

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

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(With 10 figures)

A b s t r a c t

A new species of mite of the family Tydeidae, *Tydeus dorotheae* 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 dorotheae 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 p_1 anterior to p_2 , the prodorsum with a few meshes of reticulum in its anterior part. Dorsum with 10 pairs of setae (l_2 and h_1 missing). Dorsal setae stout and serrate; setae p_1 and

p_2 sharp distally, p_3 , 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_3 22 μm long, $s = 31 \mu\text{m}$, d_1 - d_4 and l_1 - l_3 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:

P. celtides

T. dorothyae

- | | |
|---|---|
| 1. Trichobothrium whip-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_1 longitudinal | 3. Small area with transversal striae between setae l_1 and d_1 |
| 4. No empodial hooks | 4. Empodial hooks present |

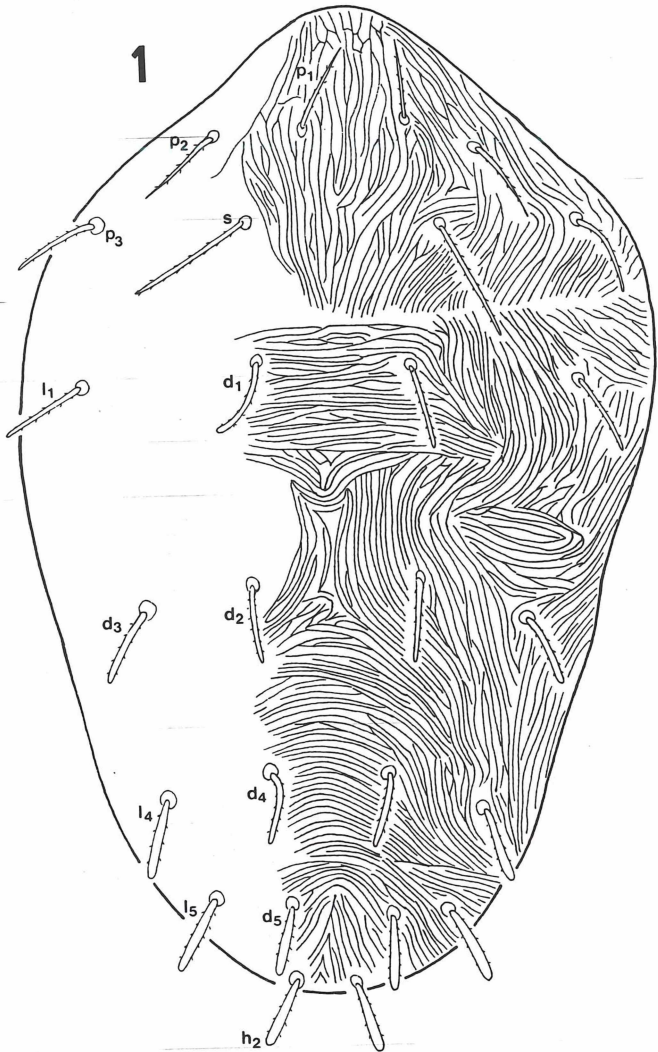
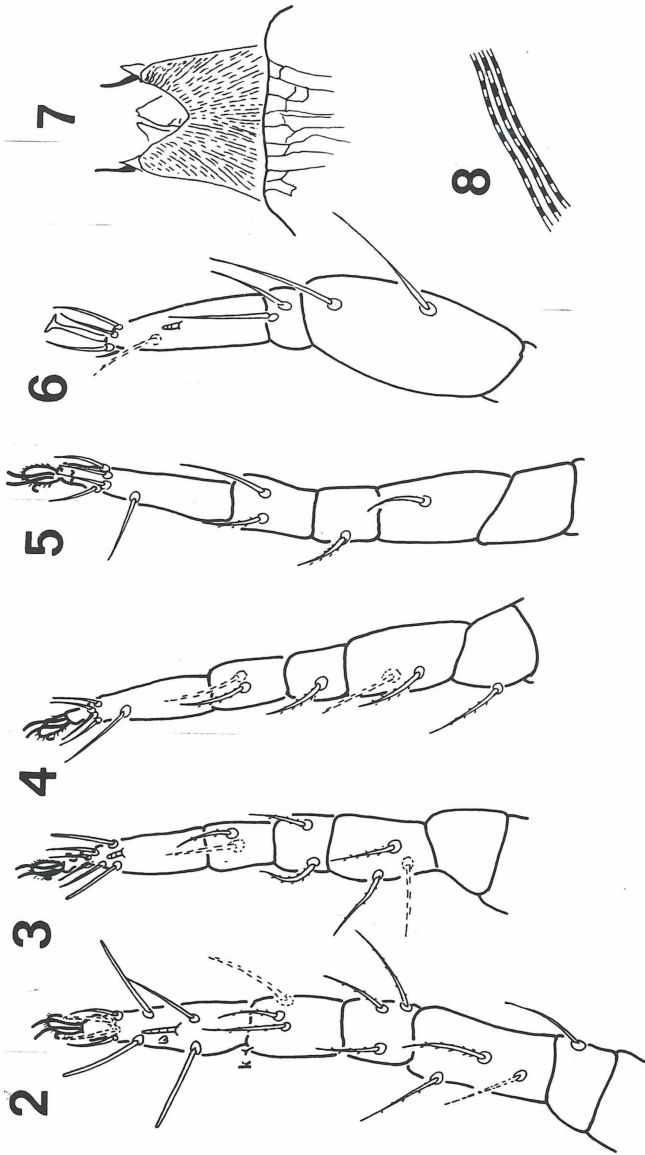
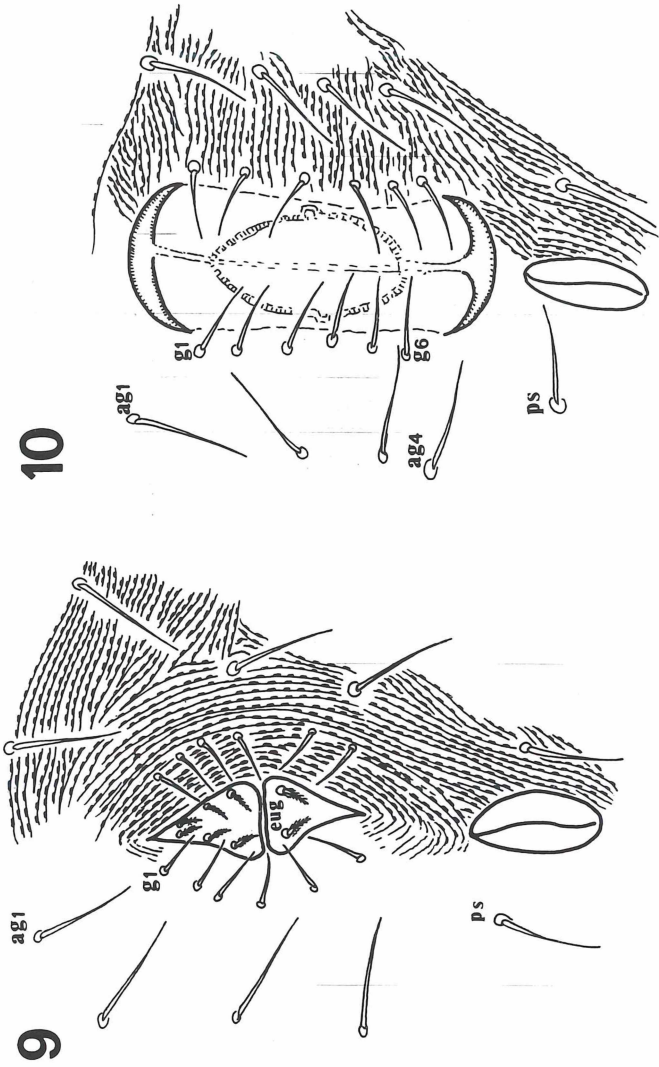


Fig. 1: *Tydeus dorothyae* sp. n., adult female, dorsal view.



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 of 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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