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Contribution to knowledge of the Oriental and Australian species of *Smicronyx* SCHOENHERR (Insecta: Coleoptera: Curculionidae: Erirrhininae)

With 14 Figures

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Abstract. Three species from Oriental region and one species from Australia are described as new for science: *Sm. orientalis* spec. nov. from South China, India, Thailand, Viet-Nam, Java – this species has no relatives among the described species; *Sm. longinotus* spec. nov. from India – it resembles to *Sm. orientalis* spec. nov. in the shape of body; *Sm. krausei* spec. nov. from Birma – it differs from other species by very elongate shape of body; *Sm. zherichini* spec. nov. from North Australia – by the shape of rostrum and body it likes to the Palaearctic species *Sm. balassogloi* FAUST. The following new synonym is proposed: *Sm. roridus* MARSHALL, 1923 = *Sm. balassogloi* FAUST, 1885. Lectotypes for all examined Oriental *Smicronyx* species are designated.

The *Smicronyx* fauna of the Oriental region is very poorly known. So far, 8 species were recorded from that region. The half from them were described by J. FAUST (1891, 1898). Each one species were described by V MOTSCHULSKY (1858), by G.A.K. MARSHALL (1923), by H. KÔNO (1930), and by D.M. ANDERSON (1974). It is known the only species of the genus *Smicronyx* from Australia: *Sm. longirostris* (LEA, 1926). D.M. ANDERSON (1971) reported more detailed information about the last species.

The *Smicronyx* fauna of the Oriental region is very characteristic because some species significantly differ from Palaearctic and African species. Just such species are described in this paper. Except such species we distinguish two clear compact groups comprising few species each around *Sm. rubricatus* KÔNO and *Sm. fasciatus* MOTSCH. We shall give the revisions of the species of these groups in our next papers.

Concerning the Australian *Smicronyx* fauna, we revealed one more species of which the description is given in this paper, too. Moreover, in the course of this study we revised all available type material of the Oriental *Smicronyx* species, and lectotypes are designated in this paper.

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List of abbreviations:

CZh = Collection of V. Zherichin	MTD = Staatliches Museum für Tierkunde, Dresden
IZMi = Institute of Zoology, Minsk	Sml = Smithsonian Institution, Washington
MHo = Bishop Museum, Honolulu	l = length
MLo = The Natural History Museum, London	w = width

Smicronyx albovariegatus FAUST, 1891

(Entom. Zeitung, Stettin 52, p. 280)

Faust described this taxon from two specimens from Nagpore (India). We examined this material from FAUST's collection (Dresden) and revealed it belonging to two different species. We stay the name *Sm. albovariegatus* with the bigger specimen (female) which is labelled "Golden square/male (it is FAUST's mistake) Nagpor, Hauser/albovariegatus Fst./Coll. J.Faust, Ankauf 1900/Type" (MTD). It designated here as lectotype.
This species is closely related to *Sm. bipunctatus* FST. and differs from it by the larger size and the shape of the median lobe. It is noted only from India, month of collecting: March, host plant unknown.

Smicronyx albovariegatus var. *bipunctatus* FAUST, 1891

(Entom. Zeitung, Stettin 52, p. 280)

This is the second specimen of the former species which is described by FAUST as variety of *Sm. albovariegatus* and named *bipunctatus*. We confer upon the status of the species to this taxon and stay the name ***Sm. bipunctatus*** FST. **(stat. nov).** It is the female, too, and labelled "Golden square/ male (it is FAUST's mistake) Nagpor, Hauser/bipunctatus Fst./Coll. J. Faust, Ankauf, 1900/Type" (MTD). It designated here as lectotype.
This species is closely related to *Sm. albovariegatus* FST. but differs from it by smaller size and the shape of the median lobe. It is noted only from India, months of collecting: January and October, host plant: *Striga* spec.

Smicronyx centropustulatus FAUST, 1891

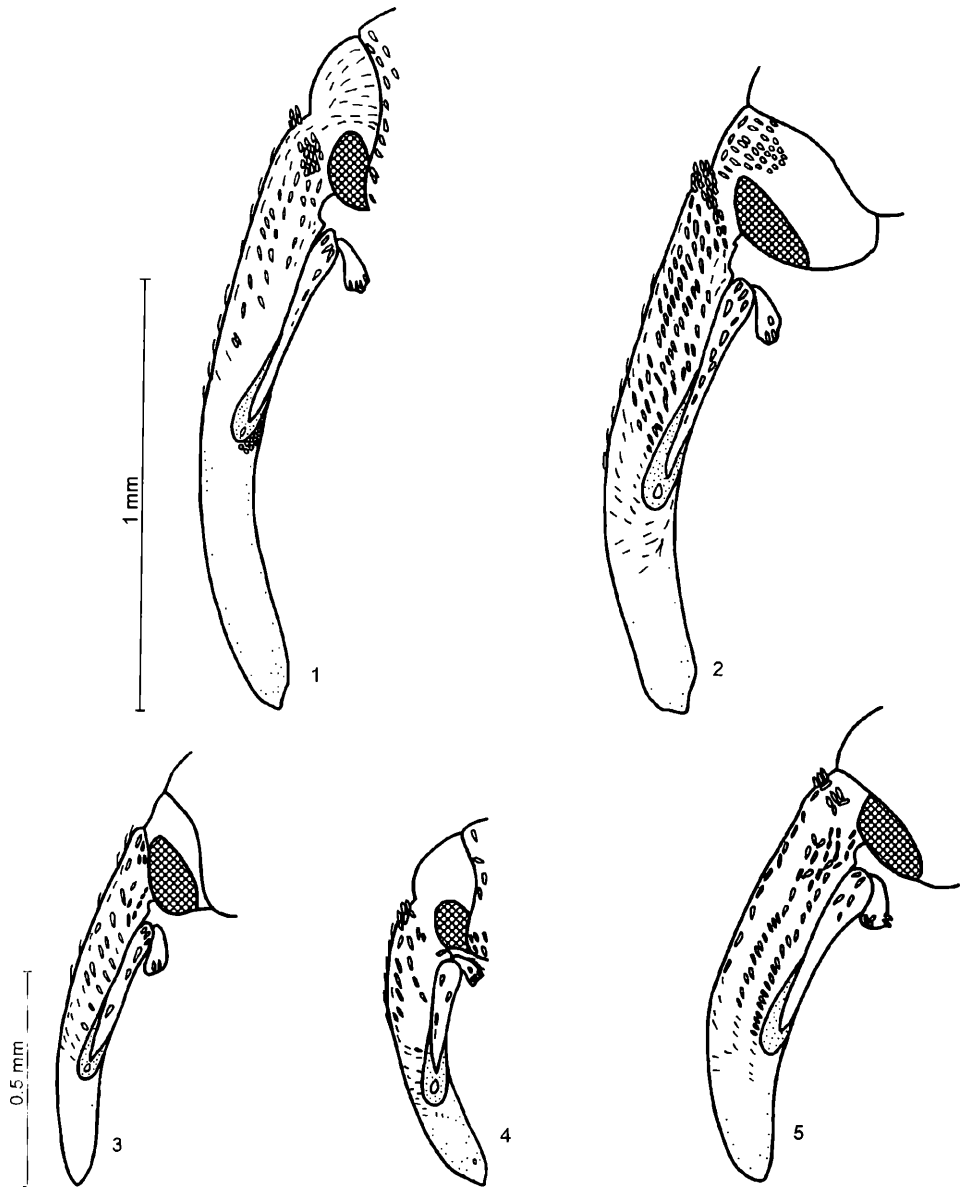
(Entom. Zeitung, Stettin 52, p. 281)

FAUST described this species from a single male from India. We examined this specimen and designated it here as lectotype. It is labelled "Golden square/male, Nagpore, Hauser/centropustulatus Fst./Coll. J. Faust, Ankauf 1900/Type" (MTD).
This species differs from other Oriental *Smicronyx* by the very curved rostrum in both sexes, elytral pattern and shape of median lobe. It is noted only from India, month of collecting: November, host plant unknown.

Smicronyx bituberculatus FAUST, 1898

(Dtsch. Ent. Zeitschr., p. 285)

This species was described by FAUST from single male from India. We examined this specimen and designated it here as lectotype. It is labelled "Golden square/Tarawady/bituberculatus Fst./Coll. J. Faust, Ankauf 1900/Type" (MTD).
By external morphology and median lobe this species is more related to Palaearctic *Sm. robustus* FST. but differs from it by colour of the vestiture and larger body size. It is noted from India and Thailand, months of collecting: April and November, host plant unknown.

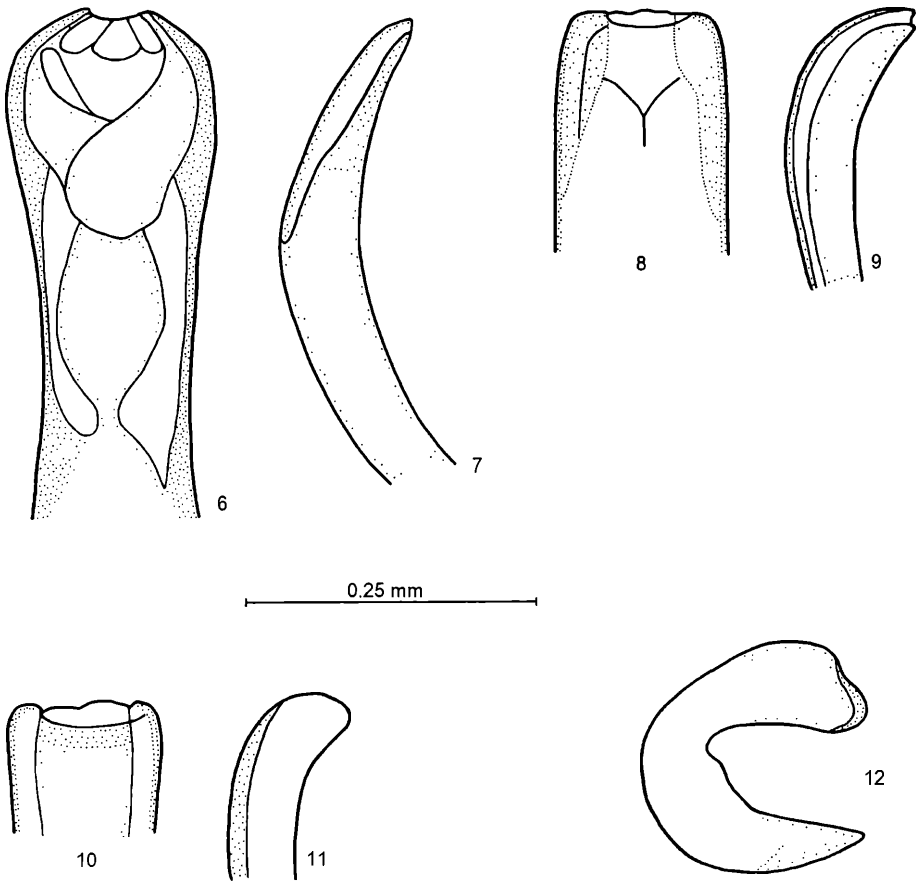


Figs. 1–5: Rostrum of *Smicronyx* species: 1 – *Sm. orientalis* spec. nov. (female); 2 – *Sm. orientalis* spec. nov. (male); 3 – *Sm. krausei* spec. nov. (male); 4 – *Sm. zherichini* spec. nov. (male); 5 – *Sm. longinotus* spec. nov. (male).

Smicronyx roridus MARSHALL, 1952

(An. Mag. Nat. Hist., Ser. 12, 5 (51), p. 267)
Sm. cuscutae MARSHALL, 1923 (Ann. Mag. Nat. Hist., Ser. 9, 12, p. 288)

We examined two cotypes (two males) of *Sm. roridus* MSHL. from the Natural History Museum, London (Coll. G.A.K. MARSHALL) and dissected one male. It is designated here as lectotype and



Figs. 6–11: Median lobe of *Smicronyx* species: 6–7 – *Sm. orientalis* spec. nov., 8–9: *Sm. longinotus* spec. nov.; 10–11: *Sm. zherichini* spec. nov. – Fig. 12: Spermatheca of *Sm. orientalis* spec. nov.

labelled "Pusa, Bihar, from galls on Cuscuta reflexa, III, 1921/G.A.K. Marshall coll., B.M. 1950–255/Smicronyx cuscutae Mshl., cotype/paratype" (MLo). Second male with the same data designated here as paralectotype (MLo.).
By comparison of this species with type material of ***Sm. balassogloi*** FAUST, 1885, we revealed that it is the same species **(syn. nov.).**
Besides India, *Sm. balassogloi* is widely distributed in the Caucasus and Central Asia. Month of collecting in India: March, in Palearctics: from April to August. Host plant is *Cuscuta reflexa.*

Smicronyx parafasciatus ANDERSON, 1974

(Proc. Entomol. Soc. Washington 76 (4), p. 368)

This species was described by D.M. ANDERSON from 52 specimens from Pakistan. We examined one male: paratype from U. S. National Museum of Natural History (Washington). It is a quite valid species. *Sm. parafasciatus* is closely related to *Sm. fasciatus* MOTSCH., for the more detailed description see ANDERSON (1974). Season of collecting in Pakistan: July to September, host plants in Pakistan: *Cuscuta planiflora, C. reflexa* var. *brachystigma, C. reflexa anguina* (ANDERSON, 1974). Besides Pakistan, this species is noted from India and Birma.

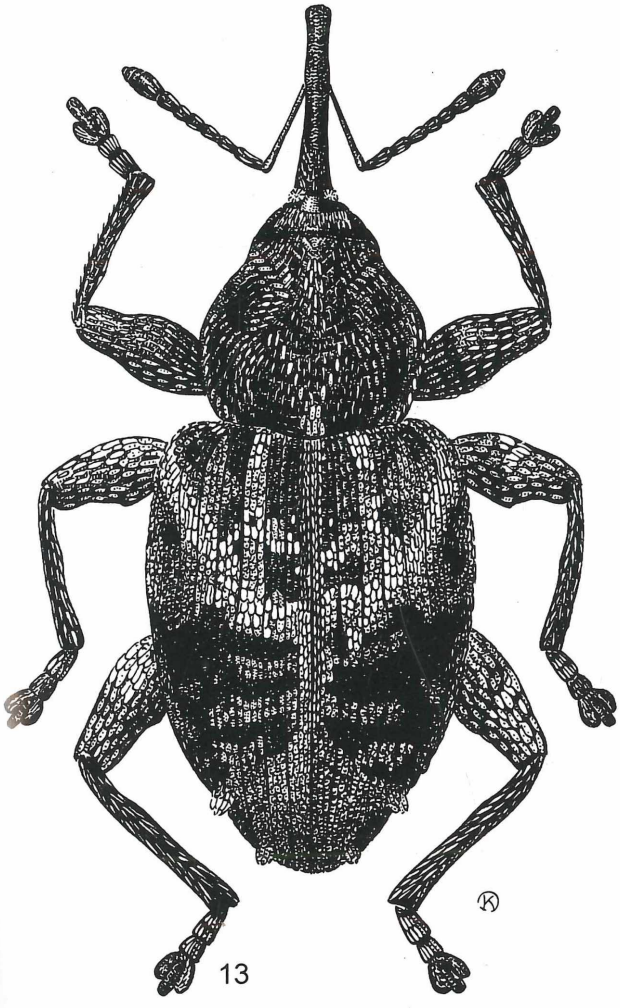


Fig. 13: *Sm. orientalis* spec. nov., habitus.

***Smicronyx orientalis* spec. nov.** (Fig. 13)

Type-material. Holotype: male (Viet-Nam, Ha-Nung, trop. forest, 11.11.1979, leg. L. MEDVEDEV) (CZh). Paratypes: 3 males, with the same data (CZh, IZMi); 1 male, 1 female (Viet-Nam, Son Lang, 1978, leg. L. MEDVEDEV) (CZh, IZMi); 1 male (Viet-Nam, M'Drak, E. of Banmethuot, 4–600 m, 8–19.12.60, C.M. YOSHIMOTO coll.) (MHo); 1 female (Viet-Nam, DiLinh (Djiring), 1200 m, 22–28.04.60, S. QUATE coll.) (MHo); 1 male (China, Hainan I., Ta Hian, 15.06.35, leg. J.L. GRESSITT) (MHo); 1 female (South China, Hainan Is., Tai-pin-ts'uan, Iam-Kahaung, Lai-mo-Ling (Mt. ran go), Kiung-shan Dist. 21–22.05.1935, Y.K. To leg.) (IZMi); 2 females (Thailand: Trang Prov., Khaophappha, Khaochang, 200–400 m, 13.01.1964, G.A. SAMUELSON coll.) (MHo); 3 females (India, Mt.Makiling, Laguna, Luzon, 11.01.31, G.C. LANDRERA coll.) (MLo, IZMi); 4 males (India, Mt. Makiling, Luzon, Baker) (SmI, IZMi); 1 female (India: Luzon, Camarines sur Mt.Isarog, Pili, 600 m, 5.04.1965, H.M. TORREVILLAS coll.) (MHo); 1 female (Ind. or., leg. RIBBA/Coll. J. FAUST, Ankauf, 1900) (MTD); 1 female (Java) (MLo).

Description. Body and appendages are fully black.
Rostrum elongate, slender and moderately curved in female (Fig. 1), sometimes almost straight, only weakly curved on apex. Males rostrum is more shorter and stouter, almost straight, only feebly curved on apex (Fig. 2). Head covered with brownish hair-like scales.
Prothorax broadly rounded at sides, distinctly narrowed near apex and basis, widest in middle, with long constriction at apex (Fig. 13). Surface of integument rugged, with strong transverse striae, covered with dark brown and light yellow scales. Yellow scales arranged in 3 length-ways bands.
Elytra (l/w: 1,4/1) feebly rounded at sides, gradually rounded behind, with prominent humeri, distinctly wider at base than prothorax, moderately convex. Each elytron with two small tubercles on apex (Fig. 13). Scaling of dorsum consists of black, yellow and white scales, which usually are arranged in Fig. 13. Striae are distinct.
Legs: All femora are strongly clavate, with large sharp tooth; protibiae with small obtuse tooth on inside near of basis and moderate mucro. Tarsal articles are of common structure.
Genitalia: see Figs. 6, 7, 12.
Length: 2,6–3,4 mm.
Sexual dimorphism: Female differs from male by rostrum more elongate rostrum and more polished before the antennal insertions (Figs. 1, 2). Moreover, female is of larger size on average.
Variability: Rostrum of the female more or less curved. Elytral pattern from uniformly black or brown to drawing as in Fig. 13. Sometimes, black spots at sides of elytra and white background sharply striped.

Biology. Months of collecting: January, April, May, June, November, December.

Distribution. South China, India, Thailand, Viet-Nam, Java.

Comparative notes. This species has no relatives among the described species, but clearly differs from the other ones by the elytral pattern (Fig. 13) and larger body size.

Etymology. The name refers to the region where this species inhabits.

Smicronyx longinotus spec. nov.

Type-material. Holotype: male (Ind. or., leg. Ribba/Coll. J. Faust, Ankauf 1900) (MTD).

Description. Integument black except the reddish brown legs.
Rostrum slender and feebly curved at apex (Fig. 5), bearing 1 median and 2 lateral carinae on dorsum, covered with long, brown scales before the antennal insertions. Head without scales.
Prothorax is barrel-like, rather longer than wide (l/w: 1,6/1), feebly rounded at sides and very slowly narrowed at apex and basis. Dorsal surface of the integument moderately punctulated. Scaling of the prothorax consists of lengthy white and brown scales. White scales forming the cross-like drawing on dorsum.
Elytra (l/w: 1,4/1) with prominent humeri, much wider at base than prothorax, somewhat convex and with almost parallel sides before $^1/_3$ from apex. Dorsal surface of the elytra covered with brown and whitish subelliptical scales, forming the irregular pattern. Only elytral interstria 1 in last half covered with bright white scales which form a length-ways band. Striae are distinct. Each elytron with small tubercle near apex.
Legs like one of *Sm. orientalis* spec. nov. and with large sharp tooth on femora, too. Tarsal articles of common structure.
Genitalia: median lobe see Figs. 8, 9.
Length: 2,5 mm.
Sexual dimorphism: Female unknown.

Biology. Month of collecting and host plant unknown.

Distribution. India orientale.

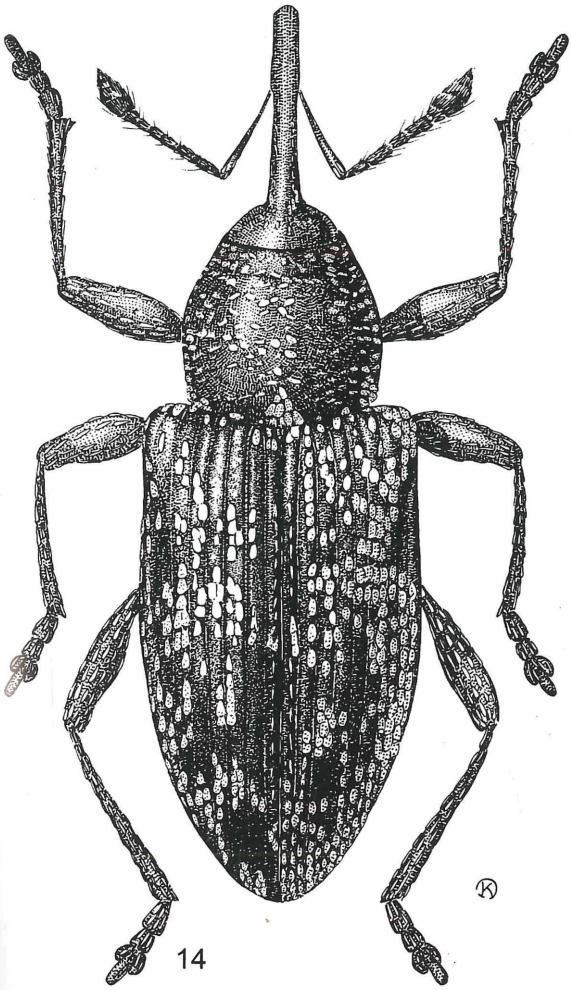


Fig. 14: *Sm. krausei* spec. nov., habitus.

Comparative notes. This species resembles to *Sm. orientalis* spec. nov. in shape of the body (excluding prothorax) but differs distinctly from the latter one by the pattern of the dorsal vestiture of elytra, the narrow and long prothorax and the shape of the median lobe.

Etymology. The name refers to the shape of the prothorax of this species.

***Smicronyx krausei* spec. nov.** (Fig. 14)

Type-material. Holotype: male (Birma, leg. Dohrn/Coll. J. Faust, Ankauf 1900) (MTD).

Description. Body and appendages fully red. Body very slender and elongate (l/w: 2,67/1) (Fig. 14). Rostrum slender and weakly curved, without carinae on dorsum (Fig. 3). Head with small, white scales near basis of rostrum.
Prothorax elongate and gradually narrowed to apex and basis, with weak constriction at the apex. Dorsal surface of the integument coarsely and closely punctulated and poorly covered by subelliptical white scales more dense near basis (Fig. 14).

Elytra (l/w: 1,8/1) with parallel sides almost to last $^3/_4$, with prominent humeri, distinctly wider at base than prothorax, weakly convex. Dorsum irregularly covered with subelliptical white scales arranged in spots and transverse bands.
Legs: Femora weakly clavate and without tooths. Tibiae and tarsal articles of common structure.
Genitalia: Unknown.
Length: 2,0 mm.
Sexual dimorphism: Unknown.

Biology. Month of collecting and host plant unknown.

Distribution. Birma.

Comparative notes. It differs from other Oriental *Smicronyx* species by the very elongate shape of body.

Etymology. We take the pleasure in naming this species after our colleague Dr. R. KRAUSE.

***Smicronyx zherichini* spec. nov.**

Type-material. Holotype: male, "Australia, N.T., Emily Gap ur 29. V. 1978, Alice Springs, A. Zakharov leg." (CZh). Paratype: 1 male with the same label, only data of collecting 5. VI. 1978 (IZMi).

Description. Integument of the rostrum, head, antennae, prothorax, tarsi, lowest part of the body and suture with 1–2 neighbouring interstriae are black. The remaining parts of the legs and elytra are reddish brown.
Rostrum stout and moderately curved (Fig. 4). Dorsal surface bear one median and four lateral carinae, covered with subelliptical white scales before the antennal insertions. The head is without vestiture.
Prothorax feebly rounded at sides, narrowed near apex and basis, widest in middle and with long constriction at the apex. Surface of the integument closely but not coarsely punctulated and covered with elongate white scales.
Elytra (l/w: 1,56/1) with prominent humeri, distinctly wider at base than prothorax, feebly convex, with parallel sides before $^1/_3$ from apex, covered with brown and white subelliptical scales and feebly pressed seta-like brown scales. White scales arranged in irregular spots and transverse bands.
Legs densely covered with elongate white scales. Femora moderately clavate, with small sharp tooth. Tibiae and tarsi of common structure.
Genitalia: median lobe see Figs. 10, 11.
Length: 1,9–2,0 mm.
Sexual dimorphism: Female unknown.

Biology. Months of collecting: May, June.

Distribution. Australia: Northern Territory.

Comparative notes. By the shape of rostrum and body this species likes to *Sm. balassogloi* FAUST but can be easily separated from it by the shape of median lobe and the vestiture of the body.

Etymology. *Sm. zherichini* is named in honour of our colleague Dr. VLADIMIR ZHERICHIN who helped us by interesting Smicronychini material.

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