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New species and records of Sericini from the Indian subcontinent (Coleoptera, Scarabaeidae) II

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Abstract. The current paper presents new locality records, including first state records for Mizoram and Nagaland, of 50 species of Sericini (Coleoptera: Scarabaeidae: Melolonthinae) from the Indian subcontinent. Nine new species are described herein: *Maladera naveeni* sp. nov., *M. sujitrae* sp. nov., *M. thirthahalliensis* sp. nov., *M. viraktamathi* sp. nov., *Neoserica* (s. lat.) *reuteri* sp. nov., *Oxyserica goertzae* sp. nov., *Selaserica hosanagarana* sp. nov., *Serica* (s. str.) *eberlei* sp. nov. and *S.* (s. str.) *tashigaonensis* sp. nov.

Keywords. Chafers, new distribution records, new species, Oriental region.

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Introduction

In the framework of a collaboration project between German and Indian chafer taxonomists funded by the German Science Foundation (DFG), we were able to study further new material from the Indian subcontinent, which was collected during field surveys in 2018 by KS and her team or which was sent to us by the Natural History Museum, Erfurt. The results of the examination of these specimens are presented in this paper. The taxonomy of the rich fauna of the sericine chafer beetles (Scarabaeidae: Melolonthinae: Sericini) of the Indian subcontinent was revised in detail recently in a series of papers

and monographs (see Ahrens 2004; Fabrizi & Ahrens 2014; Ahrens & Fabrizi 2016), while a further supplement was also given by Sreedevi *et al.* (2018). Currently, 665 species and 23 genera are known from the Indian subcontinent. Nine new species are discovered and described herein, and new data on the distribution of 50 additional species and one subspecies are given.

Material and methods

All specimens from KS's field survey were collected at light at dawn or at night. Also many other specimens were collected at light, as indicated commonly on labels by "LF" (abbreviation in German: Lichtfang (light catch)). The principal terminologies and methods used for specimen dissection and genital preparation are described in detail in Ahrens (2004). For identification of the species, genitalia of all male specimens were examined. After examination, male genitalia were glued on a small pointed card. All examined material is cited with the original label text given in quotation marks, multiple labels are separated by a slash (/). Genitalia of the new species were photographed in both lateral and dorsal views using a Leica M125 stereo microscope with a Leica DFC420C digital camera. Separate images were stacked using the Leica Application Suite (ver. 3.3.0), where a number of separate partly focused images were combined in order to obtain an image that was in focus throughout. The resulting images were subsequently digitally edited to remove Automontage reconstruction errors and to obtain a white background. New records are commented in cases of new records for a state or country.

Repositories

NBAIR = National Bureau of Agricultural Insect Resources, Bangalore, India
NME = Natural History Museum, Erfurt, Germany
NMPC = National Museum Prague (Natural History), Czech Republic
ZFMK = Zoological Research Museum Alexander Koenig, Bonn, Germany
ZMHB = Museum für Naturkunde, Berlin, Germany

Results

Class Insecta Linnaeus, 1758
Subclass Pterygota Lang, 1888
Order Coleoptera Linnaeus, 1758
Superfamily Scarabaeoidea Latreille, 1802
Family Scarabaeidae Latreille, 1802
Subfamily Melolonthinae Leach, 1819
Tribe Sericini Kirby, 1837

New distribution records

Amiserica krausei Ahrens, 2004

NEPAL • 1 ♀; "Nepal, P. Mahakali, Deuli village, N29°48'45", E80°47'00", 2400m, 28.VI.2017, LF Leg. J. Weipert"; NME • 1 ♀; "Nepal, P. Mahakali, Godhani, Godhani Khola N29°49'53", E80°40'45", 1940m, 17.VI.2017, LF Leg. J. Weipert"; NME.

Gynaecoserica arunachalensis Fabrizi & Ahrens, 2009

INDIA • 1 ♂; "NE-India, Arunachal Pradesh, Sela pass, 27°30' N, 92°03' E 25.VI.2008, 4100 m, leg. C. Reuter"; NME.

Gynaecoserica marginipes (Brenske, 1898)

NEPAL • 2 ♂♂; “E-Nepal Arun Valley Dharan-Hille, 600-1750m 30.5.1988 Leg. Lebisch & Probst”; NMPC.

Lasioserica maculata maculata (Brenske, 1896)

NEPAL • 1 ♂, 3 ♀♀; “Nepal, P. Mahakali, Godhani, Godhani Khola N29°49'53", E80°40'45", 1940m, 17.VI.2017, LF Leg. J. Weipert”; NME.

Lasioserica nepalensis Ahrens, 1996

NEPAL • 1 ♂, 3 ♀♀; “Nepal, P. Mahakali, Deuli village, N29°48'45", E80°47'00", 2400m, 28.VI.2017, LF Leg. J. Weipert”; NME.

Maladera alloservitrita Sreedevi, Speer, Fabrizi & Ahrens, 2018

INDIA • 1 ♂; “India: Mizoram, Kolasib, 888 m, 24°13' N, 92°40' E, 17.v.2018, leg. K. Sreedevi”; NBAIR.

Maladera bengalensis (Brenske, 1898)

INDIA • 1 ♂; “U. Pradesh VII.91 Rishikesh 450 m Werner lgt. India”; NMPC.

Maladera bhutanensis (Frey, 1975)

INDIA • 2 ♂♂; “India: Mizoram, Kolasib, 888 m, 24°13' N, 92°40' E, 17.v.2018, leg. K. Sreedevi”; NBAIR.

Remarks

First record of the species for India, being formerly known only from Bhutan.

Maladera burmeisteri alternans (Frey, 1975)

INDIA • 3 ♂♂; “India: Karnataka, Chikmagalur, Mudigere, 970 m, 13°14' N, 75°60' E, 20.iii.2018, leg. R. Naveen”; NBAIR • 2 ♂♂; “Karnataka, Shimoga, Thirthahalli, 589 m, 13°56' N, 75°38' E, 17.iv.2018, leg. R. Naveen”; NBAIR • 1 ♂; “India: Karnataka, Kodagu, Chettalli, 609 m, 12°33' N, 75°84' E, 4.v.2018, leg. R. Naveen”; NBAIR • 1 ♂; “India: Karnataka, Uttara Kannada, Sirsi, 620 m, 14°37' N, 74°50' E, 27.vi.2018, leg. R. Naveen”; NBAIR.

Maladera caifensis (Brenske, 1897)

INDIA • 3 ♂♂; “India: Kerala, Kasaragod, 19 m, 12° 31' N, 74° 59' E, 25.iii.2018, leg. M. Sujitra”; NBAIR.

Remarks

First record from Kerala State.

Maladera calicutensis (Frey, 1972)

INDIA • 1 ♂; “India: Karnataka, Kodagu, Chettalli, 609 m, 12°33' N, 75°84' E, 4.iv.2018, leg. K. Sreedevi”; NBAIR • 2 ♂♂; “India: Karnataka, Kodagu, Chettalli, 609 m, 12°33' N, 75°84' E, 2.v.2018, leg. R. Naveen”; NBAIR • 1 ♂; “India: Karnataka, Kodagu, Chettalli, 609 m, 12°33' N, 75°84' E, 4.v.2018, leg. R. Naveen”; NBAIR.

Remarks

First record from the Kodagu region, Karnataka State.

Maladera dierli (Frey, 1969)

NEPAL • 7 ♂♂; “Nepal, P. Mahakali, Godhani, Godhani Khola N29°49'53", E80°40'45", 1940m, 17.VI.2017, LF Leg. J. Weipert”; NME.

Maladera ferruginea (Kollar & Redtenbacher, 1844)

INDIA • 1 ♂; “India: Himachal Pradesh, Solan, Nauni, 1325 m, 30°90' N, 77°10' E, 13.vi.2017, leg. K. Sreedevi”; NBAIR.

Maladera fumosa (Brenske, 1898)

INDIA • 2 ♂♂; “Karnataka, Shimoga, Thirthahalli, 589m, 13°56' N, 75°38' E, 17.iv.2018, leg. R. Naveen”; NBAIR.

Maladera garoana Ahrens & Fabrizi, 2016

INDIA • 1 ♂; “India: Nagaland, Medziphema 360 m, 25°46' N, 93°53' E, 22.v.2018, leg. K. Sreedevi”; NBAIR.

Remarks

First record for Nagaland State.

Maladera iridescens (Blanchard, 1850)

INDIA • 1 ♂; “India: Karnataka, Kodagu, Chettalli, 609 m, 12°33' N, 75°84' E, 4.v.2018, leg. R. Naveen”; NBAIR • 1 ♂; “India: Karnataka, Chikmagalur, 1090 m, 13°28' N, 75°49' E, 7.v.2018, leg. R. Naveen”; NBAIR • 1 ♂; “India: Karnataka, Dharwad, 678 m, 15°26' N, 75°01' E, 13.vi.2017, leg. K. Sreedevi”; NBAIR • 1 ♂; “Molwar Ind.”; ZMHB.

Maladera jaintiaensis Ahrens & Fabrizi, 2016

INDIA • 1 ♂; “India: Nagaland, Medziphema 360 m, 25°46' N, 93°53' E, 22.v.2018, leg. K. Sreedevi”; NBAIR.

Remarks

First record from Nagaland State.

Maladera kazirangae Ahrens, 2004

INDIA • 1 ♂; “India: Mizoram, Kolasib, 888 m, 24°13' N, 92°40' E, 16.v.2018, leg. K. Sreedevi”; NBAIR • 2 ♂♂; “India: Mizoram, Kolasib, 888 m, 24°13' N, 92°40' E, 17.v.2018, leg. K. Sreedevi”; NBAIR.

Remarks

First record from Mizoram State.

Maladera keralensis (Frey, 1972)

INDIA • 3 ♂♂; “India: Karnataka, Chikmagalur, Mudigere, 970 m, 13°14' N, 75°60' E, 20.iii.2018, leg. R. Naveen”; NBAIR • 1 ♂; “India: Karnataka, Kodagu, Chettalli, 609 m, 12°33' N, 75°84' E, 2.v.2018, leg. R. Naveen”; NBAIR • 2 ♂♂; “India: Karnataka, Kodagu, Chettalli, 609 m, 12°33' N, 75°84' E, 4.v.2018, leg. R. Naveen”; NBAIR • 1 ♂; “India: Karnataka, Kodagu, Ponnampet, 851m, 12°20' N, 75°90' E, 6.v.2018, leg. R. Naveen”; NBAIR.

Remarks

First record from Karnataka State, previously known from the neighboring Kerala State.

Maladera lugubris (Brenske, 1896)

INDIA • 1 ♂; “India: Himachal Pradesh, Solan, Nauni, 1325 m, 30°90' N, 77°10' E, 13.vii.2017, leg. K. Sreedevi”; NBAIR.

Maladera magnicornis (Moser, 1920)

INDIA • 1 ♂; “India: Karnataka, Chikmagalur, Mudigere, 970 m, 13°14' N, 75°60' E, 20.iii.2018, leg. R. Naveen”; NBAIR.

Maladera mizoramensis Sreedevi, Speer, Fabrizi & Ahrens, 2018

INDIA • 3 ♂♂; “India: Mizoram, Kolasib, 888 m, 24°13' N, 92°40' E, 16.v.2018, leg. K. Sreedevi”; NBAIR • 3 ♂♂; “India: Mizoram, Kolasib, 888 m, 24°13' N, 92°40' E, 17.v.2018, leg. K. Sreedevi”; NBAIR.

Maladera murzini Ahrens, 2004 (Fig. 1A–D)

INDIA • 1 ♂; “India: Nagaland, Medziphema 360 m, 25°46' N, 93°53' E, 22.v.2018, leg. K. Sreedevi / 1017 Sericini: Asia spec. / KS 0094”; NBAIR • 1 ♂; “India: Nagaland, Medziphema 360 m, 25°46' N, 93°53' E, 22.v.2018, leg. K. Sreedevi / 1017 Sericini: Asia spec. / KS 0100”; NBAIR.

Remarks

Since the holotype of *Maladera murzini* Ahrens, 2004 was an immature specimen, we here illustrate the male copulation organ: aedeagus: Fig. 1A–C, habitus: Fig. 1D. First record for Nagaland State.

Maladera namborensis Ahrens & Fabrizi, 2016

INDIA • 2 ♂♂, 10 ♀♀; “N.E. India Nambor Reserv. Forest Assam, 26°00' N, 94°20' E Garampani 100 m 21.-29.11.97 leg. V. Sinaev & V.S. & M. Murzin”; ZFMK.

Maladera nigromicans (Frey, 1972)

INDIA • 1 ♂; “India: Karnataka, Kodagu, Chettalli, 609 m, 12°33' N, 75°84' E, 2.v.2018, leg. R. Naveen”; NBAIR.

Maladera profana Ahrens & Fabrizi, 2016

INDIA • 3 ♂♂; “India: Mizoram, Kolasib, 888 m, 24°13' N, 92°40' E, 16.v.2018, leg. K. Sreedevi”; NBAIR • 1 ♂; “India: Nagaland, Medziphema 360 m, 25°46' N, 93°53' E, 22.v.2018, leg. K. Sreedevi”; NBAIR.

Remarks

First record from Mizoram and Nagaland States, North East India.

Maladera pseudohongkongica Ahrens & Fabrizi, 2016

INDIA • 1 ♂; “India: Nagaland, Medziphema 360 m, 25°46' N, 93°53' E, 22.v.2018, leg. K. Sreedevi”; NBAIR.

Remarks

First record from Nagaland State.

Maladera rufocuprea (Blanchard, 1850)

INDIA • 1 ♂; “India: Himachal Pradesh, Solan, Nauni, 1325 m, 30°90' N, 77°10' E, 13.vii.2017, leg. K. Sreedevi”; NBAIR • 2 ♂♂; “India: Kerala, Thrissur, 21 m, 10°32' N, 76°13' E, 10.v.2018, leg. M. Mohan”; NBAIR • 1 ♂; “India: Kerala, Kasaragod, 19 m, 12°31' N, 74°59' E, 25.iii.2018, leg. M. Sujitra”; NBAIR • 2 ♂♂; “India: Kerala, Kasaragod, 19 m, 12°31' N, 74°59' E, 3.v.2018, leg. M. Sujitra”; NBAIR • 1 ♂; “India: Karnataka, Kodagu, Chettalli, 609 m, 12°33' N, 75°84' E, 4.v.2018, leg. R. Naveen”; NBAIR.

Maladera schenklingi (Moser, 1918)

AFGHANISTAN • 2 ♂♂; “O.-Afghanistan Sarok 1100m 28.6.1956 H.G. Amsel leg.”; NMPC.

NEPAL • 1 ♂; “Nepal, P. Narayani, N27°35'09”, E84°29'30”, Sauraha, Hotel “Sweet home”, 180m, 06.VII.2017, LF Leg. J. Weipert”; NME.

Remarks

First record for Afghanistan.

Maladera seriato-guttata Ahrens & Fabrizi, 2016

INDIA • 1 ♂; “India: Kerala, Kasaragod, 19 m, 12°31' N, 74°59' E, 17.vi.2018, leg. M. Sujitra”; NBAIR

• 1 ♂; “India: Karnataka, Chikmagalur, N. R. Pura, 700 m, 13°36' N, 75°28' E, 3.vii.2018, leg. R. Naveen”; NBAIR.

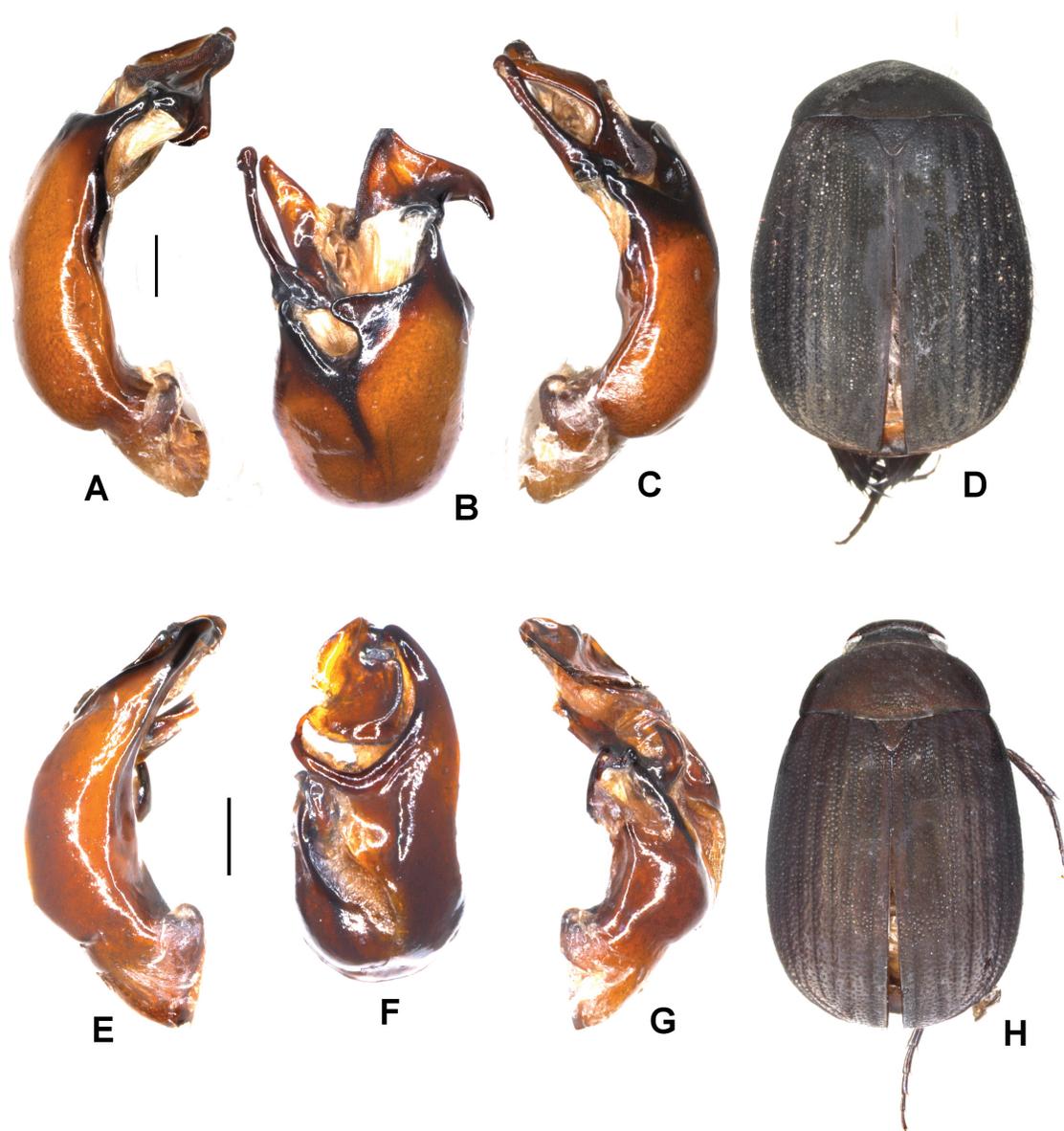


Fig. 1. A–D. *Maladera murzini* Ahrens, 2004, India: Nagaland, Medziphema. E–H. *M. viraktamathi* sp. nov., holotype, ♂. A, E. Aedeagus, left side lateral view. C, G. Aedeagus, right side lateral view. B, F. Parameres, dorsal view. D, H. Habitus. Scale bars: 0.5 mm. Habitus not to scale.

Remarks

First record from Karnataka State, previously known from the neighboring Kerala State.

Maladera sericella (Brenske, 1898)

INDIA • 3 ♂♂; “India: Mizoram, Kolasib, 888 m, 24°13' N, 92°40' E, 15.v.2018, leg. K. Sreedevi”; NBAIR.

Maladera shiva Ahrens & Fabrizi, 2016

INDIA • 1 ♂; “India: Mizoram, Kolasib, 888 m, 24°13' N, 92°40' E, 16.v.2018, leg. K. Sreedevi”; NBAIR.

Maladera simlana (Brenske, 1898)

NEPAL • 1 ♀; “Nepal, Prov. 29°19'11" N, 80°36'27" E, Dadeldhura, Hotel Ratogurans Resort, 1700m, 11.VI.2017, LF leg.: J. Weipert”; NME.

Maladera siniaevi Ahrens, 2004

INDIA • 1 ♂; “India: Nagaland, Medziphema 360 m, 25°46' N, 93°53' E, 22.v.2018, leg. K. Sreedevi”; NBAIR.

Remarks

First record from Nagaland State.

Maladera siwalikiana Ahrens, 2004

INDIA • 2 ♂♂; “U. Pradesh VII.91 Rishikesh 450 m Werner lgt. India”; NMPC.

NEPAL • 2 ♀♀; “Nepal, P: Narayani D: Chitwan, 2km W of Sauraha, 180m NN, 05.VII.2017 LF small forest with fruit trees N27°34'48", E84°26'10" leg. A. Weigel #17-22a”; NME.

Maladera subspinosa (Brenske, 1898)

INDIA • 1 ♂; “India: Nagaland, Medziphema 360 m, 25°46' N, 93°53' E, 22.v.2018, leg. K. Sreedevi”; NBAIR.

Remarks

First record from Nagaland State.

Maladera thomsoni (Brenske, 1898)

NEPAL • 1 ♂; “Nepal, Prov. Gandaki 28°14'13" N, 84°22'20" E Besisahar, 825m 29.V.2013 leg. J. Weipert”; NME • 1 ♂, 2 ♀♀; “Nepal, Prov. Gandaki 28°02'48" N, 84°48'48" E, Arughat Bazar, Hotel Manasalu, 524m, 8.V.2013 leg. J. Weipert”; NME.

Maladera vernacula Ahrens & Fabrizi, 2016

INDIA • 3 ♂♂; “India: Karnataka, Chikmagalur, Mudigere, 970 m, 13°14' N, 75°60' E, 20.iii.2018, leg. R. Naveen”; NBAIR • 3 ♂♂; “India: Karnataka, Kodagu, Chettalli, 609 m, 12°33' N, 75°84' E, 4.iv.2018, leg. R. Naveen”; NBAIR.

Microserica interrogator (Arrow, 1946)

NEPAL • 1 ♀; “Nep: Mahakali / Darchula, Jamir to Godhani, Nau Gad Khola, N29°46'59", E80°40'45", 1380-1920m, 16.VI.2017, leg. A. Kopetz #17-06a”; NME.

Microserica mygdiana Ahrens, 1998

NEPAL • 1 ♂; “Nepal, P. Mahakali Jamir bis Godhani 1400-1900m, 16.VI.2017, Leg. J. Weipert”; NME.

Microserica pruinosa (Hope, 1831)

NEPAL • 1 ♂; “Nepal, P. Mahakali Godhani bis SW von Thaisain, 2000-2900m, 18.VI.2017, Leg. J. Weipert”; NME.

Neoserica speciosa Brenske, 1898

INDIA • 3 ♂♂; “India: Mizoram, Kolasib, 888 m, 24°13' N, 92°40' E, 16.v.2018, leg. K. Sreedevi”; NBAIR • 1 ♂; “India: Nagaland, Medziphema 360 m, 25°46' N, 93°53' E, 22.v.2018, leg. K. Sreedevi”; NBAIR.

Remarks

First record from Mizoram and Nagaland States, known formerly only from Meghalaya and Assam.

Neoserica unciforceps Ahrens & Fabrizi, 2016

INDIA • 1 ♂; “India: Mizoram, Kolasib, 888 m, 24°13' N, 92°40' E, 17.v.2018, leg. K. Sreedevi”; NBAIR.

Remarks

First record from Mizoram State.

Oxyserica pygidialis annapurnae (Ahrens, 1995)

NEPAL • 11 ♂♂, 4 ♀♀; “Nepal, P. Gandaki Yak Kharka bis Goa, 3000-2500m, 26.V.2013, Leg. J. Weipert”; NME • 1 ♂; “Nepal, P. Gandaki, N28°35'28”, E84°38'17”, Sama, 3600m, 18.V.2013, Leg. J. Weipert”; NME.

Oxyserica pygidialis pygidialis Brenske, 1900

NEPAL • 1 ♂, 1 ♀; “Nepal, P. Mahakali Jamir bis Godhani 1400-1900m, 16.VI.2017, leg. J. Weipert”; NME.

Pachyserica marmorata (Blanchard, 1850)

NEPAL • 1 ♀; “Nepal, P. Mahakali, Deuli village, N29°48'45”, E80°47'00”, 2400m, 28.VI.2017, LF Leg. J. Weipert”; NME • 1 ♀; “Nepal Seti / Bajhang #35 19 km NE Chainpur Losani Khola, N29°39'44”, E81°20'54”, 2000m, 27.VI.2009, leg. A. Weigel LF”; NME.

Serica* (s. str.) *eberti (Frey, 1965)

NEPAL • 2 ♂♂; “Nepal, P. Mahakali, D: Darchula, Bachtal S Thaisain, 18.VI.2017 LF #17-08, 2910m, mountain mixed forest, 3. tent place N29°51'52”, E80°40'17”, Leg. A. Weigel”; NME • 2 ♀♀; “Nepal, P. Mahakali, Deuli village, N29°48'45”, E80°47'00”, 2400m, 28.VI.2017, LF Leg. J. Weipert”; NME • 1 ♀; “Nepal, Prov. Seti Ghatganga Khola, Sapdula Dobhan bis Shima, 2900-2300m 25.VI.2009 leg. J. Weipert”; NME.

Serica* (s. str.) *mahakaliensis Sreedevi, Speer, Fabrizi & Ahrens, 2018

NEPAL • 4 ♂♂; “Nepal, P. Mahakali, D: Darchula, Bachtal S Thaisain, 18.VI.2017 LF #17-08, 2910m, mountain mixed forest, 3. tent place N29°51'52”, E80°40'17”, Leg. A. Weigel”; NME.

Serica* (s. lat.) *sticta Fabrizi & Ahrens, 2009

INDIA • 1 ♀; “NE-India, Arunachal Pradesh, Sela pass, 27°30' N, 92°03' E 25.VI.2008, 4100 m, leg. C. Reuter”; NME.

Serica* (s. str.) *thibetana Brenske, 1897

NEPAL • 10 ♂♂; “Nepal, P. Mahakali, D: Darchula, Bachtal S Thaisain, 18.VI.2017 LF #17-08, 2910m, mountain mixed forest, 3. tent place N29°51'52”, E80°40'17”, Leg. A. Weigel”; NME • 4 ♂♂; “Nepal

Seti / Doti 20 km SSW Chainpur, Khaptad NP Tribeni, Lukause Khola / N29°22'27", E81°08'14", 3000m, 02.VII.2009, river vall., leg. A. Weigel LF #43"; NME.

Species description

Maladera viraktamathi sp. nov.

urn:lsid:zoobank.org:act:F404F56A-50C3-40B0-854B-BB63195F4BE8

Fig. 1E–H

Diagnosis

Maladera viraktamathi sp. nov. resembles *M. servitrita* (Brenske, 1898) in its external and genital morphology. The new species differs from the latter by the anterior margin of the pronotum having a medially widely lacking marginal line as well as by the shape of the aedeagus; the left aedeagal process with insertion of left paramere is produced more distally, the left paramere bears a longitudinal dorsal sublateral carina, which is absent in *M. servitrita*.

Etymology

This new species name (noun in the genitive case) is dedicated to the Indian leafhopper taxonomist and entomologist, Prof. Chandrasekhara A. Viraktamath, in recognition of his colossal work on leafhopper taxonomy.

Type material

Holotype

INDIA • ♂; "India: Mizoram, Kolasib, 888 m, 24°13' N, 92°40' E, 17.v.2018, leg. K. Sreedevi / 1020 Sericini: Asia spec. / KS 0161 / ICAR-NBAIR-S9"; NBAIR.

Description

MEASUREMENTS. Length: 9.0 mm, elytral length: 6.8 mm, width: 5.6 mm.

HABITUS AND COLORATION. Body oval (Fig. 1H), uniformly dark brown, dorsal and ventral face dull, head and anterior part of pronotum moderately shiny, except lateral setae of elytra and pronotum nearly glabrous.

HEAD. Labroclypeus wide, subtrapezoidal, widest at base and shiny, lateral margins moderately convex and convergent anteriorly, producing an indistinct angle with ocular canthus, not incised before labrum, anterior angles strongly convex, anterior margin weakly sinuate medially, margins weakly reflexed; surface slightly convex, finely and moderately densely punctate, with single and fine, erect setae on each side behind anterior margin. Frontoclypeal suture finely incised, weakly curved. Smooth area in front of eyes 1.5 times as wide as long; ocular canthus short and wide, finely and densely punctate, with a short terminal seta. Frons shiny, only in posterior half dull, finely and densely punctate, with a few single, short setae beside eyes. Eyes large, ratio of diameter/interocular width: 0.71. Antenna with ten antennomeres, club with three antennomeres, as long as remaining antennomeres combined. Mentum convexly elevated, anteriorly slightly flattened.

PRONOTUM. Widest at base, lateral margins evenly and convexly convergent anteriorly, anterior angles moderately sharp, distinctly produced, posterior angles blunt, moderately rounded at tip; anterior margin with medially widely lacking marginal line, nearly straight; lateral and lateral anterior margin with long, fine setae; surface finely and densely punctate, with microscopic setae in punctures, otherwise glabrous. Scutellum wide, triangular, punctures fine and moderately dense, glabrous.

ELYTRA. Wide, widest at middle, external apical angle strongly rounded, striae finely impressed, finely and densely punctate, intervals weakly convex, finely and moderately densely punctate, with only

microscopic setae in punctures; epipleural edge ending at external apical angle of elytra; epipleura with long, sparse setae; apical margin with a fine membranous rim of fine microtrichomes.

ABDOMEN. Ventral surface coarsely and densely punctate, with microscopic setae in punctures, with a few longer setae on mesosternum and metasternal plate. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.6. Metacoxa glabrous, laterally with a few robust setae. Abdominal sternites finely and moderately densely punctate, with a transverse row of coarse punctures each bearing a robust seta, ultimate sternite with dense, long setae. Pygidium dull, moderately convex, coarsely and densely punctate, with fine, long setae beside apical margin, otherwise with microscopic setae in punctures.

LEGS. Moderately wide; femora with two longitudinal rows of setae. Metafemur shiny, superficially punctate, anterior edge acute, with adjacent serrated line, which is straight and complete, anterior row of setae present but its setae short; posterior ventral margin almost straight, weakly widened in apical half, neither ventrally nor dorsally serrated but smooth, glabrous. Metatibia wide and short, widest at middle, ratio of width/length: 1/2.58, sharply carinate dorsally, with two groups of spines, basal one shortly behind middle, apical one at three quarters of metatibial length, in basal third with a short serrated line parallel to dorsal margin and 3–4 coarse punctures each bearing a fine seta; lateral face weakly longitudinally convex, impunctate, only basal half with moderately dense and superficial wrinkles; ventral margin with four equidistant spines; medial face impunctate and glabrous, apex shallowly sinuate anteriorly near tarsal articulation. Tarsomeres impunctate dorsally, circular in cross section, with sparse, fine setae ventrally; metatarsomeres ventrally with a strongly serrated carina, subventrally with a second, smooth longitudinal carina; first metatarsomere distinctly shorter than following two tarsomeres combined, dorsal tibial spur lacking. Protibia moderately long, bidentate, teeth moderately large. All claws symmetrical, feebly curved and long, with normally developed basal tooth.

MALE GENITALIA. Aedeagus: Fig. 1E–G.

Female

Unknown.

Maladera naveeni sp. nov.

[urn:lsid:zoobank.org:act:39D648A9-2F3C-47A7-8550-2868042C1717](https://zoobank.org/act:39D648A9-2F3C-47A7-8550-2868042C1717)

Fig. 2A–D

Diagnosis

Maladera naveeni sp. nov. is very similar to *M. cardoni* (Brenske, 1896) but differs from the latter by the slightly longer antennal club and the shape of its parameres: the left paramere in the new species is slightly widened before the apex and then at the apex abruptly and strongly bent instead of being evenly narrowed toward the apex and moderately bent.

Etymology

This new species name (noun in the genitive case) is dedicated to the collector of the new species, R. Naveen.

Type material

Holotype

INDIA • ♂; “Karnataka, Shimoga, Shettyhalli, 570 m, 13°56' N, 75°34' E, 26.vi.2018, leg. R. Naveen / 1021 Sericini: Asia spec. / KS 0290 / ICAR-NBAIR-S10”; NBAIR.

Description

MEASUREMENTS. Length: 7.2 mm, length of elytra: 4.9 mm, width: 4.4 mm.

HABITUS AND COLORATION. Body oblong-oval (Fig. 2D), dark reddish brown, elytra reddish brown, antennae yellowish, dull, labroclypeus shiny, except a few short setae on sides of elytra, glabrous.

HEAD. Labroclypeus moderately wide and subtrapezoidal, widest at base, lateral margins nearly straight, convergent anteriorly, anterior angles moderately rounded, anterior margin bluntly sinuate medially, margins moderately reflexed; lateral margin and ocular canthus produce an indistinct angle; surface convexly elevated, with a sharp and long longitudinal carina from anterior margin to frontoclypeal suture, finely, densely punctate, anteriorly with large punctures each bearing an erect seta; frontoclypeal suture distinctly incised and elevated, moderately curved; smooth area anterior to eye convex, twice as wide as long; ocular canthus short and narrow ($\frac{1}{3}$ of ocular diameter), finely densely punctate, with one terminal seta. Frons dull, with dense, fine punctures, with a few single short setae beside eyes. Eyes large, ratio of diameter/interocular width: 0.88. Antenna with ten antennomeres; club with three antennomeres and straight, slightly longer than remaining antennomeres combined. Mentum elevated and slightly flattened anteriorly.

PRONOTUM. Moderately transverse, widest at base, lateral margins in basal half subparallel and straight, in anterior half moderately evenly convex and convergent anteriorly, anterior angles distinctly produced and sharp, posterior angles strongly rounded; anterior margin straight, with fine marginal line, base without marginal line; surface moderately densely and finely punctate, with minute setae in punctures; anterior and lateral margin finely setose; hypomeron carinate, not produced ventrally. Scutellum wide, triangular, with fine, moderately dense punctures.

ELYTRA. Widest at posterior third, striae finely impressed, finely and densely punctate, intervals flat, with fine, dense punctures and with minute setae in punctures, penultimate interval with a few single setae; epipleural edge robust, ending at nearly blunt external apical angle of elytra, epipleura sparsely setose; apical border of elytra membranous, with a fine rim of microtrichomes (visible at ca 100 \times magnification).

ABDOMEN. Ventral surface dull, finely and densely punctate, with dense and fine, adpressed setae, metasternal disc sparsely covered with longer setae; metacoxa with a few longer setae laterally. Abdominal sternites finely and densely punctate, glabrous, each sternite with a transverse row of punctures each bearing a fine seta. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.66. Pygidium flat, dull, finely and densely punctate, without smooth midline, with long setae along apical margin.

LEGS. Short and moderately wide, shiny; femora with two longitudinal rows of setae, finely and sparsely punctate. Anterior margin of metafemur acute, without adjacent serrated line, anterior row of setae complete; posterior ventral margin smooth, moderately widened at ventral apex, dorsal posterior edge smooth, neither serrate, glabrous. Metatibia short and wide, widest at middle, ratio of width/length: 1/2.79, sharply carinate dorsally, with two groups of spines, basal group at middle, apical group at three quarters of metatibial length, in basal half with a few short, single setae subparallel to dorsal margin; lateral face longitudinally convex, finely and sparsely punctate on side in basal half, glabrous; ventral margin finely serrate, with five equidistant robust setae (partly abraded); medial face smooth and glabrous; apex finely serrate, shallowly sinuate interiorly near tarsal articulation. Tarsomeres dorsally impunctate, glabrous, neither laterally nor dorsally carinate, moderately setose ventrally; metatarsomeres with a strongly serrated ridge ventrally and a smooth subventral longitudinal carina; first metatarsomere slightly shorter than following two tarsomeres combined and slightly longer than dorsal tibial spur. Protibia moderately long, bidentate; anterior claws symmetrical, basal tooth of both claws bluntly truncate at apex.

MALE GENITALIA. Aedeagus: Fig. 2A–C.

Female

Unknown.

Maladera sujitrae sp. nov.

[urn:lsid:zoobank.org:act:BF3746FB-E5C4-45B7-B0F8-2D7151BCA942](https://doi.org/10.3896/ebip.urn:lsid:zoobank.org:act:BF3746FB-E5C4-45B7-B0F8-2D7151BCA942)

Fig. 2E–H

Diagnosis

The new species resembles the species of the *M. lugubris* group but differs from all other species of the group by the incomplete serrated line of the anterior margin of the metafemur and the relatively long and medially unfused parameres, as well by the large, curved motile basal lobe of the left paramere.

Etymology

This new species name (noun in the genitive case) is dedicated to the collector of the new species, M. Sujitra.

Type material

Holotype

INDIA • ♂; “India: Kerala, Kasaragod, 19 m, 12°31' N, 74°59' E, 17.vi.2018, leg. M. Sujitra / 1022 Sericini: Asia spec. / KS 0233 / ICAR-NBAIR-S11”; NBAIR.

Description

MEASUREMENTS. Length: 8.9 mm, length of elytra: 6.8 mm, width: 6.0 mm.

HABITUS AND COLORATION. Body oval (Fig. 2H), dorsal and ventral face dark brown, antennae yellowish, dull, labroclypeus shiny, except some single setae on dorsal surface of head nearly glabrous.

HEAD. Labroclypeus wide and trapezoidal, widest at base, lateral margins convex and strongly convergent anteriorly, anterior angles strongly rounded, anterior margin weakly sinuate medially, margins weakly reflexed; lateral margin and ocular canthus produce an indistinct angle; surface flat, finely and densely punctate, with a few erect setae anteriorly; frontoclypeal suture distinctly incised, angled medially; smooth area anterior to eye flat, 1.5 times as wide as long; ocular canthus moderately long and broad ($\frac{1}{3}$ of ocular diameter), finely densely punctate, with a terminal seta. Frons dull, with moderately dense, fine punctures, with a few single setae beside eyes. Eyes small, ratio of diameter/interocular width: 0.57. Antenna with ten antennomeres; club with three antennomeres and straight, a little shorter than remaining antennomeres combined. Mentum elevated and slightly flattened anteriorly.

PRONOTUM. Transverse, widest shortly before base, lateral margins evenly convex and convergent anteriorly, anterior angles produced and sharp, posterior angles widely rounded; anterior margin weakly convex, with complete, fine marginal line, base without marginal line; surface moderately densely and finely punctate, with minute setae in punctures; anterior and lateral margin finely sparsely setose; hypomerion carinate, not produced ventrally. Scutellum wide, triangular, with fine, moderately dense punctures, impunctate along middle at apex.

ELYTRA. Widest at middle, striae finely impressed, finely and sparsely punctate, intervals weakly convex, with fine, evenly moderately dense punctures concentrated along striae, with minute setae in punctures, odd intervals with a few single, short setae; epipleural edge robust, ending at bluntly rounded external

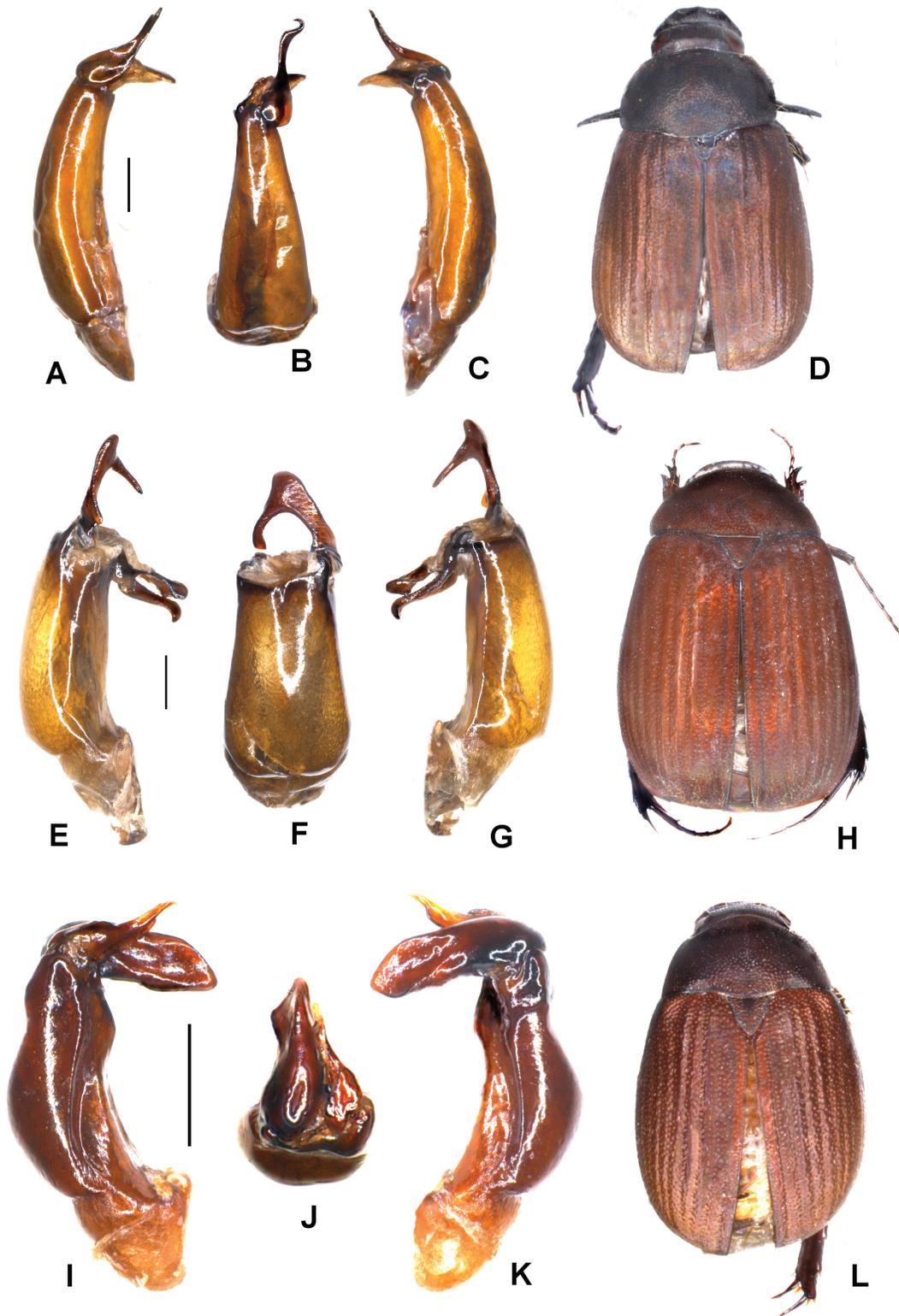


Fig. 2. A–D. *Maladera naveeni* sp. nov., holotype, ♂. E–H. *Maladera sujitrae* sp. nov., holotype, ♂. I–L. *Maladera thirthahalliensis* sp. nov., holotype, ♂. A, E, I. Aedeagus, left side lateral view. C, G, K. Aedeagus, right side lateral view. B, F, J. Parameres, dorsal view. D, H, L. Habitus. Scale bars: 0.5 mm. Habitus not to scale.

apical angle of elytra, epipleura sparsely setose; apical border of elytra narrowly membranous, with a very fine rim of microtrichomes (visible at ca 100× magnification).

ABDOMEN. Ventral surface dull, coarsely and moderately densely punctate, glabrous, metasternal disc sparsely covered with fine, short setae; metacoxa with a few longer setae laterally. Abdominal sternites finely and densely punctate, punctures with minute setae, each sternite with a transverse row of punctures, each bearing a fine seta. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.8. Pygidium weakly convex, dull, finely and densely punctate, with a wide midline, with a few robust setae along apical margin.

LEGS. Short and wide, shiny; femora with two longitudinal rows of setae, finely and sparsely punctate. Anterior margin of metafemur acute, anterior row of setae complete, its punctures serrate, but complete serrated line missing; posterior ventral margin smooth, weakly widened at ventral apex, dorsal posterior edge smooth, neither serrate, finely and shortly setose. Metatibia short and wide, widest at middle, ratio of width/length: 1/2.35, sharply carinate dorsally, with two groups of spines, basal group shortly before middle, apical group at three quarters of metatibial length, with fine setae and a serrated line basally subparallel to dorsal margin; lateral face longitudinally convex, shiny, base and only on sides finely punctate, with minute setae in punctures; ventral margin finely serrate, with four equidistant robust setae; medial face smooth and glabrous; apex finely serrate, moderately concavely sinuate interiorly near tarsal articulation. Tarsomeres dorsally impunctate, glabrous, neither laterally nor dorsally carinate, moderately setose ventrally; metatarsomeres glabrous and with a strongly serrated ridge ventrally and a smooth, subventral longitudinal carina; first metatarsomere slightly shorter than following two tarsomeres combined and slightly longer than dorsal tibial spur. Protibia moderately long, bidentate; anterior claws symmetrical, basal tooth of both claws bluntly truncate at apex.

MALE GENITALIA. Aedeagus: Fig. 2E–G.

Female

Unknown.

Maladera thirthahalliensis sp. nov.

[urn:lsid:zoobank.org:act:FA7E5515-423F-429A-A61A-FA345DA2C4C7](https://doi.org/10.3896/EBL.567.1-26)

Fig. 2I–L

Diagnosis

The new species resembles in external shape the species of the *Maladera lugubris* group; it differs, however, from the latter by the entirely lacking serrated line of the anterior margin of the metafemur and the strongly asymmetric, unfused parameres. From the previous species it differs by its smaller body size, the weakly shining surface and the lacking basal lobe of the left paramere.

Etymology

The name (adjective in the nominative singular) refers to the type locality, Thirthahalli (India).

Type material

Holotype

INDIA • ♂; “Karnataka, Shimoga, Thirthahalli, 589m, 13°56′ N, 75°38′ E, 17.iv.2018, leg. R. Naveen / 1023 Sericini: Asia spec. / KS 0281 / ICAR-NBAIR-S12”; NBAIR.

Paratypes

INDIA • 1 ♂; “Karnataka, Shimoga, Thirthahalli, 589m, 13°56' N, 75°38' E, 17.iv.2018, leg. R. Naveen / 1023 Sericini: Asia spec. / KS 0283 / ICAR-NBAIR-S13”; NBAIR • 1 ♂; “Karnataka, Shimoga, Thirthahalli, 589 m, 13°56' N, 75°38' E, 17.iv.2018, leg. R. Naveen / 1023 Sericini: Asia spec. / KS 0285 / ICAR-NBAIR-S14”; NBAIR.

Description

MEASUREMENTS. Length: 5.9 mm, length of elytra: 4.4 mm, width: 3.9 mm.

HABITUS AND COLORATION. Body oval (Fig. 2M), dorsal and ventral face dark brown, elytra slightly lighter, antennae yellowish, moderately shiny, labroclypeus shiny, except some single setae on dorsal surface of head nearly glabrous.

HEAD. Labroclypeus wide and trapezoidal, widest at base, lateral margins weakly convex and convergent anteriorly, anterior angles moderately rounded, anterior margin distinctly sinuate medially, margins weakly reflexed; lateral margin and ocular canthus produce an indistinct angle; surface weakly evenly convex, rugosely and densely punctate, with a few erect setae anteriorly; frontoclypeal suture indistinctly incised, curved; smooth area anterior to eye flat, 1.5 times as wide as long; ocular canthus moderately long and broad ($\frac{1}{3}$ of ocular diameter), finely densely punctate, with a terminal seta. Frons moderately shiny, with dense, coarse punctures and a few single setae beside eyes. Eyes small, ratio of diameter/interocular width: 0.51. Antenna with ten antennomeres; club with three antennomeres and straight, distinctly shorter than remaining antennomeres combined. Mentum elevated and slightly flattened anteriorly.

PRONOTUM. Moderately transverse, widest at base, lateral margins evenly convex and moderately convergent anteriorly, anterior angles produced and sharp, posterior angles blunt; anterior margin slightly convex, with medially narrowly interrupted fine marginal line, base without marginal line; surface densely and coarsely punctate, with minute setae in punctures; anterior and lateral margin finely sparsely setose; hypomeron carinate, not produced ventrally. Scutellum wide, triangular, with fine, moderately dense punctures, impunctate medially.

ELYTRA. Widest shortly behind middle, striae finely impressed, finely and sparsely punctate, odd intervals weakly convex, even ones flat, with fine, evenly moderately dense punctures on odd intervals concentrated along striae, with minute setae in punctures, odd intervals with a few single, short setae; epipleural edge robust, ending at bluntly rounded external apical angle of elytra, epipleura sparsely setose; apical border of elytra chitinous, fine rim of microtrichomes lacking (at ca 100× magnification).

ABDOMEN. Ventral surface shiny, dull on sides, coarsely and moderately densely punctate, glabrous, metasternal disc sparsely covered with fine, short setae, otherwise with fine, adpressed setae; metacoxa entirely covered with fine, adpressed setae, with a few longer and robust setae laterally. Abdominal sternites finely and densely punctate, punctures with short setae, each sternite with a transverse row of robust punctures each bearing a fine seta. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.5. Pygidium weakly convex, moderately shiny, coarsely and densely punctate, with a wide short apical midline and a few robust setae along apical margin

LEGS. Moderately short and wide, shiny; femora with two longitudinal rows of setae, finely and sparsely punctate. Anterior margin of metafemur acute, anterior row of setae complete, without serrated line; posterior ventral margin smooth, weakly widened at ventral apex, dorsal posterior edge smooth, neither serrate, finely and shortly setose. Metatibia moderately short and wide, widest at apex, ratio of width/length: 1/2.94, sharply carinate dorsally, with two groups of spines, basal group at one third, apical

group at three thirds of metatibial length; lateral face longitudinally convex, shiny, impunctate along middle, only on sides coarsely punctate; ventral margin finely serrate, with four equidistant fine setae; medial face smooth and glabrous; apex finely serrate, moderately concavely sinuate interiorly near tarsal articulation. Tarsomeres dorsally impunctate, glabrous, neither laterally nor dorsally carinate, moderately setose ventrally; metatarsomeres glabrous and with a strongly serrated ridge ventrally and a smooth subventral longitudinal carina; first metatarsomere slightly shorter than following two tarsomeres combined and as long as dorsal tibial spur. Protibia moderately long, bidentate; anterior claws symmetrical, basal tooth of both claws bluntly truncate at apex.

MALE GENITALIA. Aedeagus: Fig. 2I–K.

Female

Unknown.

Neoserica (s. lat.) *reuteri* sp. nov.

urn:lsid:zoobank.org:act:D04CB450-5100-4421-951E-926E13E309FC

Fig. 3A–D

Diagnosis

Neoserica reuteri sp. nov. is in its external appearance very similar to the species of the *Neoserica abnormis* group. It differs from most similar Southern Indian taxa by the smaller body size, the bicolored body surface and the subsymmetrical genitalia (rather than evidently asymmetrical in other species): the apex of the phallobase and the tip of the parameres are slightly asymmetrical.

Etymology

The new species name (noun in the genitive case) is dedicated to its collector, Christoph Reuter (Beirut).

Type material

Holotype

INDIA • ♂; “NE India, Arunachal Pradesh, Bomdila, 27°16' N, 92°25' E, 28.VI.2008, 3000 m, leg. C. Reuter / 1028 Sericini Asia spec.”; NME.

Description

MEASUREMENTS. Length: 8.4 mm, length of elytra: 5.6 mm, width: 4.8 mm.

HABITUS AND COLORATION. Body oblong (Fig. 3D), blackish dark brown, pronotum, scutellum, and head with dark greenish shine, elytra dark reddish brown, antennal club yellowish brown, anterior labroclypeus shiny, dorsal surface dull, sparsely setose.

HEAD. Labroclypeus subtrapezoidal, distinctly wider than long, widest at base, lateral margins straight and slightly convergent anteriorly, anterior angles weakly rounded, anterior margin weakly sinuate medially, margins moderately reflexed; surface flat and shiny, basis with dull-iridescent tomentum, punctation fine and dense, behind anterior margin with coarse punctures each bearing a long erect seta; frontoclypeal suture indistinctly incised, flat and distinctly curved medially; smooth area anterior to eye approximately 1.2 times as wide as long; ocular canthus wide, triangular and short (nearly $\frac{1}{3}$ of ocular diameter), impunctate, terminal seta lacking in holotype. Frons dull, with fine and sparse punctures, beside eyes with two erect setae. Eyes small, ratio of diameter/interocular width: 0.51. Antenna with ten antennomeres, club with six antennomeres, straight, 1.2 times as long as remaining antennomeres combined. Mentum elevated and slightly flattened anteriorly.

PRONOTUM. Moderately transverse, widest at base, lateral margins in basal half nearly straight and moderately convergent, in anterior half evenly convex and strongly convergent anteriorly, anterior angles sharp and distinctly produced, posterior angles blunt, slightly rounded at tip; anterior margin convex, without marginal line; surface densely and finely punctate, with minute setae in punctures; setae of anterior and lateral border sparse; hypomeron basally distinctly carinate, but carina only weakly produced. Scutellum short, triangular, with fine, moderately dense punctures, basally at middle smooth, with only minute setae.

ELYTRA. Oblong, widest at middle, striae distinctly impressed, finely and moderately densely punctate, intervals convex, with moderately dense, fine punctures concentrated along striae, odd intervals with a few fine white adpressed setae, otherwise only with very minute setae in punctures; epipleural edge fine, ending at rounded external apical angle of elytra; epipleura fine, densely setose, apical border narrowly membranous, with a very fine fringe of microtrichomes (visible at 100× magnification).

ABDOMEN. Ventral surface dull, coarsely and densely punctate, metasternum sparsely covered with setae on disc, glabrous on sides; metacoxa glabrous, with a few short setae laterally, posterior margin weakly convex; abdominal sternites finely and unevenly densely punctate, nearly glabrous, with a transverse row of coarse punctures, each bearing a robust, short seta. Mesosternum between mesocoxae half as wide as slender mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.68. Pygidium strongly convex and dull, coarsely and sparsely but superficially punctate, without smooth midline, with a few short setae beside apical margin.

LEGS. Slender; femora with two longitudinal rows of setae, finely and sparsely punctate between rows; metafemur dull, anterior margin acute, behind anterior edge without serrated line, setae of anterior longitudinal row nearly completely lacking, posterior margin in apical half ventrally smooth and slightly widened, posterior margin dorsally distinctly serrated, on its basal portion with a few short setae. Metatibia slender and long, widest at apex, ratio of width/length: 1/4.25, sharply carinate dorsally, with two groups of spines, basal group just before middle, apical group at three quarters of metatibial length, basally with a few robust but single setae; lateral face longitudinally convex, very finely, superficially and sparsely punctate, subdorsal longitudinal carina on lateral face present on about two thirds of metatibial length; ventral edge finely serrated, with three robust, nearly equidistant setae; medial face smooth, apex moderately concavely sinuate interiorly near tarsal articulation. Tarsomeres ventrally with sparse, short setae, laterally not carinate, without punctures; metatarsomeres ventrally glabrous, with a strongly serrated ridge ventrally and a sharp subventral carina immediately beside it; first metatarsomere distinctly longer than following two tarsomeres combined and longer than dorsal tibial spur. Protibia long, bidentate; anterior claws symmetrical, basal tooth of inner claw sharply truncate at apex.

MALE GENITALIA. Aedeagus: Fig. 3A–C.

Female

Unknown.

***Oxyserica goertzae* sp. nov.**

[urn:lsid:zoobank.org:act:2CB55176-65EB-4FA8-9FE3-2E1281E30FF4](https://zoobank.org/act:2CB55176-65EB-4FA8-9FE3-2E1281E30FF4)

Fig. 3E–H

Diagnosis

The new species differs from the similar *Oxyserica darjeelingia* (Brenske, 1898) by the narrower ventral and dorsal lobes of the parameres, with the first being slightly concave before the apex (dorsal view) and the latter being only half as long as the ventral lobes, rather than being subequal in length as in

O. darjeelingia. The new species differs from *O. brancuccii* Ahrens, 2001 by the less sinuate ventral lobes of the parameres.

Etymology

The name of this new species (noun in the genitive case) is dedicated to Dagmar Görtz (Köln).

Type material

Holotype

NEPAL • ♂; “Nepal: Manaslu mts., Bhudi Gandaki Vall. Machakhola to Jagat, 950-1150m, 24.V.2006, J. Schmidt leg.”; ZFMK.

Description

MEASUREMENTS. Length: 5.1 mm, length of elytra: 3.0 mm, width: 3.1 mm.

HABITUS AND COLORATION. Body oval (Fig. 3H), blackish, legs brown, elytra yellowish brown with margins and a transversal mesolateral spot black, dorsal surface dull and nearly glabrous.

HEAD. Labroclypeus wider than long, shiny, widest at base, lateral margins strongly convex and convergent to rounded anterior angles; anterior margin weakly sinuate medially, margins weakly reflexed; lateral margins and ocular canthus produce a blunt angle; surface weakly convex medially, coarsely and densely punctate, with numerous long, erect setae; frontoclypeal finely incised and curved medially. Frons dull with some iridescent shine, with evenly dense, moderately coarse punctures, beside eyes and behind frontoclypeal suture with a few single, short setae, otherwise with minute setae in punctures. Smooth area in front of eyes convex, as wide as long. Ocular canthus finely densely punctate, wide and moderately long, without a terminal seta. Eyes very small, ratio of diameter/interocular width: 0.39. Antenna with ten antennomeres; club composed of six antennomeres, straight, 1.3 times as long as than remaining antennomeres combined. Mentum elevated and slightly flattened anteriorly.

PRONOTUM. Moderately wide, widest at base, lateral margins nearly in basal half slightly concave and convergent to middle, weakly convex and moderately convergent towards produced anterior angles. Anterior margin of pronotum moderately convex, with fine and complete marginal line; basal marginal line absent; posterior angles blunt; surface finely and densely punctate, glabrous, with minute setae in punctures, setae of lateral and anterior margins dense, the latter $\frac{1}{6}$ of pronotal length. Hypomeron carinate, weakly produced ventrally. Scutellum triangular, finely and densely punctate, on base along middle narrowly impunctate.

ELYTRA. Short, widest at middle, striae slightly impressed, finely and densely punctate; second and third interval completely yellow, sutural interval and lateral 3–4 intervals black; intervals weakly convex, with fine and sparse punctures, with very minute setae in punctures, penultimate lateral interval with a few short setae; epipleural edge fine, ending at rounded external apical angle of elytra, epipleura sparsely setose, apical border membranous, with a broad fringe of short microtrichomes (magnification 100×).

ABDOMEN. Ventral surface dull, finely and densely punctate, metasternum sparsely covered with fine, short, or very minute setae; metacoxa glabrous, with a few single setae laterally. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.8. Abdominal sternites finely punctate, with a transverse row of coarse punctures, each bearing a robust seta. Pygidium strongly convex and dull, with dense, coarse punctures but without smooth midline, in punctures with numerous minute setae and a few longer ones along apical margin.

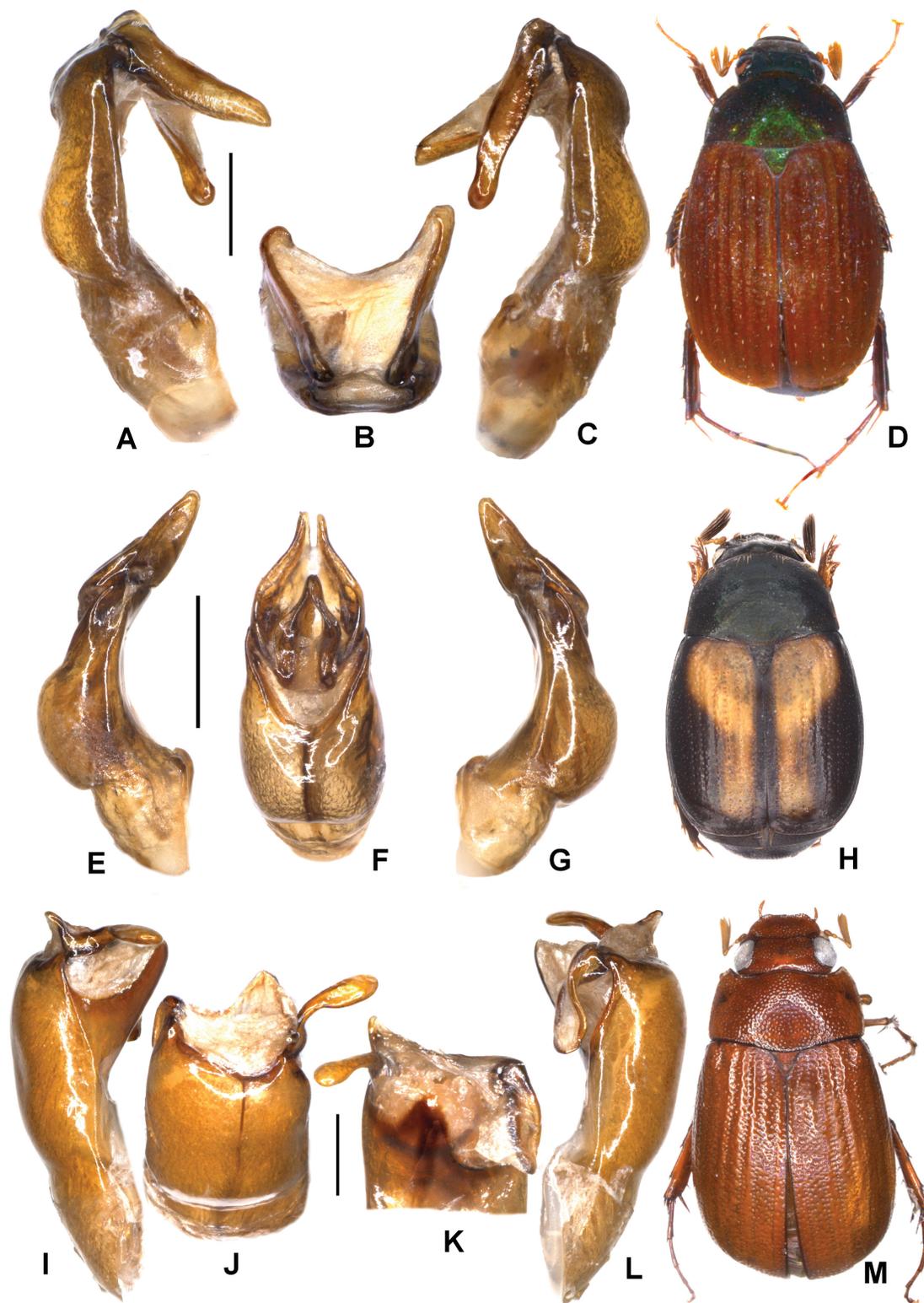


Fig. 3. A–D. *Neoserica* (s. lat.) *reuteri* sp. nov., holotype, ♂. E–H. *Oxyserica* *goertzae* sp. nov., holotype, ♂. I–M. *Selaserica* *hosanagarana* sp. nov., holotype, ♂. A, E, I. Aedeagus, left side lateral view. C, G, L. Aedeagus, right side lateral view. B, F, J–K. Parameres, dorsal view. D, H, M. Habitus. Scale bars: 0.5 mm. Habitus not to scale.

LEGS. Moderately wide; femora finely and sparsely punctate, with two longitudinal rows of longer setae. Metafemur moderately shiny, anterior margin acute, without submarginal serrated line; anterior row of seta-bearing punctures present; posterior margin smooth ventrally, widened in apical half, posterior margin smooth dorsally, with a few short setae basally. Metatibia moderately long and wide, widest at middle, ratio of width/length: 1/2.5; dorsal margin sharply carinate, with two groups of spines, basal group shortly before middle, apical one at three quarters of metatibial length, in basal third without further robust setae; lateral face longitudinally convex, finely and sparsely punctate, along midline smooth, with minute setae in punctures; ventral edge finely serrate, with four robust equidistant setae; medial face smooth, apex interiorly near tarsal articulation shallowly truncate. Tarsomeres with fine, sparse setae ventrally, neither laterally nor dorsally carinate, dorsally smooth; metatarsomeres glabrous, with a strongly serrated ridge ventrally and a parallel subventral smooth carina immediately beside it; first metatarsomere as long as following two tarsomeres combined, as long as dorsal tibial spur. Protibia short, bidentate; anterior claws symmetrical, basal tooth of both claws bluntly truncate at apex.

MALE GENITALIA. Aedeagus: Fig. 3E–G.

Female

Unknown.

Selaserica hosanagarana sp. nov.

urn:lsid:zoobank.org:act:891648E9-6C6B-4564-8B06-1E6BBE938493

Fig. 3I–M

Diagnosis

The new species is very similar to *Selaserica vagans* Fabrizi & Ahrens, 2016; however, the new species differs by the distinctly shorter parameres, as well as by the shape of the apex of the phallobase: the insertion of the left paramere in *S. hosanagarana* is positioned more laterally than in *S. vagans*.

Etymology

The name (adjective in the nominative singular) refers to the type locality, Hosanagara (India).

Type material

Holotype

INDIA • ♂; “Karnataka, Shimoga, Hosanagara, 589 m, 13°55′ N, 75°04′ E, 22.vi.2018, leg. R. Naveen / 1024 Sericini: Asia spec. / KS 0288 / ICAR-NBAIR-S15”; NBAIR.

Paratype

INDIA • 1 ♂; “Karnataka, Shimoga, Hosanagara, 589 m, 13°55′ N, 75°04′ E, 18.vi.2018, leg. R. Naveen / 1024 Sericini: Asia spec. / KS 0327 / ICAR-NBAIR-S16”; NBAIR.

Description

MEASUREMENTS. Length: 7.9 mm (variation: 7.9–8.3 mm), length of elytra: 5.3 mm (5.3–5.8 mm), width: 4.3 mm (4.3–4.4 mm).

HABITUS AND COLORATION. Body oval (Fig. 3M), reddish brown, antennae yellow, dorsal surface glabrous and shiny.

HEAD. Labroclypeus trapezoidal, distinctly wider than long, widest at base, lateral margins convex and strongly convergent to weakly rounded anterior angles, lateral border and ocular canthus producing a

blunt angle, margins weakly reflexed, anterior margin distinctly sinuate medially; surface moderately convex medially, shiny, finely and densely punctate, distance between punctures smaller than their diameter, with a few fine setae anteriorly; frontoclypeal suture finely impressed and weakly angled medially; smooth area anterior to eye approximately three times as wide as long; ocular canthus narrow and moderately wide, densely punctate, with a single short terminal seta. Frons shiny, with fine, dense punctures, glabrous except for a few setae beside eyes. Eyes moderately large, ratio of diameter/interocular width: 0.64. Antenna with ten antennomeres; club with three antennomeres, 1.3 times as long as remaining antennomeres combined. Mentum elevated and flattened anteriorly.

PRONOTUM. Moderately wide, widest at base, lateral margins nearly straight and subparallel in basal two thirds, in anterior third sides convex and moderately narrowed to anterior angles, anterior angles distinctly produced and sharp, posterior angle blunt, anterior margin convexly produced medially, anterior marginal line complete, basal marginal line absent, base medially without a rim of short fine setae; surface densely and coarsely punctate, punctures with microscopic setae only, otherwise glabrous; lateral anterior and lateral borders sparsely setose; hypomeron carinate at ventral base but slightly produced ventrally, on the carina with numerous long setae. Scutellum small, triangular, dull, with fine and sparse punctures.

ELYTRA. Oblong, widest at posterior third, striae distinctly impressed, finely and densely punctate, intervals slightly convex, with fine, dense punctures concentrated along striae, punctures with minute setae, odd intervals bear a few short, erect setae; epipleural edge fine, ending at convex external apical angle of elytra, epipleura densely setose; apical border membranous, apex covered with short microtrichomes.

ABDOMEN. Ventral surface dull, thorax and metacoxa with large and dense punctures, sparsely finely setose; metacoxa glabrous except for numerous short setae laterally; abdominal sternites shiny, finely and densely punctate, punctures with moderately long setae, each sternite with a transverse row of coarse punctures, each bearing a long seta, penultimate sternite apically with a shiny and smooth but very short chitinous border. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.32. Pygidium moderately convex, shiny, finely and densely punctate, without smooth midline, with a few long setae beside apical border.

LEGS. Moderately wide; femora shiny, with two longitudinal rows of setae, finely and sparsely punctate. Metafemur almost impunctate, anterior edge acute and without adjacent serrated line, anterior longitudinal row of setae complete; posterior ventral margin almost straight, weakly widened in apical half, neither ventrally nor dorsally serrated but smooth, glabrous. Metatibia moderately wide and long, widest at apex, dorsal and ventral margins subparallel in posterior two thirds, ratio of width/length: 1/3.2, longitudinally convex dorsally, with two groups of spines, basal one at one third, apical one at three quarters of metatibial length, basally with a very short serrated line, beside it with a few single short setae; lateral face longitudinally convex, very sparsely punctate and glabrous; ventral margin with three fine, equidistant spines; medial face smooth, apex shallowly concave interiorly near tarsal articulation. Tarsomeres impunctate dorsally, pro- and mesotarsomeres with very dense, fine setae ventrally producing a brush-like structure; metatarsomeres with a strongly serrated, longitudinal ridge ventrally but a parallel carina is absent, sparsely setose ventrally, first metatarsomere a little shorter than following two tarsomeres combined and one third of its length longer than dorsal tibial spur. Protibia moderately long, sharply tridentate. All claws symmetrical, feebly curved and long, with normally developed basal tooth.

MALE GENITALIA. Aedeagus: Fig. 3I–L.

Female

Unknown.

Serica (s. str.) eberlei sp. nov.

[urn:lsid:zoobank.org:act:85FBE853-EDA8-427D-A6BD-4076CD582839](https://doi.org/10.21203/rs.3.rs-2611111/v1)

Fig. 4A–D

Diagnosis

Serica (s. str.) eberlei sp. nov. is in shape of genitalia similar to *S. chinhillensis* Ahrens & Fabrizi, 2011. *Serica (s. str.) eberlei* sp. nov. differs from the latter by the distinctly shorter and straight antennal club of the male, by the laterally straight right paramere and the more basally bent hook of the left paramere.

Etymology

The name of this new species (noun in the genitive case) is dedicated to Dr. Jonas Eberle, in gratitude for his merits in the scarab working group at the ZFMK.

Type material

Holotype

INDIA • ♂; “NE India, Arunachal Pradesh, Sela pass, 27°30' N, 92°03' E, 25.VI.2008, 4100 m, leg. C. Reuter / 1028 Sericini Asia spec.”; NME.

Description

MEASUREMENTS. Length: 8.8 mm, length of elytra: 6.3 mm, width: 4.4 mm.

HABITUS AND COLORATION. Body oblong (Fig. 4D), dark brown, antennae and legs yellowish, wide parts on elytra and pronotal lateral margins reddish brown, dorsal surface dull; frons, pronotum and elytra with sparse, erect setae.

HEAD. Labroclypeus slightly wider than long, widest at base, lateral margins moderately convex and convergent, anterior angles weakly rounded, anteriorly not deeply but widely sinuate medially, lateral margins moderately reflexed, anterior margin strongly reflexed; surface flat and shiny, coarsely and densely punctate, with a few long, erect setae behind anterior margin; frontoclypeal suture indistinctly incised, slightly elevated and weakly convex; smooth area anterior to eye large and flat, approximately 1.5 times as wide as long; ocular canthus moderately long and slender ($\frac{1}{3}$ of ocular diameter), smooth, with one short terminal seta. Frons completely dull and flat, with fine and moderately dense punctures, with long, erect setae beside eyes and on posterior part. Eyes large, ratio of diameter/interocular width: 0.71. Antenna with ten antennomeres; antennomeres three to five slightly wider than long, antennomere six and seven transverse and short; club with three antennomeres, 1.5 times as long as remaining antennomeres combined and weakly reflexed. Mentum weakly elevated, anteriorly flattened. Labrum transverse, short, moderately produced, moderately sinuate medially.

PRONOTUM. Transverse, widest at base, lateral margins weakly convex and moderately convergent anteriorly, in anterior quarter moderately convex, anterior angles moderately produced, sharp, posterior angles weakly rounded; anterior margin medially with a complete, broad marginal line and strongly convexly produced medially; surface not densely and finely punctate, a few larger punctures with white, short and appressed setae, otherwise only with very minute setae in punctures; anterior and lateral borders long and densely setose; hypomeron not carinate at base. Scutellum slender and long, triangular, finely and moderately densely punctate, with a few minute setae in punctures.

ELYTRA. Oblong, widest at apical third, in disc nearly completely yellow, striae weakly impressed, finely and densely punctate, intervals slightly convex, with fine, moderately dense punctures concentrated along striae, dark spots completely smooth, intervals with fine, short, white setae which are sparsely scattered, sutural and lateral intervals with a few long, erect setae; epipleural edge fine, ending at moderately curved

external apical angle of elytra, epipleura densely setose, apical border finely membranous, membranous rim composed of fine microtrichomes (magnification 100×).

ABDOMEN. Ventral surface dull, finely and not densely punctate, moderately densely setose, metacoxa glabrous, with a few long setae only laterally; abdominal sternites finely and densely punctate, with a transverse row of coarse punctures, each bearing a short seta. Mesosternum between mesocoxae half as wide as slender mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.48. Pygidium moderately convex and dull, finely and densely punctate, smooth midline lacking, with dense setae, moderately long ones mixed with long erect setae.

LEGS. Very slender; femora with two longitudinal rows of setae, coarsely and not densely punctate between rows, with robust setae on basal half; metafemur dull, anterior margin acute, without a continuously serrated line behind anterior edge, posterior margin serrated ventrally in apical half and not widened, completely serrated dorsally, in basal half with a few long setae which are half as long as width of metafemur. Metatibia slender and long, widest at apex, ratio of width/length: 1/5.1, dorsally sharply carinate, with two groups of spines, basal group at first third, apical group at two thirds of metatibial length, basally with a few single, robust setae; longitudinally concave externally, finely and sparsely punctate, with numerous irregular wrinkles on dorsal portion; ventral edge serrated, with two very widely separated robust setae interspersed with two finer ones, medial face with a shallow longitudinal groove medially, sparsely punctate and along dorsal margin with a row of very robust punctures, each bearing a short seta, apex interiorly near tarsal articulation distinctly but bluntly truncate. Tarsomeres ventrally with sparse, very minute setae, dorsally smooth; metatarsomeres laterally and dorsally carinate, with a strongly serrated ridge ventrally, first metatarsomere as long as two following tarsomeres combined and twice as long as upper tibial spur; mesotarsomeres not carinate, punctures and wrinkles lacking. Protibia moderately long, bidentate, external edge with a few small teeth at base, anterior claws symmetrical, basal tooth of inner claw normally pointed, as external one.

MALE GENITALIA. Aedeagus: Fig. 4A–C.

Female

Unknown.

***Serica (s. str.) tashigaonensis* sp. nov.**

[urn:lsid:zoobank.org:act:A5B0AF1B-5AB6-41EE-BC22-85D0DB9820DA](https://zoobank.org/act:A5B0AF1B-5AB6-41EE-BC22-85D0DB9820DA)

Fig. 4E–H

Diagnosis

Serica tashigaonensis sp. nov. resembles *S. kingdoni* Ahrens, 1999 in the short, simply shaped parameres; however, in the new species the phallobase is strongly asymmetric at the apex and the left paramere is strongly narrowed towards apex.

Etymology

The name (adjective in the nominative singular) refers to the type locality close to Tashigaon (Nepal).

Type material

Holotype

NEPAL • ♂; “E-Nepal, Arun Valley, W above Tashigaon, 25-2700m, 26-27.V.2014, leg. J. Schmidt, 27°36'33" N, 87°13'28" E / 1032 Sericini Asia spec.”; NME.

Description

MEASUREMENTS. Length: 9.4 mm, length of elytra: 7.1 mm, width: 5.0 mm.

HABITUS AND COLORATION. Body oblong (Fig. 4H), dark brown, antennae and legs yellowish, ventral parts reddish brown, punctures on elytra reddish brown, dorsal surface dull; frons, pronotum and elytra with sparse, adpressed white setae.

HEAD. Labroclypeus as wide as long, widest at base, lateral margins weakly convex and convergent, anterior angles blunt, anteriorly deeply and widely sinuate medially, lateral margins moderately reflexed, anterior margin strongly reflexed; surface flat and shiny, finely and densely punctate, with a few long, erect setae behind middle; frontoclypeal suture indistinctly incised, slightly elevated and weakly curved; smooth area anterior to eye large and moderately convex, approximately 2.5 times as

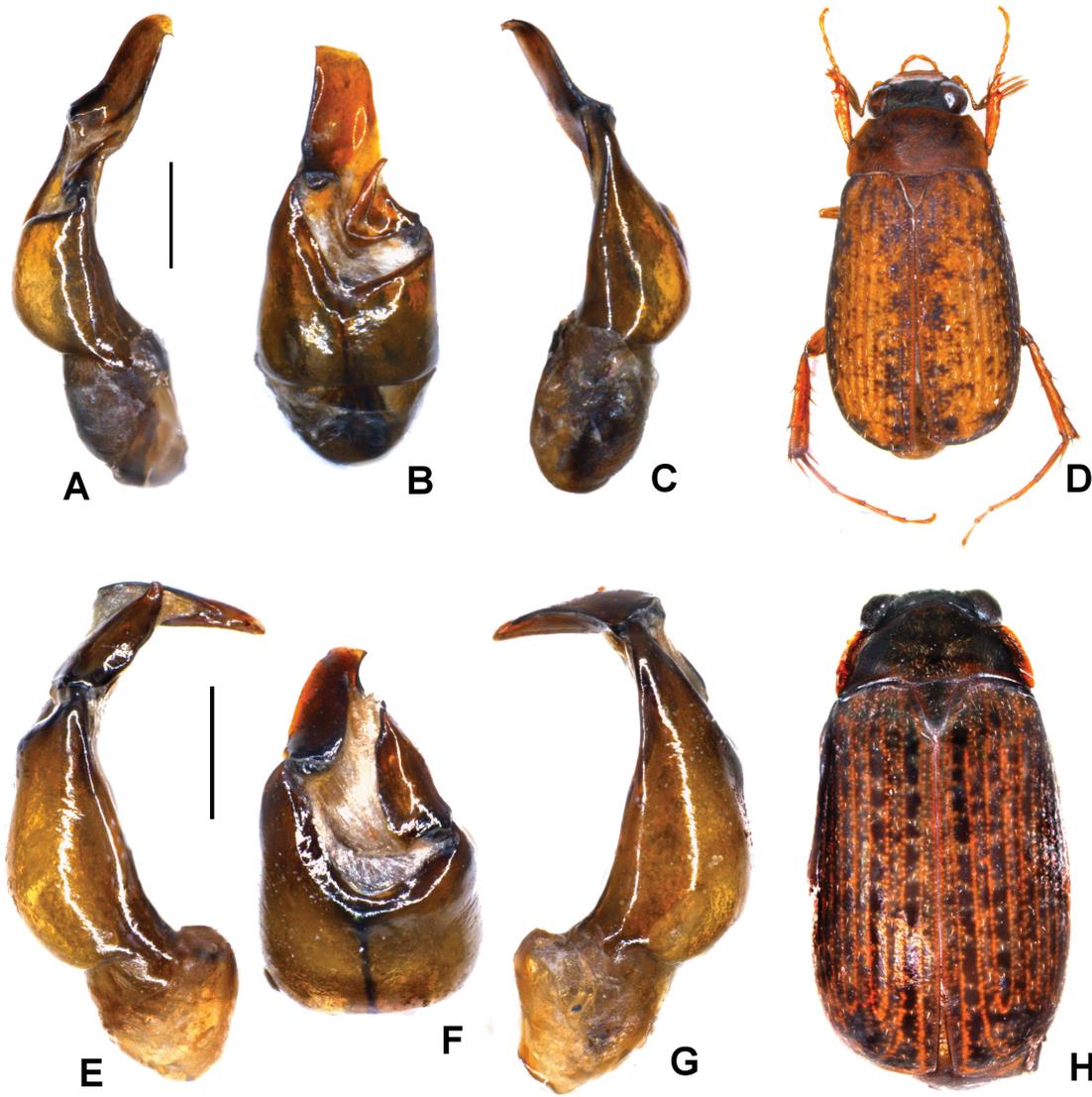


Fig. 4. A–D. *Serica* (s. str.) *eberlei* sp. nov., holotype, ♂. E–H. *S.* (s. str.) *tashigaonensis* sp. nov., holotype, ♂. A, E. Aedeagus, left side lateral view. C, G. Aedeagus, right side lateral view. B, F. Parameres, dorsal view. D, H. Habitus. Scale bars: 0.5 mm. Habitus not to scale.

wide as long; ocular canthus short and slender ($\frac{1}{4}$ of ocular diameter), smooth, with one short terminal seta. Frons completely dull and flat, with fine and moderately dense punctures, with long, erect setae beside eyes and on posterior part. Eyes very large, ratio of diameter/interocular width: 0.9. Antenna with ten antennomeres; antennomeres three to six slightly wider than long, antennomere seven transverse and short; club with three antennomeres, 2.5 times as long as remaining antennomeres combined and strongly reflexed outward. Mentum weakly elevated, anteriorly flattened. Labrum transverse, short, moderately produced, moderately sinuate medially.

PRONOTUM. Moderately transverse, widest at base, lateral margins weakly convex and moderately convergent anteriorly, anterior angles weakly produced, rounded at tip, posterior angles weakly rounded; anterior margin medially with a widely lacking marginal line and strongly convexly produced medially; surface not densely and finely punctate, a few larger punctures with white, short and appressed setae, otherwise only with very minute setae in punctures; anterior and lateral borders long and densely setose; hypomeron not carinate at base. Scutellum slender and long, triangular, finely and moderately densely punctate, with a few minute setae in punctures.

ELYTRA. Oblong, widest at apical third, striae weakly impressed, finely and densely punctate, intervals flat, with fine, sparse punctures concentrated along striae, punctures on odd intervals denser, impunctate spots dark, intervals with fine, short, white setae which are sparsely scattered, sutural and lateral intervals with a few long, erect setae; epipleural edge fine, ending at moderately curved external apical angle of elytra, epipleura densely setose, apical border finely membranous, membranous rim composed of fine microtrichomes (magnification 100 \times).

ABDOMEN. Ventral surface dull, finely and not densely punctate, moderately densely setose, metacoxa glabrous, with a few long setae only laterally; abdominal sternites finely and densely punctate, with a transverse row of coarse punctures, each bearing a short seta. Mesosternum between mesocoxae half as wide as slender mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.16. Pygidium weakly convex and dull, finely and densely punctate, smooth midline lacking, with long, moderately dense setae.

LEGS. Very slender; femora with two longitudinal rows of setae, coarsely and not densely punctate between rows, with robust setae on basal half; metafemur dull, anterior margin acute, without a continuously serrated line behind anterior edge, posterior margin serrated ventrally in apical half and not widened, completely serrated dorsally, in basal half with a few long setae which are half as long as width of metafemur. Metatibia slender and long, widest at apex, ratio of width/length: 1/5.1, dorsally sharply carinate, with two groups of spines, basal group shortly before middle, apical group at three quarters of metatibial length, basally with a few single, robust setae; longitudinally concave externally, impunctate, with numerous irregular wrinkles; ventral edge serrated, with three nearly equidistant spines; medial face with a shallow longitudinal groove medially, impunctate, apex interiorly near tarsal articulation distinctly but bluntly truncate. Tarsomeres ventrally with sparse, very minute setae, dorsally smooth; metatarsomeres laterally and dorsally carinate, with a strongly serrated ridge ventrally; first metatarsomere as long as two following tarsomeres combined and nearly twice as long as upper tibial spur; mesotarsomeres in holotype lacking. Protibia long, bidentate, external edge with a few small teeth at base, anterior claws symmetrical, basal tooth of inner claw normally pointed, as external one.

MALE GENITALIA. Aedeagus: Fig. 4E–G.

Female

Unknown.

Discussion

This second addenda to the monograph of Sericini of the Indian subcontinent (Ahrens & Fabrizi 2016), that includes the description of nine new species, further revealed the large amount of endemism on the subcontinent and confirmed yet again, how unexplored particularly the northeastern parts of India are. Already Ahrens & Fabrizi (2016) demonstrated that wide parts of the subcontinent are completely unknown in terms of their species composition and species diversity. Therefore, efforts of additional and more intensive sampling with light traps closer to remnant forest areas may reveal unknown taxa, but also complete the knowledge of the fauna in a more comprehensive way, covering the entire land surface of the Indian subcontinent rather than only selected places of interest. Therefore, we plan further field work and sampling effort seeking to involve more students and collaborators.

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