

UDC 595.422(477)

## A NEW SPECIES OF PREDACEOUS MITES OF THE GENUS *AMBLYSEIELLA* (PARASITIFORMES, PHYTOSEIIDAE) FROM UKRAINE

L. A. Kolodochka, I. D. Omeri

Shmalhausen Institute of Zoology,  
B. Chmielnicky str., 15, Kyiv, 01601 Ukraine

Received 10 April 2009

Accepted 2 December 2009

**A New Species of Predaceous Mites of the Genus *Amblyseiella* (Parasitiformes, Phytoseiidae) from Ukraine.** Kolodochka L. A., Omeri I. D. — A new species of phytoseiid mites *Amblyseiella antonii* Kolodochka et Omeri, sp. n. (Parasitiformes, Phytoseiidae) found on *Juniperus sabina* L. in Kyiv (Ukraine) is described. This is the first record of a representative of the genus *Amblyseiella* Muma from Ukraine. Description, drawings, measurements and diagnosis of the species are given.

**Key words:** taxonomy, phytoseiid mites, *Amblyseiella*, new species, Ukraine.

**Новый вид хищных клещей рода *Amblyseiella* (Parasitiformes, Phytoseiidae) из Украины.** Колодочка Л. А., Омери И. Д. — Описан новый вид растениевобитающих клещей-фитосейид *Amblyseiella antonii* Kolodochka et Omeri, sp. n. (Parasitiformes, Phytoseiidae), обнаруженный в г. Киеве (Украина) на можжевельнике *Juniperus sabina* L. Представитель рода *Amblyseiella* Muma выявлен в Украине впервые. Приведены описание, рисунки, морфометрия и диагноз нового вида.

**Ключевые слова:** таксономия, клещи-фитосейиды, новый вид, Украина.

### Introduction

Phytoseiid mites are well known as effective predators of phytophagous pests on different agricultural cultures and decorative plants. The genus *Amblyseiella* Muma, 1955 includes 3 known species: *A. setosa* (Muma, 1955), *A. rusticana* (Athias-Henriot, 1960), and *A. denmarki* (Zaher et El Brolossy in Zaher, 1986). Muma et al. (1970) assumed (without a discussion) that the name *A. rusticana* is a junior synonym of *A. setosa*. Kolodochka (2006) supported that opinion: «...both species are closely related. It is possible, that the accumulation of material would reveal their identity».

A new species of the genus *Amblyseiella* Muma found on *Juniperus communis* L. on the territory of Syretski Park (Kyiv city, Ukraine) is described and illustrated below. This is the first record of a representative of the genus *Amblyseiella* Muma from Ukraine. Terminology of spermathecal structures, solenostomes and setae follows Kolodochka (2006). The measurements are given in micrometers. Type material is deposited in collection of the Institute of Zoology, National Academy of Sciences of Ukraine, Kyiv.

### *Amblyseiella antonii* Kolodochka et Omeri, sp. n. (fig. 1, 2)

**Material.** Holotype ♀ (N 5986/1622, broken), juniper (*Juniperus sabina* L.), in Syretski Park, Kyiv city, Ukraine, 18.08.2008 (Omeri leg.).

**Female (holotype).** Dorsal shield (fig. 1, 1) slightly sclerotised, lightly striated only in antero-lateral parts of scutum, with 7 pairs of solenostomes (*it*, *iv*, *id*, *isc*, *il*, *is*, *ic*) and 16 pairs of sharp setae. Setae D2–D6, AM2, ML very short, AL4, PM2, PM3 elongated, other setae of medium length. Setae PM3 slightly serrate (with 1–2 notches), other setae smooth (fig. 1, 1). Length of setae AM1 and AL2 longer than distance

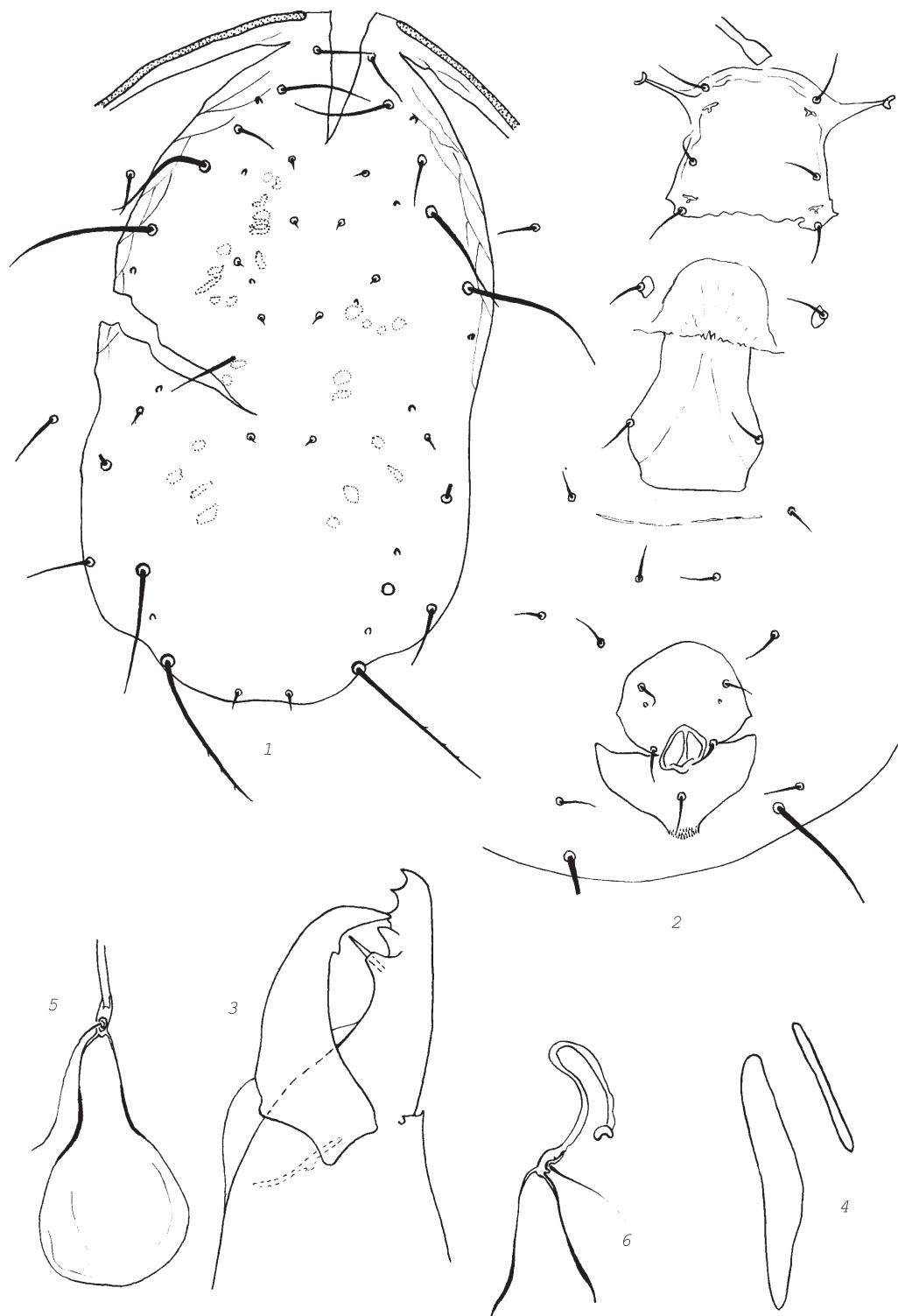


Fig. 1. *Amblyseiella antonii* sp. n., ♀: 1 — dorsal shield; 2 — ventral surface of body; 3 — chelicera; 4 — metapodal plates; 5—6 — spermatheca.

Рис. 1. *Amblyseiella antonii* sp. n., ♀: 1 — дорсальный щит; 2 — вентральная сторона тела; 3 — хелицерва; 4 — метаподальные щитки; 5—6 — сперматека.

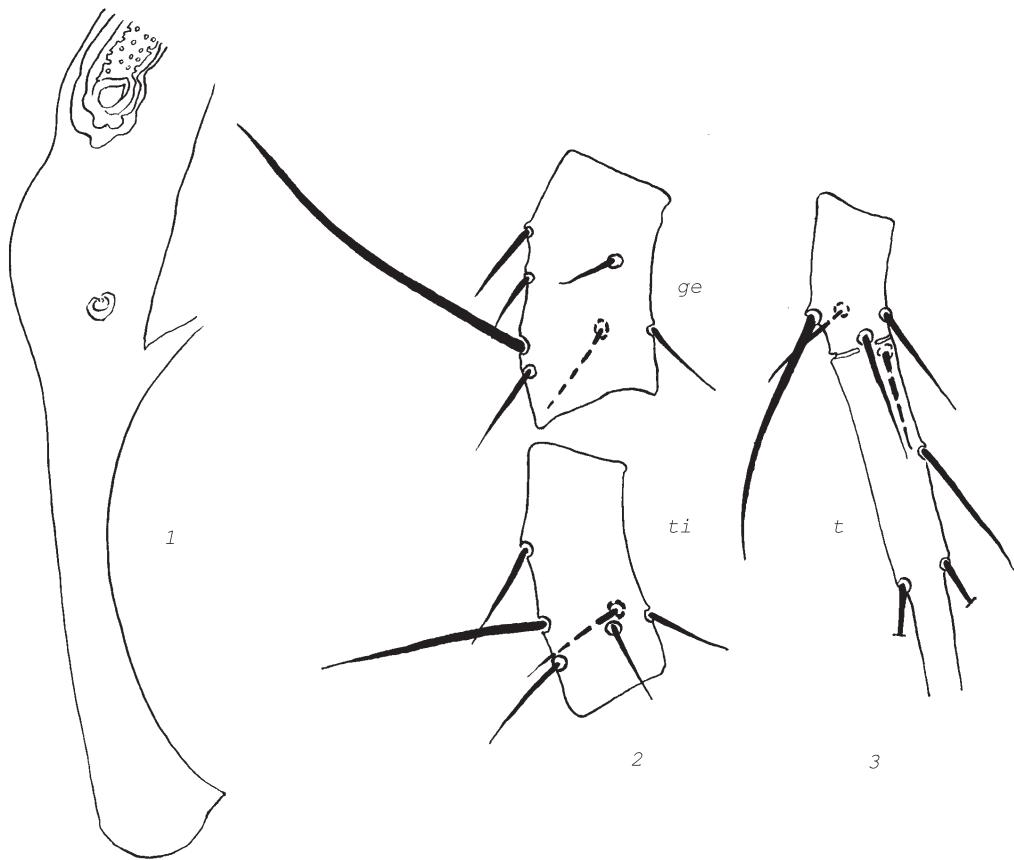


Fig. 2. *Amblyseiella antonii* sp. n. Detailes of female structure: 1 — posterior part of peritremal shield, 2 — genu — ge, tibia — ti; 3 — tarsus IV (fragment) — t.

Рис. 2. *Amblyseiella antonii* sp. n. Детали строения самки: 1 — задняя часть перитремального щита; 2 — колено — ge, голень — ti; 3 — лапка IV (фрагмент) — t.

from their thecae to thecae of subsequent setae. Length of seta AL1 equal to distance between its base and base of seta AL2. Sternal shield (fig. 1, 2) smooth, with 2 pairs of solenostomes and 3 pairs of setae (St1—St3); MSt on metasternal platelets. Ventrianal shield (fig. 1, 2) small and smooth, with one pair of preanal setae (PrA2). Anal pores small, distinct, rounded, caudal of PrA2 base level. Setae V1, V2, PrA1, MV1, MV2 and PV on integument surrounding ventrianal shield. Setae PV smooth. Other ventral setae smooth, sharp, and thin. Peritreme long, extending anteriorly over level of thecae of seta D1. Chelicerae (fig. 1, 3) normal in relation to body size. Fixed digit with 3 large denticles, movable digit with 1 tooth. Metapodal platelets narrow (fig. 1, 4). Spermatheca with bell-shaped fundibulum and with small c-shaped atrium, cervix missing (fig. 1, 5–6). Posterior part of peritremal shield slightly curved (fig. 2, 1). Macrosetae on legs sharp and smooth. Macroseta on basitarsus IV shorter than macroseta on genu IV and slightly longer than macroseta on tibia IV (fig. 2, 2, 3). Genua of other legs with shorter macrosetae.

Measurements as follows: length of dorsal shield (Lds) 438, width of dorsal shield (Wds) on level of setae AL4 237; length of ventrianal shield (Lvas) 119, width of ventrianal shield (Wvas) max 103, distance between anal pores (Lian) 39; length of tarsus of leg IV (LtIV) 176. Length of: D1 38; D2, AM2 3; D3 5; D4 7; D5, D6 8; AM1 62; AL1 25; AL2 74; AL4 106; ML 9; PL1 58; PL2 41; PM2 82; PM3 106; AS 23; PS 38;

PV 80; MCh tIV 66, MCh tibIV 63, MCh genIV 99; MCh genIII 56; MCh genII 38; MCh genI 41.

### Differential diagnosis

*Amblyseiella antonii* sp. n. differs from *A. setosa* Muma by shorter setae AL2 and PV (74 and 80 in *A. antonii* sp. n., 84 and 94 in *A. setosa*, accordingly), and from *A. denmarki* by shorter setae AL1, PL1, PM2, PS (25, 58, 82, 38 in *A. antonii* sp. n., 35, 70, 100, 47 in *A. denmarki*, accordingly). Dorsal setae in *A. antonii* sp. n. more thin than those in *A. setosa*. Besides that the posterior part of dorsal shield of *setosa* is expended and the dorsal shield margins in *antonii* more or less parallel.

Kolodochka L. A. Phytoseiid mites of the Palaearctic Region (Parasitiformes, Phytoseiidae): faunistics, taxonomy, ecomorphology, evolution // Vestnik zoologii / Resp. ed. I. A. Akimov; Schmalhausen Institute of Zoology, NAS of Ukraine. — 2006. — Suppl. N 21. — 250 p., 68 ill., 11 tab., 316 bibl. — Russian : Колодочка Л. А. Клещи-фитосейиды Палеарктики (Parasitiformes, Phytoseiidae): фаунистика, систематика, экоморфология, эволюция // Вестн. зоологии / Отв. ред. И. А. Акимов; Институт зоологии им. И. И. Шмальгаузена НАН Украины.

Muma M. H., Denmark H. A., DeLeon D. . Phytoseiidae of Florida // Arthropods of Florida and Neighboring land areas. — 1970. — 6. — 150 p. — (Florida Dpt of Agric. and Consum. Serv., Doyle Conner, Commisioner).