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REDESCRIPTION OF *TYPHLODROMUS VEPALLIDUS* (KOCH, 1839)
(BERLESE, 1889) (*Parasitiformes, Phytoseiidae*)
FROM BERLESE'S COLLECTION.

RIASSUNTO

Ridescrizione di Typhlodromus vepallidus (Koch, 1839) (Berlese, 1889) (Parasitiformes, Phytoseiidae) della collezione Berlese.

Viene ridescritto il *Typhlodromus vepallidus*, determinato da Berlese e conservato nella sua collezione a Firenze, giacché il materiale tipico risulta perduto. Per tale descrizione ci si è basati sulla forma dell'apparato di inseminazione, sul numero dei solenostomi presenti sulla placca dorsale e sulle altre caratteristiche indispensabili per una corretta determinazione (forme delle placche ventrali, macrosete, cheliceri ecc.).

SUMMARY

Typhlodromus vepallidus, kept in Berlese's collection, is redescribed as the type material does not exist any longer and the description by Koch and later by Berlese are not sufficient for the classification.

INTRODUCTION

Typhlodromus vepallidus was described by KOCH (1839), but it is not possible to determine this species as the type material does not exist any longer (WESTERBOER and BERNHARD, 1963) and the original description is not sufficient. BERLESE (1889) described a species, found «on plants» in Portici (Napoli) which he determined as *Seius vepallidus* (K.) Berlese. However, also in

this case it is not possible to identify the species following Berlese's original description and drawings.

NESBITT (1951) stated that «Koch drawings are too vague to be of value and those by Berlese... complicate the issue...» and that the drawings by Berlese belong to different species, as the dorsal shield belongs to one species and the ventral shield to another one. Nesbitt gave such a statement without checking the material described by Berlese.

During a visit to the Istituto Sperimentale per la Zoologia Agraria in Florence where Berlese's collection is kept, we had the opportunity of checking the slide determined by Berlese, and as this is the only material determined as *vepallidus* in our hands, it was decided, for the present, to redescribe the above mentioned species.

For the description, the setal terminology by CHANT and YOSHIDA-SHAUL (1992) and the adenotaxie by ATHIAS-HENRIOT (1975) were followed.

DIAGNOSIS

Female: (figs 1-2) Dorsal scutum ornamented almost all over with polygonal cells. The part around setae j3, j1, j6 and the area included between setae j1 and J5 apparently smooth. All setae almost of the same length (isotrichy) apart from Z5 which is the longest one; setae Z4 and Z5 serrated, the others smooth. Adenotaxy bideficient, (absence of gd1 and gd5); gd9 very close to setae S5; solenostomes are simple. Segment s4 - gd4 - Z1 obtuse angled, the solenostome being more close to s4; segment j4-gd2-z4 obtuse angled, the solenostome being equidistant from the two setae; gd8 inserted at the anterior level of Z4 or slightly anteroantiaxial to these setae. Unfortunately it is not possible to distinguish poroides and sigilla. Measurements of setae (in μ): j1, z3 = 27, j4, j5, z2, S5, j5, z5 = 19, j3 = 32, z4 = 25, s4 = 30, Z1 = 33, S2 = 31, S4 = 34, Z5 = 61, Z4 = 39, JV5 = 55, r3 = 24, R1 = 24, Lva = 109, lva = 103, StIV = 54, Ds = 353. Apex of peritreme is between j1-j3, nearer to j1.

Sternal scutum not well visible, seta ST4 and the poroide tylochore (fig. 1bI).

Epigynium (fig. 1bII) with a slightly convex posterior margin. It is not possible to see the genital sigilla, including sgpa, between epigynium and opisthogastral shield.

Opisthogastral shield (fig. 1bIII) subpentagonal, apparently smooth, larger than epigynium, with a convex anterior margin, and concave lateral ones; it bears 4 pairs of setae and shows a dilatation at level of setae ZV2; solenostome gv3 not visible.

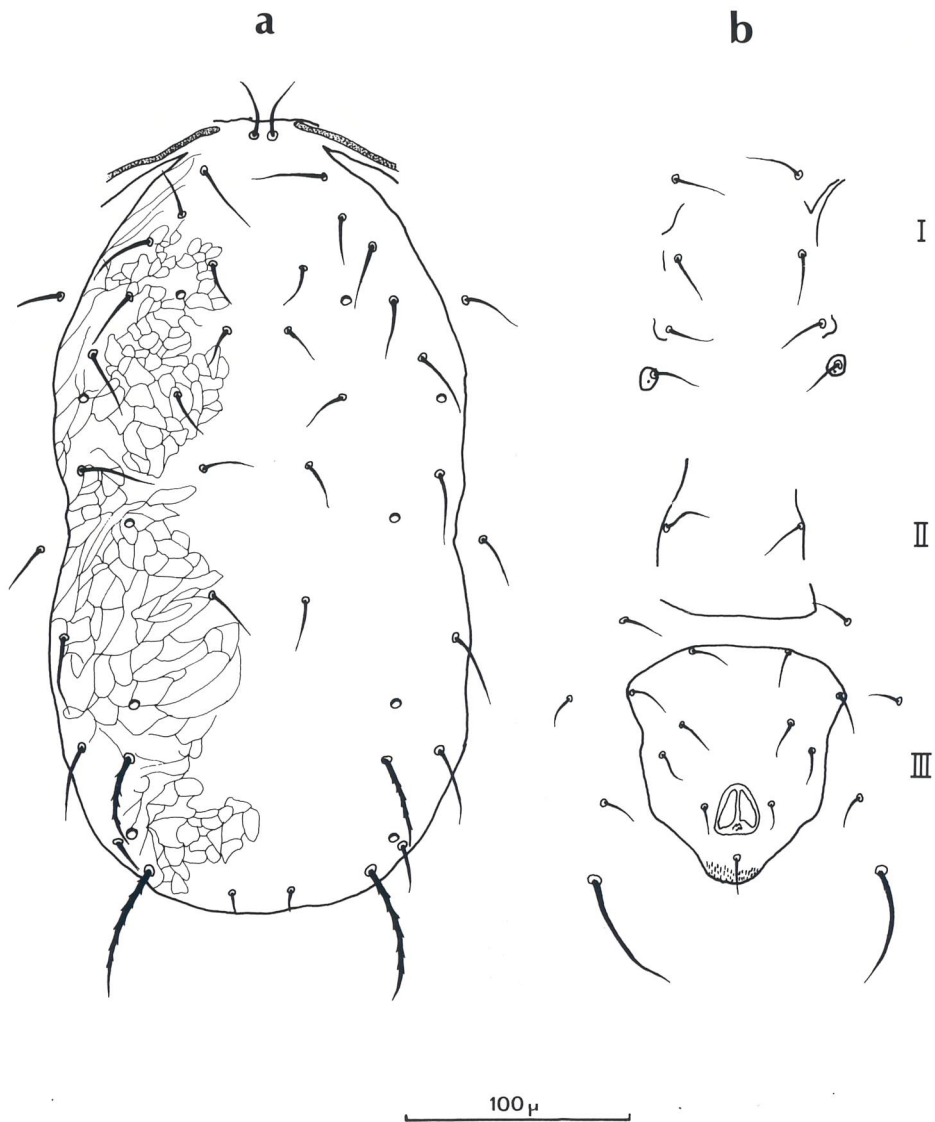


Fig. 1 — *Typhlodromus vepallidus*, female - 1a: dorsal shield; 1b: ventral side.

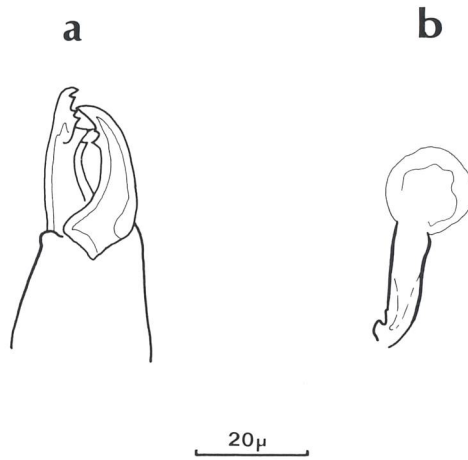


Fig. 2 — *Typhlodromus vepallidus*, female - 2a: chelicera; 2b: insemination apparatus.

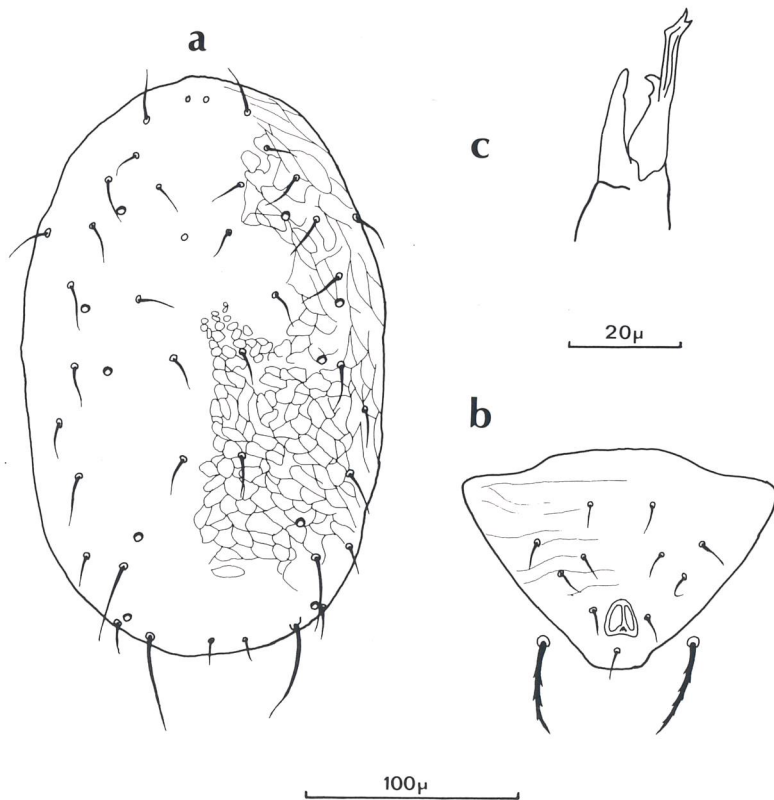


Fig. 3 — *Typhlodromus vepallidus*, male - 3a: dorsal shield; 3b: opisthogastral shield; 3c: chelicera with spermatostylus.

Fixed digit of chelicerae (fig. 2a) with 4-5 small teeth; movable digit with two teeth one of which is very small. Macroseta present on tarsus IV, being slightly knobbed.

Insemination apparatus: (fig. 2b) The adductor duct is not visible. The atrium is incorporated in the base of calyx. Calyx narrow, long, tubular, 3-4 times longer than its average diameter, the wall being thick and sclerotised; atrium prominent; slightly decentrated in comparison to the calyx axe; embolus differentiated.

Male: (fig. 3) Smaller than female, dorsal shield (fig. 3a) more coriaceous and more striated. Measurements of setae: j4, j5, S4, S5 = 13, j6, j2, Z1 = 17, j3, S2 = 22, z2 = 12, z3, z4 = 19, s4 = 23, Z5 = 42, z5 = 15, Z4 = 33, JV5 = 44, r3 = 19, StIV = 40, Ds = 260. Opisthogastral shield (fig. 3b) subtriangular, with few striae, carrying 4 pairs of setae. Spermatostylus is given in fig. 3c.

MATERIAL EXAMINED: 1 ♀, 1 ♂ in one slide (44/3) collected on plants, in Portici (Napoli), in Berlese's collection, Florence.

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