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A NEW SPECIES OF THE GENUS *DIPTACUS*; FAMILY *DIPTILOMIOPIDAE*
(ACARI: ERIOPHYOIDEA) ON *MALUS DOMESTICA* BORKH

BY R. DOMES¹

(Accepted October 2002)

ERIOPHYOIDEA
DIPTACUS
NEW SPECIES
GERMANY

SUMMARY: A new species of the genus *Diptacus* is described. *Diptacus mali* n.sp. was found on *Malus domestica* Borkh. (sort "Schöner aus Boskoop") in Bruchsal, Germany. It prefers the lower surface of leaves as a vagrant, especially on the west side of trees. The mites form only small populations and do't damage host plants.

ERIOPHYOIDEA
DIPTACUS
ESPÈCES NOUVELLES
ALLEMAGNE

RÉSUMÉ : Une espèce nouvelle du genre *Diptacus* est décrite. *Diptacus mali* n.sp. se trouve sur *Malus domestica* Borkh. (sorte "Schöner aus Boskoop"), Bruchsal, Allemagne. Elle vit de préférence sur la face inférieure des feuilles particulièrement sur le côté ouest de l'arbre et forme de petites populations sans causer de dommage à la plante hôte.

Besides the apple-rust-mite *Aculus schlechtendali* (NALEPA) 1890, the rust-mite *Epitrimerus pyri* (NALEPA) 1891, the leaf-edge-roll-mite *Phytoptus marginemtorquens* (NALEPA) 1926, the pear-leaf-blisters-mite *Phytoptus pyri* Pgst. 1857 and small populations of *Aceria ribis* n.sp., *Aceria erineus* (Nalepa) 1891 and *Aceria tristriatus* (NALEPA) 1889, a new species of *Diptacus* on *Malus domestica* Borkh. was identified in Bruchsal. SCHLISSKE 1992 found *Diptacus gigantorhynchus* (NALEPA) 1892 on *Malus ssp.* in North-Germany. *Diptacus mali* n.sp. differs from *Diptacus gigantorhynchus* (NALEPA) 1892 by different shield pattern (Fig.1), female coverflap, accessory setae (2 μ m long), 6-rayed tarsal empodium and other taxonomic characters.

***Diptacus mali* n.sp.**

Female: (all measurements are given in μ m) 280 (range of 10 specimens, 250-290, X=274) long, 100

(89-103, X=93) wide and 95 (75-97, X=89) thick (at hind shield margin). Grey-lilac coloured and fusiform. Gnathosoma 72-76, chelicerae 87-92 long. Dorsal shield 52-60 long and 89-100 wide. Shield pattern (Fig.1). Dorsal tubercles 7-8 ahead of rear shield margin, dorsal setae 10-12 long, projecting upwards, 35 apart. Foreleg 62 long, tibia 16-17, tarsus 13; foretibial seta 15, patellar seta 45-50; patella 8-10; femoral seta 5-8, thin; trochanter 6. Tarsal solenidion 10, tarsal empodium 10, 6-rayed, divided. Hindleg 58-59, tibia 14-15, tarsus 12 long; tarsal solenidion 10, tarsal empodium 10, 6-rayed, divided. First forecoxal tubercles 14-19 apart, setae 15-20 long; second forecoxal tubercles 14-18 apart, setae 40 long; hind coxal tubercles 36-38 apart, setae 50-55 long. Opisthosoma with 42-46 dorsal annuli and 74 ventral annuli, microtuberculate. Lateral tubercles 74-80 apart, on ventral annuli 14-15, setae 40 long; 1st ventral tubercles 49-63 apart, on ventral annuli 30-31, setae 51-60 long; 2nd ventral tubercles 30-35 apart,

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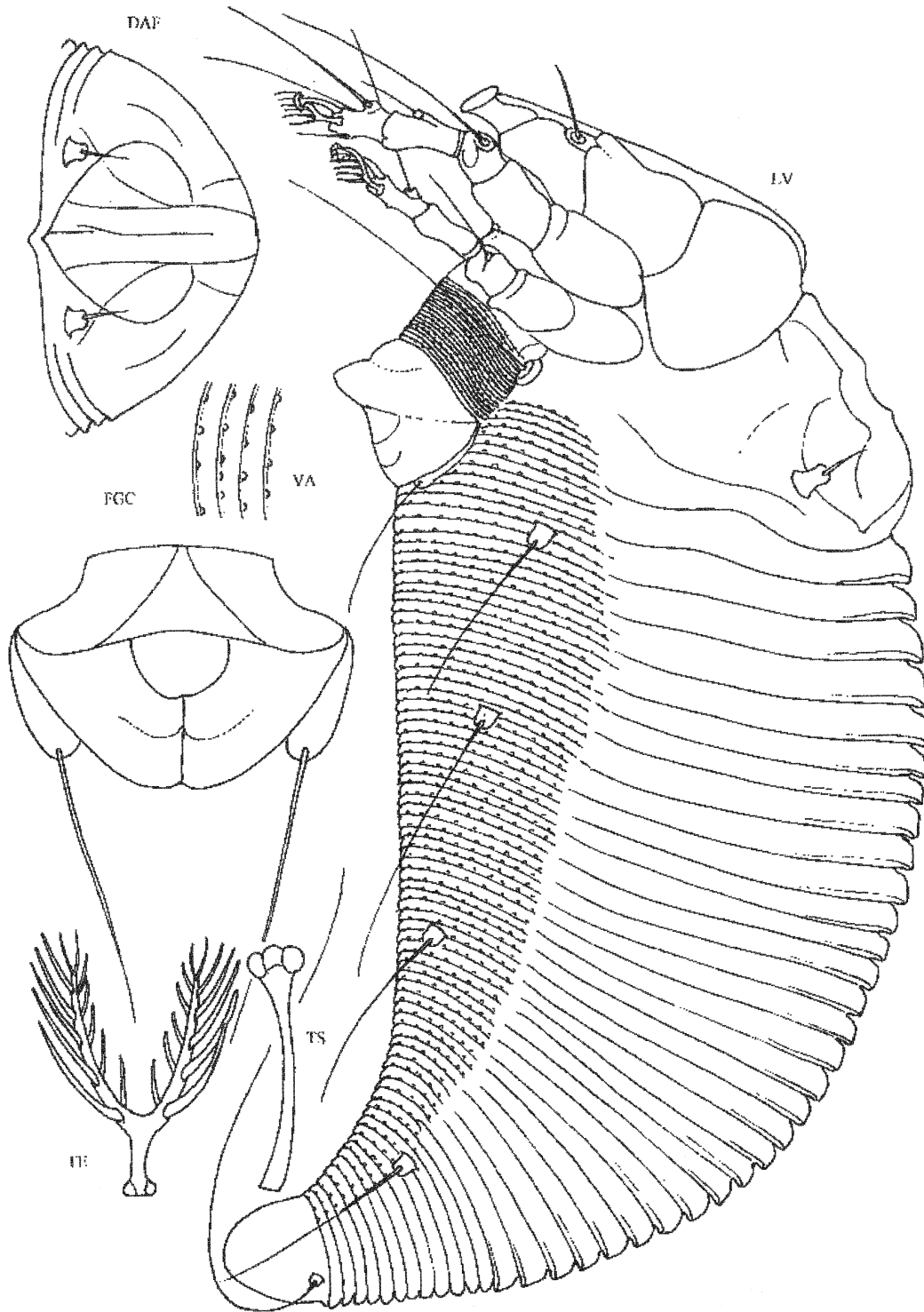


FIG. 1: *Diptacus mali* n.sp.), Female. — Anterior dorsal view (DAF); Female genital coverflap (FGC); Lateral view (LV); Tarsal empodium (TE); Tarsal solenidion (TS); Ventral annuli (VA).

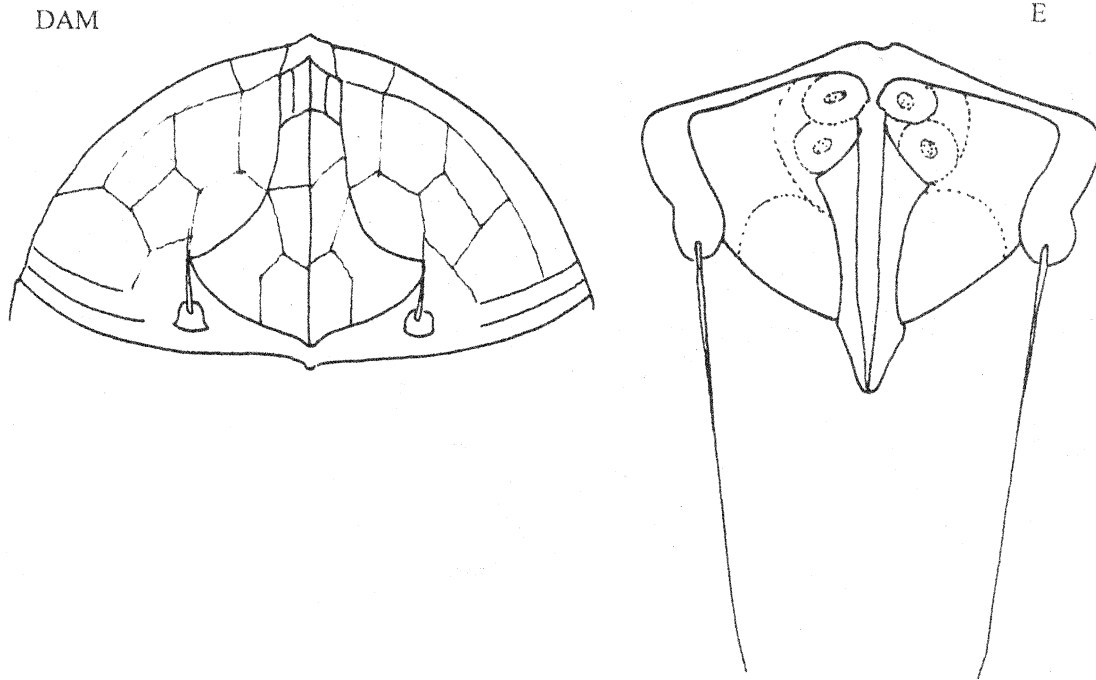


FIG 2: *Diptacus mali* n.sp., Male — Anterior dorsal view (DAM); Epiandrium (E).

on ventral annuli 48-50, setae 40-55 long; 3rd ventral tubercles 32-40 apart, on ventral annuli 67-68, setae 50-53 long. Caudal setae 80-115 long, 15 apart, accessory setae 2 long, 8 apart. Femal genital coverflap 35×15 , smooth, genital tubercles 23 apart, setae 30 long.

MALE: (from May) 165-200 long, 73-87 wide and 50-57 thick, white. Gnathosoma 55, chelicerae 71-73 long. Dorsal shield 38-42 long and 73-87 wide. Dorsal tubercles 3-4 ahead of shield margin, 30 apart, dorsal setae 8-10 long, projecting up. Foreleg 56 long, tibia 14, tarsus 12, foretibial seta 15-17, patellar seta 40-45, patella 9, femoral seta 6, thin. Tarsal solenidion 8, tarsal empodium 8-9, 6-rayed, divided. Opisthosoma with 62-67 dorsal annuli and 88 ventral annuli. Lateral tubercles 60 apart, on ventral annuli 15-17, setae 40 long; 1st ventral tubercles 47-48 apart, on ventral annuli 28-33, setae 70-80 long; 2nd ventral tubercles 26-28 apart, on ventral annuli 51-55, setae 30 long; 3rd ventral tubercles 26 apart, on ventral annuli 75-80, setae 50 long. Caudal setae 100-130, accessory setae 2 long. Male genitalia (Fig.2), genital setae 28 long.

NYMPH I: (from May) 93-130 long, 45 wide and 49-50 thick, white. Gnathosoma 43-49, chelicerae 50-55 long. Dorsal shield 33-34 long and 45 wide. Dorsal tubercles 6-7 ahead of shield margin, 17 apart, dorsal setae 4 long, projecting up. Foreleg 25 long, tibia 4-5, tarsus 5-6, foretibial seta 5, patellar seta 25-30, patella 4, femoral seta 3, trochanter 3. Tarsal solenidion 5-6, tarsal empodium 5-6, 4-rayed, divided. Hindleg 23-25 long, tibia 4, tarsus 5-6; tarsal solenidion 5-6, tarsal empodium 5-6, 4-rayed, divided. Opisthosoma with 41 dorsal annuli and 42-48 ventral annuli. Lateral tubercles 30-37 apart, on ventral annuli 11-13, setae 17-20 long; 1st ventral tubercles 26 apart, on ventral annuli 19-22, setae 35 long; 2nd ventral tubercles 9-10 apart, on ventral annuli 25-30, setae 25 long; 3rd ventral tubercles 15 apart, on ventral annuli 36-42, setae 20 long. Caudal setae 40, accessory setae 1 long. Without genital coverflap, genital tubercles 8 apart, on ventral annuli 7-10, genital setae 10 long.

HOST: *Malus domestica* Borkh.

TYPE MATERIAL: Holotype, female on slide Nr.1/2001, Kirrlacher Straße 3, Bruchsal. Paratype,

10 females on slide Nr.2/2001, Kirrlacher Straße 3, Bruchsal.

Allotype, male on slide Nr.3/2001, Kirrlacher Straße 3, Bruchsal.

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