

# Stuttgarter Beiträge zur Naturkunde

## Serie A (Biologie)

Herausgeber:

Staatliches Museum für Naturkunde, Rosenstein 1, D-70191 Stuttgart

Stuttgarter Beitr. Naturk.	Ser. A	Nr. 680	12 S., 23 Abb.	Stuttgart, 15. IX. 2005
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### A review of the Himalayan species of *Amaurodera* (Coleoptera: Staphylinidae: Aleocharinae). II. New species and additional records<sup>1</sup>

VOLKER ASSING

#### Abstract

Three species of *Amaurodera* Fauvel are described and illustrated: *A. schawalleri* n.sp. (southeastern Nepal), *A. ilamica* n.sp. (southeastern Nepal), and *A. spathulifera* n.sp. (central Nepal). The previously unknown female genitalia of *A. granata* Assing are illustrated. Additional Himalayan records are provided for eight species, including a new record of *A. veluticollis* (Motschulsky). A total of 15 species is now known from the region. Supplements to a recent key to the Himalayan *Amaurodera* species are provided.

Key words: Coleoptera, Staphylinidae, Aleocharinae, *Amaurodera*, taxonomy, new species, key to species, new records.

#### Zusammenfassung

Drei Arten der Gattung *Amaurodera* Fauvel werden beschrieben und abgebildet: *A. schawalleri* n.sp. (Südost-Nepal), *A. ilamica* n.sp. (Südost-Nepal) und *A. spathulifera* n.sp. (Zentral-Nepal). Die bislang unbekannt weiblichen Genitalia von *A. granata* Assing werden abgebildet. Für acht Arten werden weitere Nachweise gemeldet, darunter der erste bestätigte Nachweis von *A. veluticollis* (Motschulsky) für den Himalaja. Damit sind insgesamt 15 Arten aus der Region bekannt. Eine kürzlich erstellte Bestimmungstabelle der *Amaurodera*-Arten des Himalaja wird ergänzt.

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<sup>1</sup> Results of the Himalaya Expeditions of J. MARTENS, no. 250. For no. 249 see Journal of Arachnology 33 (2005). J. MARTENS sponsored by Deutscher Akademischer Austauschdienst and Deutsche Forschungsgemeinschaft.

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## 1 Introduction

The genus *Amaurodera* Fauvel, 1905 of the Lomechusini currently comprises approximately 30 species occurring in the Oriental and the Eastern Palaearctic region. In a recent revision of the Himalayan fauna, eleven species were recorded, five of them new to science (ASSING 2003). A twelfth species, *Amaurodera veluticollis*, had repeatedly been reported from the region, but these records were based on misidentifications, so that its presence remains uncertain. In the meantime, more material has become available, especially from the collections of the natural history museums in Stuttgart and Erfurt. An examination of this material, which comprised a total of 236 specimens of twelve species, yielded various additional records, three species new to science, the previously unknown female of *A. granata*, and the first confirmed record of *A. veluticollis* from the Himalaya. Altogether 15 *Amaurodera* species are now known from the region. The fact that of the previously reported twelve species, nine are here recorded again and that only three undescribed species were discovered in the new material suggests that the inventory of the Nepal *Amaurodera* fauna is probably not far from completion. However, up to the present, only few records have become known from the Himalaya west of central Nepal.

Remarkably, most of the material collected by J. MARTENS is darker than material collected by other coleopterists, indicating that the specimens changed their coloration post mortem, probably as a result of being exposed to a chemical agent of unknown identity. Similar artefacts were previously observed in material of *Othius* Stephens (ASSING 1998).

### Acknowledgements

My sincere thanks are extended to all the colleagues mentioned in the material section for arranging the loan of the material for this study. BENEDIKT FELDMANN (Münster) proof-read an earlier draft of the manuscript. JOHANNES REIBNITZ (SMNS) added the finishing touch to the figures.

## 2 Material

This study is based on a total of 236 specimens deposited in the following public institutions and private collections:

- cAss private collection V. ASSING, Hannover
- cSch private collection M. SCHÜLKE, Berlin
- NME Naturkundemuseum Erfurt (M. HARTMANN)
- SMNS Staatliches Museum für Naturkunde Stuttgart (W. SCHAWALLER, K. WOLFSCHWENNINGER)
- SMTD Staatliche Naturhistorische Sammlungen [previously Staatliches Museum für Tierkunde] Dresden (O. JÄGER)

### 3 New species and additional records

#### 3.1 *Amaurodera veluticollis* (Motschulsky)

##### Additional material examined

**Nepal** – 1 ex., Ilam District, 5 km N Sanishare, Siwalik Mts., 270–300 m, 3.–5.IV.1988, leg. SCHAWALLER (SMNS).

##### Remarks

The species had repeatedly been reported from the Himalayan region, but all the examined reference specimens proved to be misidentified, so that the presence of the species in the region had to be considered doubtful (ASSING 2003). The above record represents the first confirmed record of *A. veluticollis* from the Himalaya.

#### 3.2 *Amaurodera cameroni* Assing

##### Additional material examined

**Nepal** – 8 exs., Ilam District, 5 km N Sanishare, Siwalik Mts., 270–300 m, 3.–5.IV.1988, leg. SCHAWALLER (SMNS, cAss); 1 ex., Ilam District, N Siwalik Mts., Nodia Khola valley, 320 m, mixed forest, Berlese sample, 6.IV.1988, leg. MARTENS & SCHAWALLER (SMNS); 1 ex., Tarhathum [= Terhathum] District, Tinjura Dara, 2450–2850 m, 17.IX.1983, leg. MARTENS (SMNS); 4 exs., Tarhathum District, above Nessum, 1350–1850 m, leg. MARTENS (SMNS); 1 ex., Gorkha District, Darondi Khola, between Doreni and Motar, 750–900 m, 13.VIII.1983, leg. SCHAWALLER (SMNS); 2 exs., Pokhara, Yamdi-Khola valley near Phedi, 1100 m, 2.VI.2002, leg. JÄGER (SMTD, cAss).

**India** – 1 ex., Assam, Umrongso env., 25°27'N, 92°43'E, 700 m, 3.–8.VI.2002, leg. TRYZNA & BENDA (cSch).

##### Remarks

This recently described species was previously known from several localities in northern India and eastern Nepal (ASSING 2003). It is here reported from central Nepal for the first time. Most records are from relatively low elevations.

#### 3.3 *Amaurodera silvana* Pace

##### Additional material examined

**Nepal** – 14 exs., Kali Gandaki valley, above Lete, 28°37'24"N, 83°35'38"E, 2900 m, degraded *Rhododendron* forest, 19.V.2002, leg. JÄGER (SMTD, cAss); 1 ex., Kali Gandaki valley, plateau above Titigaon, 28°39'58"N, 83°37'31"E, 3000–3050 m, *Abies-Tsuga-Rhododendron* forest, 21.V.2002, leg. JÄGER (SMTD, cAss); 1 ex., S-Annapurna, Ghorepani, Poon hill, 28°23'56"E, 83°41'18"E, 3170 m, *Abies-Rhododendron* forest, 30.V.2002, leg. JÄGER (cAss); 2 exs., Parbat District, Banthanti, 2650 m, 30.IV.1995, leg. MARTENS & SCHAWALLER (SMNS); 4 exs., Parbat District, between Deorali and Chitre, 2700 m, 1.–2.V.1995, leg. MARTENS & SCHAWALLER (SMNS, cAss); 1 ex., Parbat District, between Chitre and Ghandrung, 6.V.1980, leg. MARTENS (SMNS); 1 ex., same data, but 2950–3050 m, 5.V.1980 (SMNS); 9 exs., same data, but 2800–2900 m, 4./7.IV.1980 (SMNS, cAss); 1 ex., Mustang District, Titi, 2600–2700 m, 1.V.1980, leg. MARTENS (SMNS); 6 exs., Manang District, Marsyandi, above Bagarchap, 2200 m, 12.–13.IV.1980, leg. MARTENS (SMNS, cAss); 8 exs., Manang District, Marsyandi, above Bagarchap, 2400 m, 13.–14.IV.1980, leg. MARTENS (SMNS, cAss); 3 exs., Manang District, Marsyandi, Thimang-Bagarchap, 2550 m, 14.–17.IV.1980, leg. MARTENS (SMNS, cAss); 1 ex., Manang District, Marsyandi, Thanjok-Chame, 2250 m, 17.IV.1980, leg. MARTENS (SMNS); 1 ex., Dhaulagiri, Myagdi District, Myagdi Khola, Dobang, 2400 m, 25.V.1995, leg.

MARTENS & SCHAWALLER (SMNS); 2 exs., Dhaulagiri, SE-slope, N Dwari village, upper Rahugat Khola valley, 2500 m, 13.–15.V.2002, leg. SCHMIDT (NME, cAss).

#### Remarks

The known distribution of this species is confined to the Annapurna and the Dhaulagiri Himal (central Nepal), where it is apparently rather common at altitudes of 2200–3200 m.

### 3.4 *Amaurodera coriacea* Assing

#### Additional material examined

**Nepal** – 1 ex., SW-Manaslu, Bhara Pokhari Lekh, below Bhara Pokhari lake, 2500 m, 2.IV.1999, leg. JÄGER (SMTD); 9 exs., Manaslu, Dudh Pokhari Lekh, upper Dordi Khola valley, 2300–2600 m, 15.–17.IV.2003, leg. SCHMIDT (NME, cAss); 2 exs. [1 teneral], SE Manaslu, Gorkha District, Darondi Khola, above Barpak, 3000–3300, 11.VIII.1983, leg. SCHAWALLER (SMNS, cAss); 1 ex., Gorkha District, Chuling Khola, Djinshi Kharka, 3400 m, 4.–5.VIII.1983, leg. SCHAWALLER (SMNS); 4 exs., Gorkha District, Chuling Khola, 3000–3400 m, 3.VIII.1983, leg. SCHAWALLER (SMNS, cAss).

#### Remarks

*Amaurodera coriacea* was previously known only from the type locality (Bhara Pokhari Lekh) in the Manaslu range, where it is probably endemic and where it has been collected at altitudes of approximately 2300–3400 m.

### 3.5 *Amaurodera granata* Assing (Figs. 12–13)

#### Additional material examined

**Nepal** – 4 exs., Sankhua Sabha District, above Pahakhola, 2650–2800 m, 31.V.–3.VI.1988, leg. SCHAWALLER (SMNS, cAss); 6 exs., Solukhumbu District, below Pangum, 2500 m, 14.–15.V.1997, leg. SCHAWALLER (SMNS, cAss); 2 exs., Solukhumbu District, Sanam, 2700–2800 m, 22.–23.V.1997, leg. SCHAWALLER (SMNS).

#### Remarks

Previously only the male type specimens from the surroundings of Mangmaya, Khandbari District were known (ASSING 2003). One of the dissected females collected in the beginning of June had a mature egg in the ovaries. The female genitalia are here illustrated for the first time (Figs. 12–13).

### 3.6 *Amaurodera bomfordi* (Eppelsheim)

#### Additional material examined

**Nepal** – 1 ex., Gorkha District, Buri Gandaki, Nyak, 2270–2450 m, 1.VIII.1983, leg. SCHAWALLER (SMNS); 1 ex., Gorkha District, Buri Gandaki, Chuling Khola, 2450–2870 m, 2.VIII.1983, leg. SCHAWALLER (SMNS); 1 ♀, Mugu District, SE Rara Lake, 2300–2700 m, 13.–14.VI.1998, leg. SCHAWALLER (SMNS); 4 ♀♀, Dailekh District, Dailekh to Mabuchin pass, 2300 m, 3.–4.VI.1998, leg. SCHAWALLER (SMNS, cAss); 9 exs., Manaslu, S Bara Pokhari, 2300 m, 8.IV.2003, leg. SCHMIDT (NME, cAss); 13 exs., Manaslu, Dudh Pokhari Lekh, below Helam Pokhari, 2000 m, 22.IV.2003, leg. SCHMIDT (NME, cAss); 3 exs., Manaslu, Gandaki Province, Bara Pokhari Lekh, Chhandi Khola valley, 2000–2300 m, 11.–12.IV.2000, leg.

SCHMIDT (NME); 1 ex., Bagmati Province, Kathmandu, Shivapuri, 2000–2500 m, 27.–28.IV.2003, leg. SCHMIDT (NME); 1 ex., NW Kathmandu, Nagarjung, Jamacok, 1900–2100 m, 18.VIII.1983, leg. SCHAWALLER (SMNS); 4 exs., Sankhua Sabha District, Arun valley, Chichila, 1900 m, 18.VI.1988, leg. SCHAWALLER (SMNS); 1 ex., Dolakha District, Chayarsa, 2000 m, 7.VI.2000, leg. SCHAWALLER (cAss); 1 ex., Dolakha District, Gyalung, 1800 m, 8.VI.2000, leg. SCHAWALLER (SMNS).

#### Remarks

This species is one of the more widespread Himalayan representatives of the genus; its distribution is mapped by ASSING (2003).

### 3.7 *Amaurodera martensi* Coiffait

#### Additional material examined

**Nepal** – 1 ex., Kathmandu valley, Godawari, Mt. Phulchoki, N-slope, 1750 m, bank of temporary stream, 6.V.2001, leg. JÄGER (SMTD); 6 exs., Kathmandu District, Sheopuri Mt., 2100–2300 m, 25.VI.1988, leg. SCHAWALLER (SMNS, cAss); 2 exs., Lalitpur District, Mt. Phulchoki, 1800–2000 m, 25.IV.1995, leg. MARTENS & SCHAWALLER (SMNS, cAss); 6 exs., Solukhumbu District, Hinku Drangka Khola bridge, 2000 m, 18.–19.V.1997, leg. SCHAWALLER (SMNS, cAss).

#### Remarks

*Amaurodera martensi* has become known only from Central Nepal; most of the records are from the surroundings of Kathmandu. The elevations range from 1750 to 2500 m (ASSING 2003 and records indicated above).

### 3.8 *Amaurodera verrucosa* Assing

#### Additional material examined

**Nepal** – 2 exs., Taplejung District, Kabeli Khola, Yamputhin [= Yamphodin], 1650–1800 m, 3.–4.IX.1983, leg. MARTENS (SMNS, cAss); 22 exs., Taplejung District, Yamputhin, 1650–1800 m, 26.IV.–1.V.1988, leg. MARTENS & SCHAWALLER (SMNS, cAss); 1 ex., Taplejung District, Omje Kharka NW Yamputhin, 2300–2500 m, 1.–6.V.1988, leg. SCHAWALLER (SMNS); 8 exs., Taplejung District, above Yamputhin, 1800–2000 m, 27.IV.1988, leg. SCHAWALLER (SMNS, cAss); 4 exs., Taplejung District, Tamur valley, Hellok, 2000 m, 17.V.1988, leg. SCHAWALLER (SMNS, cAss); 1 ex., Taplejung District, Worebung pass, 2000 m, 21.IV.1988, leg. SCHAWALLER (SMNS); 3 exs., Bhojpur District, valley NW Phedi, 1900 m, 25.V.1997, leg. SCHAWALLER (SMNS, cAss); 18 exs., Panchthar District, between Panipurua and Hinwa Khola, 1850–2300 m, 20.IV.1988, leg. SCHAWALLER (SMNS, cAss).

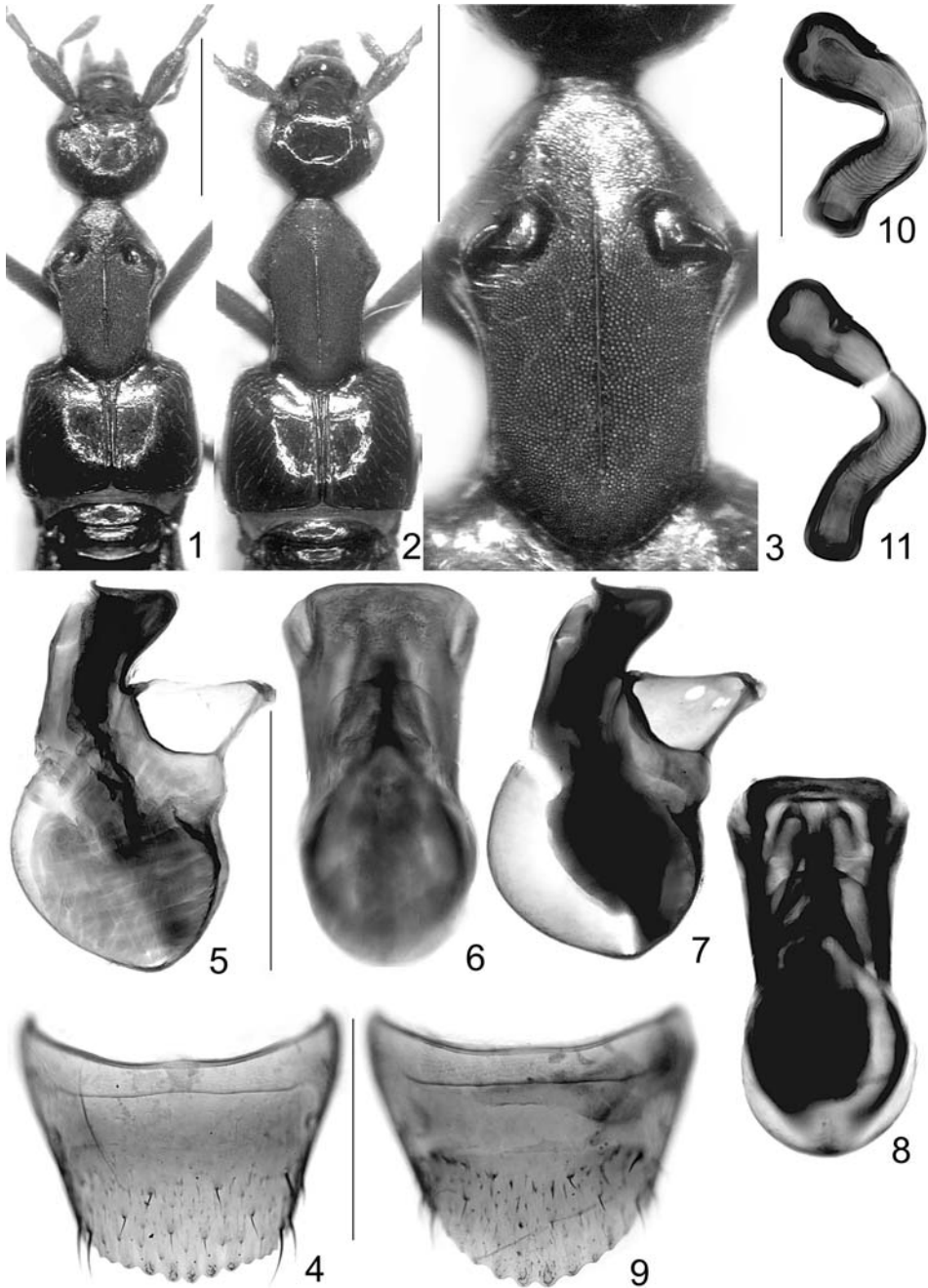
#### Remarks

This recently described species was previously known only from the type locality, Induwa Khola valley, some 50 km WSW from Yamphodin (ASSING 2003). The records above demonstrate that it is more widespread in eastern Nepal.

### 3.9 *Amaurodera schawalleri* n. sp. (Figs. 1–11)

#### Types

Holotype ♂: Nepal: 321 Ilam Dist., Gitang Khola Valley, 11.–13.IV.1988, 1750 m, leg. W. SCHAWALLER/Holotypus ♂ *Amaurodera schawalleri* sp.n. det V. ASSING 2005 (SMNS).



**Figs. 1–11.** *Amaurodera schawalleri* n. sp. – 1. Male forebody. 2. Female forebody. 3. Male pronotum. 4. Male tergite VIII. 5–8. Median lobe of aedeagus in lateral and in ventral view. 9. Female tergite VIII. 10–11. Spermatheca. – Scale bars: 1 mm (1–2), 0.5 mm (3–9), 0.2 mm (10–11).

Paratypes: 3 ♂♂, 4 ♀♀: same data as holotype (SMNS, cAss); 3 ♂♂, 1 ♀ [completely blackish]: Nepal: 254 Ilam Dist., Mai Pokhari [ca. 15 km N Ilam], 2150–2250 m, 23.–25. VIII.1983, leg. J. MARTENS (SMNS).

#### Etymology

The species is dedicated to Dr. WOLFGANG SCHAWALLER (SMNS), who collected not only most of the type series, but also numerous additional specimens of Himalayan *Amaurodera* treated in the present study.

#### Description

Large species, body length 5.5–6.5 mm; length of pronotum: 1.12–1.21 mm. Facies (forebody) as in Figs. 1–2. Coloration: head and pronotum dark brown to blackish brown; elytra castaneous; abdomen light brown to brown with most of segments VI and VII infuscate; legs and antennae light brown.

Head with relatively shallow isodiametric microreticulation and with some shine (Figs. 1–2). Pronotum with sexual dimorphism; median sulcus anteriorly more or less reduced. Elytra with very shallow microreticulation, surface shining; puncturation extremely fine, barely noticeable. Abdomen distinctly shining, microsculpture on tergites III–VII very shallow to almost obsolete.

♂: anterior  $\frac{2}{5}$  of pronotum with much shallower and less distinctly isodiametric microreticulation, also slightly more shining than the dull posterior  $\frac{3}{5}$ ; a short distance anterior to middle of pronotum with pair of pronounced semicircular elevations, which are both accompanied by an additional smaller tubercle (Fig. 3); tergite VIII with weakly convex posterior margin (Fig. 4); median lobe of aedeagus as in Figs. 5–8.

♀: pronotum unmodified, dorsal surface completely dull due to coarse microreticulation; median sulcus of reduced length (Fig. 2); tergite VIII with strongly convex posterior margin (Fig. 9); spermatheca proximally truncate (Figs. 10–11).

#### Comparative notes

This species is characterised especially by the primary and secondary sexual characters. Among the species of the *A. bomfordi* group, with which it shares the sexual dimorphism of the pronotum, the general morphology of the aedeagus (ventral process apically broadly truncate in ventral view and strongly bent in lateral view), and the proximally truncate duct of the spermatheca, it is most similar to *A. verrucosa* from northeastern Nepal. It is distinguished from that species especially by the extremely fine puncturation of the elytra, the shorter but more pronounced and more transverse elevations on the male pronotum, the more convex posterior margin of the female tergite VIII, the larger aedeagus with a ventral process of different shape in ventral view, and by the longer and more slender capsule of the spermatheca.

#### Distribution and bionomics

The type localities are situated in Ilam district, southeastern Nepal. The type specimens were collected at elevations of 1750 m and approximately 2200 m.

3.10 *Amaurodera soror* Cameron

## Additional material examined

**Nepal** – 2 exs., Myagdi District, Myagdi Khola S Boghara, 1400 m, 27.–28.V.1995, leg. MARTENS & SCHAWALLER (SMNS, cAss); 1 ex., Myagdi District, N Bega Deorali, 2400 m, 16.–17.V.1995, leg. MARTENS & SCHAWALLER (SMNS); 1 ex., Dhading District, W Samari, Banjang/Toppal Khola, 1000–1200 m, 23.VII.1983, leg. SCHAWALLER (SMNS).

**India** – 1 ex., Uttaranchal state, 30 km N Bageshwar, W Loharket vill. env., 1800–1900 m, 24.VI.2003, leg. KEJVAL & TRYZNA (cSch).

## Remarks

The species is widespread in the Himalaya, from Himachal Pradesh to central Nepal. Its distribution is mapped by ASSING (2003).

3.11 *Amaurodera spathulifera* n. sp. (Figs. 14–17)

## Type

Holotype ♂: Nepal: 135 Dist. Lamjung, Marsyandi, Senghe-Jagat, 11.IV.1980, 1100–1250 m, leg. J. MARTENS / Holotypus ♂ *Amaurodera spathulifera* sp. n. det. V. ASSING 2005 (SMNS).

## Etymology

The name (Latin, adjective, gender feminine) refers to the spatuliform subapical process of the aedeagus.

## Description

Species of intermediate size, body length 4.8 mm; length of pronotum: 0.86 mm. Facies (forebody) as in Fig. 14. Coloration: blackish brown, with the abdominal apex lighter; legs and antennae light brown, with the apical halves of the femora infuscate [since most of the specimens collected by J. MARTENS have changed their colour post mortem, the coloration of live specimens may be somewhat paler].

Head with distinct isodiametric microreticulation and almost completely dull. Pronotum with sexual dimorphism. Elytra with distinct fine microreticulation; puncturation fine, dense, and weakly granulose (Fig. 14). Abdomen shining, with shallow transverse microsculpture.

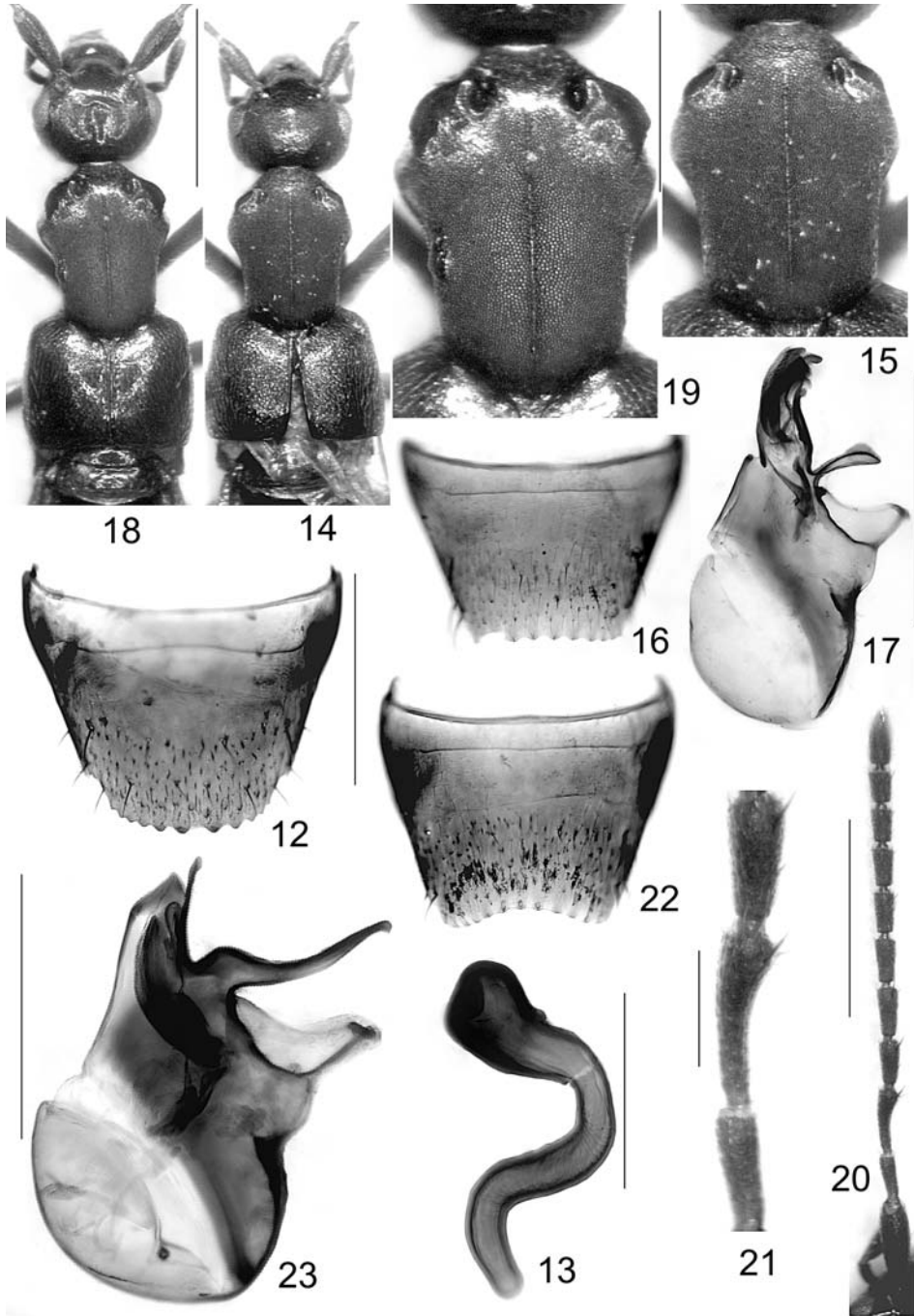
♂: anterior  $\frac{1}{4}$  of pronotum somewhat less dull and with microreticulation composed of slightly coarser meshes than posterior  $\frac{3}{4}$ ; pronotum anteriorly with pair of moderately pronounced elevations, without additional tubercle (Fig. 15); posterior margin of tergite VIII truncate and distinctly serrate (Fig. 16); posterior margin of sternite VIII in the middle weakly convex; median lobe of aedeagus of similar general morphology as in *A. soror*, but with subapical process apically truncate, spatuliform (Fig. 17).

♀: unknown.

## Comparative notes

Several synapomorphies – the dense puncturation of the elytra, the morphology of the male pronotum (elevations very close to anterior margin), and the presence of a subapical process at the base of the ventral process of the aedeagus – suggest a close relationship of *A. spathulifera* and *A. soror*. From the latter, the new species is sepa-





Figs. 12–23. *Amaurodera granata* Assing (12–13), *A. spathulifera* n. sp. (14–17), and *A. ilamica* n. sp. (18–23). – 12. Female tergite VIII. 13. Spermatheca. 14, 18. Male forebody. 15, 19. Male pronotum. 16, 22. Male tergite VIII. 17, 23. Median lobe of aedeagus in lateral view. 20. Antenna. 21. Antennomeres II–IV. – Scale bars: 1 mm (14, 18, 20), 0.5 mm (12, 15–17, 19, 22–23), 0.2 mm (13, 21).

rated by the finer puncturation of the elytra, the less pronounced elevations on the male pronotum, and especially by the different shape of the subapical process of the aedeagus.

#### Distribution and bionomics

The type locality is situated in central Nepal, W of Pokhara. The holotype was collected at an altitude of only little more than 1000 m. These observations suggest that the species may be rare, but possibly widespread.

#### 3.12 *Amaurodera ilamica* n. sp. (Figs. 18–23)

##### Type

Holotype ♂: Nepal: 117 Dist. Ilam, Pokhari 2100 m, 31.III./1.IV.1980, leg. J. MARTENS / Holotypus ♂ *Amaurodera ilamica* sp. n. det. V. ASSING 2005 (SMNS).

##### Etymology

The name (adjective, gender feminine) is derived from Ilam, the name of the district where the type locality is situated.

##### Description

Species of moderately large size, body length 5.2 mm; length of pronotum: 1.01 mm. Facies (forebody) as in Fig. 18. Coloration: blackish brown, with the abdominal apex lighter; legs brown, with the femora blackish brown; antennae light brown [in nature, the species may be of paler coloration; see remarks in diagnosis of *A. spathulifera* and in introduction].

Head with distinct isodiametric microreticulation and almost completely dull; median dorsal area somewhat impressed and slightly less dull. Antennae long and slender, antennomere III modified (sexual dimorphism?), distinctly curved (Figs. 20–21). Pronotum probably with sexual dimorphism (Fig. 19). Elytra with very fine and very shallow microsculpture; puncturation very fine and moderately dense, not granulose. Abdomen shining, with very shallow microsculpture and sparse fine puncturation.

♂: anterior  $\frac{1}{4}$  of pronotum with much shallower microreticulation and distinctly more shining than posterior  $\frac{3}{4}$ ; pronotum anteriorly with pair of pronounced elevations, each with additional tubercle (Fig. 19); posterior margin of tergite VIII distinctly concave and weakly serrate; posterior margin of sternite VIII in the middle almost truncate (Fig. 22); median lobe of aedeagus highly distinctive, with long and acute subapical process (Fig. 23).

♀: unknown.

##### Comparative notes

As is suggested by several synapomorphies – the rather dense puncturation of the elytra, the morphology of the male pronotum (pair of elevations relatively close to anterior margin), and the presence of a subapical process at the base of the ventral process of the aedeagus – *A. ilamica* is closely allied to *A. soror* and *A. spathulifera*. From both species, it is separated by the finer and somewhat sparser puncturation of the elytra, by the modified, possibly sexually dimorphic antennomere III, by the

more shining anterior area and the more pronounced elevations of the male pronotum, by the concave posterior margin of the male tergite VIII, and by the distinctive morphology of the aedeagus, especially the presence of a long and acute subapical process.

#### Distribution and bionomics

The type locality is situated in the southeast of Nepal. The holotype was collected at an altitude of only little more than 2100 m.

#### 4 Key to the Himalayan species of *Amaurodera*: supplement

In order to account for the new species described above, the key in ASSING (2003) is modified as follows:

- 8 Elytra with dense or very dense puncturation (Figs. 14, 18). Elevations on male pronotum close to anterior pronotal margin, separated from anterior margin by at most  $\frac{1}{4}$  the length of pronotum (Figs. 15, 19). Median lobe of aedeagus with subapical process and, in lateral view, with weakly curved ventral process (e. g. Figs. 17, 23). . . . . **8a**
- Elytra with moderately to very sparse puncturation and distinct shine (e. g. Figs. 1, 2). Elevations on male pronotum separated from anterior pronotal margin by approximately  $\frac{1}{3}$  the length of pronotum (Fig. 3). Median lobe of aedeagus without subapical process and, in lateral view, with strongly bent ventral process (e. g. Figs. 5–8). . . . . **9**
- 8a** Elytral puncturation less dense and finer (Fig. 18). Antennomere III (in male) distinctly curved (Figs. 20–21). Elevations on male pronotum more pronounced (Fig. 19). Male tergite VIII with distinctly concave posterior margin (Fig. 22). Median lobe of aedeagus with long and acute subapical process of highly distinctive shape (Fig. 23). – Known only from SE-Nepal. . . . . *A. ilamica* n. sp.
- Elytra with very dense and less fine puncturation, surface with less shine (Fig. 14). Antennomere III unmodified. Elevations on male pronotum less pronounced (e. g. Fig. 15). Male tergite VIII with truncate posterior margin (Fig. 16). Median lobe of aedeagus with much shorter and flattened subapical process of completely different shape. . . . . **8b**
- 8b** Elevations on male pronotum more pronounced (see fig. 32 in ASSING 2003). Median lobe of aedeagus with longer and apically acute subapical process (see figs. 33–36 in ASSING 2003). – Widespread from Himachal Pradesh to central Nepal. . . . . *A. soror* Cameron
- Elevations on male pronotum less pronounced (Fig. 15). Median lobe of aedeagus with shorter and apically truncate, spatuliform subapical process (Fig. 17). – Known only from one locality in central Nepal. . . . . *A. spathulifera* n. sp.
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- 11** Latero-apical angles of ventral process of median lobe (ventral view) excavated (see fig. 41 in ASSING 2003). – Central Nepal. . . . . *A. martensi* Coiffait
- Latero-apical angles of ventral process of median lobe (ventral view) not distinctly excavated (e. g. Figs. 6, 8). – Eastern Nepal. . . . . **12**
- 12** Puncturation of elytra fine, but distinct. Elevations on male pronotum longer, but less pronounced (see fig. 38 in ASSING 2003). Female tergite VIII posteriorly moderately convex. Median lobe of aedeagus smaller, in lateral view with less strongly bent ventral process (see figs. 46–47 in ASSING 2003). – NE-Nepal. . . . . *A. verrucosa* Assing
- Puncturation of elytra extremely fine, barely noticeable (Figs. 1–2). Elevations on male pronotum shorter, but more pronounced and more transverse (Fig. 3). Female tergite VIII posteriorly strongly convex (Fig. 9). Median lobe of aedeagus larger, in lateral view with more strongly bent ventral process (Figs. 5–8). – SE-Nepal. . . . . *A. schawalleri* n. sp.

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Manuscript received: 10.II.2005, accepted: 10.III.2005.