

A new mite of the subfamily Tydeinae (Acari: Actinedida: Tydeidae) from Ireland

Faten M. Momen
(With 10 figures)

A b s t r a c t

A new species of mite of the family Tydeidae, *Tydeus dorothyae* sp. n. from Ireland is described.

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

Momen (1988) described three new species belonging to the genus *Tydeus* from unsprayed apple trees in Ireland. Present paper is part of a continuing survey of tydeid mites of that country and describes another new species of *Tydeus* found on the bark of apple trees at Killavewey, Tinahely (Co. Wicklow, Ireland). The generic concept and the terminology used are those of André (1980, 1981a, b).

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

Tydeus dorothyae sp. n.
(Figs 1-10)

DESCRIPTION OF ADULT FEMALE (Figs 1-8, 10). Length of the body (excluding gnathosoma) 254-267 µm, width 164-170 µm.

Gnathosoma. In the "normal" position it protrudes over the aspidosomal anterior edge (Fig. 7). Cheliceral stylets (15 µm) slightly shorter than the palpal tarsus (21 µm). Terminal eupathidium bidentate distally, whereas seta *d* simple and seta *ba* slender and short.

Idiosoma. On prodorsum seta *p₁* anterior to *p₂*, the prodorsum with a few meshes of reticulum in its anterior part. Dorsum with 10 pairs of setae (*l₁* and *h₁* missing). Dorsal setae stout and serrate; setae *p₁* and

p_1 , sharp distally, p_2 , d_1 , d_2 and l_1 rod-like, d_3 and d_4 slightly expanded. All other dorsal setae stout, widely expanded and blunt distally, except the trichobothrium which is blunt distally and serrate. Dorsal striae with transverse lobes (Fig. 8). Measurements: setae p_1-p_2 22 µm long, $s = 31$ µm, d_1-d_4 and l_1-l_2 21 µm, setae d_5 and h_1 20 µm, ps 14 µm long. Ventral side finely striated and with four pairs of aggenital and six pairs of genital setae (Fig. 9). Epimeral formula: 3-1-4-2.

Leg setal patterns (formula indicates setation from tarsus to trochanter, with solenidion in parentheses: see Figs 2-5):

I: 8(1)-4-3-3-1	III: 5-2-1-2-1
II: 6(1)-2-2-3-0	IV: 5-2-1-1-0

Empodial hooks present; length of ωI 8 µm, ωII 5 µm. Seta k on tibia I forked (Fig. 2).

DESCRIPTION OF MALE. Similar to female except for genital area (Fig. 9). Anterior eugenital flap with three pairs of feathered setae, posterior eugenital flap with a single pair of setae.

ETYMOLOGY. This species is named after Miss Dorothy Hayden, who collected the material.

TYPE LOCALITY. Ireland: Killavewey, Tinahely (Co. Wicklow). From bark of apple trees, 3 March 1993, coll. D. Hayden. Holotype (♀), 3 paratypes (2 ♀, ♂).

TYPE REPOSITORIES. The holotype (Reg. No. A38/94) is deposited in the Zoological Museum Hamburg, paratypes in the National Research Centre, Plant Protection Department, Cairo, Egypt.

REMARKS. The new species is very similar to *Paralorryia celtides* Ueckermann and Mayer, 1979, described from South Africa. The main differences between these species are given below:

- | <i>P. celtides</i> | <i>T. dorothyae</i> |
|--|---|
| 1. Trichobothrium whipe-like, smooth and nearly two times longer than other dorsal setae | 1. Trichobothrium blunt, distally serrate and not much longer than other dorsal setae |
| 2. The lobes on striae rounded or oblong | 2. The lobes transverse |
| 3. Striae between setae l_1 and d_3 longitudinal | 3. Small area with transversal striae between setae l_1 and d_3 |
| 4. No empodial hooks | 4. Empodial hooks present |

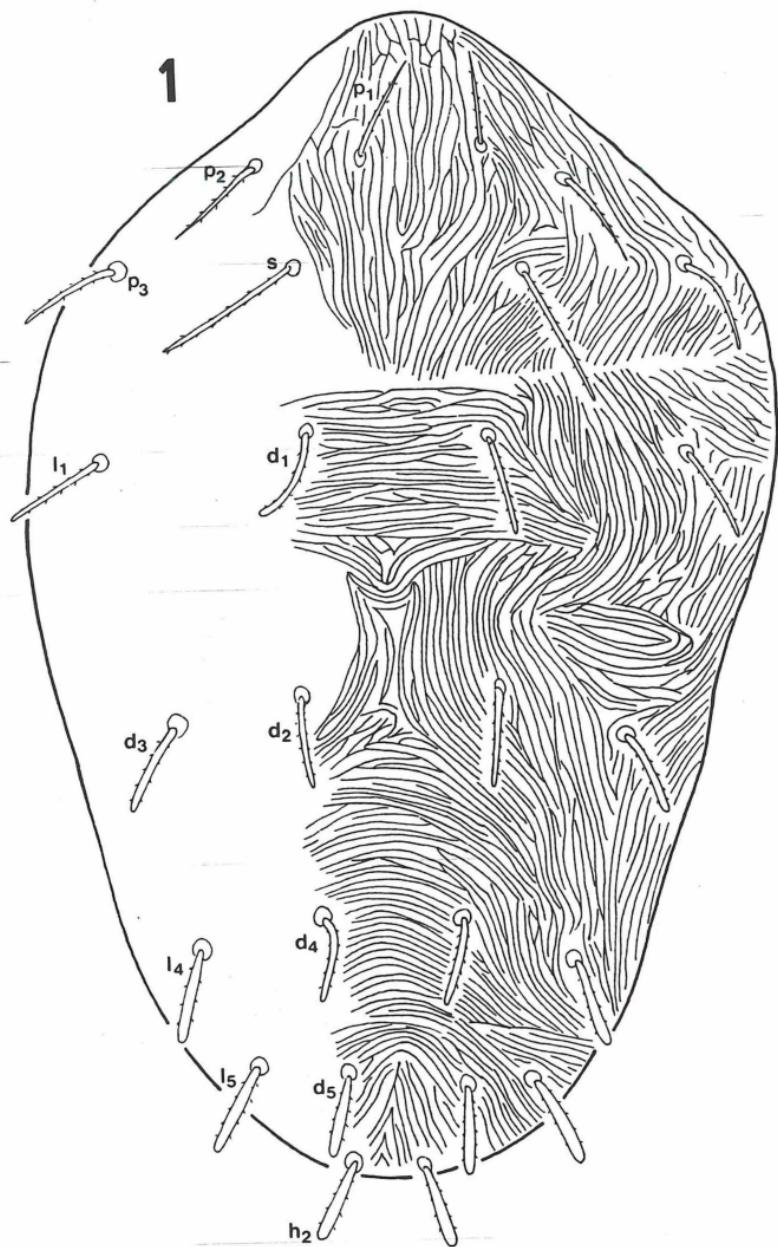
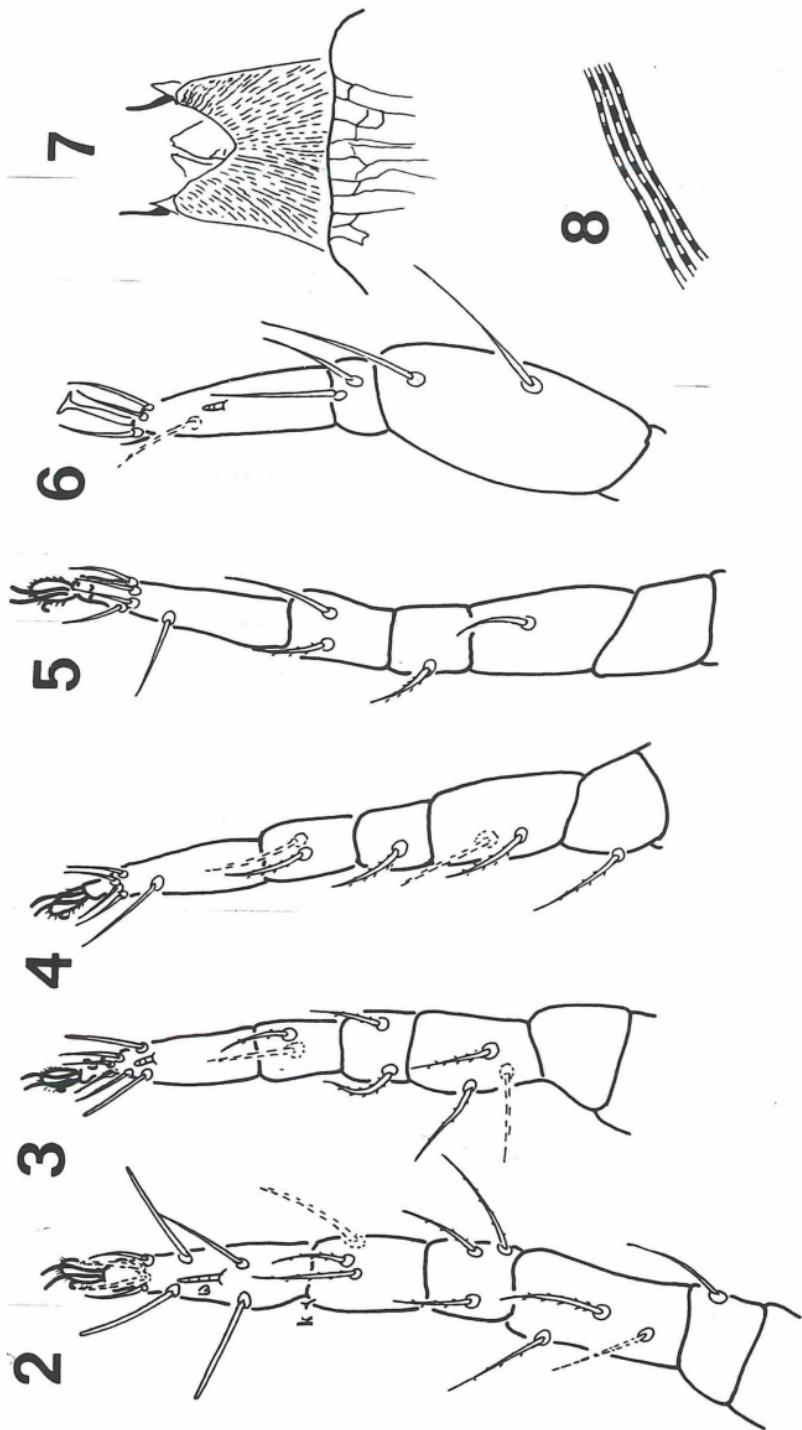
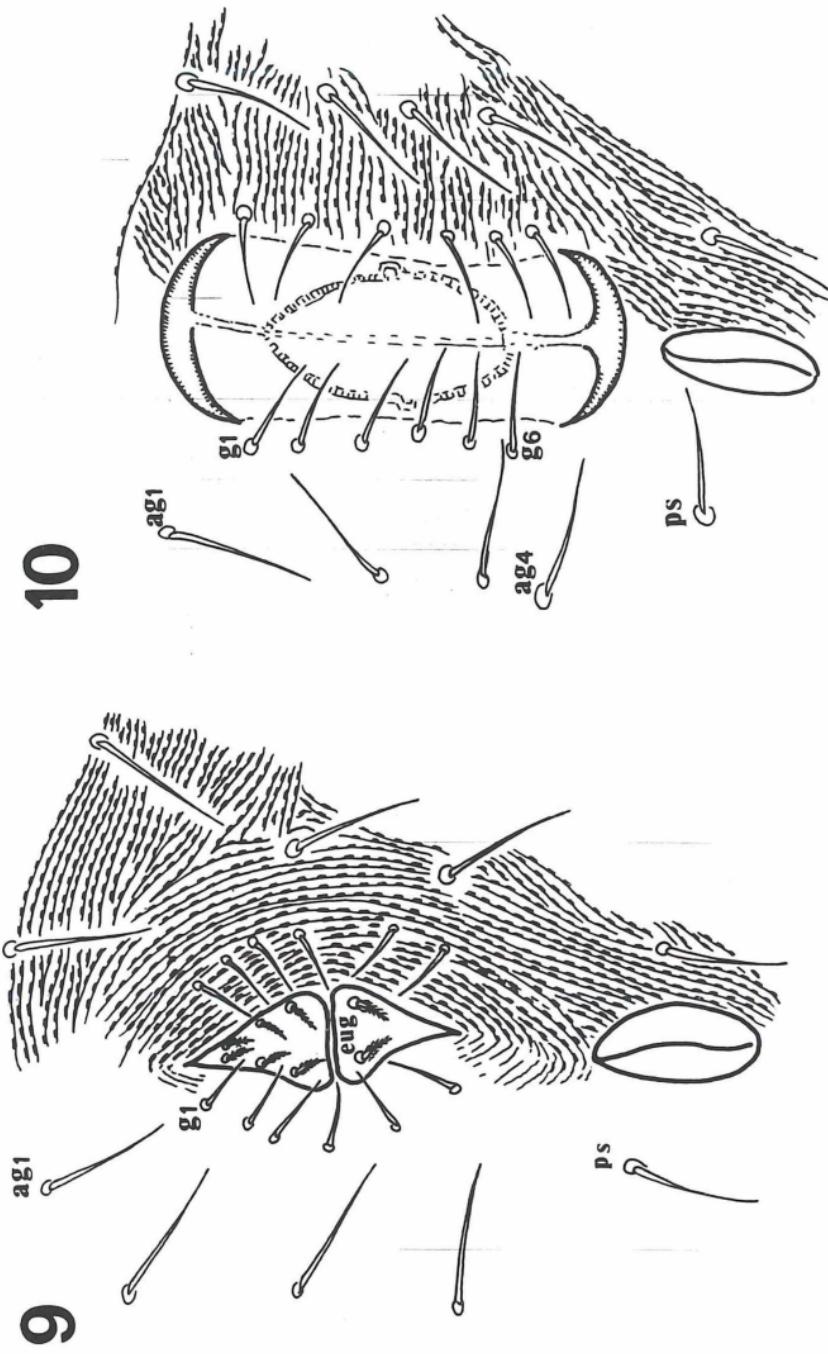


Fig. 1: *Tydeus dorothyae* sp. n., adult female, dorsal view.



Figs 2-8: *Tydeus dorothyae* sp. n., adult female: 2- leg I, 3- leg II, 4- leg III, 5- leg IV, 6- palp, 7- gnathosoma and anterior edge od aspidosoma, 8- details of dorsal striation.



Figs 9-10: *Tydeus dorothyae* sp. n.: 9- genital region of male, 10- genital region of female.

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Author's address:

Dr. Faten M. Momen, National Research Centre, Plant Protection Department, Dokki, Cairo, Egypt.

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Autor(en)/Author(s): Momen Faten M.

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