

**ON THE DAMAEID MITE FAUNA (ACARIFORMES:  
ORIBATEI: DAMAEIDAE) OF CENTRAL ASIA. GENUS  
*BELBA* HEYDEN, 1826. II. DESCRIPTION OF TWO  
NEW SPECIES**

**К ФАУНЕ БУЛАВОНОГИХ КЛЕЩЕЙ (ACARIFORMES:  
ORIBATEI: DAMAEIDAE) СРЕДНЕЙ АЗИИ. РОД  
*BELBA* HEYDEN, 1826. II. ОПИСАНИЕ ДВУХ НОВЫХ  
ВИДОВ**

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Key words: *Belba*, Damaeidae, Middle Asian soil mites  
Ключевые слова: *Belba*, Damaeidae, почвенные клещи Средней Азии

**ABSTRACT**

The paper continues discussion on the Central Asian damaeid mite fauna. Two new species *B. flammeisetosa* sp.n. and *B. sarvari* sp.n. are described from southern Uzbekistan and Tadzhikistan.

**РЕЗЮМЕ**

Статья продолжает обсуждение фауны булавоногих клещей Средней Азии. Иллюстрированное описание двух новых видов р. *Belba* (*B. flammeisetosa* sp.n., *B. sarvari* sp.n.) из Южного Узбекистана и Таджикистана.

In the course of inventory work dealing with the collections of oribatid mites from Central Asia, two new species of the genus *Belba* were discovered.

*B. flammeisetosa* has been found in E.M.Bulanova-Zakhvatkina's collection at the Institute for Animal Systematics and Ecology SO RAN.

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Zoological Museum, Novosibirsk (L.G.Grishina), in S.Sharipov's collection donated to Dr. A.A. Lyashchev, and in the collections deposited at the Institute for Problems of Ecology and Evolution RAN, Moscow (D.A.Krivolutsky).

*Belba flammeisetosa* sp.n.

Figs. 1—7.

**DIMENSIONS.** All measurements are given in micrometers. Mean total ventral length of 10 females 466 (range 460—469), mean total maximum notogastral breadth 329 (319—338). That of 10 males: length 461 (455—465), breadth 311 (308—323).

**INTEGUMENT.** The color light-brown. Body, legs, and leg setae (except distal part of tarsi) are completely covered with dense, mostly filamentous cerotegument.

**PRODORSUM.** Width at level of acetabulum II 0.55 notogastral width. Only tubercles *Da* present, subtriangular. Propodolateral apophysis present, horn-like. Setae *n* (42) and *le* (56) thin, smooth, curved; *in* long (116), attenuate, smooth; *ex* long (46), thin, attenuate, smooth. Sensillus long (125), attenuate.

**NOTOGASTER.** Slightly ovate viewed perpendicular to circumgastric suture, about 1.1 times longer than wide; exuvial scalps carried occasionally with adherent debris. Notogastral setae very unusual, unique for the genus, resembling painter brush or flame, having short stalk and flame-like thickening with short barbs. Two types of notogaster setae present: *c<sub>1</sub>*, *c<sub>2</sub>*, and *h<sub>1</sub>* 2 times longer than the remainder (43 and 21, respectively) (that is clearly seen in lateral aspect). *c<sub>1</sub>* and *c<sub>2</sub>* directed anteriad, *l* and *h* — series radiating. Mutual distance of pair *c<sub>2</sub>* 3.2 times that of *c<sub>1</sub>*. Pseudoanal setae setiform, attenuate, smooth.

**VENTRAL REGION.** Tubercles *Va* and *Vp* (bearing setae 3b) evenly rounded. Parastigmatic enantiophyses well developed. Sejugal apophyses: *sa* long, horn-like, *sp* evenly rounded. Coxisternal setation 3—1—3—4. Ventral setae smooth.

**GNATHOSOMA.** Normal for the genus.

**LEGS.** Relative length (I to IV): 1 : 0.8 : 0.9 : 1.4—1.5. Leg IV 1.05 ventral body length. Femur IV 1.2 times length trochanter IV. Proximal stalk of femur

Measurements of leg segments:

	I	II	III	IV
Tr			58	93
Fe	132	103	91	132
Ge	49	42	42	40
Ti	60	55	66	97
Ta	150	129	143	177

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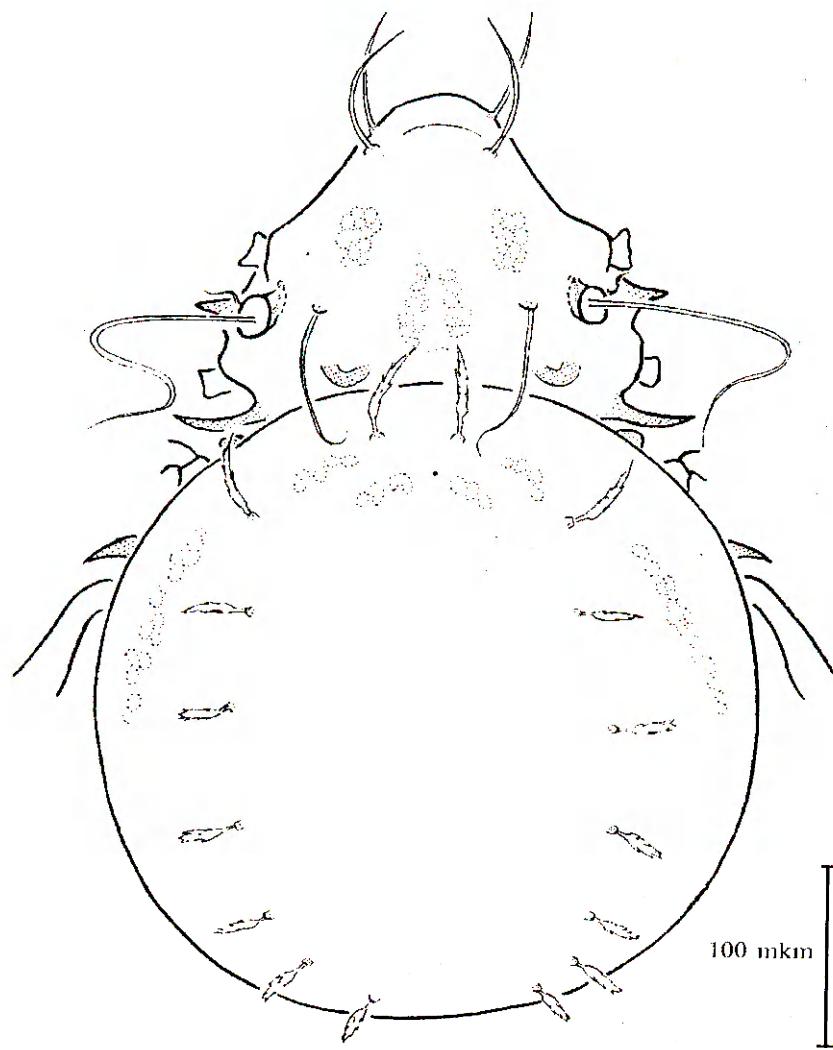


Fig.1. *Belba flammeisetosa*. Dorsal aspect.  
Рис.1. *Belba flammeisetosa*. Вид сверху.

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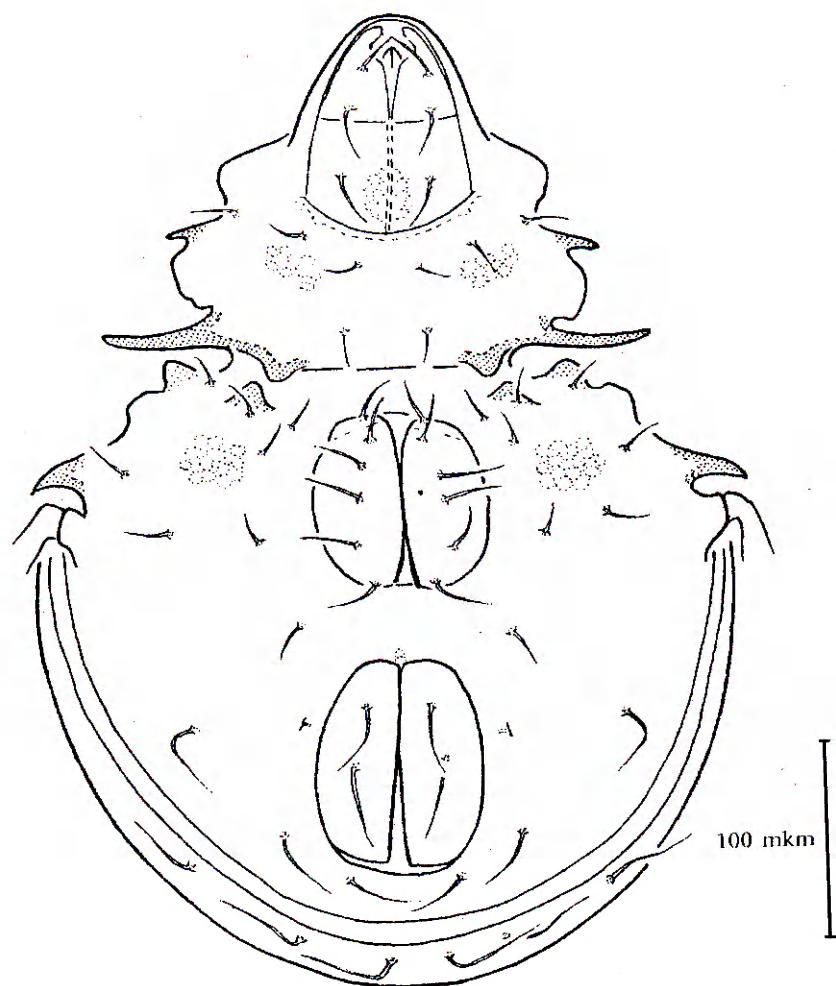


Fig.2. *Belba flammeisetosa*. Ventral aspect.  
Рис.2. *Belba flammeisetosa*. Вид снизу.

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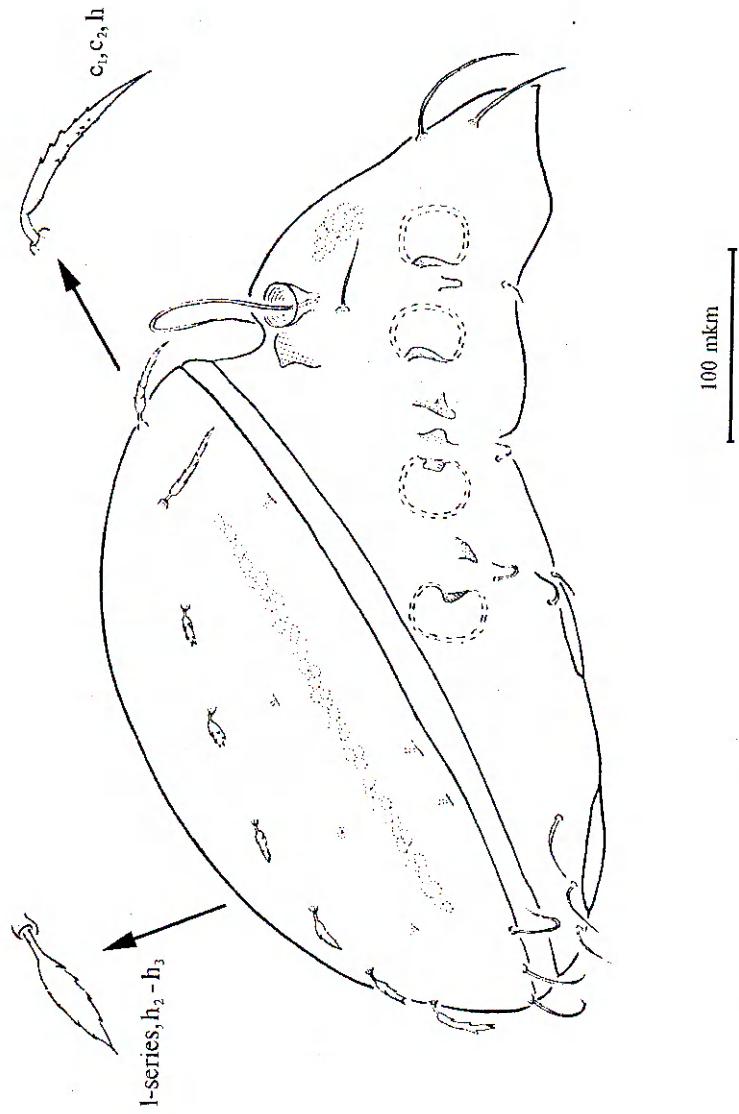


Fig.3. *Belba flammeisetaosa*. Lateral aspect.  
Pic.3. *Belba flammeisetaosa*. Биа сбоку.

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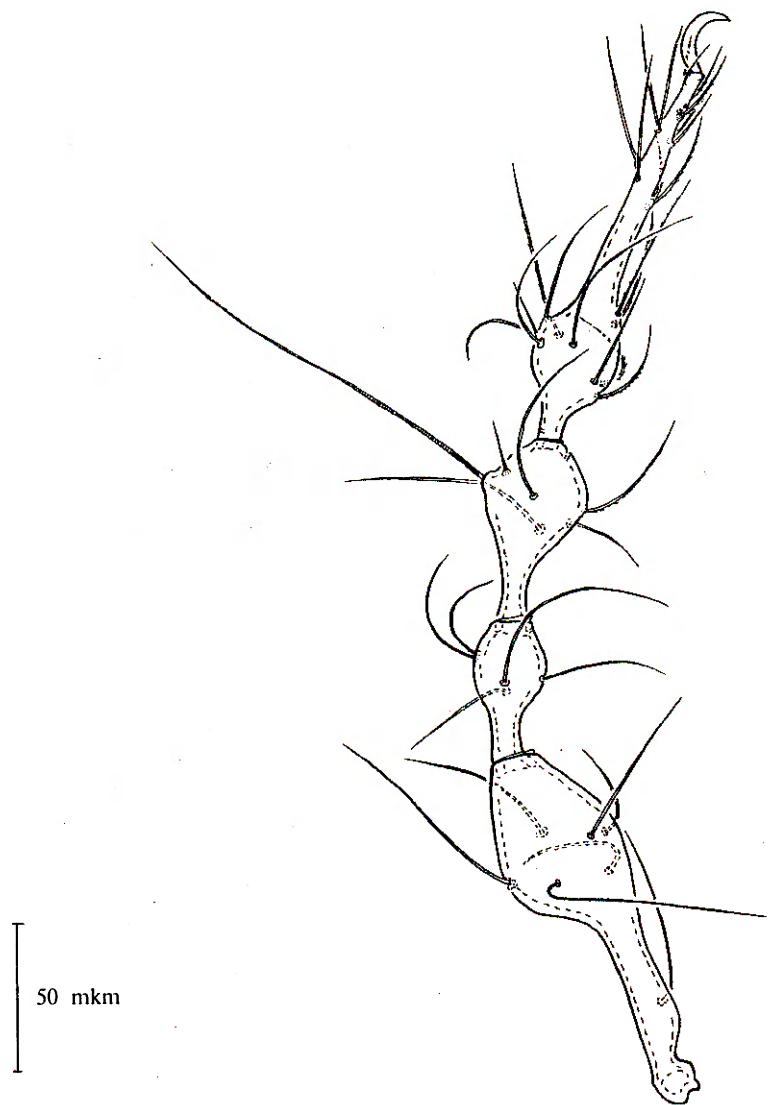


Fig.4. *Belba flammeisetosa*. Leg I.  
Рис.4. *Belba flammeisetosa*. Нога I.

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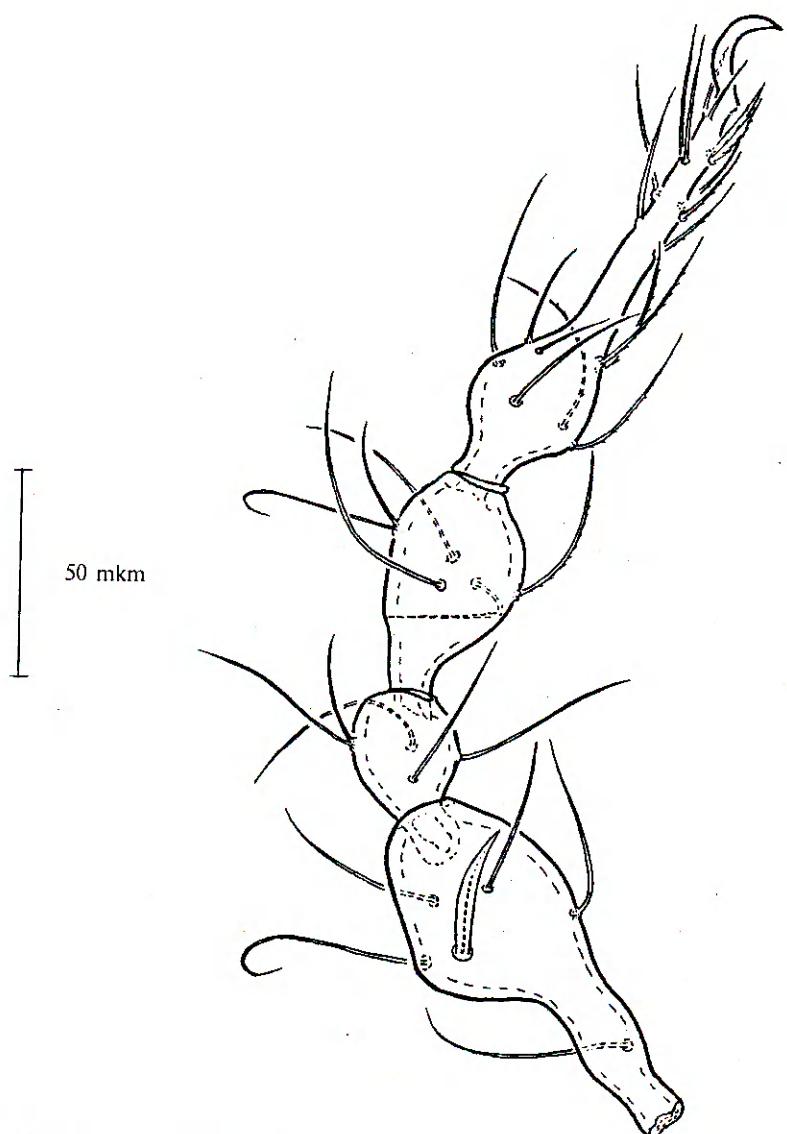


Fig.5. *Belba flammeisetosa*. Leg II.  
Рис.5. *Belba flammeisetosa*. Нога II.

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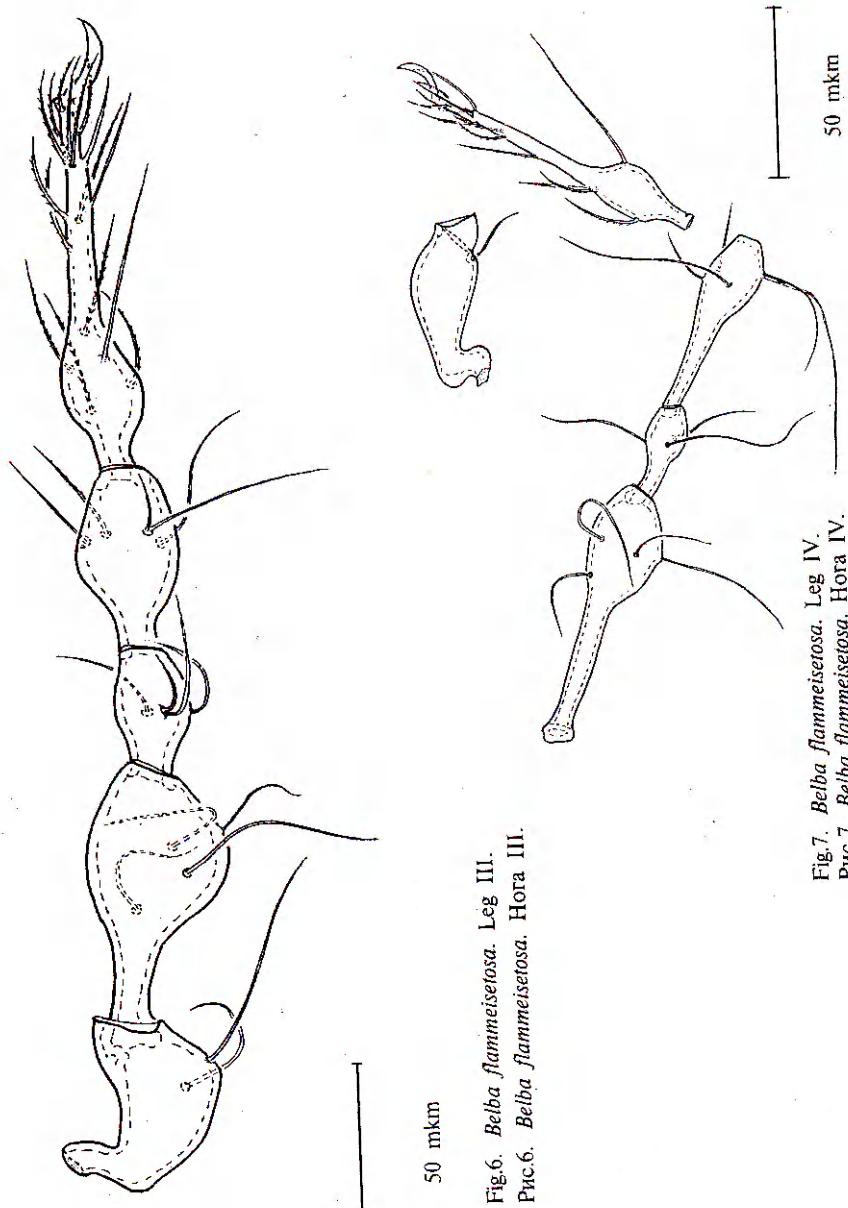


Fig.6. *Belba flammulifera*. Leg III.  
Пис.6. *Belba flammulifera*. Нога III.

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Fig.7. *Belba flammulifera*. Leg IV.  
Пис.7. *Belba flammulifera*. Нога IV.

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IV 0.72 length of bulb. Setal formulae, I to IV (famulus included, solenidia in parentheses): trochanters, 1—1—2—1 (a specimen with two setae on trochanter IV recorded: setae *pl'* present); femora, 7—6—4—4; genua, 4(1)—4(1)—3(1)—3; tibiae, 4(2)—5(1)—4(1)—4(1); tarsi, 20(2)—17(2)—16—13. Setae *v'* of femur II modified into spine.

**ONTOGENY.** Unknown.

**MATERIAL EXAMINED.** Holotype adult male: UZBEKISTAN: 1965, "Uchkhuz" (Collection of Zoological Museum of ISEA SO RAN, Novosibirsk). Any other data lost. Two other specimens of the species from B.-Z.'s collection: UZBEKISTAN, 23 August 1969, Ak-Daringel, vicinities of the collective farm "Fridrikh Engels" — 2; 27 May 1969 "Uchkhuz" — 1. Mites from S.Sharipov's collection: UZBEKISTAN: 19 June 1987, Shurkhak, *Juniperus seravschanica* soil litter — 4; 24 June 1987, Zinchob, Unabi, *J.seravschanica* soil litter — 5; 15 July 1987, river Tupalang basin. Shargun' settlement, *J.seravschanica* soil litter — 2. IPEE Collection (D.A.Krivolutsky): TADJIKISTAN: date and locality unknown. Coll.V.V.Khrustov.

**ETYMOLOGY.** The species name "*flammeisetosa*" is taken from the Latin "flammeus, and "seta" referring to an unusual shape of the notogastral setae.

*Belba sarvari* sp.n.

Figs.8—10.

**DIMENSIONS.** Total ventral length of holotype male 434; notogastral maximum breadth 255.

**INTEGUMENT.** The color dark-yellow. Cerotegument subfilamentous. It covers body and legs completely except distal parts of tarsi.

**PRODORSUM.** Width at level of acetabulum II 0.62 notogastral width. Tubercles *Da* present; subtriangular. Propodolateral apophysis present; subtriangular. Setae *ro* (35), *le* (50), *in* (44), and *ex* (35) thin, smooth. Sensillus (78) thin, smooth, attenuate, tapering apical.

**NOTOGASTER.** Slightly ovate viewed perpendicular to circumgastric scissure, about 1.05 times longer than wide. Notogastral setae very thin, hair-like, attenuate, smooth, directed posteriorly, of equal length (34).

**VENTRAL REGION.** Tubercles *Va* and *Vp* (bearing setae *3b*) evenly rounded. Sejugal apophyses: *sa* — long, spine-like; *sp* — evenly rounded. Discidium (*di*) present, subtriangular. Coxisternal setation 3—1—3—4.

**GNATHOSOMA.** Normal for the genus.

**LEGS** (tibia and tarsi IV studied but lost after remounting of the holotype specimen): Relative length (I to IV): 1 : 0.85 : 0.95 : 1.25. Leg IV 1.15 ventral body length. Femur IV 1.14 times length trochanter IV. Proximal stalk of

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femur IV 0.75 length of bulb. Setal formulae, I to IV (famulus included, solenidia in parentheses): trochanters, 1—1—2—1; femora, 7—6—4—4; genua 4(1)—4(1)—3(1)—3; tibia 4(2)—5(1)—4(1)—4(1); tarsi 20(2)—17(2)—16—13. Setae ν' of femur II modified into slender spine.

Leg segment measurements:

	I	II	III	IV
Tr			59	81
Fe	120	91	75	72
Ge	37	39	39	46
Ti	62	52	56	89
Ta	127	107	120	179

**ONTOGENY.** Unknown.

**MATERIAL EXAMINED.** One holotype male: UZBEKISTAN: 23 July 1987, Surkhandarya Province, mountain pass Anzob. 3300 m.a.s.l. Alpine meadow. 0-5 cm. Coll.S.Sharipov (Univ.of Tashkent).

**ETYMOLOGY.** The species is named after Mr. Sarvar Sharipov, deceased Uzbek acarologist, who collected the mite.

**ACKNOWLEDGEMENTS**

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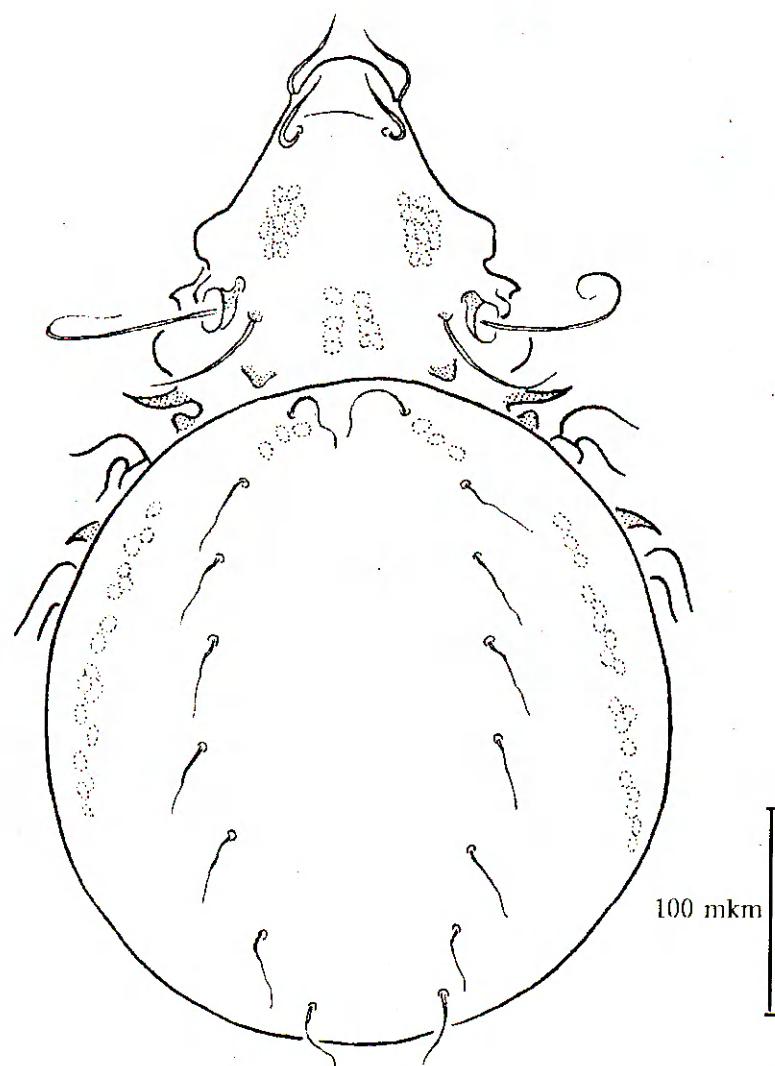


Fig.8. *Belba svari*. Dorsal aspect.  
Рис.8. *Belba svari*. Вид сверху.

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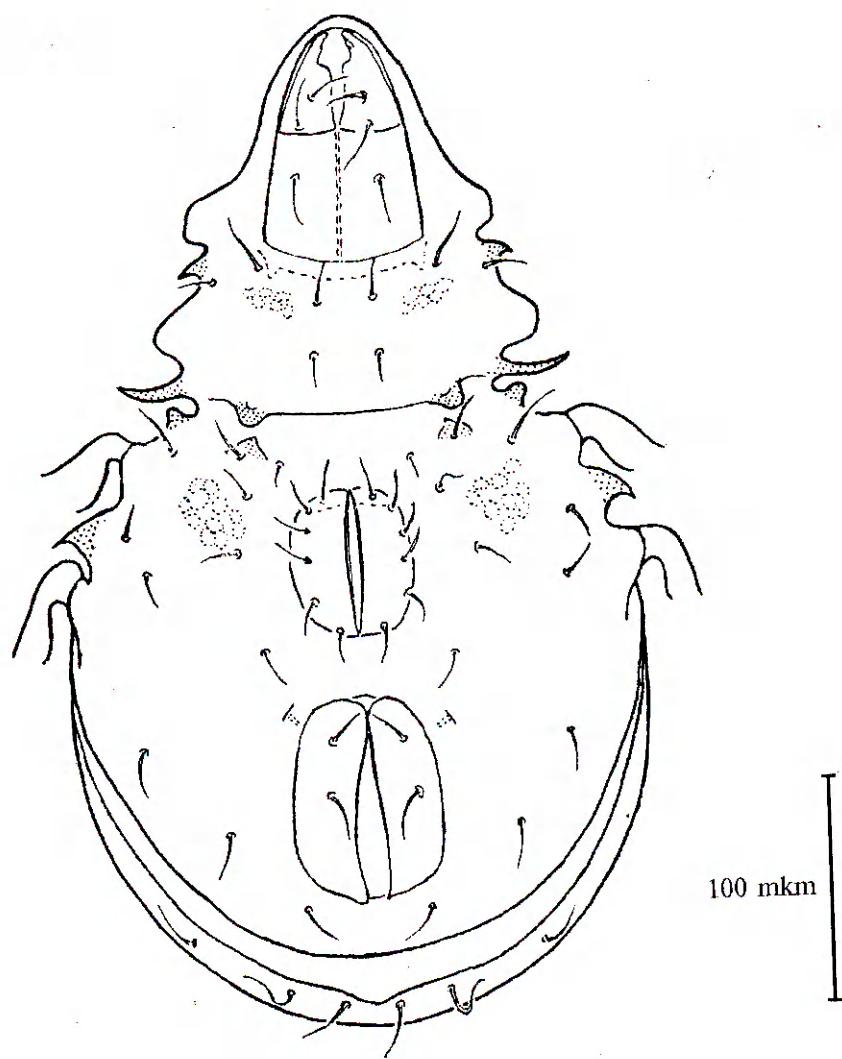


Fig.9. *Belba sarvari*. Ventral aspect.  
Рис.9. *Belba sarvari*. Вид снизу.

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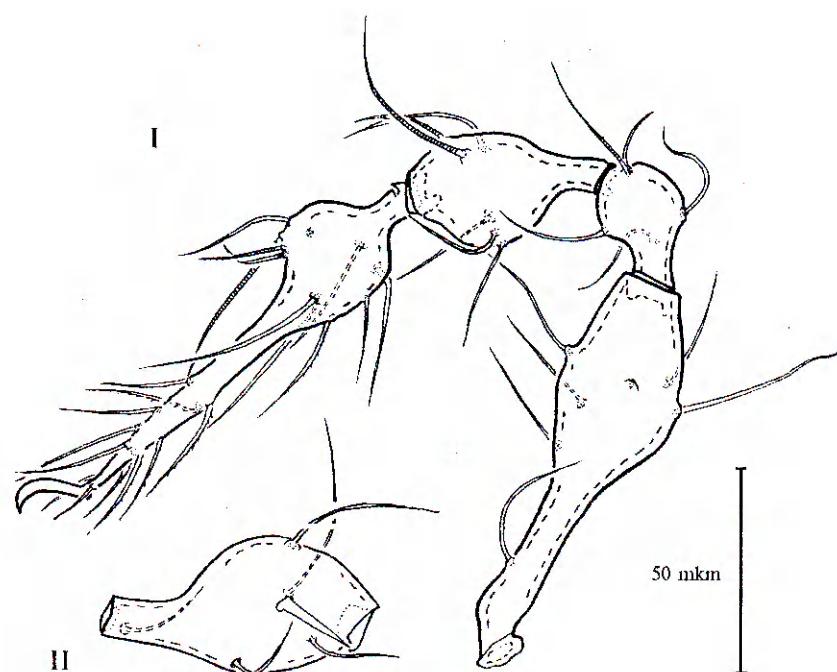


Fig.10. *Belba sarvari*. I — leg I, II — femur II.  
Рис.10. *Belba sarvari*. I — нога I, II — бедро II.