

Two new species of micropterous Ectrichodiinae from Sichuan, China (Heteroptera: Reduviidae)

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Two new species of Ectrichodiinae from Sichuan, China are described from single females. Both new species, *Parascadra puetzi* sp. n. and *P. breuningi* sp. n., are micropterous. Until now, only macropterous and submacropterous species were known in the group of genera comprising *Scadra*, *Parascadra*, *Scadrana*, and *Neoscadra*.

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About 40 species of Ectrichodiinae were recorded from China, all macropterous or submacropterous. The two species described below are micropterous, at least their females. They are similar in appearance and coloration. Their generic assignment is not fully clear. In Cook's (1977) key, they run to couplet "13", which includes "macropterous" among the characters. Following the above key, one comes to the group comprising four genera: *Scadrana* Miller, *Scadra* Stel, *Neoscadra* Miller and *Parascadra* Miller. Both species definitely belong neither to *Scadrana* (in which the transverse sulcus of head is situated slightly anterior to the level of the posterior margin of eyes) nor to *Neoscadra* (in which there is a sulcus between the prongs of scutellum, and the postocular part of the head is of uniform width throughout), but the distinguishing between *Scadra* and *Parascadra* remains difficult. As both new species resemble *Parascadra nigra* Li, 1981 from Xizang in their body shape and coloration, we place them tentatively in the genus *Parascadra* Miller, 1954.

***Parascadra puetzi* sp. n.** (Figs 1, 3, 5, 6)

Holotype. ♀, **China**, Sichuan, Daxue Shan, Gongga Shan Mts, 2650 m, 30.V.1997, A. Pütz leg., kept at the Zoological Institute, St.Petersburg.

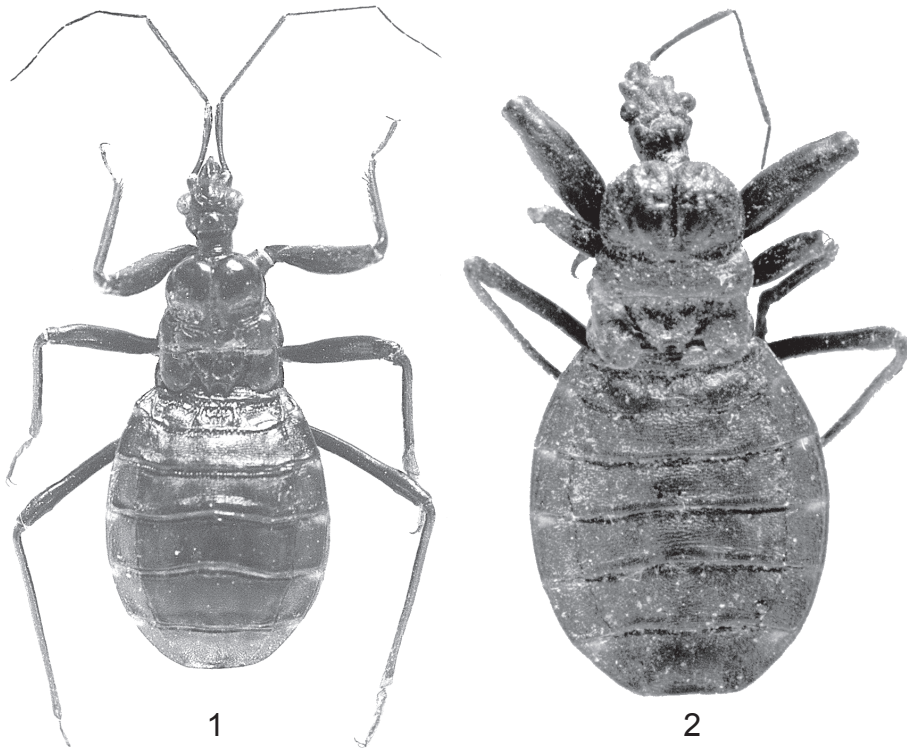
Description. Body 2.3 times as long as broad, with strongly dilated abdomen.

Coloration. Fuscous-black to black, with abdomen and ventral side of meso- and metathorax darker than the rest of body. Lateral areas of hind pronotal lobe, base and sides of corium, an-

tennae and tarsi yellowish to yellowish fuscous. Connexival segments III to VII with a yellow transverse spot in anterolateral corners.

Pubescence. Body glabrous; genital plates with a few short hairs along inner margins. Antennae with dense, oblique hairs subequal to or slightly longer than width of respective segments; basal two-thirds of 1st segment with sparse and somewhat longer hairs. Rostrum with a few hairs on 3rd and apex of 2nd segment. Hairs on the legs short, oblique. Fore and middle femora with denser hairs on ventral surface and sparse hairs in apical half of dorsal surface; hind femora with sparse hairs on swelling only. Tibiae with moderately dense hairs; their dorsal surfaces glabrous in basal two-thirds. Tarsi with dense hairs.

Structure. Head nearly horizontal. Length of head with neck 2.4 mm, of anteocular part 0.9 mm, of eye 0.55 mm, of postocular part 1.2 mm, of neck 0.45 mm. Width of head across eyes 1.6 mm, of vertex 0.7 mm, of postocular part 1.2 mm, of neck 0.7 mm. Clypeus with rounded upper margin (lateral view). Antenniferous tubercles simple, without plate-like sclerites. Transverse sulcus of head arched, situated just behind posterior margins of eyes. Lateral margins of postocular part subparallel in anterior half, converging in posterior half. Ocelli distinct; distance between them twice the diameter of one ocellus. Antennae slender; 3rd segment subdivided by constrictions into two and 4th segment into four "subsegments". Length of segments and subsegments (1-4): 1.8 mm, 2.45 mm, 2.1 mm (1.2 + 0.9), 2.0 mm (0.5 + 0.4 + 0.35 + 0.55). Rostrum stout, curved, reaching middle of fore coxae; length of segments (1-3): 1.2 mm, 0.8 mm, 0.4 mm.



Figs 1-2. *Parascadra*, habitus (photo). 1, *P. puetzi* sp. n.; 2, *P. breuningi* sp. n.

Pronotum trapezoid, with rounded fore corners, incised laterally between the lobes. Length of pronotum 2.3 mm, of fore lobe 1.3 mm, of hind lobe 1.0 mm; width of anterior lobe 2.3 mm, of posterior lobe 2.8 mm. Collar narrow, hardly visible perpendicularly from above, with rounded fore corners. Anterior lobe distinctly projecting above the level of posterior lobe, convex, even, polished, with a deep median sulcus, narrowly edged, with rounded lateral margins. Transverse suture of pronotum widely interrupted medially and thus not reaching the median sulcus, with about 10 crossing short furrows on each side. Posterior lobe on each side with polished lateral area separated from disc by longitudinal furrow. Disc of posterior lobe in basal half with median depression continuing the median sulcus of anterior lobe and becoming wider and shallower posteriorly; there are six transverse furrows in this depression. Fore half of posterior lobe between lateral furrows with four or five transverse, slightly oblique furrows on each side.

Scutellum trapezoid, with two acute prongs separated by a distance twice as long as width of one prong at its base. Sides with a small tubercle

before middle, lowered between tubercle and prong. Median furrow not reaching apex of scutellum, crossed by several transverse furrows.

Hemelytra as long as scutellum, not reaching hind margin of abdominal tergite I, rounded at apex; claval suture distinct; membrane vestigial, occupying inner third of hemelytral apex.

Fore and middle femora widest about in middle; ventral sides not sharp, with a row of minute tubercles. Hind femora swollen in apical fifth. All tibiae straight, without tubercles on ventral side. Fore and middle tibiae with a fossa spongiosa occupying about one-fifth of their length. Length and width of femora: fore 3.6 and 0.7 mm; middle 3.5 and 0.6 mm; hind 5.0 and 0.5 mm. Tibiae subequal in length to corresponding femora.

Abdomen moderately shining, strongly widened medially. Tergite II with two longitudinal ribs widened posteriorly and delimiting nearly square depression with coarse sculpture. Distance between ribs distinctly less than width of scutellum. Basal half of tergite lateral to ribs slightly depressed, with coarse sculpture. Hind margin of tergite II crenulate. Tergites II-VII with very fine, dense, irregular rugosity. Connexivum horizontal.

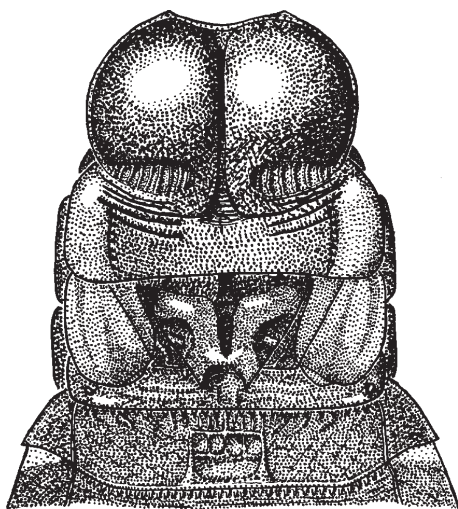


Fig. 3. *Parascadra puetzi* sp. n., pronotum and base of abdomen.

Body length 12 mm, width 5.1 mm.

Comparison. The species is similar to *P. nigra* Li known to us only from the original description (Li, 1981) based on a female from Xizang. *P. nigra* differs from the new species in the slightly more elongate body (2.55 times as long as wide), shorter antennae (1st and 2nd segment 1.38 and 1.94 mm, respectively), obtusangulate margins of anterior pronotal lobe and complete hemelytra although not reaching the apex of abdomen.

Etymology. The species is named after Andreas Pütz, Eisenhüttenstadt, Germany, who let to us an extensive collection of bugs from Sichuan, China.

***Parascadra breuningi* sp. n.**
(Figs 2, 4, 7)

Holotype. China, Sichuan, Ta-t sien-lu [= Kangding], St. Breuning ded., kept at the Zoological Institute, St. Petersburg.

Description. Body 2.2 times as long as broad, with strongly dilated abdomen.

Coloration. Fuscous-black to black; hind pronotal lobe fuscous; tarsi yellowish brown. Connexival segments III to VII dorsally with a yellow transverse spot in anterolateral corners; outer margins of these spots and most of the extreme outer margin of connexivum (lateral view!) reddish.

Pubescence. Body glabrous; genital plates with a few short hairs along inner margins. Antennae with dense, oblique hairs; hairs on 1st segment less than half as long as thickness of segment,

but covering it nearly entirely; hairs on 2nd segment from slightly shorter to slightly longer and on 3rd segment twice as long as thickness of respective segment. Rostrum with a few hairs on 3rd and apex of 2nd segment. Hairs on the legs very short and dense, nearly adpressed, covering almost entire surface of femora, tibiae, and tarsi.

Structure. Head nearly horizontal. Length of head with neck 3.2 mm, of anteocular part 1.3 mm, of eye 0.6 mm, of postocular part 0.8 mm, of neck 0.5 mm. Width of head across eyes 1.9 mm, of vertex 0.95 mm, of postocular part 1.4 mm, of neck 0.7 mm. Clypeus with upper margin forming an obtuse angle in basal third (lateral view). Antenniferous tubercles simple, without plate-like sclerites. Transverse sulcus of head arched, situated well behind posterior margins of eyes. Lateral margins of postocular part subparallel in anterior half, converging in posterior half. Ocelli distinct; distance between them twice the diameter of one ocellus. Antennae slender; nothing can be said about the subdivision of 3rd and 4th segments as the 3rd segment is broken and the 4th is missing from the holotype. Length of 1st and 2nd segments 2.4 and 3.0 mm, respectively. Rostrum stout, curved, reaching anterior margin of fore coxae; length of segments (1-3): 1.8 mm, 0.9 mm, 0.4 mm.

Pronotum nearly trapezoid, with subangulate fore corners and lateral margins of anterior lobe, slightly incised laterally between the lobes. Length of pronotum 3.2 mm, of fore lobe 2.1 mm, of hind lobe 1.1 mm; width of anterior lobe 3.3 mm, of posterior lobe 3.8 mm. Collar hardly visible from above, with angulate fore corners.

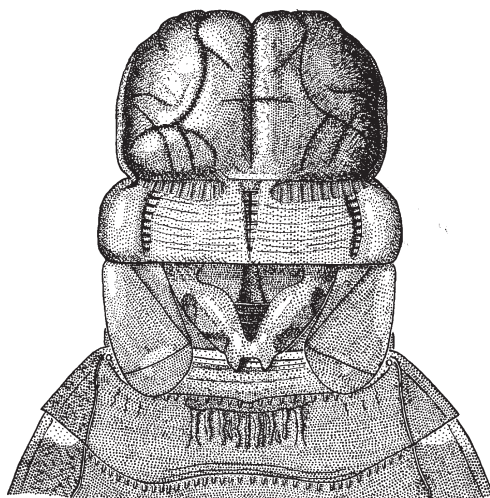
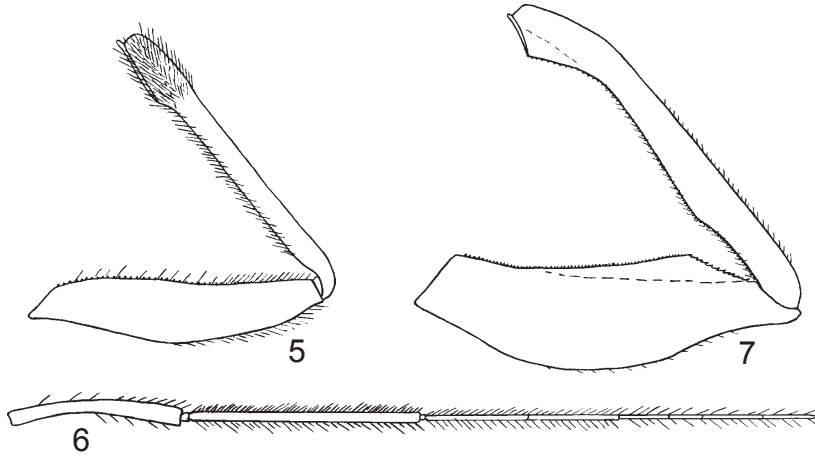


Fig. 4. *Parascadra breuningi* sp. n., pronotum and base of abdomen.



Figs 5-7. *Parascadra*. 5, 6, *P. puetzi* sp. n.: 5, fore femur and tibia; 6, antenna; 7, *P. breuningi* sp. n., fore femur and tibia.

Anterior lobe distinctly projecting above the level of posterior lobe, weakly convex, with uneven surface bearing irregular shallow furrows, moderately shining, with a deep median sulcus separated from the transverse suture by a thickened transverse ridge; lateral margins narrowly edged, subangulate in anterior half and subparallel in the most of posterior half. Transverse suture widely interrupted medially and thus not reaching the median sulcus, with several crossing short furrows on each side. Posterior lobe on each side with shining lateral area separated from disc by longitudinal furrow crossed by eight short transverse furrows. Disc of posterior lobe with percurrent, shallow, narrow median sulcus and fine transverse furrows.

Scutellum trapezoid, with two acute prongs separated by a distance 1.5 times as long as width of one prong at its base. Sides with obliterated tubercle near the middle, lowered between tubercle and prong. Median furrow not reaching apex of scutellum, crossed by several transverse furrows.

Hemelytra longer than scutellum, reaching hind margin of abdominal tergite I, rounded at apex; claval suture distinct; membrane rudimentary, but much larger than in *P. puetzi*, occupying inner 3/4 of hemelytral apex.

Fore femora strongly thickened, slightly curved, with flattened, sharp ventral sides bearing a row of minute tubercles. Fore tibiae curved apically; ventral sides slightly flattened in basal half, so that basal half of tibia is slightly dilated (lateral view); ventral margin of tibia with minute tubercles along the whole length. Middle femora moderately thickened; middle tibiae straight; both without tubercles on ventral margin. Fossa spongiosa small, occupying about 1/10 of length in fore and middle tibiae. Hind femora weakly swollen

apically. Length and width of femora: fore 4.5 and 1.3 mm; middle 4.0 and 0.9 mm; hind 5.5 and 0.6 mm. Fore and middle tibiae subequal in length to corresponding femora; hind tibiae 6.0 mm long.

Abdomen duller than in *P. puetzi*, strongly widened medially. Tergite II with two longitudinal ribs widened posteriorly and delimiting nearly square depression with coarse sculpture. Distance between ribs subequal to width of scutellum. Basal third of tergite lateral to ribs slightly depressed, with coarse sculpture. Hind margin of tergite II crenulate. Tergites II-VII with very fine, dense, irregular rugosity. Connexivum slightly raising laterally.

Body length 15.3 mm, width 7.0 mm.

Comparison. The new species is larger than *P. nigra* Li and *P. puetzi* sp. n., it differs from *P. nigra* also in the relatively broader body and shorter hemelytra. Distinctions from *P. puetzi* are numerous: angulate upper margin of clypeus, less shining and less convex anterior lobe of pronotum, longer hemelytra with larger rudiment of membrane, pubescence, shape and armament of fore and middle legs, etc.

Etymology. The species is named after the late German entomologist Stephan Breuning, who donated many Heteroptera from Sichuan to the collection of Zoological Institute, St. Petersburg.

References

- Cook, M.L. 1977. A key to the genera of Asian Ectrichodiinae (Hemiptera: Reduviidae) together with a check list of genera and species. *Oriental Insects*, **11**: 63-88.
- Li, J.J. 1981. New species of Hemiptera Heteroptera from Xizang, China. *Acta zootaxon. Sinica*, **6**: 191-198.

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