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**Six new species of micropterous *Atheta* and *Apimela* from
northern Yunnan, China
(Coleoptera: Staphylinidae, Aleocharinae)**

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A b s t r a c t : Five species of micropterous *Atheta* THOMSON and one of *Apimela* MULSANT & REY from northern Yunnan, China, are described and illustrated: *Atheta* (*Microdota*) *xueica* nov.sp., *A. (M.) dimorpha* nov.sp., *A. (M.) foliacea* nov.sp., *A. (M.) detruncata* nov.sp., *A. (M.) hastata* nov.sp. and *Apimela schuelkei* nov.sp.

K e y w o r d s : Coleoptera, Staphylinidae, Aleocharinae, *Atheta*, *Microdota*, *Apimela*, Palaearctic region, China, Yunnan, taxonomy, new species, endemism.

1. Introduction

In the Palaearctic region, high montane and alpine biotopes are inhabited by numerous more or less endemic Staphylinidae species of various groups, often characterised by adaptive reductions of eye size, elytral length, hind wings, and pigmentation. In the Western Palaearctic, the Athetini are represented in this species guild by genera such as *Geostiba* THOMSON (by far the most diverse genus), *Alpinia* BRUNDIN, *Bellatheta* ROUBAL (= *Emmelostiba* PACE), *Paraleptusa* PEYERIMHOFF, and *Cantaberella* PACE. In the Eastern Palaearctic, on the other hand, where *Geostiba* is represented by only a few species, the subgenus *Microdota* MULSANT & REY of the genus *Atheta* THOMSON may eventually turn out to be one of the athetine taxa with a substantial number of high-elevation endemics. This is suggested not only by the diversity of *Microdota* species in the somewhat better studied Nepalese Himalaya (see PACE 1990), but also by the increasing number of such species recently described from Chinese mountain ranges (ASSING 2002, 2004; PACE 1998, 1999a, 2004). Previously, some 60 *Microdota* species were recorded from China (including Taiwan) (ASSING 2002, 2004; PACE 1998, 2004; SMETANA 2004). At least three of them are micropterous: *A. puetzi* PACE (Shaanxi), *A. elisa* ASSING (Shaanxi), and *A. geostiboides* ASSING (northern Yunnan).

Species of the oxypodine genus *Apimela* MULSANT & REY are usually long-winged and generally occur in riparian habitats. A total of four species had become known from Chinese territory (SMETANA 2004).

Staphylinid material from northern Yunnan, recently collected and subsequently made available to me by Michael Schülke (Berlin), included several undescribed species of

Athetini and one of *Apimela*. All of them are micropterous and very likely to have restricted distributions. With one exception – a species with a very distinctive spermatheca – only those species that are represented by males (and females) are described below.

2. Material and measurements

The material referred to in this study is deposited in the following private collections:

OÖLL..... Oberösterreichisches Landesmuseum Linz (Biologiezentrum)

cAss..... author's private collection

cSch..... private collection M. Schülke, Berlin

Head length was measured from the anterior margin of the clypeus to the posterior margin of the head, elytral length at suture from the apex of the scutellum to the posterior margin of the elytra.

3. Descriptions of new species

Atheta (Microdota) xueica nov.sp. (Figs 1-13)

Holotype ♂: China: N-Yunnan [C2005-05], Diqing Tibet. Aut. Pref., Zhongdian Co., Xue Shan near lake 23 km S Zhongdian, 3895 m / 27°37.1'N, 99°38.5'E, devast. mixed forest, meadows, lake border, leaf litter, dead wood, sifted, 5.VI.2005, leg. M. Schülke [C2005-05] / Holotypus ♂ *Atheta xueica* sp. n. det. V. Assing 2006 (cAss). **Paratypes**: 8 exs.: same data as holotype (OÖLL, cSch, cAss); 5 exs.: same data as holotype, but "C2005-05A ... 6.VI.2005" (cSch, cAss); 1 ex.: China: N-Yunnan [C2005-06], Diqing Tibet. Aut. Pref., Deqin Co., Baima Shan, pass 25 km SE Deqin, 4225 m, / 28°19.38'N, 99°05.47'E, small creek valley, Rhododendron, Salix, leaf litter, moss, dead wood, sifted, 8.VI.2005, leg. M. Schülke [C2005-06] (cAss).

Description: 2.3-2.8 mm. Habitus as in Fig. 1. Coloration: body black; legs brown to dark brown, with the femora predominantly blackish; antennae blackish brown.

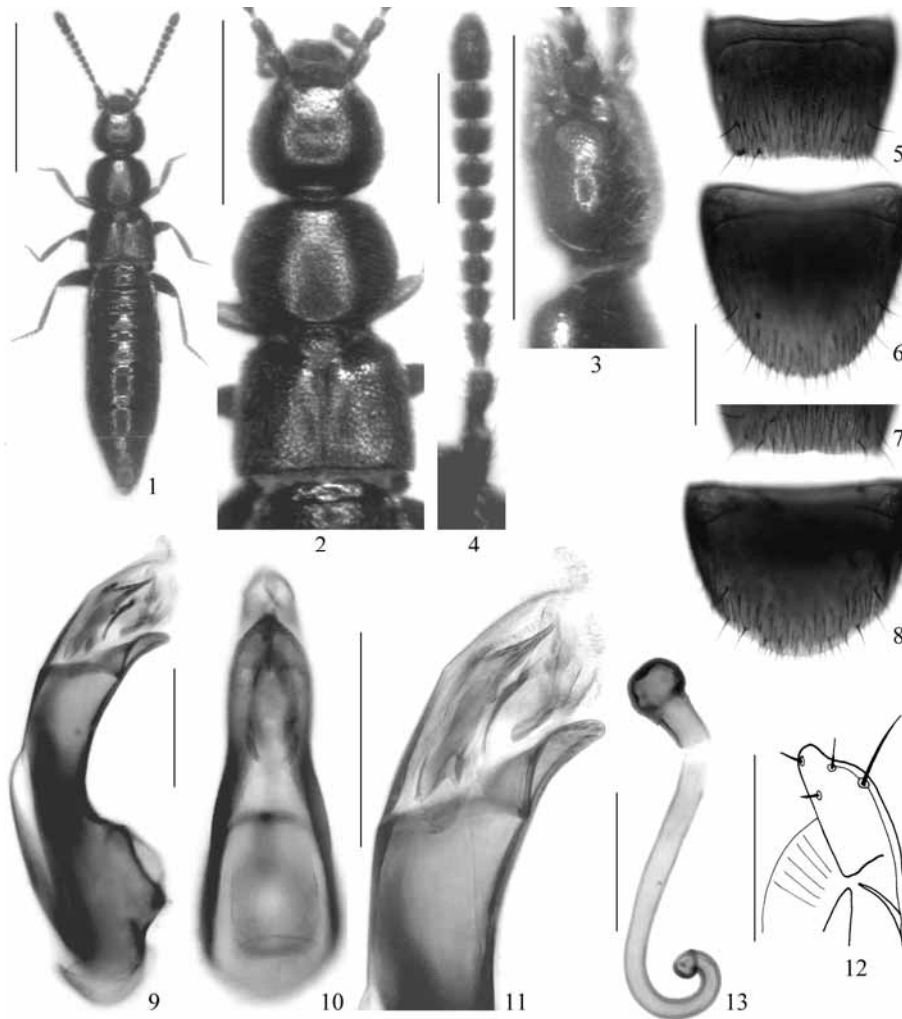
Head slightly wider than long (Fig. 2), somewhat wedge-shaped (i. e. widest near posterior angles); eyes moderately large (Fig. 3), weakly protruding from lateral outline of head, postocular region approximately 1.5 times as long as eyes; integument with distinct microreticulation and almost matt; puncturation moderately sparse, fine, and very shallow, barely noticeable in the microsculpture. Antenna distinctly incrassate apically (Fig. 4); antennomere III distinctly shorter than II; IV approximately as wide as long; V-X of increasing width and increasingly transverse; X approximately 1.5 times as wide as long.

Pronotum 1.25-1.30 times as wide as long and about 1.25 times as wide as head (Fig. 2); maximal width in anterior half; pubescence directed cephalad along midline; puncturation and microsculpture similar to those of head.

Elytra about as wide and approximately 0.7 times as long as pronotum (Fig. 2); microreticulation pronounced, puncturation denser and slightly more distinct than that of head and pronotum. Hind wings reduced.

Abdomen slightly wider than elytra, maximal width at segments V/VI (Fig. 1); puncturation fine, sparser on posterior than on anterior tergites; microreticulation distinct; posterior margin of tergite VII with palisade fringe.

♂: head and pronotum unmodified; posterior margin of tergite VIII weakly concave in the middle (Fig. 5); sternite VIII much longer than tergite VIII, its posterior margin strongly convex (Fig. 6); median lobe of aedeagus rather long and slender (Figs 9-11); apical lobe of paramere shaped as in Fig. 12, with one moderately long and three short setae.



Figs 1-13: *Atheta xueica*: (1) habitus; (2) forebody; (3) head in lateral view; (4) antenna; (5) ♂ tergite VIII; (6) ♂ sternite VIII; (7) posterior margin of ♀ tergite VIII; (8) ♀ sternite VIII; (9-10) median lobe of aedeagus in lateral and in ventral view; (11) apex of median lobe of aedeagus in ventral view; (12) apical lobe of paramere; (13) spermatheca. Scale bars: 1: 1.0 mm; 2-3: 0.5 mm; 4-8: 0.2 mm; 9-13: 0.1 mm.

♀: tergite VIII similar to that of ♂ (Fig. 7); sternite VIII only slightly longer than tergite VIII, with moderately concave posterior margin (Fig. 8) and rather weakly modified marginal setae; spermatheca with long and slender duct (Fig. 13).

E t y m o l o g y : The name (adj.) is derived from the one of the mountain ranges where the species was discovered.

C o m p a r a t i v e n o t e s : From the other three micropterous *Microdota* species, *A. xueica* is easily separated especially by the distinctive primary and secondary sexual characters, particularly the slender median lobe of the aedeagus and the long duct of the spermatheca. In addition, it is characterised by the dark coloration and the pronounced microreticulation. For illustrations of the genitalia of the other micropterous species see the figures in ASSING (2002, 2004) and PACE (1999a).

D i s t r i b u t i o n a n d b i o n o m i c s : The type localities are situated in Zhongdian and Deqin Counties in northern Yunnan. The specimens were sifted from debris in mixed forests at altitudes of 3895 and 4225 m. The locality in the Xue Shan is illustrated in ASSING (2006: Fig. 20).

***Atheta (Microdota) foliacea nov.sp.* (Figs 14-26)**

H o l o t y p e ♂: China: N-Yunnan [C2005-05], Diqing Tibet. Aut. Pref., Zhongdian Co., Xue Shan near lake 23 km S Zhongdian, 3895 m / 27°37.1'N, 99°38.5'E, devast. mixed forest, meadows, lake border, leaf litter, dead wood, sifted, 5.VI.2005, leg. M. Schülke [C2005-05] / Holotypus ♂ *Atheta foliacea* sp. n. det. V. Assing 2006 (cAss). **P a r a t y p e s :** 5 exs.: same data as holotype (cSch, cAss).

D e s c r i p t i o n : 2.4-2.9 mm. Habitus as in Fig. 14. Coloration: head brown to blackish brown; pronotum and elytra brown to dark brown; abdomen blackish brown, with the apex slightly paler; legs light brown; antennae brown, with the basal 3-4 antennomeres yellowish to yellowish brown.

Head, with sexual dimorphism, slightly wider than long, of suborbicular shape (Fig. 15); eyes very small, composed of only approximately 10 ommatidia (Fig. 16), not protruding from lateral outline of head, less than 1/4 the length of postocular region in dorsal view; integument with distinct microreticulation and almost matt; puncturation sparse, fine, and very shallow, barely noticeable in the microsculpture. Antenna distinctly incrassate apically (Fig. 17); antennomere III distinctly shorter than II; IV weakly transverse; V-X of increasing width and increasingly transverse; X approximately twice as wide as long.

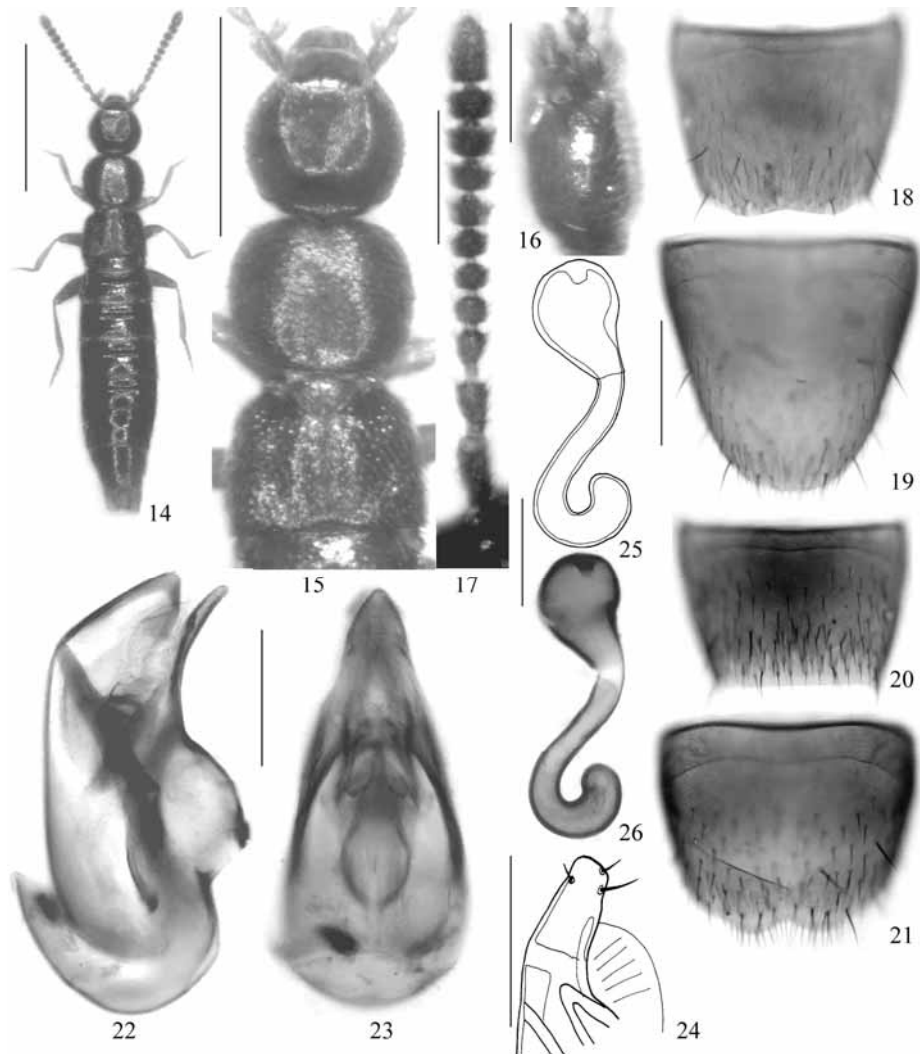
Pronotum, with sexual dimorphism, 1.15-1.20 times as wide as long and approximately 1.15 times as wide as head (Fig. 15); maximal width in anterior half; pubescence of midline directed cephalad in anterior half and caudad in posterior half; puncturation and microsculpture similar to those of head.

Elytra with sexual dimorphism, 1.05-1.10 times as wide and at suture less than 0.6 times as long as pronotum (Fig. 15); microreticulation pronounced, puncturation denser and slightly more distinct than that of head and pronotum. Hind wings reduced.

Abdomen slightly (1.10-1.15 x) wider than elytra, maximal width at segments V/VI (Fig. 14); puncturation fine, much sparser on posterior than on anterior tergites; microreticulation distinct; posterior margin of tergite VII with very narrow rudiment of a palisade fringe.

♂: head and pronotum with extensive median impressions (Fig. 15); elytra on either side of suture somewhat elevated (Fig. 15); posterior margin of tergite VIII broadly concave

in the middle (Fig. 18); sternite VIII much longer than tergite VIII, its posterior margin strongly convex (Fig. 19); median lobe of aedeagus with thin, blade-like ventral process (Figs 22-23); apical lobe of paramere shaped as in Fig. 24, with three relatively short setae.



Figs 14-26: *Atheta foliacea*: (14) ♂ habitus; (15) ♂ forebody; (16) head in lateral view; (17) antenna; (18) ♂ tergite VIII; (19) ♂ sternite VIII; (20) ♀ tergite VIII; (21) ♀ sternite VIII; (22-23) median lobe of aedeagus in lateral and in ventral view; (24) apical lobe of paramere; (25-26) spermatheca. Scale bars: 14: 1.0 mm; 15: 0.5 mm; 16-21: 0.2 mm; 22-26: 0.1 mm.

♀: head and pronotum without or with very indistinct impressions; elytra not distinctly elevated on either side of suture; tergite VIII similar to that of ♂ (Fig. 20); sternite VIII longer than tergite VIII, its posterior margin in the middle distinctly concave and with distinctly modified marginal setae (Fig. 21); spermatheca as in Figs 25-26.

E t y m o l o g y : The name (Lat., adj.: shaped like a leaf) refers to the thin ventral process of the aedeagus.

C o m p a r a t i v e n o t e s : Based on the modifications of the male head and pronotum, as well as on the morphology of the aedeagus, *A. foliacea* is very closely related to *A. elisa* from the Daba Shan in Shaanxi. From this species, *A. foliacea* is distinguished especially by the darker coloration of the forebody, the less pronounced impressions on the male head and pronotum, the modified male elytra, the different shapes of tergite and sternite VIII in both sexes, the more evenly curved (lateral view), broader and apically less acute (ventral view) ventral process of the aedeagus, as well as by the slightly differently shaped spermatheca. For illustrations of the sexual characters of *A. elisa* see ASSING (2002). From the syntopic *A. xueica*, *A. foliacea* is readily separated by much paler coloration of the forebody and the appendages, by the more transverse antennomeres IV-X, the much smaller eyes, the subcircular head shape, the sexual dimorphism of head, pronotum, and elytra, the smaller and less transverse pronotum, the distinctly shorter elytra, the narrow rudiment of a palisade fringe at the posterior margin of tergite VII, the different shapes of tergite and sternite VIII in both sexes, as well as by the completely different morphology of the primary sexual characters; for comparison see Figs 1-14.

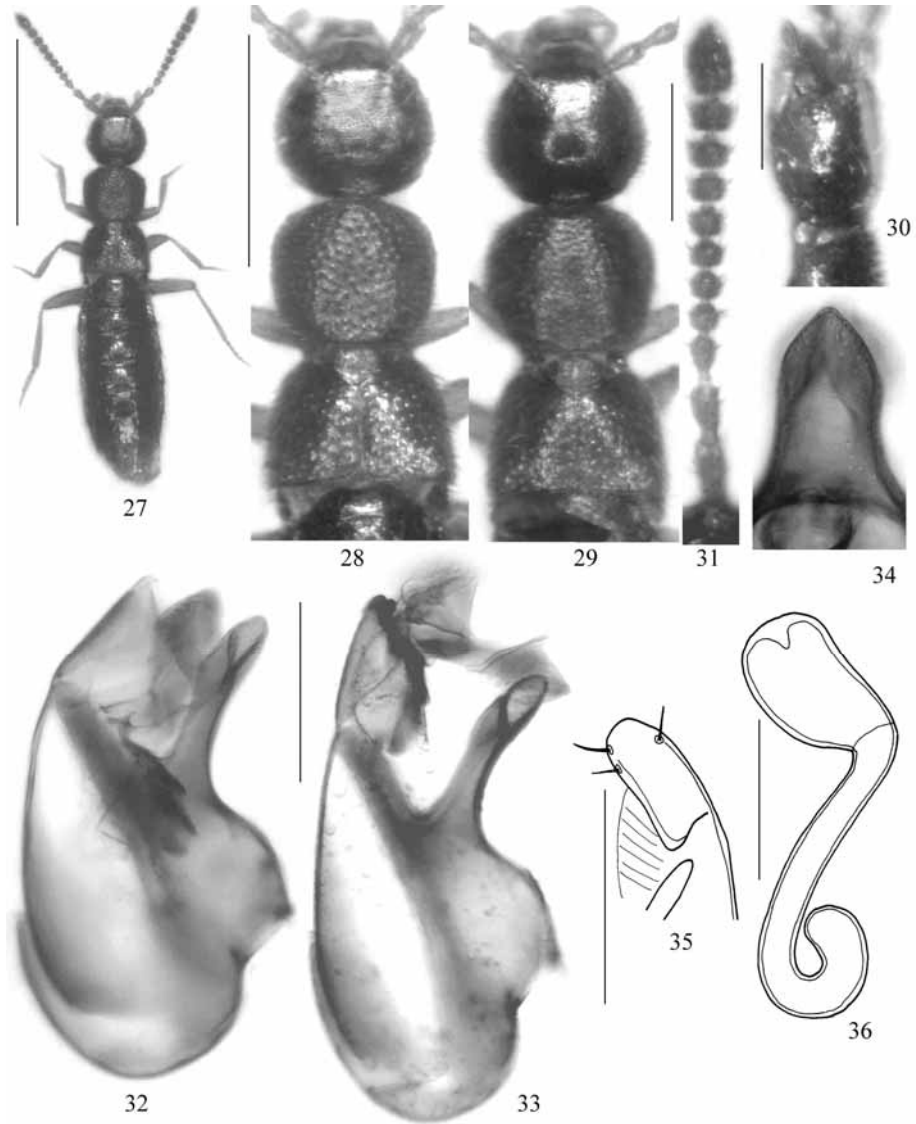
D i s t r i b u t i o n a n d b i o n o m i c s : The type locality is situated in the Xue Shan in northern Yunnan; for an illustration see ASSING (2006: Fig. 20). The specimens were sifted from the forest floor in a mixed forest at an altitude of approximately 3900 m.

Atheta (Microdota) dimorpha nov.sp. (Figs 27-36, 45-48)

H o l o t y p e ♂: China: N-Yunnan [C2005-08], Diqing Tibet. Aut. Pref., Deqin Co., Baima Shan, E-side, pass 12 km SE Deqin, 4085 m / 28°23.86'N, 98°59.04'E, small creek valley, Rhododendron, Salix, leaf litter, moss, dead wood, sifted, 10.VI.2005, leg. M. Schülke [C2005-08] / Holotypus ♂ *Atheta dimorpha* sp. n. det. V. Assing 2006 (cAss). **P a r a t y p e s :** 6 exs.: same data as holotype (cSch, cAss); 3 exs.: China: N-Yunnan [C2005-06], Diqing Tibet. Aut. Pref., Deqin Co., Baima Shan, pass 25 km SE Deqin, 4225 m, / 28°19.38'N, 99°05.47'E, small creek valley, Rhododendron, Salix, leaf litter, moss, dead wood, sifted, 8.VI.2005, leg. M. Schülke [C2005-06] (cSch, cAss); 1 ex.: China: N-Yunnan [C2005-07], Diqing Tibet. Aut. Pref., Deqin Co., Meili Xue Shan, E-side, 12 km SW Deqin, 2890 m, 28°25.30'N, 98°48.47'E / small creek valley, mixed forest with bamboo, leaf litter, moss, dead wood, sifted, 9.VI.2005, leg. M. Schülke [C2005-07] (cSch).

D e s c r i p t i o n : 2.1-2.6 mm. Habitus as in Fig. 27. Coloration: head and pronotum brown to blackish brown, with the head usually slightly darker than pronotum; elytra brown; abdomen blackish brown, with the apex (posterior margin of segment VII, segments VIII-X) distinctly paler, yellowish; legs yellowish brown; antennae dark brown, with the basal 3-4 antennomeres yellowish to yellowish brown.

♀: head not depressed; pronotum with weaker microsculpture and with very fine puncturation (Fig. 29); posterior margin of tergite VII more weakly concave; tergite VIII with almost truncate posterior margin (Fig. 47); sternite VIII slightly longer than tergite VIII, its posterior margin in the middle weakly concave and with long modified marginal setae (Fig. 48); spermatheca as in Fig. 36.



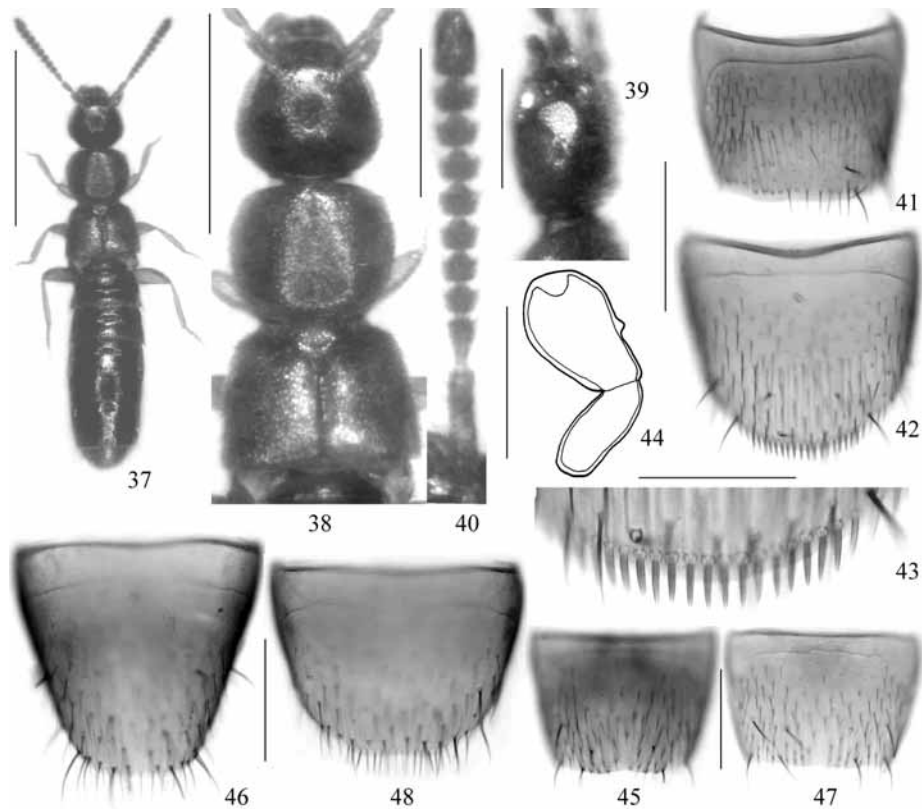
Figs 27-36: *Atheta dimorpha*: (27) ♂ habitus; (28) ♂ forebody; (29) ♀ forebody; (30) head in lateral view; (31) antenna; (32-33) median lobe of aedeagus in lateral view; (34) ventral process of median lobe of aedeagus in ventral view; (35) apical lobe of paramere; (36) spermatheca. Scale bars: 27: 1.0 mm; 28-29: 0.5 mm; 30-31: 0.2 mm; 32-36: 0.1 mm.

E t y m o l o g y : The name (adj.) refers to the pronounced sexual dimorphism, especially of the pronotum.

C o m p a r a t i v e n o t e s : The species is readily distinguished from all other Chinese representatives by the remarkably small (in relation to head) and weakly trans-

verse pronotum, by the conspicuous puncturation and microsculpture of the male pronotum, as well as by the primary sexual characters.

Distribution and bionomics: The localities are situated in the Baima Shan and the Meili Xue Shan in Deqin County, northern Yunnan. The specimens were sifted from the forest floor in mixed forests at altitudes of 2890-4225 m.



Figs 37-48: *Atheta detruncata* (37-44) and *A. dimorpha* (45-48): (37) ♀ habitus; (38) ♀ forebody; (39) head in lateral view; (40) antenna; (41, 47) ♀ tergite VIII; (42, 48) ♀ sternite VIII; (43) posterior margin of ♀ sternite VIII; (44) spermatheca; (45) ♂ tergite VIII; (46) ♂ sternite VIII. Scale bars: 37: 1.0 mm; 38: 0.5 mm; 39-42, 45-48: 0.2 mm; 43-44: 0.1 mm.

***Atheta (Microdota) detruncata* nov.sp.** (Figs 37-44)

Holotype ♀: China: N-Yunnan [C2005-12A], Nujiang Lisu Aut. Pref., Gongshan Co., Gaoligong Shan, 2500 m, 27°45.404'N, 98°35.749'E / litter and debris [sic] around snow sifted, 21.VI.2005, M. Schülke / Holotypus ♀ *Atheta detruncata* sp. n. det. V. Assing 2006 (cAss). **Paratypes:** 2 ♀♀: same data as holotype (cSch).

Description: 2.3-2.6 mm. Habitus as in Fig. 37. Coloration: head brown to dark brown, at least slightly darker than pronotum; pronotum and elytra brown; abdomen blackish, with segments III-IV slightly paler and segments VIII-X light brown; legs yel-

lowish; antennae dark brown, with the basal 3-4 antennomeres yellowish to yellowish brown.

Head somewhat wedge-shaped, weakly transverse (Fig. 38); eyes moderately large (Fig. 39), slightly shorter than postocular region and weakly protruding from lateral outline of head in dorsal view; integument with distinct microreticulation; puncturation moderately dense, extremely fine, barely noticeable. Antenna distinctly incrassate apically (Fig. 40); antennomere III slightly shorter than II; IV weakly transverse; V-X of increasing width and increasingly transverse; X approximately twice as wide as long.

Pronotum about 1.2 times as wide as long and approximately 1.1 times as wide as head (Fig. 38); maximal width in anterior half; pubescence of midline directed cephalad in anterior half and apparently (not clearly visible in the three specimens available) caudad in posterior half; microsculpture and puncturation similar to those of head.

Elytra slightly wider than and at suture approximately 0.7 times as long as pronotum (Fig. 38); microreticulation less distinct than that of head and pronotum; puncturation fine, but more distinct and denser than that of head and pronotum. Hind wings reduced.

Abdomen approximately as wide as or slightly wider than elytra, maximal width at segments V/VI (Fig. 37); puncturation fine, moderately dense on anterior and sparse on posterior tergites; microreticulation distinct, but shallow; posterior margin of tergite VII with narrow palisade fringe.

♂: unknown.

♀: tergite VIII with almost truncate posterior margin (Fig. 41); sternite VIII somewhat longer than tergite VIII, its posterior margin distinctly convex and with row of distinctly modified setae (Figs 42-43); spermatheca with very short duct (Fig. 44).

E t y m o l o g y : The name (Lat., adj.) alludes to the short spermathecal duct.

C o m p a r a t i v e n o t e s : The species is readily distinguished from all other micropterous Chinese representatives of the subgenus by the shape of the spermatheca and by the shape and chaetotaxy of the female sternite VIII, from most species also by the larger eyes. The only *Microdota* species from China with a similarly short spermathecal duct are *Atheta kadoorium* PACE from Hong Kong and *A. yanensis* PACE from Beijing. Apart from their longer and larger elytra and longer hind wings, they are separated from *A. detruncata* also by distinctly smaller size, as well as by their larger (*A. kadoorium*) or smaller (*A. yanensis*) eyes and by the shape of the spermatheca. For illustrations of the habitus and the sexual characters of *A. kadoorium* and *A. yanensis* see PACE (1998).

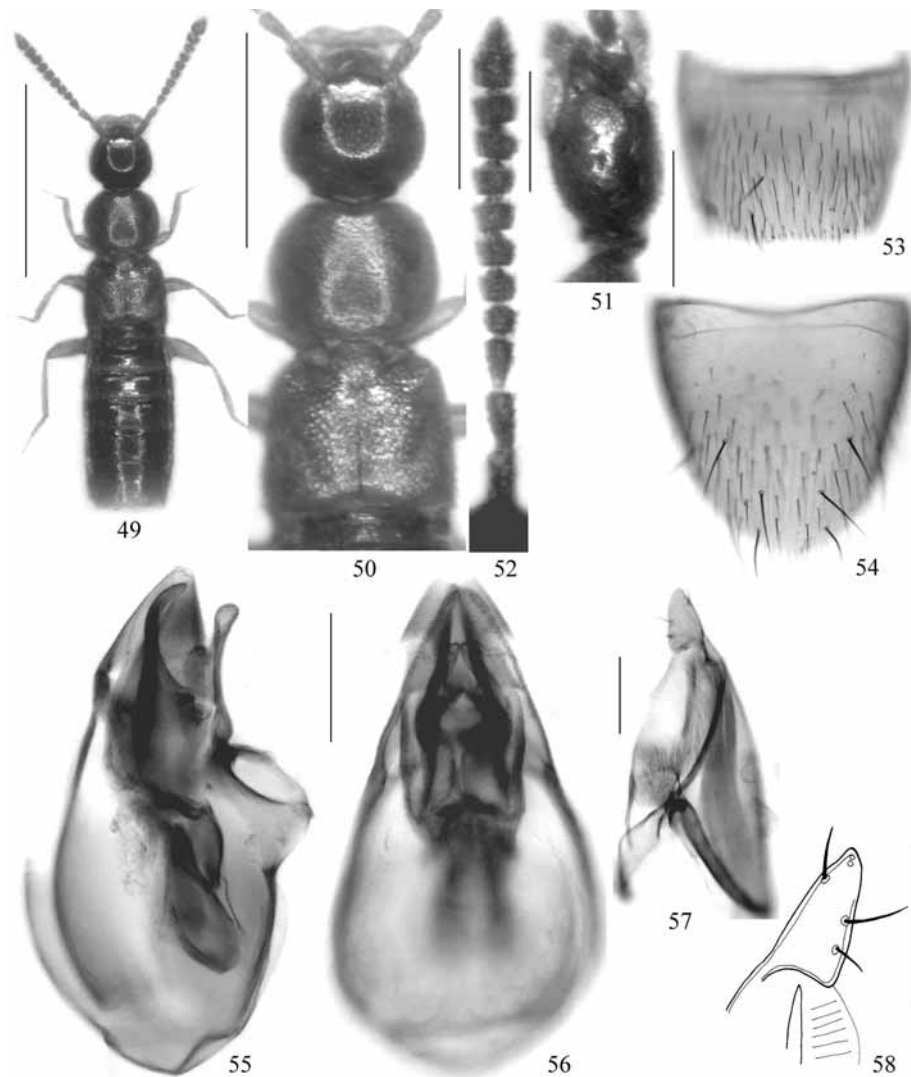
D i s t r i b u t i o n a n d b i o n o m i c s : The species is currently known only from one locality in the Gaoligong Shan, northern Yunnan, where the types were sifted near snow at an altitude of 2500 m. The type locality is illustrated in ASSING (in press: Fig. 40).

Atheta (Microdota) hastata nov.sp. (Figs 49-58)

Holotype ♂: CHINA: N-Yunnan [C2005-09], Diqing Tibet. Aut. Pref., Deqin Co., Meili Xue Shan, E-side, 14 km E Deqin, 2580 m / 28°27.47'N, 98°46.35'E, creek valley below glacier, mixed forest, leaf litter, moss, dead wood, sifted, 11.VI.2005, M. Schülke [C2005-09] / Holotypus ♂ *Atheta hastata* sp. n. det. V. Assing 2006 (cAss).

D e s c r i p t i o n : 2.3 mm. Habitus as in Fig. 49. Coloration: head dark brown, darker

than pronotum; pronotum and elytra brown; abdomen blackish, with the posterior half of segment VII and segments VIII-X yellowish brown; legs yellowish; antennae reddish brown, with the basal 3 antennomeres only indistinctly paler.



Figs 49-58: *Atheta hastata*: (49) ♂ habitus; (50) ♂ forebody; (51) head in lateral view; (52) antenna; (53) ♂ tergite VIII; (54) ♂ sternite VIII; (55-56) median lobe of aedeagus in lateral and in ventral view; (57) – paramere; (58) apical lobe of paramere. Scale bars: 49: 1.0 mm; 50: 0.5 mm; 51-54: 0.2 mm; 55-58: 0.1 mm.

Head indistinctly wedge-shaped, weakly transverse (Fig. 50); eyes rather small (Fig. 51), approximately half the length of postocular region and weakly protruding from lateral

outline of head in dorsal view; integument with shallow microreticulation; puncturation moderately dense, extremely fine, barely noticeable. Antenna distinctly incrassate apically (Fig. 52); antennomere III somewhat shorter than II; IV weakly transverse; V-X of increasing width and increasingly transverse; X almost twice as wide as long.

Pronotum about 1.25 times as wide as long and approximately 1.2 times as wide as head (Fig. 50); maximal width in anterior half; pubescence of midline of uncertain condition (rubbed off in holotype); microsculpture and puncturation similar to those of head.

Elytra slightly wider than and at suture approximately 0.75 times as long as pronotum (Fig. 50); each elytron with shallow diagonal impression extending from humeral angle almost to sutural angle; microreticulation less distinct than that of head and pronotum; puncturation fine, but more distinct and denser than that of head and pronotum. Hind wings reduced.

Abdomen slightly wider than elytra, maximal width at segment V (Fig. 49); puncturation very fine, moderately sparse on anterior and very sparse on posterior tergites; microreticulation distinct, but shallow; posterior margin of tergite VII with narrow palisade fringe.

♂: posterior margin of tergite VIII weakly concave in the middle (Fig. 53); sternite VIII much longer than tergite VIII, posteriorly almost pointed (Fig. 54); median lobe of aedeagus of distinctive shape (Figs 55-56), internal sac apically with long hook-shaped structures; paramere with apical lobe of distinctive shape (Figs 57-58).

♀: unknown.

E t y m o l o g y : The name (Lat., adj.: armed with a spear) alludes to the spear-shaped apical lobe of the paramere.

C o m p a r a t i v e n o t e s : The species is separated from other micropterous *Microdota* species occurring in China especially by the morphology of the median lobe of the aedeagus and by the spear-shaped apical lobe of the paramere. From *A. detruncata*, whose male sexual characters are unknown, it is distinguished by the paler (apically not infusate) and longer antennae, the distinctly smaller eyes, the less distinctly wedge-shaped head, the larger pronotum, and the apically more extensively yellowish tergite VII.

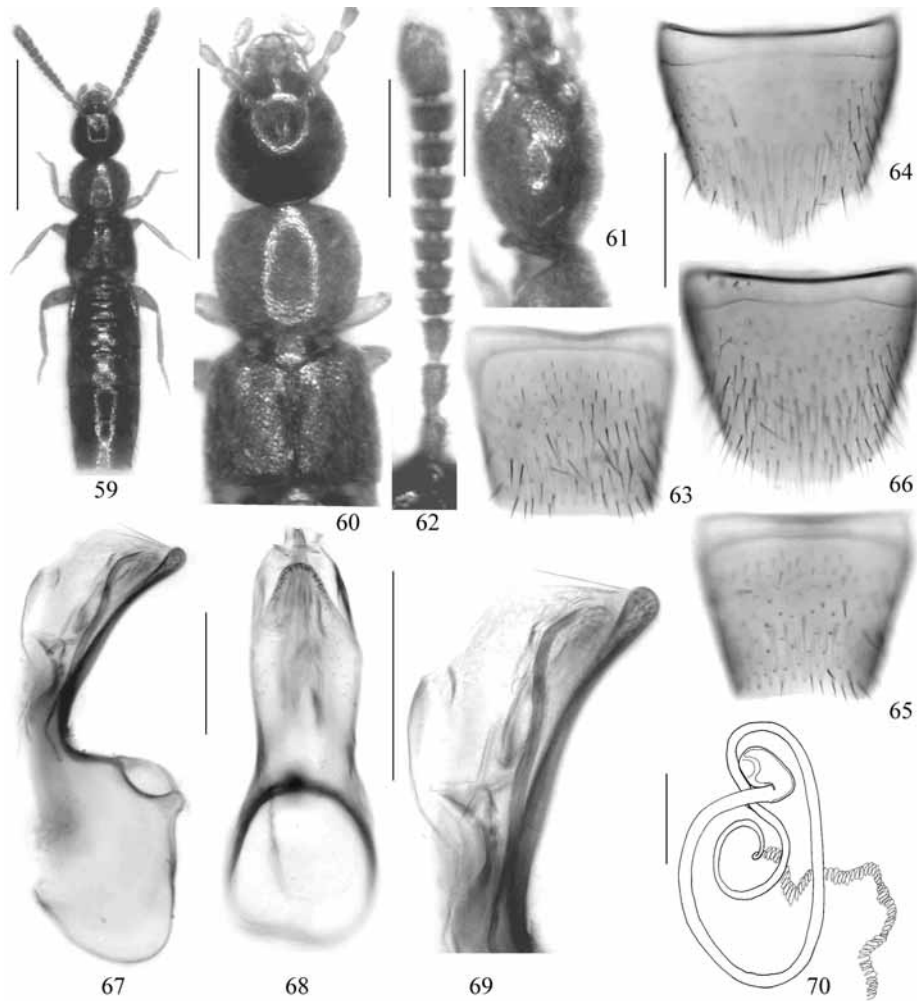
D i s t r i b u t i o n a n d b i o n o m i c s : The species is known from one locality in the Meili Xue Shan, northern Yunnan, where the holotype was sifted from the forest floor of a mixed forest at an altitude of almost 2600 m. The type locality is illustrated by ASSING (in press: Fig. 52).

***Apimela schuelkei* nov.sp. (Figs 59-70)**

Holotype ♂: China: N-Yunnan [C2005-12A], Nujiang Lisu Aut. Pref., Gongshan Co., Gaoligong Shan, 2500 m, 27°45.404'N, 98°35.749'E / litter and debris [sic] around snow sifted, 21.VI.2005, M. Schülke / Holotypus ♂ *Apimela schuelkei* sp. n. det. V. Assing 2006 (cAss). **Paratypes:** 2♂♂: same data as holotype (cSch, cAss); 1♂, 1♀: China: N-Yunnan [C2005-13], Nujiang Lisu Aut. Pref., Gongshan Co., Gaoligong Shan, above "ranger station" / 27°47.65'N, 98°35.41'E, 2000 m, broadleaved forest remnant, litter & moss sifted, 19.VI.2005, M. Schülke (cSch).

D e s c r i p t i o n : 2.2-2.9 mm. Habitus as in Fig. 59. Coloration: body rufous, with the head sometimes slightly darker; legs yellowish; antennae rufous with the basal 3 antennomeres paler.

Head approximately as wide as long (Fig. 60); eyes moderately large (Fig. 61), weakly protruding from lateral outline of head; postocular region approximately 1.5 times as long as eyes in dorsal view; integument with shallow microsculpture and somewhat shiny; puncturation dense and fine. Antenna distinctly incrassate apically (Fig. 62); antennomere III somewhat shorter than II; IV transverse; V-X of increasing width and increasingly transverse; X approximately twice as wide as long.



Figs 59-70: *Apimela schuelkei*: (59) habitus; (60) forebody; (61) head in lateral view; (62) antenna; (63) ♂ tergite VIII; (64) ♂ sternite VIII; (65) ♀ tergite VIII; (66) ♀ sternite VIII; (67-68) median lobe of aedeagus in lateral and in ventral view; (69) apical part of median lobe of aedeagus in lateral view; (70) spermatheca. Scale bars: 59: 1.0 mm; 60: 0.5 mm; 61-66: 0.2 mm; 67-70: 0.1 mm.

Pronotum about 1.15 times as wide as long and 1.15-1.20 times as wide as head (Fig. 60); maximal width in anterior half; posterior angles marked, obtuse; pubescence of midline directed caudad; microsculpture and puncturation similar to those of head.

Elytra approximately 1.15 times as wide and at suture about 0.8 times as long as pronotum (Fig. 60); puncturation even denser and finer than that of head and pronotum. Hind wings reduced, only slightly longer than elytra. Metatarsomere I somewhat longer than II, but distinctly shorter than the combined length of II and III.

Abdomen approximately as wide as elytra, maximal width at segment V (Fig. 59); puncturation very fine, moderately dense on anterior and very sparse on posterior tergites; microsculpture present, but shallow; posterior margin of tergite VII with palisade fringe.

♂: posterior margin of tergite VIII truncate (Fig. 63); posterior margin of sternite VIII distinctly pointed (Fig. 64); median lobe of aedeagus as in Figs 67-69.

♀: posterior margin of tergite VIII weakly concave (Fig. 65), that of sternite VIII convex (Fig. 66); spermatheca as in Fig. 70.

E t y m o l o g y : The species is dedicated to Michael Schülke, who collected all of the material treated in the present paper.

C o m p a r a t i v e n o t e s : From the other *Apimela* species known to occur in China – *A. chinensis* PACE, *A. consors* PACE, *A. lineola* (KRAATZ), and *A. rufigaster* PACE – the new species is distinguished by the short wings, by the morphology of the aedeagus, as well as by the shape of the spermatheca. For illustrations of the habitus and genitalia of *A. chinensis* and *A. rufigaster* see PACE (1999b), for those of *A. lineola* and *A. consors* see PACE (1992a) and PACE (1992b), respectively.

D i s t r i b u t i o n a n d b i o n o m i c s : The localities are situated in the Gaoligong Shan, northern Yunnan. The specimens were collected by sifting flood debris on a snowfield, as well as moss and leaf litter at altitudes of 2000 and 2500 m. The locality where most of the specimens were found is illustrated in ASSING (in press: Fig. 40).

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Zusammenfassung

Sechs microptere Arten der Gattungen *Atheta* THOMSON und *Apimela* MULSANT & REY werden aus dem nördlichen Yunnan, China, beschrieben und abgebildet: *Atheta (Microdota) xueica* nov.sp., *A. (M.) foliacea* nov.sp., *A. (M.) dimorpha* nov.sp., *A. (M.) detruncata* nov.sp., *A. (M.) hastata* nov.sp. und *Apimela schuelkei* nov.sp.

References

- ASSING V. (2002): On some micropterous species of Athetini from Nepal and China (Coleoptera: Staphylinidae, Aleocharinae). — Linzer biol. Beitr. **34**: 953-969.
- ASSING V. (2004): A new microphthalmous *Atheta* species from Yunnan, China (Coleoptera: Staphylinidae, Aleocharinae). — Linzer biol. Beitr. **36**: 589-592.
- ASSING V. (2006): Six new species and additional records of *Leptusa* from northern Yunnan, China (Coleoptera: Staphylinidae, Aleocharinae). — Linzer biol. Beitr. **38**: 1157-1174.
- ASSING V. (in press): New genera and species of Aleocharinae from China (Insecta: Coleoptera: Staphylinidae). — Entomol. Probl. (2006).
- PACE R. (1990): Aleocharinae nepalesi del Museo di Ginevra. Parte III. Revisione delle specie himalayane del sottogenere *Microdota* MULSANT & REY (Coleoptera, Staphylinidae). — Revue suisse Zool. **97**: 901-979.
- PACE R. (1992a): Aleocharinae della Thailandia (Coleoptera, Staphylinidae). — Boll. Mus. civ. St. nat. Verona **16** (1989): 227-268.
- PACE R. (1992b): Aleocharinae nepalesi del Museo di Ginevra. Parte VII (conclusione): Oxypodini e Aleocharini (Coleoptera, Staphylinidae). — Revue suisse Zool. **99**: 263-342.
- PACE R. (1998): Aleocharinae della Cina: Parte IV (Coleoptera, Staphylinidae). — Revue suisse Zool. **105**: 911-982.
- PACE R. (1999a): Due nuove Aleocharinae orofile e microterre della Cina (Coleoptera: Staphylinidae). — Beitr. Entomol. Berlin **49**: 377-381.
- PACE R. (1999b): Aleocharinae della Cina: Parte V (conclusione) (Coleoptera, Staphylinidae). — Revue suisse Zool. **106**: 107-164.
- PACE R. (2004): Hygronomini e Athetini della Cina con note sinonimiche (Coleoptera, Staphylinidae). — Revue suisse Zool. **111**: 457-523.
- SMETANA A. (2004): Staphylinidae, subfamilies Omaliinae–Dasycerinae, Phloecharinae–Apaticinae, Piestinae–Staphylininae, pp. 237-272, 329-495, 505-698. — In: LÖBL I. & SMETANA A. (eds), Catalogue of Palearctic Coleoptera. II. Hydrophiloidea – Histeroidea – Staphylinoidea. — Stenstrup: Apollo Books, 942 pp.

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