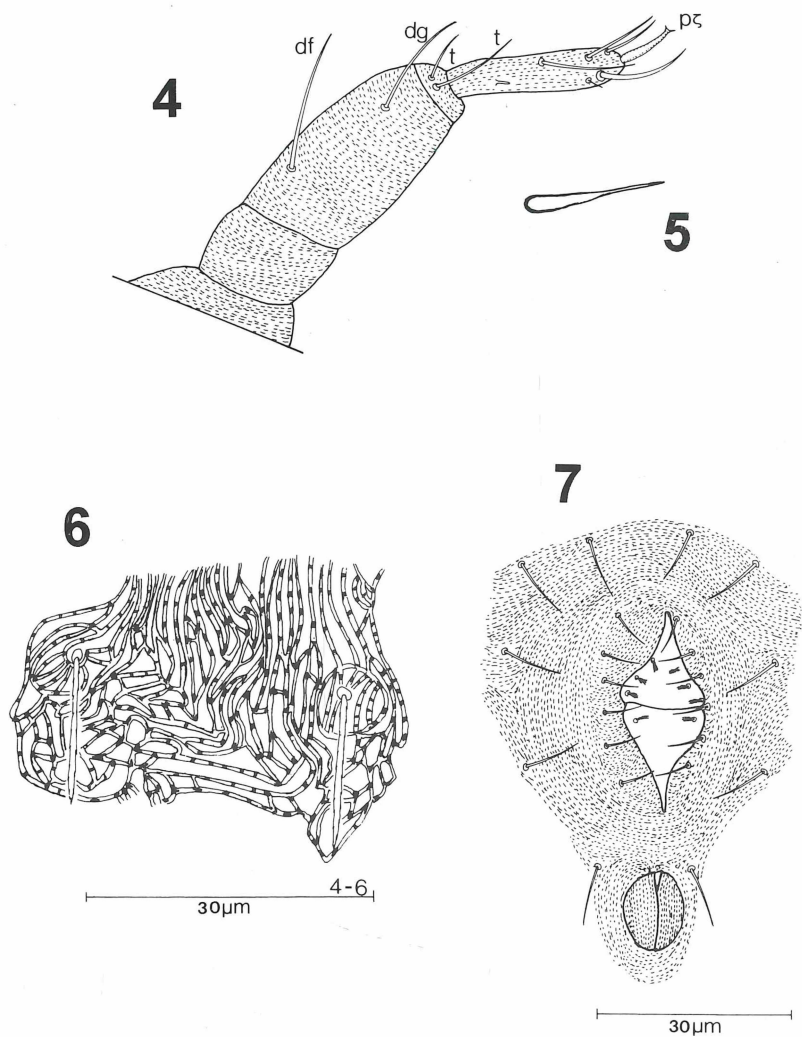
Lorryia epimekes sp. n. is most similar to *Lorryia martini* Marshall, 1970 and *Lorryia sororcula* Kuznetzov, 1975. Common features of all three species are as follow:

1. All dorsum covered with flat reticulation (no discrete areas, no lobes),
2. Reticulation walls more or less irregular (different shape in different places),
3. Narrow, longitudinally elongate walls between sensory setae and,
4. Palpal tarsus elongate: much longer than its double width.

Table 1 lists some features which can be used to distinguish the aforementioned three species.

Zusammenfassung

Eine neue Milben-Art aus der Familie Tydeidae, *Lorryia epimekes* sp. n., von einer unbestimmten Pflanze vom Berg Oeti (Phthiois: Griechenland), wird beschrieben.



Figs. 4-7. *Lorryia epimekes* sp. n., 4-6 (female): 4 - palp, 5 - cheliceral stylet, 6 - details of dorsal reticulum; 7 (male) - genital and anal region.

Table 1. Differences between *L. epimekes* sp. n. and similar taxa

<i>Lorryia epimekes</i> sp. n.	<i>Lorryia martini</i> Marshall	<i>Lorryia sororcula</i> Kuzn.
Body elongate (length/width quotient: 1,8)	Body "normally" broad (length/width quotient not higher than 1,5)	Body more broad (length/width quotient lower than 1,5)
Reticulation walls with I - shaped ties between them and triangular at their junctions	Reticulation walls with somehow X -shaped ties between them	Reticulation walls with somehow X -shaped ties between them
Length of dorsal idiosomal setae 12-15. Setae f_1 reaches to half- way of f_1-h_1	Almost twice longer (>23). Setae f_1 reaches to half- way of f_1-h_1	Length of setae 15-17. Setae f_1 not reaches to half-way of f_1-h_1
Sensory setae 37 long	Sensory setae about 60 long	Sensory setae about 60 long, basal part slightly serrate
Dorsal idiosomal setae apparently nude, really with very small serrations	Dorsal idiosomal setae simple, needle-shaped	Dorsal idiosomal setae serrated, slightly curved
Striation between <i>mta</i> and <i>mtβ</i> longitudinal	Striation between <i>mta</i> and <i>mtβ</i> longitudinal	Striation between <i>mta</i> and <i>mtβ</i> V-shaped
Eupathidium $p\zeta$ T-shaped	Eupathidium $p\zeta$ simple	Eupathidium $p\zeta$ T-shaped
Solenidion ω_1 rod-like, 9 long	Solenidion ω_1 rod-like, 8 long	Solenidion ω_1 club-like, 5 long
Empodial claws (<i>om</i>) well developed: strong, broader than claws (<i>o</i>), reach to half length of claws	Empodial claws (<i>om</i>) weakly developed: small, situated nearby the basis of the empodium	Empodial claws (<i>om</i>) like in <i>L. epimekes</i>
In natural position, gnathosoma visible from above	In natural position, gnathosoma visible from above	In natural position, gnathosoma covered by aspidosoma

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