

A NEW SPECIES OF MITES OF THE GENUS *CUNAXA* (ACARINA: PROSTIGMATA: CUNAXIDAE) FROM CRIMEA (UKRAINE)

НОВЫЙ ВИД КЛЕЩЕЙ РОДА *CUNAXA* (ACARINA: PROSTIGMATA: CUNAXIDAE) ИЗ КРЫМА (УКРАИНА)

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Ключевые слова: Prostigmata, Cunaxidae, *Cunaxa*, новый вид, Крым

ABSTRACT

Female, male, tritonymph and deutonymph of *Cunaxa dentata* sp. n. are described from Crimea. *C. bochkovi* Khaustov et Kuznetsov, 1998 is recorded for the first time for Crimea.

РЕЗЮМЕ

Приводится описание самки, самца, тритони- и дейтонимфы *Cunaxa dentata* sp. n. из Крыма. *C. bochkovi* Khaustov et Kuznetsov, 1998 впервые обнаружен в Крыму.

Five species of the genus *Cunaxa* Von Heyden, 1826 have been previously recorded from Crimea: *C. setirostris* (Hermann, 1804), *C. capreola* (Berlese, 1890), *C. anomala* Khaustov, Kuznetsov, 1998, *C. heterostriata* Khaustov, Kuznetsov, 1998, and *C. sudakensis* Khaustov, Kuznetsov, 1998 [Kuznetsov, Livshits, 1979; Khaustov, Kuznetsov, 1998].

In this paper, a new species of *Cunaxa* is described and *C. bochkovi* Khaustov, Kuznetsov, 1998 is recorded for the first time for Crimea.

The terminology used in the description follows that of Den Heyer [1981]. All measurements for holotype and paratypes (in parenthesis) are given in micrometers (μm). The holotype is deposited in the collection of the Department of Agroecology, Nikita Botanical Gardens — National Scientific Center, Yalta, Crimea, Ukraine.

***Cunaxa dentata* sp. n.**

Figs. 1–18

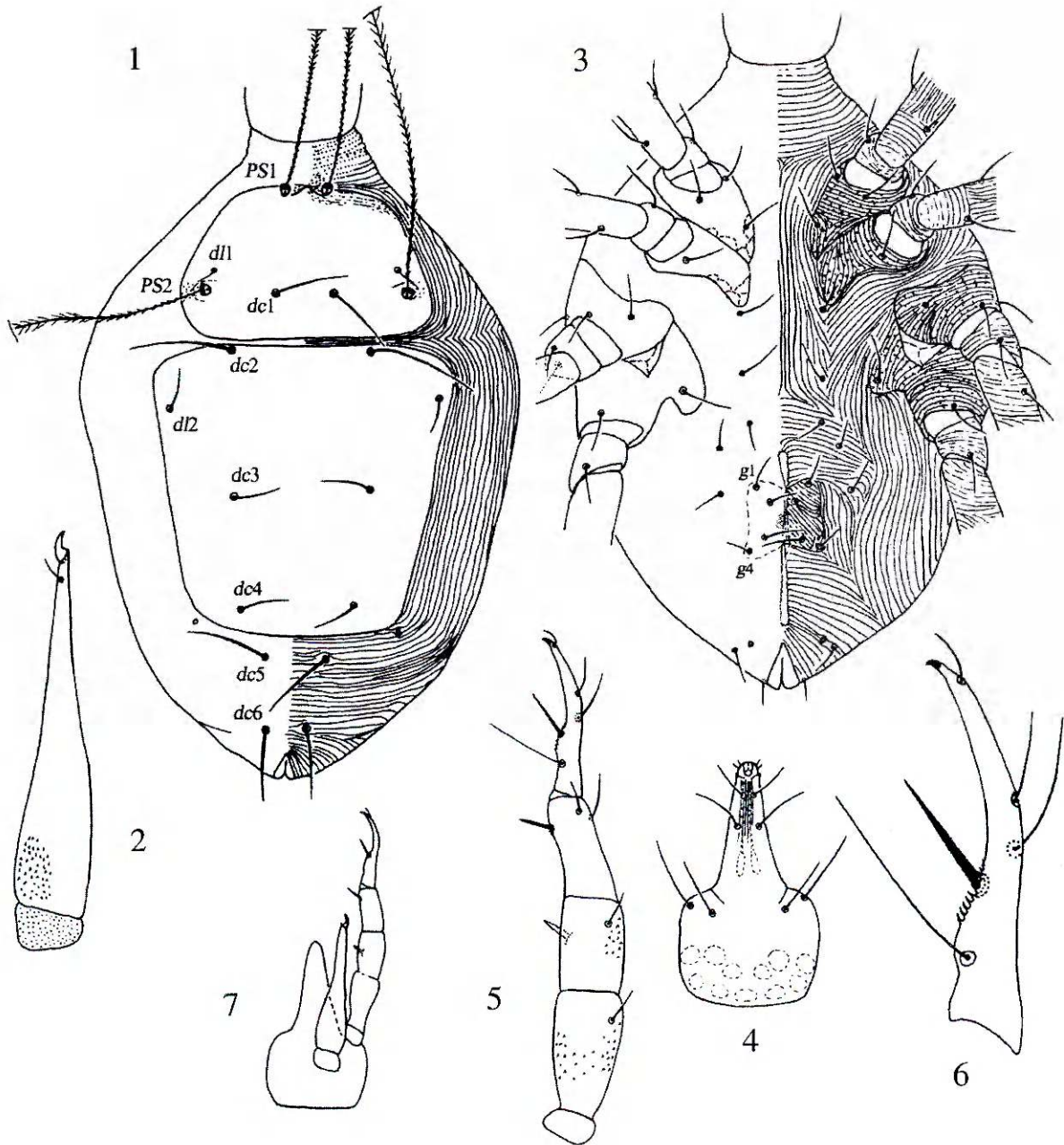
Female (Figs. 1–10). Length of idiosoma, 314 (310–411); width, 243 (227–272).

Idiosomal dorsum (Fig. 1). There are two strongly sclerotized dorsal plates. Propodosomal

plate weakly striated behind anterior trichobotria, with small areas with few papillae laterally of posterior trichobotria. Posterior trichobotria longer than anterior ones. Setae *dc1* 41 (41–48) longer than distance between their bases 29 (28–34) and distance *dc1*–*PS2* 34 (34–40). Length of setae *dl1* 10 (9–11); distance between *dl1*–*PS2* 16 (16–17). Dorsal hysterosomal plate relatively large, smooth, trapezoid, with four pairs of setae. Setae *dc2* 59 (59–63) longest on dorsum and longer than distance to *dl2* 43 (43–56). Length of setae *dl2* 24 (23–32); *dc3* 29 (29–37); *dc4* 27 (26–36). Setae *dc5* 44 (44–50) and *dc6* 41 (40–50) finely setose; other dorsal setae smooth. Integumental striae smooth.

Idiosomal venter (Fig. 3). Coxae punctated. Coxae I and II with subcuticular ridges in median aspect. Genital valves bearing four pairs of genital setae (*g*); *g* 3 is slightly longer than others. Genital papillae very small; there are three pairs of disks. There are four pairs of hysterogastral and one pair of propodogastral setae on venter. Integumental striae smooth.

Gnathosoma (Figs. 2, 4–7). Hypognathum well-sclerotized, with ventral subcuticular ridges, length/width ratio 1,7 (Fig. 4). Hypostome with few papillated longitudinal striae. Chaetotaxy of palp typical for genus (Fig. 5). Palps with line of small sharp spines nearby median spine-like seta of palp tibiotarsus (Figs. 5–6). There is cylindrical apophysis in middle part of telofemur. Palp with papillae on segments II–III. Two distal palpomeres project past entomale (Fig. 7). Chelicerae (Fig. 2) with chelae typical for genus. Chelicerae with many papillae on trochanters but few on proximodorsal aspect of segments II.



Figs. 1-7. *Cunaxa dentata* sp. n., female: 1 — idiosomal dorsum, 2 — chelicera, 3 — idiosomal venter, 4 — hypognathum, 5 — palp, 6 — palpal tibiotarsus, 7 — gnathosoma.

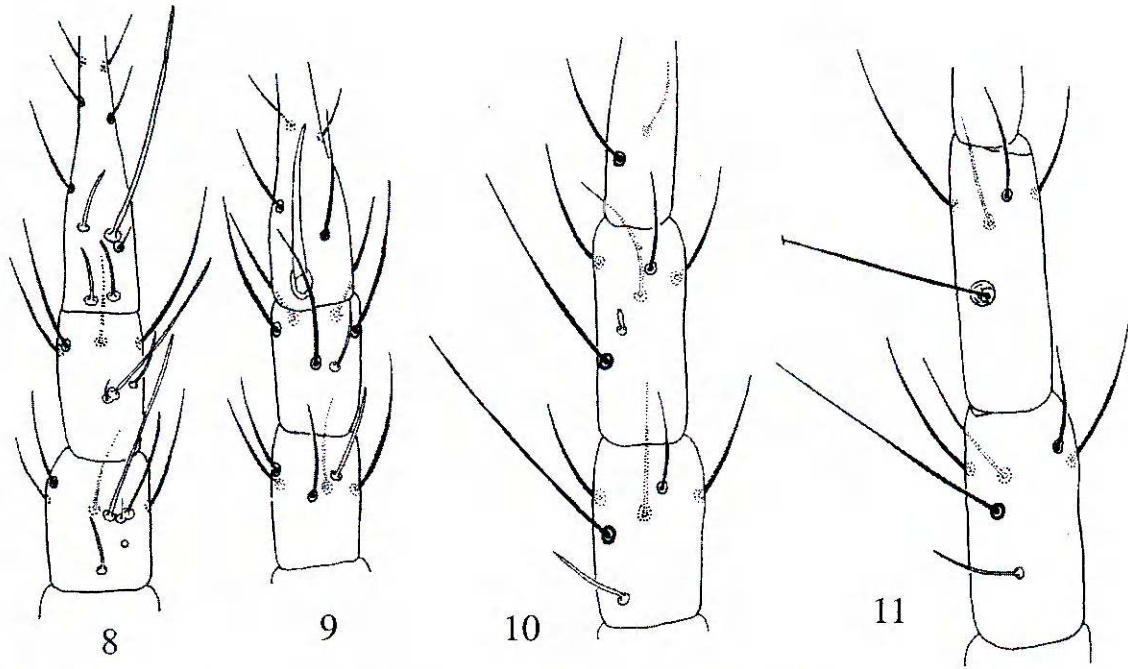
Рис. 1-7. *Cunaxa dentata* sp. n., самка: 1 — дорсальная сторона идиосомы, 2 — хелицера, 3 — ventральная сторона идиосомы. 4 — гипогнатум, 5 — пальпа, 6 — тибіотарзус пальпы, 7 — гнатосома.

Legs (Figs. 8-11). Length of legs I 259 (254-275); II 240 (235-262); III 309 (292-311); IV 324 (324-348) (measured from base of trochanter to apex of tarsus, excluding ambulacrum). Pretarsi III and IV well-separated. Ventral surface and distal part of dorsal surface of tarsi with papillae; others podomeres with fine striae. Chaetotaxy as follows: coxae I-IV: 3 *sts*-1 *sts*-3 *sts*-2 *sts*; trochanters I-IV: 1 *sts*-1 *sts*-2 *sts*-1 *sts*; femora I-IV: 8 *sts*-8 *sts*-2 *sts*/3 *sts*, 1 *ms*-1 *sts*/3 *sts*, 1 *ms*; genua I-IV: 1 *asl*,

{ 2 *asl*, 1 *sts* }, 4 *sts*-1 *asl*, 5 *sts*-1 *asl*, 4 *sts*, 1 *ms*-1 *asl*, 4 *sts*, 1 *ms*; tibia I-IV: { 1 *asl*, 1 *sts* }, 1 *bsl*, 4 *sts*-1 *bsl*, 5 *sts*-1 *bsl*, 4 *sts*, 1 *ms*-1 *T*, 4 *sts*; tarsi I-IV: 3 *bsl*, { 1 *bsl*, 1 *sts* }, 1 *dt*, 2 *tsl*, 22 *sts*-1 *bsl*, 1 *dt*, 1 *tsl*, 23 *sts*-1 *tsl*, 24 *sts*-20 (21) *sts*. Genu I with base lacking a solenidion (Fig. 8).

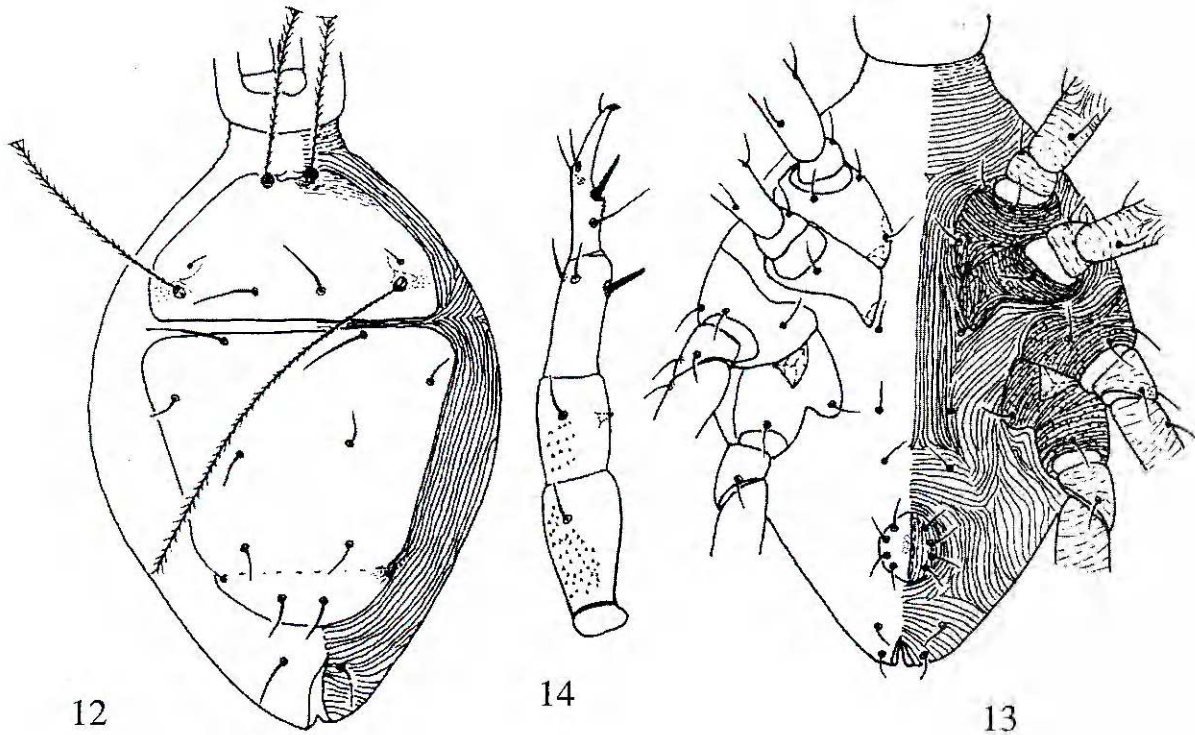
Male (Figs. 12-18). Length of idiosoma 262-289; width 192-211.

Male significantly smaller than female. Hysterosomal plate (Fig. 12) bears five pairs of setae:



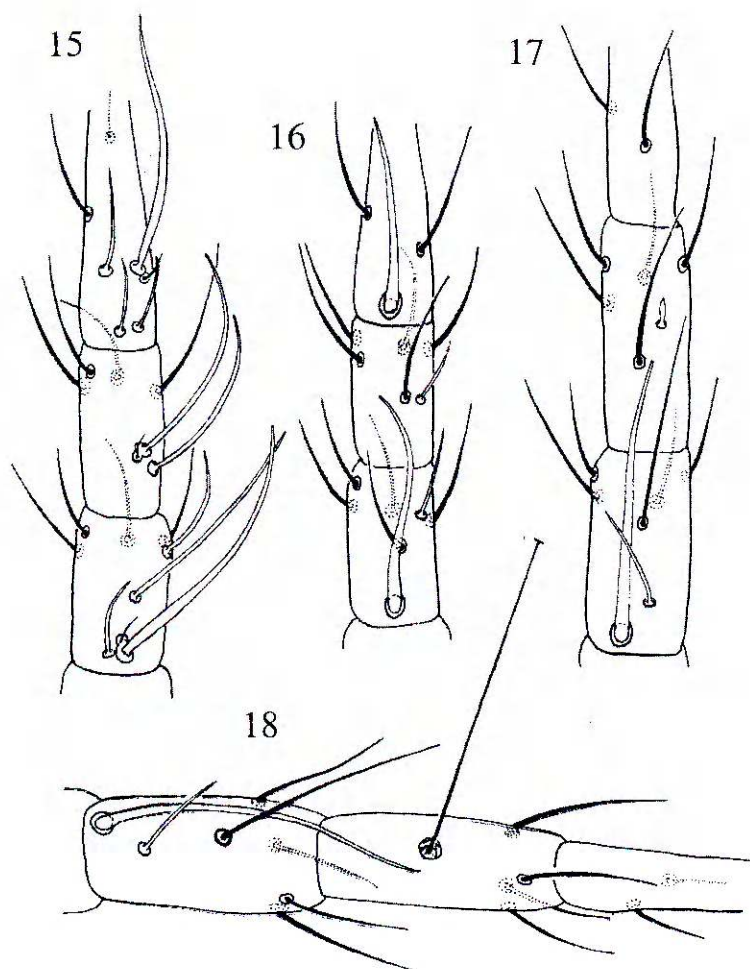
Figs. 8-11. *Cunaxa dentata* sp. n., female: 8 — genua, tibia and tarsi of leg I, 9 — genua, tibia and tarsi of leg II, 10 — genua, tibia and tarsi of leg III, 11 — genua and tibia of leg IV.

Рис. 8-11. *Cunaxa dentata* sp. n., самка: 8 — колено, голень и лапка ноги I, 9 — колено, голень и лапка ноги II, 10 — колено, голень и лапка ноги III, 11 — колено и голень ноги IV.



Figs. 12-14. *Cunaxa dentata* sp. n., male: 12 — idiosomal dorsum, 13 — idiosomal venter, 14 — palp.

Рис. 12-14. *Cunaxa dentata* sp. n., самец: 12 — дорсальная сторона идиосомы, 13 — вентральная сторона идиосомы, 14 — пальпа.



Figs. 15–18. *Cunaxa dentata* sp. n., male: 15–18 — genua, tibia and tarsi of legs I–IV, respectively.

Рис. 15–18. *Cunaxa dentata* sp. n., самец: 15–18 — колени, голени и лапки ног I–IV, соответственно.

dc2 39; *dl2* 14–16; *dc3* 16–17; *dc4* 17; and finely setose *dc* 5 19. Venter (Fig. 13) resembles that of female but with only two pairs of hysteroastral setae. Genital valves smaller and different in shape (Fig. 13). Gnathosoma similar to that of female; apophysis on palp segments III positioned as in female, slightly reduced (Fig. 14).

Legs (Figs. 15–18). Length of legs I 254; II 227; III 262; IV 282. Legs as in female except from chaetotaxy. Latter differs from that of female as follows: genua I–IV: { 1 *bsl*, 1 *asl*, 1 *sts* }, 1 *bsl*, 1 *asl*, 4 *sts*–1 *bsl*, 1 *asl*, 5 *sts*–1 *bsl*, 1 *asl*, 5 *sts*–1 *bsl*, 1 *asl*, 5 *sts*; tarsi I–IV: 3 *bsl*, { 1 *bsl*, 1 *sts* }, 2 *tsl*, 20 *sts*–1 *bsl*, 1 *tsl*, 21 *sts*–1 *tsl*, 21 *sts*–17 *sts*.

Tritonymph. Gnathosoma and legs as in female. Dorsum with weakly sclerotized propodosomal plate. Coxae not punctated. Venter with three pairs of hysteroastral setae. Chaetotaxy of tarsi I–IV: 3 *bsl*, { 1 *bsl*, 1 *sts* }, 1 *dt*, 2 *tsl*, 20 *sts*–1

bsl, 1 *dt*, 1 *tsl*, 22 *sts*–1 *tsl*, 22 *sts*–18 *sts*; chaetotaxy of other podomeres as in female.

Deutonymph. As tritonymph but apophysis on palp telofemora slightly shorter. Genital region with three pairs of genital setae. There are two pairs of hysteroastral setae. Leg chaetotaxy differs from female as follows: femora I–IV: 6 *sts*–6 *sts*–1 *sts*/3 *sts*, 1 *ms*–0/3 *sts*, 1 *ms*; tarsi I–IV: 3 *bsl*, { 1 *bsl*, 1 *sts* }, 1 *dt*, 2 *tsl*, 17 *sts*–1 *bsl*, 1 *dt*, 1 *tsl*, 18 *sts*–1 *tsl*, 17 *sts*–15 *sts*. Genua I without base of lacking solenidion.

Protonymph and larva: unknown.

Type material. Holotype (female): slide № C-1 Ukraine, Crimea, cape Kazantip, in moss on a stone under *Crataegus* sp., 18.07.02 (A. Sergeyenko); paratypes: 6 females, 2 males, 3 tritonymphes, same data; 3 females, 2 deutonymphs Ukraine, Crimea, Karadag in moss on *Quercus pubescens* Willd., 17.06.02 (A. Sergeyenko); 8 females, Ukraine, Crimea, Kanaka, in soil under *Juniperus excelsa* Bieb. 20.05.02. (A. Sergeyenko); 2 females, Ukraine, Crimea, lakeside of Kayashskoe in soil, 19.07.02 (A. Sergeyenko); 1 female, Ukraine, Crimea, cape Fiolent in cereal sod, 19.05.02., (A. Sergeyenko); 1 female, Ukraine, Crimea, bank of river Zuya in sod, 18.06.02 (A. Sergeyenko).

DIFFERENTIAL DIAGNOSIS

This species is similar to *Cunaxa globleri* Den Heyer, 1979 described from South Africa [Den Heyer, 1979], but differs by a line of small sharp spines nearby the median spine-like seta of the palp tibiotarsus (absent in *C. globleri*). Setae *dc2* of females and males of *C. dentata* sp. n. are longer than distance between bases *dc2* and *dl2* (shorter in *C. globleri*). Females of *C. dentata* sp. n. with one solenidion on genu II (two solenidia in *C. globleri*). Males of *C. dentata* sp. n. have two pairs of hysteroastral setae (one in *C. globleri*).

ETYMOLOGY

The species is named “*dentata*” (toothed), because it is characterized by a line of small sharp

spines nearby the median spine-like seta of the palp tibiotarsus.

Cunaxa bochkovi

Khaustov et Kuznetsov, 1998

This species was described from Russia (Voronezh distr.) [Khaustov, Kuznetsov, 1998].

New records in Crimea: 2 females, Ukraine, Crimea, vicinity settl. Grisheno in soil under *Gladiolus triacanthos*, 15.09.02 (A. Sergeyenko); 1 female at same place 20.06.02 (A. Sergeyenko); 1 female Ukraine, Crimea, vicinity settl. Gvardeyskoe in soil under *Armeniaca vulgaris*, 15.09.02 (A. Sergeyenko).

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