Bonn zoological Bulletin

Supplementum Vol. 64 (2019)

formerly: Bonner zoologische Monographien

A taxonomic revision of Chinese *Neoserica* (sensu lato): final part (Coleoptera: Scarabaeidae: Sericini)

Wan-Gang Liu, Silvia Fabrizi, Ming Bai, Xingke Yang & Dirk Ahrens

An open access journal of organismal zoology, published by
Zoologisches Forschungsmuseum Alexander Koenig – Leibniz-Institut für Biodiversität der Tiere, Bonn

BONN ZOOLOGICAL BULLETIN – SUPPLEMENTUM (BzB-S),
formerly “Bonner zoologische Monographien”,

The peer-reviewed series Bonn zoological Bulletin – Supplementum, formerly “Bonner zoologische Monographien”, has existed since 1971. It is published by the Zoological Research Museum Alexander Koenig – Leibniz Institute for Animal Biodiversity (ZFMK), Bonn. Supplements on focus topics are produced in irregular succession. The BzB-S consists of original zoology papers too long for inclusion in our institute’s regular journal, Bonn zoological Bulletin. Preferred manuscript topics are: systematics, taxonomy, biogeography, anatomy, and evolutionary biology. Manuscripts should be in American English. Authors are requested to contact the managing editor prior to manuscript submittal.

For subscription, back issues and institutional exchange, please contact the ZFMK library (ZFMK, Bibliothek, Mareike Bollen, Adenauerallee 160, 53113 Bonn, Germany, tel. +49 228–9122–216, fax: +49 228–9122–212; m.bollen@zfmk.de). The online version of BzB-S is available free of charge at the BzB homepage: http://www.zoologicalbulletin.de.

Author of this issue:
Thomas Wesener
Published: Bonn zoological Bulletin – Supplementum Vol. 63, 104 pp.

ISBN-13: 978-3-925382-67-3
ISSN: 0302-671X

Produced by Eva-Maria Levermann, Kaiserstr. 129, 53113 Bonn, Germany; emlevermann@netcologne.de.
Printed and bound by Verlag Natur & Wissenschaft, Postfach 170209, 42624 Solingen, Germany.

Cover: The Montagne de Français giant pill-millipede, *Zoosphaerium solitarium* Wesener, 2009, one of Madagascar's numerous microendemic species, occuring only on top of a single karstic hill in northern Madagascar. Photos by Jörn Köhler, Darmstadt.

A taxonomic revision of Chinese *Neoserica* (sensu lato): final part (Coleoptera: Scarabaeidae: Sericini)

Wan-Gang Liu, Silvia Fabrizi, Ming Bai, Xingke Yang & Dirk Ahrens

Bonn zoological Bulletin Supplementum 64: 1–71

Contents Volume 64

Bonn zoological Bulletin – Supplementum 64: 1–71
2019 · Liu W.G. et al.
https://doi.org/10.20363/BZB-S-2019.64

June 2019
ISSN 0302–671X
http://www.zoologicalbulletin.de

Monograph

urn:lsid:zoobank.org:pub:2C5BEB95-3242-485F-A3CD-F52A55CFBF83

A taxonomic revision of Chinese *Neoserica* (sensu lato): final part (Coleoptera: Scarabaeidae: Sericini)

Wan-Gang Liu[1], Silvia Fabrizi[2], Ming Bai[3], Xingke Yang[4] & Dirk Ahrens[5, *]

[1] *Institute of Earth and Environment, Chinese Academy of Sciences, Yanxiang Road 97#, Yanta District, Xi'an 710061 P.R. China*
[1, 3, 4] *Key Laboratory of Zoological Systematics and Evolution, Institute of Zoology, Chinese Academy of Sciences, Box 92, No. 1, Beichen West Road, Chaoyang District, Beijing, 100101, P.R. China*
[1, 2, 5] *Centre of Taxonomy and Evolutionary Research, Zoologisches Forschungsmuseum A. Koenig, Adenauerallee 160, D-53113 Bonn, Germany*

* *Corresponding author: Email: ahrens.dirk_col@gmx.de*

[1] urn:lsid:zoobank.org:author:31DC0343-BFC2-4622-B325-7392294DAF41
[2] urn:lsid:zoobank.org:author:D88C5E0B-9E32-430A-909C-CED1C3075471
[3] urn:lsid:zoobank.org:author:AF657935-9B32-4F91-B25D-46203C82EB51
[4] urn:lsid:zoobank.org:author:1DFA8B54-148D-4346-82B1-35DDBBFA9644
[5] urn:lsid:zoobank.org:author:DEDCE5CF-AA11-4BBF-A2C6-D7C815019714

Abstract. The species of the *Neoserica major*, *N. uniformis*, *N. dianae*, *N. funiushanensis, N. multifoliata* species groups, as well as all other species incertae sedis of *Neoserica* Brenske, 1894 are revised, while additional taxa were discovered in the *N. calva* group. The study resulted in three new combinations, *Neoserica insubida* (Brenske, 1898) comb. n., *N. major* (Arrow, 1946) comb. n., and *N. sigillata* (Brenske, 1898) comb. n., and the description of 39 new species from China: *Neoserica allorubiginea* Ahrens, Fabrizi & Liu, sp. n., *N. anmaxinzhaiensis* Ahrens, Fabrizi & Liu, sp. n., *N. bailongshanica* Ahrens, Fabrizi & Liu, sp. n., *N. caiyangheensis* Ahrens, Fabrizi & Liu, sp. n., *N. costisquamosa* Ahrens, Fabrizi & Liu, sp. n., *N. dashanensis* Ahrens, Fabrizi & Liu, sp. n., *N. defuensis* Ahrens, Fabrizi & Liu, sp. n., *N. dianae* Ahrens, Fabrizi & Liu, sp. n., *N. dilatipennis* Ahrens, Fabrizi & Liu, sp. n., *N. fopingensis* Ahrens, Fabrizi & Liu, sp. n., *N. funiushanensis* Ahrens, Fabrizi & Liu, sp. n., *N. gracilisetosa* Ahrens, Fabrizi & Liu, sp. n., *N. huangjingensis* Ahrens, Fabrizi & Liu, sp. n., *N. jianfenglingica* Ahrens, Fabrizi & Liu, sp. n., *N. jinpingica* Ahrens, Fabrizi & Liu, sp. n., *N. leigongshanica* Ahrens, Fabrizi & Liu, sp. n., *N. liangshandingensis* Ahrens, Fabrizi & Liu, sp. n., *N. longwangshanica* Ahrens, Fabrizi & Liu, sp. n., *N. martinui* Ahrens, Fabrizi & Liu, sp. n., *N. menglaensis* Ahrens, Fabrizi & Liu, sp. n., *N. milani* Ahrens, Fabrizi & Liu, sp. n., *N. nanhuaensis* Ahrens, Fabrizi & Liu, sp. n., *N. nannuoshanica* Ahrens, Fabrizi & Liu, sp. n., *N. napoensis* Ahrens, Fabrizi & Liu, sp. n., *N. paramajor* Ahrens, Fabrizi & Liu, sp. n., *N. pararubiginea* Ahrens, Fabrizi & Liu, sp. n., *N. pariliforceps* Ahrens, Fabrizi & Liu, sp. n., *N. pingbianensis* Ahrens, Fabrizi & Liu, sp. n., *N. pui* Ahrens, Fabrizi & Liu, sp. n., *N. qingyinica* Ahrens, Fabrizi & Liu, sp. n., *N. reni* Ahrens, Fabrizi & Liu, sp. n., *N. sangangensis* Ahrens, Fabrizi & Liu, sp. n., *N. shuizhouensis* Ahrens, Fabrizi & Liu, sp. n., *N. strenua* Ahrens, Fabrizi & Liu, sp. n., *N. tianmushanica* Ahrens, Fabrizi & Liu, sp. n., *N. tsinlingensis* Ahrens, Fabrizi & Liu, sp. n., *N. xingdoushanana* Ahrens, Fabrizi & Liu, sp. n., *N. yanshanica* Ahrens, Fabrizi & Liu, sp. n., *Neoserica yulongensis* Ahrens, Fabrizi & Liu sp. n. The lectotypes of *Neoserica insubida* (Brenske, 1898) and *N. rubiginea* Moser, 1916 are designated. Finally, due to primary homonymy, *Neoserica* (s. str.) *schoolmeestersi* Ahrens nom. n. is given as replacement name for the Thai species *Neoserica* (s. str.) *vicina* Ahrens, 2003 (nec Moser, 1915). A key to the genera of Sericini with multilamellate antennae, species-groups of *Neoserica* from mainland Asia, as well as a key to the individual species of the species-groups examined here are provided. A map of the species distribution is given; habitus and male genitalia are illustrated.

Key words. Beetles, chafers, *Neoserica*, China, new species, new records.

INTRODUCTION

In the course of the revision of the genus *Neoserica* Brenske, 1894 of China a recent series of papers were published (Ahrens et al. 2014a–c, Liu et al. 2014a–c, 2015, Liu et al. 2016). In continuation of this work, additional new taxa were discovered for the *N. calva* group; we present the results of the taxonomic revisions of the *Neoserica major*, *N. uniformis*, *N. dianae*, *N. funiushanensis* species groups as well as of all species of uncertain systematic assignment (species incertae sedis).

Neoserica (sensu lato) comprises a polyphyletic mix of larger species with multilamellate antenna (Ahrens 2003, 2004, Liu et al. 2014a–c, 2015, 2016). They need a revision of generic nomenclature once they are better known in their taxonomy, morphology, and phylogeny. The treatment of the species of uncertain systematic assignment remains particularly complicated as the relationships to

other groups of species remain obscure and would benefit from future investigations, especially once the neighbouring faunas of Asia are better known.

MATERIAL & METHODS

The terminology and methods used for measurements, specimen dissection and genital preparation follow Ahrens (2004). Data from specimens examined are cited in the text with original label contents given in quotation marks, multiple labels for a single specimen are separated by a "/". Descriptions and illustrations of new taxa are based on the holotype specimen if not otherwise stated, while the variation of specimens is given separately under 'variation'. Male genitalia were glued to a small pointed card and photographed in both lateral and dorsal views using a stereomicroscope Leica M125 with a Leica DC420C digital camera or a Zeiss AxioCam HRc mounted on a Zeiss Stereo Discovery V20 stereo-microscope. A number of single focussed images were combined with the Automontage software in order to obtain an entirely focussed image. The resulting images were subsequently digitally edited.

Abbreviations used in the text for collection depositories are as follows:

BMH Bishop Museum Honululu, Hawai, U.S.A.
CAU Department of Entomology, China Agricultural University, Beijing, China
CMLN collection M. Langer, Niederwiesa, Germany;
CNA collection A. Napolov, Riga, Latvia
CP collection P. Pacholátko, Brno, Czech Republic;
HBUM Museum of Hebei University, Baoding (Hebei Province), China
IZAS Institute of Zoology, Chinese Academy of Sciences, Beijing, China
MNHN Museum national d'Histoire naturelle, Paris, France
MZUF Museo Zoologico "La Specola", Università di Firenze, Italy
NHMW Naturhistorisches Museum Wien, Austria;
NHRS Naturhistoriska Riksmuseet Stockholm, Sweden
NKU Nankai University, Tianjin, China
NMPC National Museum Prague (Natural History), Prague, Czech Republic
RMNH Naturalis Biodiversity Centre Leiden, Netherlands
SYUG Sun Yat-Sen University, Guangzhou, China;
USNM National Museum of Natural History, Washington D.C., U.S.A.
ZFMK Zoologisches Forschungsmuseum A. Koenig, Bonn, Germany
ZIN Russian Academy of Sciences, Zoological Institute, St. Petersburg, Russia
ZMHB Museum für Naturkunde Berlin, Germany;
ZSM Zoologische Staatssammlung München, Germany

RESULTS

Key to Sericini genera with multi-lamellate antennal club from China (including *Neoserica* species groups and *Neoserica* species incertae sedis)

1 Hypomeron not carinate. ..... ***Tetraserica* Ahrens, 2004**
1' Hypomeron carinate. 2
2 Antennal club in female composed of 3 antennomeres. 3
2' Antennal club in female composed of more than 3 antennomeres[1]. 27
3 Posterior margin of metafemur ventrally and dorsally serrate. 4
3' Posterior margin of metafemur ventrally smooth. 10
4 Anterior angles of pronotum obsolete. 8
4' Anterior angles of pronotum acute and moderately produced. 5
5 Antennal club in male with four antennomeres and straight. 6
5' Antennal club in male with five antennomeres and reflexed. ..... ***N. longwangshanica* Ahrens, Fabrizi & Liu sp. n.***
6 Dorsal surface more or less glabrous. ..... ***Neoserica* (s.l.) *calva* group**
6' Dorsal surface densely setose. 7
7 Metatibia beside dorsal margin in basal half with a serrated longitudinal line or carina. ..... ***N. jianfenglingica* Ahrens, Fabrizi & Liu sp. n.***
7' Metatibia beside dorsal margin without a serrated longitudinal line or carina. ..... ***N. gracilisetosa* Ahrens, Fabrizi & Liu sp. n.***
8 Dorsal surface nearly glabrous. ..... ***Gastroserica* Brenske, 1897**
8' Dorsal surface densely setose. 8
9 Metatibia beside dorsal margin with a serrated longitudinal line or carina. ..... ***Neoserica* (s.str.) Brenske, 1894**
9' Metatibia beside dorsal margin without a serrated longitudinal line or carina. ..... ***Calloserica* Brenske, 1894**
10 Metatibia beside dorsal margin with a serrated longitudinal line or carina. 11

[1]If female specimens were unknown*, we treated those taxa in the key as if the antennal club in the female was composed of 3 antennomeres.

10’ Metatibia beside dorsal margin without a serrated longitudinal line or carina. 14
11 Metatibia with one group of robust spines. .... ***Lasioserica*** **Brenske, 1896**
11’ Metatibia with two groups of robust spines. 12
12 Frons dull. ..... ***Neoserica*** **(s.l.)** ***silvestris*** **group**
12’ Frons in anterior two thirds shiny, without toment. 13
13 Metafemur beside anterior margin with a continuous serrated line. Aedeagus and parameres symmetric, phallobase without lateral apophysis. ....***N. jinpingica*** **Ahrens, Fabrizi & Liu sp. n.***
13’ Metafemur beside anterior margin without a continuous serrated line. Aedeagus asymmetric, phallobase with a long, right lateral apophysis. ..... ***N. anmaxinzhaiensis*** **Ahrens, Fabrizi & Liu sp. n.**
14 Antennal club in males long and reflexed. 15
14’ Antennal club in males short, or moderately long and straight. 17
15 Antennal club in male with five antennomeres. .... ***Anomalophylla*** **Reitter, 1887**
15’ Antennal club in male with four antennomeres. ... 16
16 Phallobase asymmetric. .... ***Neoserica*** **(s.l.)** ***dianae*** **group**
16’ Phallobase symmetric. ....***Neoserica*** **(s.l.)** ***funiushanensis*** **group***
17 Protibia bidentate. 18
17’ Protibia tridentate. ..... ***Trioserica*** **Moser, 1922**
18 Elytra bicolored, yellowish or reddish brown and black. 19
18’ Elytra unicolored. 20
19 Parameres symmetrical. ..***Oxyserica*** **Brenske, 1900**
19’ Parameres asymmetrical. ....***Microserica*** **Brenske, 1894**
20 Apex of metatibia shallowly truncate at interior apex near tarsal articulation. 21
20’ Apex of metatibia sharply truncate at interior apex near tarsal articulation. 26
21 Dorsal surface yellowish brown to reddish brown, strongly and simply shiny. ..... ***Neoserica*** **(s.l.)** ***lubrica*** **group**
21’ Dorsal surface dull or iridescently shiny. 22
22 Elytra glabrous or with fine setae only. Metatibia sharply carinate along dorsal margin. 23
22’ Elytra with single scale-shaped setae. Metatibia longitudinally convex along dorsal margin. .... ***N. costisquamosa*** **Ahrens, Fabrizi & Liu sp. n.***
23 Antennal club in male with four antennomeres. .. 24
23’ Antennal club in male with six antennomeres. ....***N. menglaensis*** **Ahrens, Fabrizi & Liu sp. n.***
24 Labroclypeus nearly semi-circular. Metatibia wide and short. 25
24’ Labroclypeus subrectangular. Metatibia narrow and long. .....***Neoserica*** **(s.l.)** ***vulpes*** **group**
25 Phallobase strongly asymmetric. Metatarsomere 1 as long as dorsal metatibial spine. ..... ***N. xingdoushanana*** **Ahrens, Fabrizi & Liu sp. n.***
25’ Phallobase symmetric. Metatarsomere 1 distinctly longer than dorsal metatibial spine. ....***N. yanshanica*** **Ahrens, Fabrizi & Liu sp. n.***
26 Pronotum and elytra always almost glabrous. ..... .***Sericania*** **Motschulsky, 1860** (see also couplet 38)
26’ Pronotum and elytra always distinctly setose. .... ***Gynaecoserica*** **Brenske, 1896**
27 Labrum without a transverse rim of very dense, short and robust setae. 28
27’ Labrum short, with a transverse rim of very dense, short and robust setae. Dorsal surface densely setose. ..... ***Neoserica*** **(s.l.)** ***pilosula*** **group**
28 Metatibia slender and long. 34
28’ Metatibia short and wide. 29
29 Body smaller 8.5 mm. .... ***Neoserica*** **(s.l.)** ***obscura*** **group**
29’ Body larger 9 mm. 30
30 Antennal club composed in male and female of 4 antennomeres. 31
30’ Antennal club composed in male of more than 4 antennomeres. ..... ***Neoserica*** **(s.l.)** ***multifoliata*** **group** (from Indochina)
31 Aedeagus asymmetric. 32
31’ Aedeagus symmetric. .***N. insubida*** **(Brenske, 1898)**
32 Base of labroclypeus not covered with dull toment. Parameres entirely fused with phallobase to a uniform but gently narrowed tube..... ..... ***Neoserica*** **(s.l.)** ***majori*** **group**
32’ Base of labroclypeus covered with dull toment. .. 33
33 Parameres partly fused with phallobase, at least one paramere separate from phallobase..... ..... ***Neoserica*** **(s.l.)** ***uniformis*** **group**
33’ Parameres normal, not fused with phallobase. ....***N. martinui*** **Ahrens, Fabrizi & Liu sp. n.**
34 Antennal club of males with 7 antennomeres. 35
34’ Antennal club of males with 6 or less antennomeres. 36
35 Metafemur with a continuously serrated line adjacent to the anterior margin of metafemur. Protibia more or less distinctly tridentate. ....***Neoserica*** **(s.l.)** ***septemlamellata*** **group**
35’ Metafemur without a continuously serrated line adjacent to the anterior margin of metafemur. Protibia always distinctly bidentate. ....***Nepaloserica*** **Frey, 1965**
36 Basis of labroclypeus dull. Antennal club of males with 6 antennomeres. 37
36’ Antennal club of males with 5 or 4 antennomeres. 38
37 Angle between basis of hypomeron and that of pronotum strongly rounded, angle between surfaces of hypomeron and pronotum basally blunt.

Hypomeron basally strongly produced ventrally and transversely sulcate. .. ***Lepidoserica*** **Nikolaev, 1979**

37' Angle between basis of hypomeron and that of pronotum sharp, angle between surfaces of hypomeron and pronotum sharp. Hypomeron basally not produced ventrally and not sulcate. ....***Neoserica*** **(s.l.)** ***abnormis*** **group**

38 Apex of metatibia shallowly truncate at interior apex near tarsal articulation. 39

38' Apex of metatibia deeply truncate at interior apex near tarsal articulation. .... ***Sericania*** **Motschulsky, 1860** (see couplet 26)

39 Body surface strongly shiny. Body smaller (5.7–6.6 mm). .....***Neoserica*** **(s.l.)** ***speciosa*** **group**

39' Body surface dull. Body larger (8 mm). ....***Chrysoserica*** **Brenske, 1897**

Updated key to species of the *Neoserica calva* group (♂♂):

1 Eyes small: ratio diameter/interocular distance < 0.68. 2

1' Eyes larger: ratio diameter/interocular distance ≥ 0.7..... 12

2 Antennal club longer, 3 times as long as remaining antennomeres combined.. .... ***N. zhibenshanica*** **Liu et al., 2014**

2' Antennal club shorter, at maximum 1.7 times as long as remaining antennomeres combined. 3

3 Antennal club short, at maximum 1.2 times as long as remaining antennomeres combined. Phallobase without an apical process. 7

3' Antennal club longer, 1.4 to 1.7 times as long as remaining antennomeres combined. 4

4 Phallobase without an apical process. 5

4' Phallobase with an apical process. 8

5 Phallobase strongly narrowed before apex. ....***N. nannuoshanica*** **Ahrens, Fabrizi & Liu sp. n.**

5' Phallobase not narrowed before apex. Right paramere with a large basal hook. 6

6 Left paramere with a distinct sharp tooth before apex. .. ***N. napoensis*** **Ahrens, Fabrizi & Liu sp. n.**

6' Left paramere without a tooth before apex. ....***N. sigillata*** **(Brenske, 1897)**

7 Metatibia moderately wide, ratio width/length: 1/3.3. Left paramere not reduced in length. ....***N. anonyma*** **Liu et al., 2014**

7' Metatibia stouter, ratio width/length: 1/2.8. Left paramere strongly reduced in length.. ....***N. mengi*** **Liu et al., 2014**

8 Phallobase with narrow dorsal process. Species from South Korea. .....***N. koelkebecki*** **Liu et al., 2014**

8' Phallobase with wide dorsolateral process..... 9

9 Phallobasal process blunt. 10

9' Phallobasal process sharp. 11

9 Left paramere wide and lobiform. Right paramere dorsally concave before apex. ....***N. huangjingensis*** **Ahrens, Fabrizi & Liu sp. n.**

9' Left paramere narrow and straight, with a distinct blunt ventral tooth before apex. Right paramere dorsally straight before apex. ....***N. bailongshanica*** **Ahrens, Fabrizi & Liu sp. n.**

11 Right paramere more elongate, narrow. ....***N. ailaoshanica*** **Liu et al., 2014**

11' Right paramere shorter, dorsoventrally strongly widened at middle. ..... ***N. luxiensis*** **Liu et al., 2014**

12 Antennal club moderately long, at maximum 1.4 times as long as remaining antennomeres combined. 13

12' Antennal club long, at least twice as long as remaining antennomeres combined. 18

12'' Antennal club short, slightly longer than remaining antennomeres combined. .... ***N. pingbianensis*** **Ahrens, Fabrizi & Liu sp. n.**

13 Eyes very large, ratio diameter/interocular distance > 0.9. Metatibia in basal half with ..... blunt carina beside dorsal margin bearing a few short robust setae in punctures with serrated margin. .. .14

13' Eyes smaller, ratio diameter/interocular distance < 0.8. Metatibia in basal half without a blunt carina beside dorsal margin. 15

14 Left paramere reduced in length, not visible under the largely widened dorsal lobe of right paramere. .. ..***N. calvoides*** **Liu et al., 2014**

14' Left paramere not reduced in length, subequal in length to the less widened dorsal lobe of right paramere. .....***N. gulinqingensis*** **Liu et al., 2014**

15 Phallobase at apex subsymmetrical..... 16

15' Phallobase at apex strongly asymmetrical, insertion of left paramere displaced distally..... 17

16 Phallobase distinctly widened at apex. Left paramere straight at apex. .....***N. liangi*** **Liu et al., 2014**

16' Phallobase not widened at apex. Left paramere hooked at apex. ... ***N. menghaiensis*** **Liu et al., 2014**

17 Right paramere long, distinctly extending beyond insertion of left paramere. ....***N. defuensis*** **Ahrens, Fabrizi & Liu sp. n.**

17' Right paramere rather short, extending only little beyond insertion of left paramere. ....***N. dashanensis*** **Ahrens, Fabrizi & Liu sp. n.**

18 Antennal club composed of 5 antennomeres. ....***N. zheijangensis*** **Liu et al., 2014**

18' Antennal club composed of 4 antennomeres. 19

19 Eyes very large, ratio diameter/interocular distance > 1.0. ..... ***N. calva*** **(Frey, 1972)**

19' Eyes smaller, ratio diameter/interocular distance < 0.85. 20

20 Legs moderately long, ratio metatibial width/length: 1/3.4. ..... ***N. taipingensis*** **Liu et al., 2014**

20' Legs longer, ratio metatibial width/length: 1/3.9. ....***N. zongyuani*** **Liu et al., 2014**

Neoserica (s.l.) *menghaiensis* Liu, Fabrizi, Bai, Yang & Ahrens, 2014

Remarks. The species has in the identification key (p. 51) of the original publication (Liu et al. 2014) erroneously the name *Neoserica napoana* which has to be considered as nomen nudum.

Neoserica (s.l.) *dashanensis* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:D4D99F12-4034-420E-AC4C-46F25A364519
Figs 1A–D, 17

Type material examined. Holotype: ♂ "[China] Dashan Forestry Farm, Tian'e, Guangxi, 3.VIII.2002, 1100m, leg. Jiang Guofang" (IZAS).

Description. Body length: 6.8 mm, length of elytra: 5.1 mm, width: 4.6 mm. Body oblong, dark reddish brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, labroclypeus and anterior two thirds of frons shiny.

Labroclypeus subtrapezoidal, little wider than long, widest at base; lateral margins strongly convergent and convex; anterior angles moderately rounded; anterior margin distinctly sinuate medially; margins moderately reflexed; surface weakly elevated medially and shiny, finely and very densely punctate, with a few isolated setae. Frontoclypeal suture distinctly incised, weakly elevated and moderately angled medially. Smooth area anterior to eye approximately 1.5 times as wide as long. Ocular canthus moderately long and narrow, finely and sparsely punctate, with a single terminal seta. Frons on anterior two thirds shiny and finely and densely punctate; on posterior third dull, finely and sparsely punctate, with a few erect setae. Eyes moderately large, ratio diameter/interocular width: 0.7. Antenna with ten antennomeres, club with four antennomeres and straight, 1.2 times as long as remaining antennomeres combined. Mentum elevated and slightly flattened anteriorly. Labrum transverse, short, not produced medially, with weak median sinuation.

Pronotum moderately transverse, almost twice as wide as long, widest at base; lateral margins moderately convex and moderately convergent anteriorly; anterior angles weakly produced and blunt; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, weakly convexly produced medially; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, very dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; even intervals flat, with evenly and moderately dense punctures; odd intervals convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum except long setae on disc nearly glabrous, sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, with a transverse row of coarse punctures each bearing a robust long seta. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.4. Pygidium moderately convex and dull, coarsely and densely punctate, with narrow smooth midline, with a few long setae at apex, otherwise glabrous.

Legs moderately slender. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur dull and sparsely finely punctate; anterior margin acute, behind anterior margin without serrated line; posterior margin in apical half serrated ventrally and moderately widened at apex; posterior margin finely serrated dorsally, glabrous. Metatibia slender and short, widest at apex, ratio of width/length: 1/3.2; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face longitudinally convex, finely and sparsely punctate; ventral margin finely serrated, with three robust setae, with the apical one being more distant; medial face impunctate, glabrous, apex sharply truncate interiorly near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, with fine sparse punctures dorsally; metatarsomere 1 distinctly longer than dorsal metatibial spur and as long as following two tarsomeres combined. Protibia moderately long, bidentate, bluntly widened laterally before basal tooth; anterior claws symmetrical, basal tooth of inner claw sharply truncate at apex.

Aedeagus: Fig. 1A–C. Habitus: Fig. 1D.

Female unknown.

Diagnosis. *Neoserica dashanensis* sp. n. differs from all other species of the *Neoserica calva* group by the strongly asymmetrical apex of the phallobase, having the insertion of the left paramere strongly displaced distally.

Etymology. The new species is named after the type locality, Mt. Dashan (adjective in the nominative singular).

***Neoserica* (s.l.) *defuensis* Ahrens, Fabrizi & Liu sp. n.**

urn:lsid:zoobank.org:act:1039BFFE-1285-4E5D-9854-0446894775B7

Figs 1E–H, 17

Type material examined. Holotype: ♂ "[China] Defu, Napo, Guangxi, 16.VIII.1998, 100m, leg. He Tongli" (IZAS).

Description. Body length: 7.0 mm, length of elytra: 5.4 mm, width: 4.3 mm. Body oblong, dark reddish brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, labroclypeus and anterior two thirds of frons shiny.

Labroclypeus subtrapezoidal, little wider than long, widest at base; lateral margins strongly convergent and convex; anterior angles moderately rounded; anterior margin distinctly sinuate medially; margins moderately reflexed; surface weakly elevated medially and shiny, finely and very densely punctate, with a few single setae. Frontoclypeal suture distinctly incised, weakly elevated and moderately angled medially. Smooth area anterior to eye approximately 1.5 times as wide as long. Ocular canthus moderately long and narrow, finely and densely punctate, with a single terminal seta. Frons on anterior two thirds shiny and finely and densely punctate; on posterior third dull, finely and sparsely punctate, with a few erect setae. Eyes moderately large, ratio diameter/interocular width: 0.73. Antenna with ten antennomeres, club with four antennomeres and straight, 1.2 times as long as remaining antennomeres combined. Mentum elevated and slightly flattened anteriorly. Labrum transverse, short, not produced medially, with weak median sinuation.

Pronotum moderately transverse, almost twice as wide as long, widest at base; lateral margins in basal half straight and subparallel, in anterior half convex and moderately convergent anteriorly; anterior angles weakly produced and blunt; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, weakly convexly produced medially; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, very dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; even intervals flat, with evenly and moderately dense punctures; odd intervals convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum except long seta on disc nearly glabrous, sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, with a transverse row of coarse punctures each bearing a robust long seta. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.4. Pygidium moderately convex and dull, coarsely and densely punctate, without smooth midline, with a few long setae on apical half.

Legs moderately slender. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur dull and sparsely finely punctate; anterior margin acute, behind anterior margin without serrated line; posterior margin in apical half serrated ventrally and moderately widened at apex; posterior margin finely serrated dorsally, glabrous. Metatibia moderately slender and short, widest at apex, ratio of width/length: 1/3.0; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face longitudinally convex, finely and sparsely punctate; ventral margin finely serrated, with three robust setae, with the apical one being more distant; medial face impunctate, glabrous, apex sharply truncate interiorly near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomere 1 distinctly longer than dorsal metatibial spur and as long as following two tarsomeres combined. Protibia moderately long, bidentate, bluntly widened laterally before basal tooth; anterior claws symmetrical, basal tooth of inner claw sharply truncate at apex.

Aedeagus: Fig. 1E–G. Habitus: Fig. 1H.

Female unknown.

Diagnosis. *Neoserica defuensis* sp. n. is in the shape of the male genitalia rather similar to *N. dashanensis* sp. n. *Neoserica defuensis* differs from the former by the elongated right paramere, distinctly extending above the insertion of the left paramere.

Etymology. The new species is named after the type locality, Defu (adjective in the nominative singular).

***Neoserica* (s.l.) *huangjingensis* Ahrens, Fabrizi & Liu sp. n.**

urn:lsid:zoobank.org:act:94095D74-85CB-40E1-BB08-97C4A4CA837E

Figs 1I– L, 17

Type material examined. Holotype: ♂ "[China] Huangjing, Luzhou, Sichuan, 18.VII.2002, leg. Bai Ming, Wang Jianfeng" (HBUM). Paratypes: 1 ♂ "[China] Institute of Agricultural Sciences, Bijie" (IZAS), 1 ♂ "[China] Institute of Agricultural Sciences, Bijie, Guizhou" (IZAS),

1 ♂ "[China] Huangjing, Luzhou, Sichuan, 19.VII.2002, leg. Bai Ming, Wang Jianfeng" (HBUM), 1 ♂ "[China] Xiangnan, Sichuan, 21.VII.2002, leg. Bai Ming, Wang Jianfeng" (HBUM), 1 ♂ "[China] Institute of Agricultural Sciences, Bijie, Guizhou, leg. Yang, No. #103" (ZFMK).

Description. Body length: 6.5 mm, length of elytra: 5.4 mm, width: 4.5 mm. Body oblong, dark reddish brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, labroclypeus and anterior two thirds of frons shiny.

Labroclypeus subtrapezoidal, slightly wider than long, widest at base; lateral margins strongly convergent and convex; anterior angles moderately rounded; anterior margin distinctly sinuate medially; margins moderately reflexed; surface weakly elevated medially and shiny, finely and very densely punctate, with a few single setae. Frontoclypeal suture distinctly incised, weakly elevated and moderately angled medially. Smooth area anterior to eye approximately 1.5 times as wide as long. Ocular canthus moderately long and narrow, finely and densely punctate, with a single terminal seta. Frons on anterior two thirds shiny, finely and densely punctate; on posterior third dull, finely and sparsely punctate, with a few erect setae. Eyes moderately large, ratio diameter/interocular width: 0.59. Antenna with ten antennomeres, club with four antennomeres and straight, 1.2 times as long as remaining antennomeres combined. Mentum elevated and slightly flattened anteriorly. Labrum transverse, short, not produced medially, with weak median sinuation.

Pronotum moderately transverse, almost twice as wide as long, widest at base; lateral margins in basal half straight and subparallel, in anterior half convex and moderately convergent anteriorly; anterior angles weakly produced and blunt; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, weakly convexly produced medially; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, very dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; even intervals flat, with evenly and moderately dense punctures; odd intervals convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum, except long seta on disc, nearly glabrous, sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, with a transverse row of coarse punctures each bearing a robust long seta. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.4. Pygidium moderately convex and moderately shiny, coarsely and densely punctate, without smooth midline, with a few long setae on apical half.

Legs moderately slender. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur dull and sparsely finely punctate; anterior margin acute, behind anterior margin without serrated line; posterior margin in apical half serrated ventrally and moderately widened at apex; posterior margin finely serrated dorsally, glabrous._Metatibia slender and moderately short, widest at apex, ratio of width/length: 1/3.4; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face longitudinally convex, finely and sparsely punctate; ventral margin finely serrated, with three robust setae, with the apical one being more distant; medial face impunctate, glabrous, apex sharply truncate interiorly near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomere 1 distinctly longer than dorsal metatibial spur and as long as following two tarsomeres combined. Protibia moderately long, bidentate, bluntly widened laterally before basal tooth; anterior claws symmetrical, basal tooth of inner claw sharply truncate at apex.

Aedeagus: Fig. 1I–K. Habitus: Fig. 1L.

Female unknown.

Diagnosis. *Neoserica huangjingensis* sp. n. differs from all species of the *Neoserica calva* group (*N. luxiensis* and *N. ailaoshanica*) having an apical lateral phallobasal process by having this process blunt, and having the left paramere wide and lobiform.

Etymology. The new species is named after the type locality, Huangjing (adjective in the nominative singular).

Variation. Body length: 6.0–6.5 mm, length of elytra: 4.6–5.4 mm, width: 3.6–4.5 mm.

Neoserica (s.l.) *bailongshanica* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:A2AB7690-122D-4284-A7AE-7DD424795CD1

Figs 2A–D, 17

Type material examined. Holotype: ♂ "China, SW Guizhou prov. Bailongshan 1990m 24°56'N 104°44'E Jatua leg., 26.V.–19.VI.2014" (ZFMK). Paratypes: 9 ♂♂, 3 ♀♀ "China, SW Guizhou prov. Bailongshan

1990m 24°56'N 104°44'E Jatua leg., 26.V.–19.VI.2014" (ZFMK).

Description. Body length: 6.0 mm, length of elytra: 4.4 mm, width: 3.4 mm. Body oblong, dark reddish brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, labroclypeus and anterior two thirds of frons shiny.

Labroclypeus subtrapezoidal, slightly wider than long, widest at base; lateral margins straight, convergent; anterior angles moderately rounded; anterior margin distinctly sinuate medially; margins moderately reflexed; surface weakly elevated medially and shiny, finely and very densely punctate, with a few single setae. Frontoclypeal suture distinctly incised, weakly elevated and moderately angled medially. Smooth area anterior to eye approximately 1.5 times as wide as long. Ocular canthus moderately long and narrow, finely and densely punctate, with a single terminal seta. Frons on anterior two thirds shiny and finely and sparsely punctate; on posterior third dull, finely and sparsely punctate, with a few erect and long setae. Eyes moderately large, ratio diameter/interocular width: 0.67. Antenna with ten antennomeres, club with four antennomeres and straight, 1.2 times as long as remaining antennomeres combined. Mentum elevated and slightly flattened anteriorly. Labrum transverse, short, not produced medially, with weak median sinuation.

Pronotum moderately transverse, almost twice as wide as long, widest at base; lateral margins in basal half straight and subparallel, in anterior half convex and moderately convergent anteriorly; anterior angles weakly produced and blunt; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, weakly convexly produced medially; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, very dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; even intervals flat, with evenly and moderately dense punctures; odd intervals convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum except long seta on disc nearly glabrous, sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, with a transverse row of coarse punctures each bearing a robust long seta. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.44. Pygidium moderately convex and moderately shiny, coarsely and densely punctate, without smooth midline, with a few long setae on apical half.

Legs moderately slender. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur dull and sparsely finely punctate; anterior margin acute, behind anterior margin without serrated line; posterior margin in apical half serrated ventrally and moderately widened at apex; posterior margin finely serrated dorsally, glabrous. Metatibia slender and moderately short, widest at apex, ratio of width/length: 1/3.2; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face longitudinally convex, finely and sparsely punctate; ventral margin finely serrated, with three robust setae, with the apical one being more distant; medial face impunctate, glabrous, apex sharply truncate interiorly near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomere 1 distinctly longer than dorsal metatibial spur and as long as following two tarsomeres combined. Protibia moderately long, bidentate, bluntly widened laterally before basal tooth; anterior claws symmetrical, basal tooth of inner claw sharply truncate at apex.

Aedeagus: Fig. 2A–C. Habitus: Fig. 2D.

Diagnosis. The shape of the aedeagus and parameres is similar to *N. ailaoshanica* and *N. huangjingensis* sp. n. From the former the new species differs by the shorter and wider right paramere, while *N. bailongshanica* sp. n. can be distinguished from the latter by the concave sinuation located before the apex of the right paramere, as well as the left paramere being wide and lens-shaped, lacking a blunt ventral tooth before its apex.

Etymology. The new species is named after the type locality, Bailongshan (adjective in the nominative singular).

Variation. Body length: 5.9–6.6 mm, length of elytra: 4.2–4.8 mm, width: 3.4–3.6 mm. Female: Eyes as large as in male, antennal club short, composed of 3 antennomeres, as long as remaining antennomeres combined; pygidium weakly convex.

Neoserica sigillata (Brenske, 1897) comb. n.

Figs 2E–H, 17

Microserica sigillata Brenske, 1897: 417.

Type material examined. Syntypes: 1 ♂, 1 ♀ "[China] Foochau April 1886 (Leech)/ ex. Museo H. W. Bates

1892/ *sigillata* type Brsk./ Museum Paris ex. coll. R. Oberthür" (MHNP).

Additional material examined. 21 ex. "nr Foochow China 1921 CR Kellogg" (USNM), 1 ♂ "Chekiang China/ OL Cartwright Collection 1959" (USNM), 1 ex. "Fukien, S. China Shaowu, Shuipei-kai V.1944/ T. C. Maa Collector" (BMH), 1 ex. "Fukien, S. China Shaowu City 16.V.1942 T. C. Maa" (BMH), 1 ex. "Fukien, S. China Shaowu City 2.–6.VI.1942 T. C. Maa" (BMH).

Description. Body length: 5.1 mm, length of elytra: 3.6 mm, width: 3.1 mm. Body oblong, reddish brown, antennal club and margins of pronotum yellowish brown, dorsal surface dull and nearly glabrous, labroclypeus and anterior two thirds of frons shiny.

Labroclypeus subtrapezoidal, as wide as long, widest at base; lateral margins strongly convergent and convex; anterior angles distinctly rounded; anterior margin distinctly sinuate medially; margins moderately reflexed; surface weakly elevated medially and shiny, finely and very densely punctate, with a few single setae. Frontoclypeal suture distinctly incised, weakly elevated and moderately angled medially. Smooth area anterior to eye approximately 1.2 times as wide as long. Ocular canthus moderately long and narrow, finely and densely punctate, with a single terminal seta. Frons on anterior half shiny, finely and densely punctate; on posterior half dull, finely and moderately densely punctate, with erect setae. Eyes small, ratio diameter/interocular width: 0.54. Antenna with ten antennomeres, club with four antennomeres and straight, 1.3 times as long as remaining antennomeres combined. Mentum elevated and slightly flattened anteriorly. Labrum transverse, short, not produced medially, with weak median sinuation.

Pronotum transverse, almost twice as wide as long, widest at base; lateral margins moderately convex and moderately convergent anteriorly; anterior angles produced and moderately sharp; posterior angles blunt; anterior margin with a fine and complete marginal line, weakly convexly produced medially; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, very dense punctures, glabrous.

Elytra oblong, widest at middle; striae finely impressed, finely and moderately densely punctate; even intervals flat, with evenly and moderately dense punctures; odd intervals convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum except long seta on disc nearly glabrous, sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, with a transverse row of coarse punctures each bearing a robust long seta. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1. 3. Pygidium moderately convex and moderately shiny, coarsely and densely punctate, with smooth midline, with a few long setae on apical half.

Legs moderately slender. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur dull and sparsely finely punctate; anterior margin acute, behind anterior margin without serrated line; posterior margin in apical half serrated ventrally and moderately widened at apex; posterior margin finely serrated dorsally, glabrous. Metatibia slender and short, widest at apex, ratio of width/length: 1/3.2; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face longitudinally convex, finely and sparsely punctate; ventral margin finely serrated, with three robust setae, with the apical one being more distant; medial face impunctate, glabrous, apex sharply truncate interiorly near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomere 1 distinctly longer than dorsal metatibial spur and as long as following two tarsomeres combined. Protibia moderately long, bidentate, bluntly widened laterally before basal tooth; anterior claws symmetrical, basal tooth of inner claw sharply truncate at apex.

Aedeagus: Fig. 2E–G. Habitus: Fig. 2H.

Variation. Female: Antennal club composed of three antennomeres being as long as remainder antennomeres of antenna combined; eyes as large as in male; pygidium flat.

Neoserica (s.l.) *napoensis* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:298F70E4-234C-4B90-9128-F904DB60F919

Figs 2I–L, 17

Type material examined. Holotype: ♂ "[China] Defu, Napo, Guangxi, 15.VIII.1998, 1300m, leg. Huang Fusheng, Li Wenzhu/ LW-384" (IZAS).

Description. Body length: 5.7 mm, length of elytra: 4.0 mm, width: 3.6 mm. Body oblong, reddish brown, antennal club and margins of pronotum yellowish brown, dorsal surface dull and nearly glabrous, labroclypeus and anterior two thirds of frons shiny.

Labroclypeus subtrapezoidal, as wide as long, widest at base; lateral margins strongly convergent and convex; anterior angles distinctly rounded; anterior margin distinctly sinuate medially; margins moderately reflexed; surface weakly elevated medially and shiny, finely and very densely punctate, with a few single setae. Frontoclypeal suture distinctly incised, weakly elevated and moderately angled medially. Smooth area anterior to eye approximately 1.2 times as wide as long. Ocular canthus moderately long and narrow, finely and densely punctate, with a single terminal seta. Frons on anterior half shiny, finely and densely punctate; on posterior half dull, finely and moderately densely punctate, with erect setae. Eyes small, ratio diameter/interocular width: 0.52. Antenna lacking in holotype. Mentum elevated and slightly flattened anteriorly. Labrum transverse, short, not produced medially, with weak median sinuation.

Pronotum transverse, almost twice as wide as long, widest at base; lateral margins moderately convex and moderately convergent anteriorly; anterior angles produced and moderately sharp; posterior angles blunt; anterior margin with a fine and complete marginal line, weakly convexly produced medially; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, very dense punctures, glabrous.

Elytra oblong, widest at middle; striae finely impressed, finely and moderately densely punctate; even intervals flat, with evenly and moderately dense punctures; odd intervals convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum except long seta on disc nearly glabrous, sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, with a transverse row of coarse punctures each bearing a robust long seta. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.4. Pygidium moderately convex and moderately shiny, coarsely and densely punctate, with smooth midline, with a few long setae on apical half.

Legs moderately slender. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur dull and sparsely finely punctate; anterior margin acute, behind anterior margin without serrated line; posterior margin in apical half serrated ventrally and moderately widened at apex; posterior margin finely serrated dorsally, glabrous. Metatibia slender and short, widest at apex, ratio of width/length: 1/2.8; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face longitudinally convex, finely and sparsely punctate; ventral margin finely serrated, with three robust setae, with the apical one being more distant; medial face impunctate, glabrous, apex sharply truncate interiorly near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres lacking in holotype. Protibia moderately long, bidentate, bluntly widened laterally before basal tooth; anterior claws symmetrical, basal tooth of inner claw sharply truncate at apex.

Aedeagus: Fig. 2I–K. Habitus: Fig. 2L.

Female unknown.

Diagnosis. *Neoserica napoensis* sp. n. is very similar to *N. sigillata*; *N. napoensis* differs from the latter by the left paramere having a distinct sharp tooth before its apex, which is absent in *N. sigillata*.

Etymology. The name of the new species refers to the occurrence of the species near Napo (adjective in the nominative singular).

Neoserica (s.l.) *pingbianensis* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:B4123BD4-3DC5-4450-8B04-854C47459682

Figs 3A–D, 17

Type material examined. Holotype: ♂ "[China] Mts. Daweishan, Pingbian, Yunnan, 20.VI.1956, 1500m, leg. Huang Keren" (IZAS). Paratypes: 1 ♂ "[China] Mts. Daweishan, Pingbian, Yunnan, 20.VI.1956, 1500m, leg. Huang Keren" (IZAS), 1 ♂ "[China] Mt. Daweishan, Pingbian, Southeast of Yunnan, 22.VI.1956, 1350m, leg. Panfilov" (IZAS), 1 ♂ "[China] Mt. Daweishan, Pingbian, Southeast of Yunnan, 28.VI.1956, leg. Panfilov" (ZFMK).

Description. Body length: 6.4 mm, length of elytra: 4.7 mm, width: 3.9 mm. Body oblong, reddish brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, labroclypeus and anterior two thirds of frons shiny.

Labroclypeus subtrapezoidal, as wide as long, widest at base; lateral margins strongly convergent and convex; anterior angles moderately rounded; anterior margin distinctly sinuate medially; margins moderately reflexed; surface weakly elevated medially and shiny, finely and very densely punctate, with a few single setae. Frontoclypeal suture distinctly incised, weakly elevated and moderately angled medially. Smooth area anterior to eye

approximately 1.5 times as wide as long. Ocular canthus moderately long and narrow, finely and densely punctate, with a single terminal seta. Frons on anterior two thirds shiny and finely and densely punctate; on posterior third dull, finely and sparsely punctate, with a few erect setae. Eyes large, ratio diameter/interocular width: 0.75. Antenna with ten antennomeres, club with four antennomeres and straight, 1.1 times as long as remaining antennomeres combined. Mentum elevated and slightly flattened anteriorly. Labrum transverse, short, not produced medially, with weak median sinuation.

Pronotum moderately transverse, almost twice as wide as long, widest at base; lateral margins moderately convex and moderately convergent anteriorly; anterior angles weakly produced and blunt; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, weakly convexly produced medially; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, very dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; even intervals flat, with evenly and moderately dense punctures; odd intervals convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum except long seta on disc nearly glabrous, sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, with a transverse row of coarse punctures each bearing a robust long seta. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.43.

Legs moderately slender. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur dull and sparsely finely punctate; anterior margin acute, behind anterior margin without serrated line; posterior margin in apical half serrated ventrally and moderately widened at apex; posterior margin finely serrated dorsally, glabrous. Metatibia lacking in holotype. Protibia moderately long, bidentate, bluntly widened laterally before basal tooth; anterior claws symmetrical, basal tooth of inner claw sharply truncate at apex.

Aedeagus: Fig. 3A–C. Habitus: Fig. 3D.

Female unknown.

Diagnosis. *Neoserica* (s.l.) *pingbianensis* sp. n. differs from all other large-eyed species of the *Neoserica calva* species-group by the short antennal club being slightly longer than the combined length of the remaining antennomeres, and by the shape of the parameres.

Etymology. The new species is named after the type locality, Pingbian (adjective in the nominative singular).

Variation. Body length: 5.8–6.4 mm, length of elytra: 4.4–4.7 mm, width: 3.7–3.9 mm. Pygidium moderately convex and moderately shiny, coarsely and densely punctate, without smooth midline, with a few long setae on apical half. Metatibia slender and short, widest at apex, ratio of width/length: 1/3.1; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face longitudinally convex, finely and sparsely punctate; ventral margin finely serrated, with three robust setae, apical one being more distant; medial face impunctate, glabrous, apex sharply truncate interiorly near tarsal articulation. Metatarsomeres also lacking in the paratype.

Neoserica (s.l.) *nannuoshanica* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:55CFF4AA-BFB1-4FE9-9C0E-BDAC1356699B

Figs 3E–H, 19

Type material examined. Holotype: ♂ "[China] Mts. Nannuoshan, Jinghong, Yunnan, 2.VIII.2006, leg. Mao Benyong etc." (HBUM).

Description. Body length: 7.4 mm, length of elytra: 5.6 mm, width: 4.4 mm. Body oval, dark brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, forehead shiny.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins strongly convergent and strongly convex, lateral margin and ocular canthus produce a distinct blunt angle; anterior angles weakly rounded; anterior margin distinctly and widely sinuate medially; margins moderately reflexed; surface convexly elevated medially and shiny, finely and very densely punctate, with a few single setae anteriorly. Frontoclypeal suture distinctly incised, distinctly elevated and moderately curved medially. Smooth area anterior to eye approximately 1.5 times as wide as long. Ocular canthus short and wide, finely and sparsely punctate, without terminal seta. Frons shiny, posterior third dull, finely and densely punctate, with a few erect setae beside each eye. Eyes moderately large, ratio diameter/interocular width: 0.68. Antenna with ten antennomeres, club with four antennomeres and straight, slightly longer than remaining antennomeres combined, first joint of club subequal to club length. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, with distinct median sinuation.

Pronotum moderately transverse, widest at base; lateral margins convex and moderately convergent anteriorly; anterior angles distinctly produced and sharp; posterior angles blunt and moderately rounded at tip; anterior margin with a fine and complete marginal line, nearly straight; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border densely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, dull, with fine, dense punctures, with minute setae in punctures.

Elytra oval, widest shortly behind middle; striae distinctly impressed, finely and moderately densely punctate; intervals moderately convex, with moderately dense, fine punctures concentrated along striae, with minute setae in punctures, penultimate interval with a few single long setae. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a broad rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur, with a semi-circular ridge bearing long setae. Ratio of length of metepisternum/metacoxa: 1/1.3. Pygidium weakly convex and dull, coarsely and densely punctate, without smooth midline, with numerous long setae on apical half.

Legs long and moderately wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur dull and sparsely finely punctate; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line; posterior margin finely serrated dorsally, ventrally in distal half, glabrous, posterior margin weakly widened at apex. Metatibia long and moderately wide, widest at apex, ratio of width/length: 1/3.4; dorsal margin sharply carinate, with two groups of spines; basal group shortly behind middle, apical group at three quarters of metatibial length; in basal half with a finely serrated line beside dorsal margin; external face longitudinally convex, impunctate; ventral margin finely serrated, with four robust equidistant setae; medial face impunctate, glabrous; apex truncate and concavely sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae (mesotarsomeres lacking in holotype), not carinate laterally, finely punctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 nearly twice as long as dorsal metatibial spur and as long as following two tarsomeres combined. Protibia moderately long, bidentate, bluntly widened laterally before basal tooth; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 14I–K. Habitus: Fig. 14L.
Female unknown.

Diagnosis. *Neoserica nannuoshanica* sp. n. differs from all other species of the *N. calva* group by having the phallobase strongly narrowed before its apex.

Etymology. The new species is named after the type locality, Nannuoshan (adjective in the nominative singular).

***Neoserica major* group**

Key to species of the *Neoserica major* group (males)

1 Distal portion, including fused parameres, shorter than phallobase. 2
1' Distal portion, including fused parameres, as long as phallobase. .....***N. major* (Arrow, 1946)**
2 Base of distal portion with a sharp, deep ventral sinuation. ....***N. sangangensis* Ahrens, Fabrizi & Liu sp. n.**
2' Base of distal portion without a ventral sinuation. ... .***N. paramajor* Ahrens, Fabrizi & Liu sp. n.**

***Neoserica major* (Arrow, 1946) comb. n.**
Figs 4A–D, 20

Aserica major Arrow, 1946: 14.

Type material examined. Syntypes: 2 ♂♂ "Co-Type/ N. E. Burma Kambaiti 7000 ft. 25/3.1934/ N. E. Burma R. Malaise B. M. 1945-71/ Aserica major Arrow co-type" (BMNH), 1 ♂ "N. E. Burma Kambaiti 7000 ft. 25/3.1934/ Aserica major sp. n. Arrow" (NHRS).

Remarks. This species was originally described from the Myanmar border to China, however, this taxon so far has not been recorded from China. It was included here in reference to the newly discovered taxa of this species group. The genus name *Aserica* Lewis, 1895 being a junior sysnomym of *Maladera* Mulsant & Rey, 1871, refers to species with an antennal club composed of three antenneomeres (Ahrens 2004). For this multilamellate species is transferred to *Neoserica*.

***Neoserica* (s.l.) *paramajor* Ahrens, Fabrizi & Liu sp. n.**
urn:lsid:zoobank.org:act:155D428B-ECDD-40E5-B441-9289E89C2A52
Figs 4E–H, 20

Type material examined. Holotype: ♂ "China: Hunan, Jiucai Ling, 25°32'N 111°22'E IV.2006, H~1300m Leg. V. Siniaev/ 793 Sericini: Asia spec." (ZFMK). Paratypes: 1 ♂ "China: Hunan, Jiucai Ling, 25°32'N 111°22'E,

1300m, VII. 2006, leg. Viktor & Sveta Siniaev" (ZFMK), 1 ♂ "Jiugongshan Tongshan, S-Hubei, 1.V.2004 leg. Wen" (ZFMK), 4 ♂♂ "China, NE Jiangxi, 18.IV. Sanquingshan, 450–600m, 28°52'N, 118°04'E Jaroslav Turna leg., 2006" (ZFMK), 1 ♂ "China: N-Yunnan Baiyungshan (Bai Railing Mts.) 2400m, Yong Ren VII-2003 leg. Ying et al." (ZFMK [doubtful label record]), 1 ♂ "China-Guangdong, Daqiao env., 1000–1200 m, 24°54'N – 113°01'E, 1.–3.v.2002, Dr. R. Fencl lgt." (CP).

Description. Body length: 9.1 mm, length of elytra: 6.1 mm, width: 5.2 mm. Body oblong, dark reddish brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, labroclypeus shiny.

Labroclypeus subtrapezoidal, slightly wider than long, widest at base; lateral margins strongly convergent and moderately convex; anterior angles moderately rounded, lateral margin and ocular canthus produce an indistinct blunt angle; anterior margin weakly sinuate medially; margins moderately reflexed; surface weakly elevated medially and shiny, finely and very densely punctate, with a few single setae. Frontoclypeal suture distinctly incised, elevated and moderately angled medially. Smooth area anterior to eye approximately twice as wide as long. Ocular canthus moderately long and moderately wide, finely and densely punctate, without a single terminal seta. Frons dull, behind toment thicker, finely and sparsely punctate, with a few erect setae beside eyes. Eyes moderately large, ratio diameter/interocular width: 0.6. Antenna with ten antennomeres, club with four antennomeres and straight, 1.1 times as long as remaining antennomeres combined. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, with very weak median sinuation.

Pronotum moderately transverse, almost twice as wide as long, widest at base; lateral margins convex and moderately convergent anteriorly; anterior angles weakly produced and blunt; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, weakly convexly produced medially; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur; posterior margin of mesosternum fused with the semicircular median ridge which bears dense setae. Ratio of length of metepisternum/metacoxa: 1/1.58. Pygidium moderately convex and dull, finely and moderately densely punctate, without smooth midline, with a few short setae at apex.

Legs moderately slender. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate; anterior margin acute, behind anterior margin without serrated line; posterior margin in apical half weakly serrated ventrally and moderately widened at apex; posterior margin not serrated dorsally, with a number of very long setae. Metatibia wide and short, widest at apex, ratio of width/length: 1/2.9; dorsal margin sharply carinate, with two groups of spines; basal group shortly before middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face longitudinally convex, finely and sparsely punctate; ventral margin finely serrated, with three robust setae, with the apical one being more distant; medial face impunctate, glabrous; apex very shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 slightly longer than dorsal metatibial spur and slightly shorter than following two tarsomeres combined. Protibia moderately long, bidentate, not widened laterally; anterior claws asymmetrical, basal tooth of inner claw lobiform.

Aedeagus: Fig. 4E–G. Habitus: Fig. 4H.

Female unknown.

Diagnosis. *Neoserica* (s.l.) *paramajor* sp. n. is in the shape of its genitalia similar to *N. major*. The new taxon differs from the latter by the distal portion of the aedeagus including the fused parameres being shorter than the phallobase (distal portion longer than the phalloboase in *N. major*).

Etymology. The name of this species (adjective in the nominative singular) is based on the combined Greek prefix *para-* (close to) and the species name "*major*", with reference of its similarity to *Neoserica major*.

Variation. Body length: 7.9–9.1 mm, length of elytra: 5.9–6.1 mm, width: 5.0–5.2 mm.

***Neoserica* (s.l.) *sangangensis* Ahrens, Fabrizi & Liu sp. n.**

urn:lsid:zoobank.org:act:82AEB6EC-BC84-4D7A-A718-34A9569600C8

Figs 5A– D, 20

Type material examined. Holotype: ♂ "[China] San'gang, Fujian, 9.IV.1981, leg. Wang Jiang" (IZAS).

Description. Body length: 7.6 mm, length of elytra: 5.9 mm, width: 4.9 mm. Body oblong, dark reddish brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, labroclypeus shiny.

Labroclypeus subtrapezoidal, slightly wider than long, widest at base; lateral margins strongly convergent and moderately convex, lateral margin and ocular canthus produce an indistinct blunt angle; anterior angles moderately rounded; anterior margin weakly sinuate medially; margins moderately reflexed; surface weakly elevated medially and shiny, finely and very densely punctate, with a few single setae. Frontoclypeal suture distinctly incised, elevated and moderately angled medially. Smooth area anterior to eye approximately twice as wide as long. Ocular canthus moderately long and moderately wide, finely and densely punctate, without a single terminal seta. Frons dull, behind toment thicker, finely and sparsely punctate, with a few erect setae beside eyes. Eyes moderately large, ratio diameter/interocular width: 0.7. Antenna with ten antennomeres, club with four antennomeres and straight, 1.2 times as long as remaining antennomeres combined. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, with very weak median sinuation.

Pronotum moderately transverse, almost twice as wide as long, widest at base; lateral margins convex and moderately convergent anteriorly; anterior angles weakly produced and blunt; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, weakly convexly produced medially; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur; posterior margin of mesosternum fused with the semicircular median ridge which bears dense setae. Ratio of length of metepisternum/metacoxa: 1/1.48. Pygidium moderately convex and dull, finely and moderately densely punctate, without smooth midline, with a few short setae at apex.

Legs moderately slender. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate; anterior margin acute, behind anterior margin without serrated line; posterior margin in apical half weakly serrated ventrally and moderately widened at apex; posterior margin not serrated dorsally, with a number of very long setae. Metatibia wide and short, widest at apex, ratio of width/length: 1/2.8; dorsal margin sharply carinate, with two groups of spines; basal group shortly before middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face longitudinally convex, finely and sparsely punctate; ventral margin finely serrated, with three robust setae, with the apical one being more distant; medial face impunctate, glabrous; apex very shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 slightly longer than dorsal metatibial spur and slightly shorter than following two tarsomeres combined. Protibia moderately long, bidentate, not widened laterally; anterior claws asymmetrical, basal tooth of inner claw lobiform.

Aedeagus: Fig. 5A–C. Habitus: Fig. 5D.

Female unknown.

Diagnosis. *Neoserica sangangensis* sp. n. differs in the shape of its aedeagus significantly from *N. major* and *N. paramajor* sp. n.: In *N. sangangensis* sp. n. is the aedeagus abruptly sinuated on the ventral face shortly behind the apex of the phallobase, in the other two species this part is weakly concave.

Etymology. The new species is named after the type locality, San'gang (adjective in the nominative singular).

Neoserica uniformis group

Key to species of the *Neoserica uniformis* group (males)

1 Ventral part of phallobase setose at middle. 2
1' Ventral part of phallobase entirely glabrous..... 8

2 Left paramere freely inserted and motile at phallobase, not fused at base with phallobase..... 3
2’ Left paramere fused at base with phallobase. 6
3 Left paramere composed by a simple single branch. 5
3’ Left paramere composed by a deeply bifurcate branch. 4
4 Apical half of aedeagus strongly angulate externally. ....***N. tsinlingensis* Ahrens, Fabrizi & Liu sp. n**
4’ Apical half of aedeagus weakly curved externally. .. ..***N. yulongensis* Ahrens, Fabrizi & Liu sp. n.**
5 Left paramere strongly sclerotized, straight and at apex with a distinct hook. ....***N. caiyangheensis* Ahrens, Fabrizi & Liu sp. n.**
5’ Left paramere weakly sclerotized, double-curved and at apex without a hook. ....***N. pui* Ahrens, Fabrizi & Liu sp. n.**
6 Base of left paramere fused with phallobase narrow, half as wide as phallobase at the level of insertion of left paramere. 7
6’ Base of left paramere fused with phallobase wide, as wide as entire phallobase at level of insertion of left paramere. ..***N. milani* Ahrens, Fabrizi & Liu sp. n.**
7 Apical half of aedeagus nearly straight, laterally without blunt tooth. .... ***N. liangshandingensis* Ahrens, Fabrizi & Liu sp. n.**
7’ Apical half of aedeagus distinctly curved ventrally, laterally with a blunt tooth. ....***N. reni* Ahrens, Fabrizi & Liu sp. n.**
8 Apical half of aedeagus nearly straight. 9
8’ Apical half of aedeagus strongly bent behind middle. 11
9 Aedeagus narrowed (lateral view) before 1/3 of aedeagal length. 10
9’ Aedeagus narrowed (lateral view) behind 3/4 of aedeagal length. ....***N. shuizhouensis* Ahrens, Fabrizi & Liu sp. n.**
10 Apical half of aedeagus strongly bent before apex. . .....***N. allorubiginea* Ahrens, Fabrizi & Liu sp. n.**
10’ Apical half of aedeagus evenly curved. ....***N. rubiginea* Moser, 1916**
11 Apical half of aedeagus with a strong ventral subapical tooth at one fifth of aedeagal ..... length. .....***N. strenua* Ahrens, Fabrizi & Liu sp. n.**
11’ Apical half of aedeagus without ventral subapical tooth..... 12
12 Apical half of aedeagus bent but straight, laterally without blunt tooth. ....***N. pararubiginea* Ahrens, Fabrizi & Liu sp. n.**
12’ Apical half of aedeagus bent and twisted, laterally with blunt tooth. .... ***N. nanhuaensis* Ahrens, Fabrizi & Liu sp. n.**

***Neoserica* (s.l.) *allorubiginea* Ahrens, Fabrizi & Liu sp. n.**

urn:lsid:zoobank.org:act:1E75E6AD-F55D-4216-BAD2-1C2E889ABACC
Figs 7A–D, 21

Type material examined. Holotype: ♂ “China: Hunan, Jiucai Ling, 25°32’N 111°22’E IV.2006, H~1300m Leg. V. Siniaev/ Asia Sericini 794 spec.” (ZFMK). Paratypes: **China:** 1 ♂, 1 ♀ “China: Hunan: Mupu Mt. 1600 m, Pingjiang VIII-2003, leg. Li et al.” (ZFMK). **Vietnam:** 1 ♂ “X-DA3443 – Vietnam, N. Cao Bang Prov., Mt. Pa Oac, 1600–2000m (at light), 14–16.vi.2012, leg. L. Bartolozzi, S. Bambi, F. Fabiano, E. Orbach” (MZUF), 4 ♂♂ “Vietnam-N (Tam Dao), 55km NW Hanoi, Tam Dao vill. env. 1998 850–900m lg. A. Napolov 22.–30.7.” (ZFMK, CNA), 1 ♂, 5 ♀♀ “N-Vietnam, Tam Dao N21°27’18; E105°38’58; 900–1100m, 2.–5.VI.1999 leg. Ahrens, Jäger, Fabrizi” (ZFMK), 1 ♂ “N Vietnam (Tonkin) pr. Vinh Phu 1990 Tam Dao 6.–9.V. Vit. Kuban leg.” (ZFMK), 1 ♂ “N-Vietnam, Tam Dao Vinh Phu Prov. 21°27’18’’N; 105°38’58’’E; 1050–1200m, 2.–6. VI.1999 leg. Fabrizi, Jäger, Ahrens/ 227 Sericini Asia spec.” (ZFMK), 1 ♂ “N-Vietnam Vinh Phu Prov., Tam Dao 01.–07.V.1998 Y. Arita leg.” (ZFMK), 1 ♂ “Vietnam N 1989 Tam Dao 12–24.5. Vinh Phu prov. Strnad Jan lgt.” (CP).

Description. Body length: 10.6 mm, length of elytra: 7.5 mm, width: 6.4 mm. Body oblong, dark brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, anterior labroclypeus shiny.

Labroclypeus nearly semicircular, wider than long, widest at base; lateral margins strongly convergent and convex, lateral margin and ocular canthus produce an indistinct blunt angle; anterior angles strongly rounded; anterior margin straight; margins weakly reflexed; surface convexly elevated medially and shiny, finely and very densely punctate, glabrous; base of labroclypeus narrowly covered with dull toment. Frontoclypeal suture finely incised, moderately curved medially. Smooth area anterior to eye approximately 1.5 times as wide as long. Ocular canthus short and wide, finely and densely punctate, without a single terminal seta. Frons dull, finely and sparsely punctate, with a single erect seta beside each eye. Eyes small, ratio diameter/interocular width: 0.54. Antenna with ten antennomeres, club with four antennomeres and straight, slightly shorter than remaining antennomeres combined, first joint of club slightly shorter than club. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, without median sinuation.

Pronotum moderately transverse, almost twice as wide as long, widest at base; lateral margins convex and moderately convergent anteriorly; anterior angles weakly produced and blunt; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a

fine and complete marginal line, straight; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur; posterior margin of mesosternum fused with the semicircular median ridge which bears dense setae. Ratio of length of metepisternum/metacoxa: 1/1.8. Pygidium strongly convex and dull, coarsely and densely punctate, without smooth midline, with a few short setae at apex.

Legs short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate, anterior row of setae completely reduced; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line; posterior margin serrated neither ventrally nor dorsally, glabrous, posterior margin strongly widened at apex. Metatibia wide and short, widest at middle, ratio of width/length: 1/2.2; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face nearly flat, impunctate, finely and sparsely punctate on sides only; ventral margin very finely serrated, with three robust setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 slightly longer than dorsal metatibial spur and slightly shorter than following two tarsomeres combined. Protibia moderately long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 7A–C. Habitus: Fig. 7D.

Diagnosis. *Neoserica allorubiginea* sp. n. is in the shape of its aedeagus very similar to *N. rubiginea.* It can be distinguished from the latter by the apical half of the aedeagus being strongly bent before its apex rather than being evenly curved as in *N. rubiginea.*

Etymology. The name of this species (adjective in the nominative singular) is based on the combined Greek prefix *allo-* (different to) and the species name "*rubiginea*", with reference of its similarity to *Neoserica rubiginea*.

Variation. Body length: 10.6–11.0 mm, length of elytra: 7.4–7.5 mm, width: 6.4–6.6 mm. Female: eyes as large as in male; antennal club with four antennomeres and straight, distinctly shorter than remaining antennomeres combined, first joint of club one third as long as club; pygidium weakly convex.

Neoserica (s.l.) *caiyangheensis* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:0C913939-4C2C-4B49-8E34-8EE4D0C5CCBB

Figs 8I–L, 21

Type material examined. Holotype: ♂ "[China] Caiyanghe Nature Reserve, Pu'er, Yunnan, 28–29. VII.2007, leg. Shi Lei/ LW-557" (SYUG).

Description. Body length: 8.9 mm, length of elytra: 6.6 mm, width: 5.2 mm. Body oblong, reddish brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, anterior labroclypeus shiny.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins strongly convergent and convex, lateral margin and ocular canthus produce an indistinct blunt angle; anterior angles strongly rounded; anterior margin slightly sinuate medially; margins weakly reflexed; surface convexly elevated medially and shiny, finely and very densely punctate, with a few single long setae; base of labroclypeus narrowly covered with dull toment. Frontoclypeal suture finely incised, moderately angled medially. Smooth area anterior to eye approximately twice as wide as long. Ocular canthus short and wide, finely and densely punctate, with a single terminal seta. Frons dull, finely and sparsely punctate, with a few single erect setae beside each eye. Eyes small, ratio diameter/interocular width: 0.54. Antenna with ten antennomeres, club with four antennomeres and straight, as long as remaining antennomeres combined, first joint slightly shorter than length of club. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, without median sinuation.

Pronotum moderately transverse, widest at base; lateral margins evenly convex and moderately convergent anteriorly; anterior angles strongly produced and sharp; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, weakly convex; surface densely and finely

punctate, with minute setae in punctures; lateral and anterior border setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur; posterior margin of mesosternum fused with the semi-circular median ridge which bears dense setae. Ratio of length of metepisternum/metacoxa: 1/1.72. Pygidium weakly convex and dull, coarsely and densely punctate, without smooth midline, with a few short setae at apex.

Legs moderately short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate, anterior row of setae completely reduced; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line; posterior margin serrated neither ventrally nor dorsally, glabrous, posterior margin strongly widened at apex. Metatibia moderately short and wide, widest at middle, ratio of width/length: 1/2.34; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face nearly flat, impunctate, finely and sparsely punctate on sides only; ventral margin very finely serrated, with three robust setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 as long as dorsal metatibial spur and distinctly shorter than following two tarsomeres combined. Protibia moderately long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 8I–K. Habitus: Fig. 8L.

Female unknown.

Diagnosis. *Neoserica caiyangheensis* sp. n. differs from all other taxa with a setose ventral median part of the phallobase by the left paramere being freely inserted and motile at the phallobase, instead of being basally fused with the phallobase, as well as by the left paramere being composed of only a simple single branch which is strongly sclerotized, straight, and at its apex with a distinct hook.

Etymology. The new species is named after its occurrence in the Caiyanghe Nature Reservev (adjective in the nominative singular).

Neoserica (s.l.) *liangshandingensis* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:DC750CEC-F828-4693-81C4-1055183E6CA0

Figs 9A–D, 21

Type material examined. Holotype: ♂ "China: Fujian Province; Mt. Liang-shan-ding, Wuping County, 2–13. VII.2009 local collectors, Ankauf via Li Jingke 2010, ex coll. Ahrens" (ZFMK). Paratypes: **China:** 1 ♂ "China: Fujian Province; Mt. Liang-shan-ding, Wuping County, 2–13.VII.2009 local collectors, Ankauf via Li Jingke 2010, ex coll. Ahrens" (ZFMK). **Vietnam:** 7 ♂♂, 5 ♀♀ "Vietnam N (Sa Pa) Lao Cai Prov., 250 km from Hanoi bearing 31°, Sa Pa vill. env. Hoang Lien Son Nat. Res. 25.VI.–5.VII.1998 1250m leg. A. Napolov" (CNA), 5 ♂ "Vietnam N (Sa Pa) Lao Cai Prov., 250 km from Hanoi bearing 31°, Sa Pa vill. env. Hoang Lien Son Nat. Res. 27.V.–3.VI.1998 1250m leg. A. Napolov" (CNA), 4 ♂♂, 2 ♀♀ "N-Vietnam, Sa Pa env., Lao Cai Prov., 22°19'52''N; 103°50'35''E; 1630–1680m, 23.–27.V.1999 leg. Fabrizi, Jäger, Ahrens" (ZFMK), 12 ♂♂, 7 ♀♀ "N-Vietnam, Prov. Lao Cai, Sa Pa, 1600–1700 m, N22°19'52; E103°50'35; 23.–27.V.1999, leg. Ahrens, Jäger, Fabrizi" (CA), 1 ♂ "N Vietnam, 21,35N 106,30E 52km SW of Lang Son, 27.iv.–6.v.1996, 370m Pacholátko & Dembicky leg." (CP). **Thailand:** 1 ♂ "N-Thailand 1990 Doi Inthanon lg. Malicky/ 20.II.–6.III./ 110 Sericini Asia spec." (ZSM), 1 ♂ "Thai-N, 1.–19.5.1998 Chiang Mai prov., Ban San Pakia, Bednarik leg., 1400m" (CP). **Laos:** 1 ♂ "Laos 21°09'N 101°19'E Louangnamtha pr. Namtha -> Muang Sing, 5.–31.v.1997, 900–1200m Vit Kuban leg." (CP). **Myanmar:** 1 ♂ "Myanmar (Burma) 21km E Putao, H=550m Nan Sa Bon vill., 1.–5.5.98 leg. S. Murzin & V. Sinaev" (ZFMK), 1 ♂ "Birmanie Theinzeik P. Loizeau 1913/ Museum Paris ex coll. R. Oberthur" (MNHN), 4 ♂♂ "Burma (Myanmar) SW Shan state Taunggyi J. Rejsek 1.–18.6.1997" (ZFMK).

Description. Body length: 8.6 mm, length of elytra: 7.9 mm, width: 5.6 mm. Body oblong, dark brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, anterior labroclypeus shiny.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins strongly convergent and con-

vex, lateral margin and ocular canthus produce an indistinct blunt angle; anterior angles strongly rounded; anterior margin slightly sinuate medially; margins weakly reflexed; surface nearly flat, shiny, finely and very densely punctate, with a few single long setae; base of labroclypeus narrowly covered with dull toment. Frontoclypeal suture finely incised, moderately angled medially. Smooth area anterior to eye approximately twice as wide as long. Ocular canthus short triangular, finely and densely punctate, with a single terminal seta. Frons dull, finely and sparsely punctate, with a few single erect setae beside each eye. Eyes moderately small, ratio diameter/interocular width: 0.61. Antenna with ten antennomeres, club with four antennomeres and straight, distinctly shorter than remaining antennomeres combined, first joint shorter than length of club. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, without median sinuation.

Pronotum moderately transverse, widest at base; lateral margins evenly convex and moderately convergent anteriorly; anterior angles distinctly produced and sharp; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, weakly convex; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at blunt external apical angle of elytra; epipleura densely setose; apical border slightly concavely, with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur; posterior margin of mesosternum fused with the semicircular median ridge which bears dense setae. Ratio of length of metepisternum/metacoxa: 1/1.78. Pygidium weakly convex and dull, coarsely and densely punctate, without smooth midline, with a few long setae at apex.

Legs short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate, anterior row of setae completely reduced; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line; posterior margin serrated neither ventrally nor dorsally, glabrous, posterior margin strongly widened at apex. Metatibia short and wide, widest at middle, ratio of width/length: 1/2.16; dorsal margin sharply carinate, with two groups of spines; basal group shortly before middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face nearly flat, impunctate, finely and sparsely punctate on sides only; ventral margin very finely serrated, with three robust setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 slightly longer than dorsal metatibial spur and distinctly longer than following tarsomere. Protibia moderately long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 9A–C. Habitus: Fig. 9D.

Diagnosis. *Neoserica liangshandingensis* sp. n. differs from all other taxa with a setose ventral median part of the phallobase by the narrow left paramere fused at the base with the phallobase being half as wide as the phallobase at the level of the insertion of the left paramere and by the nearly straight apical half of the aedeagus which lacks a lateral blunt tooth.

Etymology. The new species is named after its type locality, Mt. Liang-shan-ding (adjective in the nominative singular).

Variation. Body length: 8.6–10.0 mm, length of elytra: 7.0–7.9 mm, width: 5.6–5.9 mm. Female: eyes as large as in male; antennal club with four antennomeres and straight, slightly shorter than remaining antennomeres combined, first joint of club half as long as club; pygidium weakly convex.

Neoserica (s.l.) *milani* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:EE095255-8F1A-41F6-89E2-3B156ACB7A52

Figs 7E–H, 19

Type material examined. Holotype: ♂ "Yunnan 2000–3000m 27.20N 100.11E Habashan mts. SE slope 10–13/7. Vit Kuban leg. 92/ [ex] coll. Milan Nikodym, Praha/ 775 Sericini: Asia spec." (ZFMK). Paratypes: 1 ♂ "Kunming, Yunnan, 7.VI.1955, 1900m, leg. Li Xiwen" (IZAS), 1 ♂ "Yuanjiang, V.1979, No. 308" (IZAS), 2 ♂♂, 3 ♀♀ "Yunnan, 2000–3000 m, 27°20'N 100°11'E, Habashan Mts., SE slope, 10, 13.7.1992, D. Král" (NMPC, ZFMK), 1 ♂ "Yunnan 2000–3000m 27.20N 100.11E Habashan mts. SE slope 10–13/7 Vit Kuban leg. 92/ 428 Sericini Asia spec." (CP), 1 ♂ "China: Yunnan prov., Daju-50km N Lijiang; 27,21N 100,19E; S. Becvár leg.; 21.–27.vi.1993" (CP).

Description. Body length: 9.0 mm, length of elytra: 6.2 mm, width: 5.0 mm. Body oblong, reddish brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, anterior labroclypeus shiny.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins strongly convergent and nearly straight, lateral margin and ocular canthus produce an indistinct blunt angle; anterior angles moderately rounded; anterior margin sliglty sinuate medially; margins weakly reflexed; surface convexly elevated medially and shiny, finely and very densely punctate, with a few sparse short setae; base of labroclypeus narrowly covered with dull toment. Frontoclypeal suture finely incised, moderately curved medially. Smooth area anterior to eye approximately 1.5 times as wide as long. Ocular canthus short and wide, finely and densely punctate, without a single terminal seta. Frons dull, finely and sparsely punctate, with a single erect seta beside each eye. Eyes small, ratio diameter/interocular width: 0.54. Antenna with ten antennomeres, club with four antennomeres and straight, as long as remaining antennomeres combined, first joint of club slightly shorter than club. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, without median sinuation.

Pronotum moderately transverse, almost twice as wide as long, widest at base; lateral margins convex and moderately convergent anteriorly; anterior angles weakly produced and blunt; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, weakly convex; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals flat, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur; posterior margin of mesosternum fused with the semicircular median ridge which bears dense setae. Ratio of length of metepisternum/metacoxa: 1/1.7. Pygidium moderately convex and dull, coarsely and densely punctate, without smooth midline, with a few short setae at apex.

Legs short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate, anterior row of setae completely reduced; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line; posterior margin serrated neither ventrally nor dorsally, glabrous, posterior margin strongly widened at apex. Metatibia moderately wide and short, widest at middle, ratio of width/length: 1/2.5; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face nearly flat, impunctate, finely and sparsely punctate on sides only; ventral margin very finely serrated, with three robust setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 as long as dorsal metatibial spur and slightly longer than following tarsomere. Protibia moderately long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 7E–G. Habitus: Fig. 7H.

Diagnosis. *Neoserica milani* sp. n. differs from all other taxa with a setose ventral median part of the phallobase by the wide left paramere fused at its base with the phallobase being as wide as the entire phallobase at the level of the insertion of the left paramere.

Etymology. The new species is dedicated to Milan Nikodým (Prague, Czech Republic) as thanks for the donation of his Sericini collection to D.A (noun in genitive case).

Variation. Body length: 8.4–9.0 mm, length of elytra: 5.8–6.2 mm, width: 4.8–5.0 mm. Female: eyes as large as in male; antennal club with four antennomeres and straight, slightly shorter than remaining antennomeres combined, first joint of club half as long as club; pygidium weakly convex.

Neoserica (s.l.) *pararubiginea* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:62217AD2-0662-4CF9-A7FE-FEF7EF5E1B7E

Figs 8A–D, 21

Type material examined: Holotype: ♂ "[China] Yunnan, Nabanhe Nature Reserve, 2009-IV-16/ LW-1330" (IZAS).

Description. Body length: 10.6 mm, length of elytra: 7.5 mm, width: 6.4 mm. Body oblong, dark brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, anterior labroclypeus shiny.

Labroclypeus nearly semicircular, wider than long, widest at base; lateral margins strongly convergent and convex, lateral margin and ocular canthus produce an indistinct blunt angle; anterior angles strongly rounded; anterior margin straight; margins weakly reflexed; surface nearly flat and shiny, finely and very densely punctate, glabrous; base of labroclypeus narrowly covered with dull toment. Frontoclypeal suture finely incised, moderately curved medially. Smooth area anterior to eye approximately 1.5 times as wide as long. Ocular canthus short and wide, finely and densely punctate, without a single terminal seta. Frons dull, finely and sparsely punctate, with a single erect seta beside each eye. Eyes small, ratio diameter/interocular width: 0.49. Antenna with ten antennomeres, club with four antennomeres and straight, as long as remaining antennomeres combined, first joint of club slightly shorter than club. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, without median sinuation.

Pronotum moderately transverse, almost twice as wide as long, widest at base; lateral margins convex and moderately convergent anteriorly; anterior angles weakly produced and blunt; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, straight; surface densely and finely punctate, with minute setae in punctures; lateral border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur; posterior margin of mesosternum fused with the semicircular median ridge which bears dense setae. Ratio of length of metepisternum/metacoxa: 1/1.8. Pygidium strongly convex and dull, coarsely and densely punctate, without smooth midline, with a few short setae at apex.

Legs short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate, anterior row of setae completely reduced; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line; posterior margin serrated neither ventrally nor dorsally, glabrous, posterior margin strongly widened at apex. Metatibia wide and short, widest at middle, ratio of width/length: 1/2.1; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face nearly flat, impunctate, finely and sparsely punctate on sides only; ventral margin very finely serrated, with three robust setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 as long as dorsal metatibial spur and slightly longer than following tarsomere. Protibia moderately long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 8A–C. Habitus: Fig. 8D.

Female unknown.

Diagnosis. *Neoserica pararubiginea* sp. n. differs from all other taxa with a glabrous ventral median part of the phallobase by the apical half of the aedeagus being bent and not twisted (but straight) after the middle, as well as in having neither a ventral subapical nor a lateral tooth.

Etymology. The name of this species (adjective in the nominative singular) is based on the combined Greek prefix *para-* (close to) and the species name "*rubiginea*", with reference of its general similarity to *Neoserica rubiginea*.

Neoserica (s.l.) *nanhuaensis* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:6A650A29-6484-4745-86A0-25BCCE24408A

Figs 9E–H, 21

Type material examined. Holotype: ♂ "[China] Nanhua, Yunnan, 7.V.1982, 2400m, leg. Yu Peiyu/ LW-580" (IZAS). Paratype: 1 ♂ "[China] Nanhua, Yunnan, 7.V.1982, 2400m, leg. Yu Peiyu" (ZFMK).

Description. Body length: 9.9 mm, length of elytra: 7.5 mm, width: 5.4 mm. Body oblong, dark reddish brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, anterior labroclypeus shiny.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins strongly convergent and convex, lateral margin and ocular canthus produce an indistinct blunt angle; anterior angles strongly rounded; anterior margin slightly sinuate medially; margins weakly re-

flexed; surface nearly flat, shiny, finely and very densely punctate, with a few single long setae; base of labroclypeus narrowly covered with dull toment. Frontoclypeal suture finely incised, moderately angled medially. Smooth area anterior to eye approximately 2.5 times as wide as long. Ocular canthus moderately long and narrow, finely and densely punctate, with a single terminal seta. Frons dull, finely and sparsely punctate, with a few single erect setae beside each eye. Eyes moderately small, ratio diameter/interocular width: 0.61. Antenna with ten antennomeres, club with four antennomeres and straight, slightly longer than remaining antennomeres combined, first joint subequal length of club. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, without median sinuation.

Pronotum moderately transverse, widest at base; lateral margins evenly convex and moderately convergent anteriorly; anterior angles moderately produced and sharp; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, weakly convex; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur; posterior margin of mesosternum fused with the semicircular median ridge which bears dense setae. Ratio of length of metepisternum/metacoxa: 1/1.62. Pygidium weakly convex and dull, coarsely and densely punctate, with a narrow smooth midline, with a few short setae at apex.

Legs moderately short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate, anterior row of setae completely reduced; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line; posterior margin serrated neither ventrally nor dorsally, glabrous, posterior margin strongly widened at apex. Metatibia moderately short and wide, widest at middle, ratio of width/length: 1/2.8; dorsal margin sharply carinate, with two groups of spines; basal group shortly before middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face nearly flat, impunctate, finely and sparsely punctate on sides only; ventral margin very finely serrated, with three robust setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 as long as dorsal metatibial spur and distinctly longer than following tarsomere. Protibia moderately long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 9E–G. Habitus: Fig. 9H.

Diagnosis. *Neoserica nanhuaensis* sp. n. differs from all other taxa with a glabrous ventral median part of the phallobase by the apical half of the aedeagus being strongly bent and twisted after its middle, as well as in having no ventral subapical but a lateral blunt tooth.

Etymology. The new species is named after its type locality, Nanhua (adjective in the nominative singular).

Variation. Body length: 9.9–10.4 mm, length of elytra: 7.5–7.6 mm, width: 5.4–5.9 mm.

Neoserica (s.l.) *pui* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:C60E1D77-1F8F-4F51-B230-AECC9251B895

Figs 9I–L, 21

Type material examined. Holotype: ♂ "[China] Meng'e, Xishuangbanna, Yunnan, 10.VI.1958, 1050–1080m, leg. Pu Fuji/ LW-532" (IZAS). Paratype: 1 ♂ "[China] Yunnan 1500–2500m 25.22N 98.49E 17-24/5 Gaoligong mts. Vit Kuban leg. 1995" (CP).

Description. Body length: 9.1 mm, length of elytra: 6.9 mm, width: 5.3 mm. Body oblong, reddish brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, anterior labroclypeus shiny.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins strongly convergent and convex, lateral margin and ocular canthus produce an indistinct blunt angle; anterior angles strongly rounded; anterior margin distinctly sinuate medially; margins weakly reflexed; surface weakly convex medially, shiny, finely and very densely punctate, with a few single long setae; base of labroclypeus narrowly covered with dull toment. Frontoclypeal suture finely incised, moderately angled medially. Smooth area anterior to eye approximately 2.5 times as wide as long. Ocular canthus moderately long and narrow, finely and densely punctate, with a single

terminal seta. Frons dull, finely and sparsely punctate, with a few single erect setae beside each eye. Eyes small, ratio diameter/interocular width: 0.52. Antenna with ten antennomeres, club with four antennomeres and straight, as long as remaining antennomeres combined, first joint shorter than length of club. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, without median sinuation.

Pronotum moderately transverse, widest at base; lateral margins evenly convex and moderately convergent anteriorly; anterior angles moderately produced and sharp; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, straight; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur; posterior margin of mesosternum fused with the semicircular median ridge which bears dense setae. Ratio of length of metepisternum/metacoxa: 1/1.77. Pygidium weakly convex and dull, coarsely and densely punctate, without midline, with a few short setae at apex.

Legs short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate, anterior row of setae completely reduced; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line; posterior margin serrated neither ventrally nor dorsally, glabrous, posterior margin strongly widened at apex. Metatibia short and wide, widest at middle, ratio of width/length: 1/2.1; dorsal margin sharply carinate, with two groups of spines; basal group shortly before middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face nearly flat, impunctate, finely and sparsely punctate on sides only; ventral margin very finely serrated, with three robust setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 as long as dorsal metatibial spur and distinctly longer than following tarsomere. Protibia moderately long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 9I–K. Habitus: Fig. 9L.

Female unknown.

Diagnosis. *Neoserica pui* sp. n. is in the shape of the aedeagus very similar to *N. caiyangheensis* sp. n. *Neoserica pui* can be distinguished from the latter by the weakly sclerotized left paramere, which is double-curved and has no hook at the apex.

Etymology. The new species is named after its collector, Pu Fuji (noun in genitive case).

Variation. Body length: 9.0–9.1 mm, length of elytra: 6.2–6.9 mm, width: 5.3–5.5 mm.

Neoserica (s.l.) *reni* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:121D1E08-F079-49B0-9E66-2509F106F0B9

Figs 8E–H, 21

Type material examined. Holotype: ♂ "[China] Mohan Town, Mengla, Yunnan, 2–4.VIII.2007, leg. Ren Guodong, Hou Wenjun, Li Yalin/ LW-687" (HBUM).

Description. Body length: 8.6 mm, length of elytra: 6.4 mm, width: 5.4 mm. Body oblong, dark brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, anterior labroclypeus shiny.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins strongly convergent and weakly convex, lateral margin and ocular canthus produce an indistinct blunt angle; anterior angles strongly rounded; anterior margin slightly sinuate medially; margins weakly reflexed; surface convexly elevated medially and shiny, finely and very densely punctate, with a few single long setae; base of labroclypeus narrowly covered with dull toment. Frontoclypeal suture finely incised, moderately angled medially. Smooth area anterior to eye approximately twice as wide as long. Ocular canthus short and wide, finely and densely punctate, with a single terminal seta. Frons dull, finely and sparsely punctate, with a few single erect setae beside each eye. Eyes small, ratio diameter/interocular width: 0.5. Antenna with ten antennomeres, club with four antennomeres and straight, as long as remaining antennomeres combined, first joint slightly shorter than length of club. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, without median sinuation.

Pronotum moderately transverse, widest at base; lateral margins evenly convex and moderately convergent

anteriorly; anterior angles strongly produced and sharp; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, weakly convex; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur; posterior margin of mesosternum fused with the semicircular median ridge which bears dense setae. Ratio of length of metepisternum/metacoxa: 1/1.89. Pygidium weakly convex and moderately shiny, coarsely and densely punctate, with a smooth midline, with a few short setae at apex.

Legs moderately short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate, anterior row of setae completely reduced; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line; posterior margin serrated neither ventrally nor dorsally, glabrous, posterior margin strongly widened at apex. Metatibia moderately short and wide, widest at middle, ratio of width/length: 1/2.17; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face nearly flat, impunctate, finely and sparsely punctate on sides only; ventral margin very finely serrated, with three robust setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 as long as dorsal metatibial spur and distinctly shorter than following two tarsomeres combined. Protibia moderately long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 8E–G. Habitus: Fig. 8H.

Diagnosis. *Neoserica reni* sp. n. is in the shape of the aedeagus very similar to *N. liangshandingensis* sp. n. *Neoserica reni* can be distinguished from the latter by the apical half of the aedeagus being distinctly curved ventrally, and by the presence of a lateral blunt tooth.

Etymology. The new species is named after one of the collectors Ren Guodong (noun in genitive case).

Neoserica (s.l.) *rubiginea* Moser, 1916

Figs 6A–D, 21

Neoserica rubiginea Moser, 1916: 154.

Type material examined. Lectotype (here designated): ♂ "[Vietnam] Hanoi 1903/ Neoserica rubiginea Type Mos./ rubiginea Type Mos." (ZMHB).
Additional material examined. 3 ♂♂ "[China] Taojiang, Leishan, Guizhou, 7.VII.1998, 950m, leg. Wang Shuyong" (IZAS), 1 ♂ "[China] Mts. Leigongshan, Leishan, Guizhou, 27.VI.1988, leg. Yang Xingke" (IZAS), 1 ♂ "[China] Mts. Linaoshan, Langping, Tianlin, Guangxi, 28.V.2002, 1300–1400m, leg. Liu Jianwen" (IZAS), 1 ♂ "[China] Laoshan Forestry Farm, Tianlin, Guangxi, 28.V.2002, 1400m, leg. Yang Xiujuan" (IZAS).

Redescription. Body length: 9.2 mm, length of elytra: 6.8 mm, width: 5.5 mm. Body oblong, reddish brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, anterior labroclypeus shiny.

Labroclypeus nearly semicircular, wider than long, widest at base; lateral margins strongly convergent and convex, lateral margin and ocular canthus produce an indistinct blunt angle; anterior angles strongly rounded; anterior margin nearly straight; margins weakly reflexed; surface convexly elevated medially and shiny, finely and very densely punctate, glabrous; base of labroclypeus covered with dull toment. Frontoclypeal suture finely incised, moderately angled medially. Smooth area anterior to eye approximately as wide as long. Ocular canthus short and wide, finely and densely punctate, without a single terminal seta. Frons dull, finely and sparsely punctate, with a single erect seta beside each eye. Eyes small, ratio diameter/interocular width: 0.53. Antenna with ten antennomeres, club with four antennomeres and straight, as long as remaining antennomeres combined, first joint of club subequal to club length. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, without median sinuation.

Pronotum moderately transverse, almost twice as wide as long, widest at base; lateral margins convex and moderately convergent anteriorly; anterior angles weakly produced and blunt; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, straight; surface densely

and finely punctate, with minute setae in punctures; lateral border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur; posterior margin of mesosternum fused with the semicircular median ridge which bears dense setae. Ratio of length of metepisternum/metacoxa: 1/1.7. Pygidium strongly convex and dull, coarsely and densely punctate, without smooth midline, with a few short setae at apex.

Legs short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate, anterior row of setae completely reduced; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line; posterior margin serrated neither ventrally nor dorsally, glabrous, posterior margin strongly widened at apex. Metatibia moderately wide and short, widest at middle, ratio of width/length: 1/2.4; dorsal margin sharply carinate, with two groups of spines; basal group shortly before middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face nearly flat, impunctate, finely and sparsely punctate on sides only; ventral margin very finely serrated, with three robust setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 as long as dorsal metatibial spur and slightly shorter than following two tarsomeres combined. Protibia moderately long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 6A–C. Habitus: Fig. 6D.

Neoserica (s.l.) *shuizhouensis* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:1BD99A4F-E657-46F6-9886-B419D2666DCE
Figs 5I– L, 21

Type material examined. Holotype: ♂ "China: Hubei; Dahongshan 1700m, Shuizhou VI-2003 leg. Ying et al./ 730 Sericini: Asia spec." (ZFMK). Paratypes: 3 ♂♂, 2 ♀♀ "China: Hubei; Dahongshan 1700m, Shuizhou VI-2003 leg. Ying et al." (ZFMK).

Description. Body length: 11.1 mm, length of elytra: 8.0 mm, width: 6.7 mm. Body oblong, dark brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, anterior labroclypeus shiny.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins strongly convergent and convex, lateral margin and ocular canthus produce an indistinct blunt angle; anterior angles strongly rounded; anterior margin straight; margins weakly reflexed; surface convexly elevated medially and shiny, finely and very densely punctate, glabrous; basal third of labroclypeus narrowly covered with dull toment. Frontoclypeal suture finely incised, moderately curved medially. Smooth area anterior to eye approximately 1.3 times as wide as long. Ocular canthus short and wide, finely and densely punctate, without a single terminal seta. Frons dull, finely and sparsely punctate, with a single erect seta beside each eye. Eyes small, ratio diameter/interocular width: 0.5. Antenna with ten antennomeres, club with four antennomeres and straight, as long as remaining antennomeres combined, first joint of club slightly shorter than club. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, without median sinuation.

Pronotum moderately transverse, almost twice as wide as long, widest at base; lateral margins in basal half straight and evenly convergent, in anterior half convex and moderately convergent anteriorly; anterior angles strongly produced and sharp; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, weakly convex; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites

with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur; posterior margin of mesosternum fused with the semicircular median ridge which bears dense setae. Ratio of length of metepisternum/metacoxa: 1/1.79. Pygidium strongly convex and dull, coarsely and densely punctate, without smooth midline, with a few short setae at apex.

Legs short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate, anterior row of setae completely reduced; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line; posterior margin serrated neither ventrally nor dorsally, glabrous, posterior margin strongly widened at apex. Metatibia moderately wide and short, widest at middle, ratio of width/length: 1/2.5; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face nearly flat, impunctate, finely and sparsely punctate on sides only; ventral margin very finely serrated, with three robust setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 as long as dorsal metatibial spur and slightly shorter than following two tarsomeres combined. Protibia moderately long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 5I–K. Habitus: Fig. 5L.

Diagnosis. *Neoserica shuizhouensis* sp. n. is in the shape of the aedeagus very similar to *N. rubiginea* and *N. allorubiginea*. *Neoserica shuizhouensis* differs from both by the apical half of the aedeagus being narrowed (in lateral view) apically at 3/4 of the aedeagal length.

Etymology. The new species is named after its type locality, Shuizhou (adjective in the nominative singular).

Variation. Body length: 9.1–11.1 mm, length of elytra: 7.2–8.0 mm, width: 5.8–6.7 mm. Female: eyes as large as in male; antennal club with four antennomeres and straight, slightly shorter than remaining antennomeres combined, first joint of club half as long as club; pygidium weakly convex.

Neoserica (s.l.) *strenua* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:730222F6-3822-45E7-8FCC-864DD65F4DE9

Figs 7I–L, 21

Type material examined. Holotype: ♂ "China: Hubei; Dahongshan 1700m, Shuizhou VI-2003 leg. Ying et al./ 721Sericini: Asia spec." (ZFMK).

Description. Body length: 9.1 mm, length of elytra: 7.0 mm, width: 5.9 mm. Body oblong, dark brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, anterior labroclypeus shiny.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins strongly convergent and weakly convex, lateral margin and ocular canthus produce an indistinct blunt angle; anterior angles strongly rounded; anterior margin slightly sinuate medially; margins weakly reflexed; surface convexly elevated medially and shiny, finely and very densely punctate, with a few single long setae; base of labroclypeus narrowly covered with dull toment. Frontoclypeal suture finely incised, moderately curved medially. Smooth area anterior to eye approximately 1.3 times as wide as long. Ocular canthus short and wide, finely and densely punctate, with a single terminal seta. Frons dull, finely and sparsely punctate, with a few single erect setae beside each eye. Eyes small, ratio diameter/interocular width: 0.56. Antenna with ten antennomeres, club with four antennomeres and straight, slightly longer than remaining antennomeres combined, first joint subequal to length of club. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, without median sinuation.

Pronotum moderately transverse, widest at base; lateral margins in basal half straight and evently convergent, in anterior half convex and moderately convergent anteriorly; anterior angles strongly produced and sharp; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, weakly convex; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur; posterior margin of mesosternum fused with the

semicircular median ridge which bears dense setae. Ratio of length of metepisternum/metacoxa: 1/1.64. Pygidium strongly convex and dull, coarsely and densely punctate, without smooth midline, with a few short setae at apex.

Legs moderately short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate, anterior row of setae completely reduced; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line; posterior margin serrated neither ventrally nor dorsally, glabrous, posterior margin strongly widened at apex. Metatibia moderately short and wide, widest at middle, ratio of width/length: 1/2.67; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face nearly flat, impunctate, finely and sparsely punctate on sides only; ventral margin very finely serrated, with three robust setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 slightly longer than dorsal metatibial spur and slightly shorter than following two tarsomeres combined. Protibia moderately long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 7I–K. Habitus: Fig. 7L.

Female unknown.

Diagnosis. *Neoserica strenua* sp. n. is in the shape of the aedeagus very similar to *N. pararubiginea* and *N. nanhuaensis*. *Neoserica strenua* differs from both by the presence of a strong ventral subapical tooth at one fifth of the aedeagal length.

Etymology. The name of the new species is derived from the Latin adjective *strenuus* (busy) (adjective in the nominative singular).

Neoserica (s.l.) *tsinlingensis* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:5E6A5361-A41C-481E-BA48-6909DBAD79DD

Figs 5E–H, 21

Type material examined. Holotype: ♂ "China-Shaanxi; S Taibashan Tsinling Mts.; Houzhenzi vill.; 33°53'N 107°49'E; 15.viii.–15.x. local collector leg.; 1999; 1600m" (ZFMK). Paratypes: 1 ♂ "China-Shaanxi; S Taibashan Tsinling Mts.; Houzhenzi vill.; 33°53'N 107°49'E; 15.viii.–15.x. local collector leg.; 1999; 1600m" (ZFMK), 1 ♂ "C. China 33°35'N, 107°43'E Shaanxi prov. Mt. Tai bei Shan 1300–1500m 20.8.–4.9.1998 leg. Murzin & Siniaev" (CP), 1 ♂, 1 ♀ "China: Hunan: Mupu Mt. 1600M, Pingliang VIII-2003, leg. Li et al." (ZFMK), 1 ♂ "[China] Getiaopa, Neixiang, Henan, 11.VII.1998, 600m, leg. Zhang Youwei" (IZAS), 1 ♂ "Houzhenzi, Zhouzhi, Shaanxi, 24.VI.1999, 1350m, leg. Yao Jian" (IZAS), 1 ♂ "[China] Mts. Xingdoushan, Lichuan, Hubei, 21.VII.1989, 810m, light trap, leg. Wang Shuyong" (IZAS), 1 ♂ "[China] Wolong, Wenchuan, Sichuan, 27.VII.1983, 1920m, leg. Wang Shuyong" (IZAS), 2 ♂♂, 1 ♀ "[China] Huangping, Xixia, Henan, 19.VIII.2008, leg. Ren Guodong, Wu Qiqi etc." (HBUM), 2 ♂♂ "[China] Miaotaizi, Liuba, Shaanxi, 21.VII.1998, 1350m, leg. Yao Jian" (IZAS), 1 ♂ "China W-Sichuan (Aba Tibet Aut. Pref., Weizhou Co.) Quionglai Shan, Wolong valley 20 km WNW Dujiangyan, 1100m 31°05N/ 103°26E (brook bank) 14.VII.1999 D.W. Wrase" (ZFMK), 1 ♂ "China-Shaanxi; S Taibashan Tsingling Mts.; Houzhenzi vill., 33°53'N 107°49'E; 15.viii.–15.x. local collector leg.; 1999; 1600m" (CP), 1 ♂ "[China] Yunnan 1500–3200m 26.07N 103.14E Dongchuan 28/6–3/7 Vit Kuban leg. 1994" (CP).

Description. Body length: 8.4 mm, length of elytra: 6.6 mm, width: 5.3 mm. Body oblong, reddish brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, anterior labroclypeus shiny.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins moderately convergent and weakly convex, lateral margin and ocular canthus produce an indistinct blunt angle; anterior angles moderately rounded; anterior margin slightly sinuate medially; margins weakly reflexed; surface convexly elevated medially and shiny, finely and very densely punctate, with a few single long setae; base of labroclypeus narrowly covered with dull toment. Frontoclypeal suture finely incised, moderately curved medially. Smooth area anterior to eye approximately 1.2 times as wide as long. Ocular canthus short and wide, finely and densely punctate, with a single terminal seta. Frons dull, finely and sparsely punctate, with a few single erect setae beside each eye. Eyes small, ratio diameter/interocular width: 0.53. Antenna with ten antennomeres, club with four antennomeres and straight, as long as remaining antennomeres combined, first joint slightly shorter than club. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, without median sinuation.

Pronotum moderately transverse, widest at base; lateral margins moderately convex and convergent anteriorly; anterior angles strongly produced and sharp; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, weakly convex; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur; posterior margin of mesosternum fused with the semicircular median ridge which bears dense setae. Ratio of length of metepisternum/metacoxa: 1/1.52. Pygidium weakly convex and moderately shiny, coarsely and densely punctate, without smooth midline, with a few short setae at apex.

Legs moderately short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate, anterior row of setae completely reduced; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line; posterior margin serrated neither ventrally nor dorsally, with a few, longer setae; ventral posterior margin strongly widened at apex. Metatibia moderately short and wide, widest behind middle, ratio of width/length: 1/2.6; dorsal margin sharply carinate, with two groups of spines; basal group shortly before middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face nearly flat, impunctate, finely and sparsely punctate on sides only; ventral margin very finely serrated, with three robust setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 slightly longer than dorsal metatibial spur and slightly shorter than following two tarsomeres combined. Protibia moderately long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 5E–G. Habitus: Fig. 5H.

Diagnosis. *Neoserica tsinlingensis* sp. n. differs from all other species of the *Neoserica uniformis* group with a setose medioventral part of the aedeagus by the left paramere being composed by a deeply bifurcate branch, as well as by the strongly angulate externally (in dorsal view) apical half of the aedeagus.

Etymology. The new species is named after its occurrence in the Tsinling Mountains (adjective in the nominative singular).

Variation. Body length: 8.4–9.0 mm, length of elytra: 6.5–6.6 mm, width: 5.3–5.4 mm. Female: eyes as large as in male; antennal club with four antennomeres and straight, as long as remaining antennomeres combined, first joint of club one third as long as club; pygidium weakly convex.

Neoserica (s.l.) *yulongensis* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:CE2A4A3D-1031-4A07-8A42-74CFCE0D1151

Figs 6E–H, 21

Type material examined. Holotype: ♂ "China, Yunnan NW, 3600–3700 m, Yulongshan Mt. 14.–22.VI.1996 S. Murzin leg." (ZFMK). Paratypes: 1 ♂ "Yunnan 3000 m 27.05N 100.15E Yulongshan mts. Ganhaizi pass 4.7.92 David Kral leg." (NMPC), 1 ♂ "China: Yunnan; 1995; Habashan Mts.; 2500–3800m 27,20N 100,13E; 3.–6.vi. SE slope; S. Becvár" (CP), 1 ♂ "[China] Yunnan 2500–2700m 25.58N 100.21E Jizu Shan 6–10.7. Vit Kuban leg. 1994" (CP), 1 ♂ "China, Daxue Shan Mts., Sichuan, Gonga Shan Mt. 2850M, 14.–19.vi.1999, 29°41'N, 109°58'E, NW Moxi, V. Siniaev & A. Plutenko lgt." (CP), 1 ♂ "China: Yunnan province, Mazhan env., 6.VI.2007 Volcano Geological Park, 25°13,5'N 098°30,0'E, 1930 m, J. Hajek & J. Ruzicka leg./ individually collected on soil surface, on plants and flowering shrubs, ruderalized grasslands on volcanic rocks/ grove margins" (NMPC), 2 ♂♂ "China Centr. Sichuan Volong 150SV Chengdu 9.–10.7.94 Benes lg." (ZFMK), 1 ♂ "[China] Yunnan 2000–2800m 25.11N 100.24E Weibaoshan mts. W slope 25–28/6.92 Vit Kuban leg." (ZFMK), 1 ♂ "[China] Yunnan 3600–4100m 27.02N 100.11E Yulongshan mts. 27/9. Vit Kuban leg. 1993" (CP), 1 ♂ "[China] Laoshan Forestry Farm, Tianlin, Guangxi, 4.VI.2002, 1200–1600m, leg. Yang Xiujuan/ LW-680" (IZAS), 1 ♂ "[China] Dongjiafen, Jingdong, Yunnan, 25.VI.1956, 1250m, leg. A. Schnitnikov" (IZAS), 1 ♂ "[China] Dongtang, Maolan, 23.X.1998, leg. Song Qiongzhang"(IZAS), 1 ♂ "[China] Dadongshanbei, Langping, Tianlin, Guangxi, 2.VI.2002, 1300m, leg. Jiang Guofang" (IZAS), 1 ♂ "[China] Fanba, Wenxian, Gansu, 26.VI.1998, 800m, light trap, leg. Yao Jian" (IZAS).

Description. Body length: 8.4 mm, length of elytra: 5.8 mm, width: 5.1 mm. Body oblong, reddish brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, anterior labroclypeus shiny.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins strongly convergent and straight, lateral margin and ocular canthus produce an indistinct

blunt angle; anterior angles strongly rounded; anterior margin straight; margins weakly reflexed; surface convexly elevated medially and shiny, finely and very densely punctate, with numerous short setae; base of labroclypeus covered with dull toment. Frontoclypeal suture finely incised, moderately curved medially. Smooth area anterior to eye approximately 1.5 times as wide as long. Ocular canthus short and wide, finely and densely punctate, with a single terminal seta. Frons dull, finely and sparsely punctate, with a few single erect setae beside each eye. Eyes small, ratio diameter/interocular width: 0.54. Antenna with ten antennomeres, club with four antennomeres and straight, as long as remaining antennomeres combined, first joint subequal club length. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, without median sinuation.

Pronotum moderately transverse, widest at base; lateral margins moderately convex and convergent anteriorly; anterior angles strongly produced and sharp; posterior angles nearly right-angled and moderately rounded at tip; anterior margin with a fine and complete marginal line, weakly convex; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals flat, with sparse, fine punctures concentrated along striae, impunctate medially, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur; posterior margin of mesosternum fused with the semicircular median ridge which bears dense setae. Ratio of length of metepisternum/metacoxa: 1/1.44. Pygidium strongly convex and dull, coarsely and densely punctate, without smooth midline, with a few short setae at apex.

Legs moderately short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate, anterior row of setae completely reduced; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line; posterior margin serrated neither ventrally nor dorsally, with a few, longer setae; ventral posterior margin strongly widened at apex. Metatibia moderately long and wide, widest behind middle, ratio of width/length: 1/2.9; dorsal margin sharply carinate, with two groups of spines; basal group shortly before middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face nearly flat, finely and sparsely punctate; ventral margin very finely serrated, with three robust setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 slightly longer than dorsal metatibial spur and slightly shorter than following two tarsomeres combined. Protibia moderately long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 6E–G. Habitus: Fig. 6H.

Female unknown.

Diagnosis. *Neoserica yulongensis* sp. n. is very similar to *N. tsinlingensis* and differs by the apical half of the aedeagus being weakly curved externally (dorsal view).

Etymology. The new species is named after its occurrence in the Yulong Mountains (adjective in the nominative singular).

Variation. Body length: 8.4–10.1 mm, length of elytra: 5.8–7.5 mm, width: 5.1–5.9 mm.

Neoserica dianae group

Key to species of the *Neoserica dianae* group (males)

1 Metafemur behind anterior margin without serrated line..... 2
1' Metafemur behind anterior margin with continuous serrated line. .... ***N. leigongshanica* Ahrens, Fabrizi & Liu sp. n.**
2 Apex of parameres pointed. 3
2' Apex of parameres rounded. .... ***N. dianae* Ahrens, Fabrizi & Liu sp. n.**
3 Parameres in lateral view straight. Basal lobe of right paramere round..... .....***N. tianmushanica* Ahrens, Fabrizi & Liu sp. n.**
3' Parameres in lateral view bent dorsally in apical half. Basal lobe of right paramere elongate..... .....***N. fopingensis* Ahrens, Fabrizi & Liu sp. n.**

Neoserica (s.l.) *dianae* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:8CF51024-7DAB-44C7-8B35-8173ADD42E08

Figs 10A–D, 22

Type material examined. Holotype: ♂ "China, W Henan, 16.–17.V. Funiu Shan, 33°31'N 111°56'E Baotianman, pitfall traps, 1500–1750m Jaroslav Turna leg., 2009" (ZFMK). Paratypes: 1 ♂ "China, W Henan, 16.–18.V. Funiu Shan, 33°31'N 111°56'E Baotianman, pitfall traps, 1500–1750m Jaroslav Turna leg., 2008" (ZFMK), 11 ♂♂ "China, Shaanxi, Tsinling Mts., South Taibashan, 1400m, Houzhenzi, 33°51'N, 107°49'E, x.1999, leg. by local collectors" (CP), 1 ♂ "China, Shaanxi, Taibashan Range, 1900m, Houzhenzi vill. env., 1–12.viii[sic!].1999, 33°53N, 107°49E, V. Siniaev & A. Plutenko lgt." (CP).

Description. Body length: 8.1 mm, length of elytra: 6.0 mm, width: 4.9 mm. Body oblong, dark brown, antennal club yellowish brown, dorsal surface dull or weakly shiny, nearly glabrous, labroclypeus shiny.

Labroclypeus subtrapezoidal, slightly wider than long, widest at base; lateral margins weakly convergent and nearly straight; anterior angles moderately rounded, lateral margin and ocular canthus produce a distinct angle; anterior margin distinctly sinuate medially; margins well reflexed; surface flat and shiny, coarsely and densely punctate, with numerous erect setae, between coarse punctures a numerous tiny ones interspersed. Frontoclypeal suture distinctly incised, elevated and moderately curved medially. Smooth area anterior to eye approximately twice as wide as long. Ocular canthus long and narrow, finely and sparsely punctate, with a single terminal seta. Frons dull, anterior third shiny, finely and sparsely punctate, with a few erect setae beside eyes and behind frontoclypeal suture. Eyes very large, ratio diameter/interocular width: 0.9. Antenna with ten antennomeres, club with four antennomeres and strongly reflexed, 2.2 times as long as remaining antennomeres combined. Mentum elevated and flattened anteriorly. Labrum transverse, moderately short, weakly produced medially, with distinct median sinuation.

Pronotum transverse, twice as wide as long, widest at base; lateral margins in basal half nearly straight, weakly concavely sinuate, and weakly convergent anteriorly, in anterior half convex and distinctly convergent; anterior angles weakly produced and blunt; posterior angles nearly right-angled and moderately rounded at tip; anterior margin convexly produced medially, fine marginal line widely interrupted medially; surface moderately densely and coarsely punctate, with minute setae in punctures, otherwise glabrous; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with coarse, moderately dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with moderately dense, fine punctures, with minute setae in punctures, odd intervals with a few single short setae. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur, with a few irregular robust setae, but without semicircular ridge. Ratio of length of metepisternum/metacoxa: 1/1.48. Pygidium weakly convex and dull, coarsely and densely punctate, with a narrow smooth midline and a few short setae at apex.

Legs narrow and slender. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate; anterior margin acute, behind anterior margin without serrated line; posterior margin neither serrated ventrally nor dorsally, moderately widened at apex, with dense short setae. Metatibia narrow and long, widest at apex, ratio of width/length: 1/4.0; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at four fifths of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face longitudinally convex, finely and very sparsely punctate, smooth along middle; ventral margin finely serrated, with five robust equidistant setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomere 1 slightly longer than dorsal metatibial spur and distinctly shorter than following two tarsomeres combined. Protibia long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw wide, bluntly truncate at apex.

Aedeagus: Fig. 10A–C. Habitus: Fig. 10D.

Female unknown.

Diagnosis. *Neoserica dianae* sp. n. differs from all other species of this group by the rounded apex of the parameres.

Etymology. This new species is dedicated to Diana Carteni (Velletri, Italy) (noun in genitive case).

Variation. Body length: 7.8–8.4 mm, length of elytra: 5.6–6.0 mm, width: 4.4–4.9 mm.

Neoserica (s.l.) *fopingensis* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:E8C2DDE2-C854-4623-83D2-6589FD16E46C

Figs 10E–H, 22

Type material examined. Holotype: ♂ "China, Shaanxi, Panda area, Nat. Res. Foping, 1600m, 6–11.iv.1999, 33°45'N, 107°48'E, V. Siniaev & A. Plutenko lgt./ 831 Sericini: Asia spec." (CP). Paratypes: 38 ♂♂, 1 ♀ "China, Shaanxi, Panda area, Nat. Res. Foping, 1600m, 6–11. iv.1999, 33°45'N, 107°48'E, V. Siniaev & A. Plutenko lgt." (CP, ZFMK), 1 ♂ "China, Shaanxi, Tsingling Mts., 1600m, Nat. Res. Foping, 33°51'N, 107°57'E, 20.iv.–11.v.1999, V. Siniaev & A. Plutenko lgt." (CP), 1 ♂ "China, Shaanxi, Taibashan Range, 1900m, Houzhenzi vill. env., 1–12.viii.1999 33°53'N, 107°49'E, V. Siniaev & A. Plutenko lgt." (CP), 5 ♂♂ "China, Shaanxi, Tsinling Mts., South Taibashan, 1400m, Houzhenzi, 33°51'N, 107°49'E, X.1999, leg. by local collectors" (CP).

Description. Body length: 7.7 mm, length of elytra: 5.3 mm, width: 4.1 mm. Body oblong, dark brown, elytra somewhat reddish brown, antennal club yellowish brown, dorsal surface dull, nearly glabrous, labroclypeus shiny.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins convergent and moderately convex; anterior angles strongly rounded, lateral margin and ocular canthus produce a distinct angle; anterior margin deeply sinuate medially; margins well reflexed; surface flat and shiny, coarsely and densely punctate, with numerous erect setae, between coarse punctures numerous tiny ones interspersed. Frontoclypeal suture distinctly incised, elevated and moderately curved medially. Smooth area anterior to eye approximately twice as wide as long. Ocular canthus long and narrow, finely and sparsely punctate, with a single terminal seta. Frons dull, anterior third shiny, finely and sparsely punctate, with a few erect setae beside eyes and behind frontoclypeal suture. Eyes large, ratio diameter/interocular width: 0.71. Antenna with ten antennomeres, club with four antennomeres and strongly reflexed, 2.5 times as long as remaining antennomeres combined. Mentum elevated and flattened anteriorly. Labrum transverse, moderately short, weakly produced medially, with distinct median sinuation.

Pronotum transverse, twice as wide as long, widest at base; lateral margins in basal half nearly straight, subparallel, in anterior half convex and distinctly convergent; anterior angles weakly produced and blunt; posterior angles nearly right-angled and moderately rounded at tip; anterior margin convexly produced medially, fine marginal line widely interrupted medially; surface moderately densely and coarsely punctate, with minute setae in punctures, otherwise glabrous; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with coarse, moderately dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with moderately dense, fine punctures, with minute setae in punctures, odd intervals with a few single short setae. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur, with a few irregular robust setae, but without semicircular ridge. Ratio of length of metepisternum/metacoxa: 1/1.55. Pygidium weakly convex and dull, coarsely and densely punctate, with a narrow smooth midline and a few short setae at apex.

Legs narrow and slender. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate; anterior margin acute, behind anterior margin without serrated line; posterior margin neither serrated ventrally nor dorsally, moderately widened at apex, with dense short setae. Metatibia narrow and moderately long, widest at apex, ratio of width/length: 1/3.3; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at four fifths of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face longitudinally convex, finely and very sparsely punctate, smooth along middle; ventral margin finely serrated, with five robust equidistant setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomere 1 slightly longer than dorsal metatibial spur and distinctly shorter than following two tarsomeres combined. Protibia long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw wide, bluntly truncate at apex.

Aedeagus: Fig. 10E–G. Habitus: Fig. 10H.

Diagnosis. *Neoserica fopingensis* sp. n. differs from *N. dianae* sp. n. by the shape of the parameres: in *N. fopingensis* they are slightly angled at the middle (lateral view), and the basal lobe of the right paramere is as narrow as the paramere and curved interiorly (dorsal view), while in *N. dianae* the parameres are straight (lateral view) and the basal lobe is strongly widened and straight (dorsal view).

Etymology. The new species is named after its type locality, Foping Nature Reserve (adjective in the nominative singular).

Variation. Body length: 7.1–7.8 mm, length of elytra: 5.2–5.4 mm, width: 4.1–4.4 mm. Female: with slightly

smaller eyes than male, antennal club short (as long as remaining antennomeres combined) and composed of three antennomeres.

Neoserica (s.l.) *tianmushanica* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:53570D15-AFBF-432F-9817-32629B0ED092

Figs 10I–L, 22

Type material examined. Holotype: ♂ "DA1427 NeosericaspCHINA2 China Zhejiang, West Tianmu Shan N.R., way to peak/ of immortals, 1100–1200 m, primary mixed forest, litter, moss, sifted 30°20'34''N, 119°25'51''E 15.VI.2007 leg. A. Pütz" (ZFMK).

Description. Body length: 8.5 mm, length of elytra: 6.1 mm, width: 4.6 mm. Body oblong, dark brown, elytra somewhat reddish brown, antennal club yellowish brown, dorsal surface dull, nearly glabrous, labroclypeus shiny.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins distinctly convergent and straight; anterior angles moderately rounded, lateral margin and ocular canthus produce a distinct angle; anterior margin deeply sinuate medially; margins well reflexed; surface flat and shiny, coarsely and densely punctate, with numerous erect setae. Frontoclypeal suture distinctly incised, elevated and moderately curved medially. Smooth area anterior to eye approximately 1.5 times as wide as long. Ocular canthus long and narrow, finely and sparsely punctate, with a single terminal seta. Frons dull, anterior quarter shiny, finely and sparsely punctate, with numerous erect setae. Eyes large, ratio diameter/interocular width: 0.76. Antenna with ten antennomeres, club with four antennomeres and moderately reflexed, 1.5 times as long as remaining antennomeres combined. Mentum elevated and flattened anteriorly. Labrum transverse, moderately short, weakly produced medially, with distinct median sinuation.

Pronotum transverse, twice as wide as long, widest at base; lateral margins in basal half nearly straight and subparallel, distinctly concavely sinuate, in anterior half convex and distinctly convergent; anterior angles weakly produced and blunt; posterior angles nearly right-angled and moderately rounded at tip; anterior margin convexly produced medially, fine marginal line widely interrupted medially; surface moderately densely and coarsely punctate, with minute setae in punctures, otherwise glabrous; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with coarse, moderately dense punctures, impunctate at median base, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with moderately dense, fine punctures concentrated along striae, with minute setae in punctures, odd intervals with a few single short setae. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur, with numerous irregular robust setae, but without semicircular ridge. Ratio of length of metepisternum/metacoxa: 1/1.5. Pygidium weakly convex and dull, coarsely and densely punctate, without midline, with a few short setae at apex.

Legs narrow and slender. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate; anterior margin acute, behind anterior margin without serrated line; posterior margin neither serrated ventrally nor dorsally, moderately widened at apex, with dense short setae. Metatibia narrow and long, widest at apex, ratio of width/length: 1/3.9; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at four fifths of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face longitudinally convex, finely and very sparsely punctate, smooth along middle; ventral margin finely serrated, with five robust equidistant setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomere 1 distinctly longer than dorsal metatibial spur and distinctly shorter than following two tarsomeres combined. Protibia long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw wide, bluntly truncate at apex.

Aedeagus: Fig. 10I–K. Habitus: Fig. 10L.

Female unknown.

Diagnosis. *Neoserica tianmushanica* sp. n. is in shape of the parameres very similar to *N. fopingensis* sp. n. It differs from the latter in the shape of the parameres: they are not slightly angled at the middle as in *N. fopingensis* (lateral view), and the basal lobe of the right paramere is widened at the apex and bent 90° to the main axis of the paramere, while it is only in an angle of 45° to the main paramere axis in *N. fopingensis* (dorsal view).

Etymology. The new species is named after its type locality, Tianmu Shan (adjective in the nominative singular).

***Neoserica* (s.l.) *leigongshanica* Ahrens, Fabrizi & Liu sp. n.**

urn:lsid:zoobank.org:act:81A6DC8B-7C6C-475B-83F2-11DAAD22786B

Figs 11A–D, 22

Type material examined. Holotype: ♂ "China: Guizhou, Leishen pref., Mt. Leigongshan, 4-IV-1994 W. Kitawaki leg./ Coll. Takeshi Itoh, Osaka (Japan)" (ZFMK).

Description. Body length: 6.2 mm, length of elytra: 4.6 mm, width: 3.8 mm. Body oblong, dark brown, antennal club yellowish brown, dorsal surface dull or weakly shiny, nearly glabrous, labroclypeus shiny.

Labroclypeus subtrapezoidal, slightly wider than long, widest at base; lateral margins weakly convergent and nearly straight; anterior angles moderately rounded, lateral margin and ocular canthus produce a distinct angle; anterior margin distinctly sinuate medially; margins well reflexed; surface flat and shiny, coarsely and densely punctate, with a few erect setae, between coarse punctures a numerous tiny ones interspersed. Frontoclypeal suture distinctly incised, elevated and moderately curved medially. Smooth area anterior to eye approximately as wide as long. Ocular canthus long and narrow, finely and sparsely punctate, with a single terminal seta. Frons dull, anterior quarter shiny, finely and sparsely punctate, with a few erect setae beside eyes and behind frontoclypeal suture. Eyes moderately large, ratio diameter/interocular width: 0.63. Antenna with ten antennomeres, club with four antennomeres and strongly reflexed, 2.5 times as long as remaining antennomeres combined. Mentum elevated and flattened anteriorly. Labrum transverse, moderately short, weakly produced medially, with distinct median sinuation.

Pronotum transverse, slightly wider than long, widest at base; lateral margins in basal half nearly straight, weakly concavely sinuate, and weakly convergent anteriorly, in anterior half convex and distinctly convergent; anterior angles weakly produced and blunt; posterior angles nearly right-angled and moderately rounded at tip; anterior margin convexly produced medially, fine marginal line widely interrupted medially; surface moderately densely and coarsely punctate, with minute setae in punctures, otherwise glabrous; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with coarse, moderately dense punctures, glabrous.

Elytra oblong, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with moderately dense, fine punctures, with minute setae in punctures, odd intervals with a few single short setae. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur, with a few irregular robust setae, but without semicircular ridge. Ratio of length of metepisternum/metacoxa: 1/1.34. Pygidium weakly convex and dull, coarsely and densely punctate, with a narrow smooth midline and a few short setae at apex.

Legs narrow and slender. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate; anterior margin acute, behind anterior margin with continuous serrated line; posterior margin neither serrated ventrally nor dorsally, moderately widened at apex, with dense short setae. Metatibia narrow and long, widest at apex, ratio of width/length: 1/4.7; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at four fifths of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face longitudinally convex, finely and very sparsely punctate, smooth along middle; ventral margin finely serrated, with five robust equidistant setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomere 1 slightly longer than dorsal metatibial spur and distinctly shorter than following two tarsomeres combined. Protibia long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw wide, bluntly truncate at apex.

Aedeagus: Fig. 11A–C. Habitus: Fig. 11D.

Female unknown.

Diagnosis. *Neoserica leigonghsanica* sp. n. is very similar to *N. dianae* sp. n. and *N. tianmushanica* sp. n. *Neoserica leigongshanica* differs, however, from *N. dianae* by the shorter parameres, and from *N. tianmushanica* by the tips of the parameres being (in dorsal view) not narrowed at the apex.

Etymology. This new species is named with reference to its type locality, Leigongshan mountain (adjective in the nominative singular).

Neoserica funiushanensis group

Key to species of the *Neoserica funiushanensis* group (males)

1 Parameres strongly asymmetric. 2
1' Parameres subsymmetric..... ..... ***N. pariliforceps* Ahrens, Fabrizi & Liu sp. n.**
2 Parameres widened towards base (lateral view), apex of both parameres widened (dorsal view). ....***N. qingyinica* Ahrens, Fabrizi & Liu sp. n.**
2' Parameres not widened towards base (lateral view), apex of both parameres not widened (dorsal view). ....***N. funiushanensis* Ahrens, Fabrizi & Liu sp. n.**

Neoserica (s.l.) *funiushanensis* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:11432904-0C73-40BE-8B66-BED5294639D3
Figs 12A–D, 22

Type material examined. Holotype: ♂ "China, W Henan, 16.–17.V. Funiu Shan, 33°31'N 111°56'E Baotianman, pitfall traps, 1500–1750m Jaroslav Turna leg., 2009/ 796 Sericini: Asia spec." (ZFMK). Paratypes: 1 ♂ "[China] Xiaohekou, Xingshan, Hubei, 11.V.1994, leg. Yao Jian"(IZAS), 1 ♂ "China: E-Yunnan; Damaidi 2500m, Guangnan near Vietnam VII-2003 leg. Li et al./ 715 Sericini: Asia spec." (ZFMK).

Description. Body length: 9.9 mm, length of elytra: 7.0 mm, width: 5.4 mm. Body oblong, dark brown, antennal club yellowish brown, dorsal surface dull or weakly shiny, nearly glabrous, labroclypeus moderately shiny.

Labroclypeus subtrapezoidal, slightly wider than long, widest at base; lateral margins weakly convergent and straight; anterior angles weakly rounded, lateral margin and ocular canthus produce a distinct angle; anterior margin straight; margins well reflexed; surface slightly convex and moderately shiny, base narrowly dull, coarsely and densely punctate, with numerous erect setae, between coarse punctures numerous tiny ones interspersed. Frontoclypeal suture distinctly incised and moderately curved medially. Smooth area anterior to eye approximately 1.5 times as wide as long. Ocular canthus long and narrow, finely and densely punctate, with a single terminal seta. Frons completely dull, finely and sparsely punctate, with a few erect setae beside eyes and behind frontoclypeal suture. Eyes large, ratio diameter/interocular width: 0.82. Antenna with ten antennomeres, club with four antennomeres and strongly reflexed, twice as long as remaining antennomeres combined. Mentum elevated and flattened anteriorly. Labrum transverse, moderately short, not produced, without median sinuation.

Pronotum slightly transverse, slightly wider than long, widest at base; lateral margins in basal half nearly straight and distinctly convergent anteriorly, in anterior half moderately convex and convergent; anterior angles weakly produced and blunt; posterior angles nearly right-angled; anterior margin convexly produced medially, fine marginal line complete; surface moderately densely and coarsely punctate, with minute setae in punctures, otherwise glabrous; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with coarse, moderately dense punctures, glabrous.

Elytra elongate, widest at middle; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with sparse, fine punctures concentrated along striae, with minute setae in punctures, odd intervals with a few single short setae. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur, with a few irregular robust setae, but without semicircular ridge. Ratio of length of metepisternum/metacoxa: 1/1.46. Pygidium strongly convex and dull, coarsely and densely punctate, without midline, with a few short setae at apex.

Legs narrow and slender. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate; anterior margin acute, behind anterior margin without serrated line; posterior margin neither serrated ventrally nor dorsally, moderately widened at apex, with dense short setae. Metatibia narrow and long, widest at apex, ratio of width/length: 1/4.9; dorsal margin sharply carinate, with two groups of spines; basal group shortly before middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face longitudinally convex, coarsely but sparsely punctate, punctures on sides denser; ventral margin finely serrated, with four robust equidistant setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, finely punctate dorsally; metatarsomere 1 slightly longer than dorsal metatibial spur and distinctly shorter than following two tarsomeres combined. Protibia long, bidentate, not widened laterally; anterior claws asymmetrical, basal tooth of inner claw small and lobiform.

Aedeagus: Fig. 12A–C. Habitus: Fig. 12D.

Female unknown.

Diagnosis. *Neoserica* (s.l.) *funiushanensis* sp. n. resembles somewhat the species of the *Serica erectosetosa* group, however, its antennal club is composed of four antennomeres. From all other *Neoserica* species *Neoserica* (s.l.) *funiushanensis* sp. n. can be distinguished by the symmetric phallobase.

Etymology. The new species is named after its occurrence in the Funiu Shan (adjective in the nominative singular).

Variation. Body length: 9.2–9.9 mm, length of elytra: 7.0–7.2 mm, width: 5.2–5.4 mm.

Neoserica (s.l.) *qingyinica* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:936ECA5F-9E6C-4463-86CC-FA82FD2706C8

Figs 12E–H, 22

Type material examined. Holotype: ♂ "Qingyin'ge, Mts. Emeishan, Sichuan, 24.IV.1957, 800–1000m, leg. Huang Keren" (IZAS).

Description. Body length: 8.8 mm, length of elytra: 6.8 mm, width: 4.8 mm. Body oblong, dark brown, antennal club yellowish brown, dorsal surface dull or weakly shiny, nearly glabrous, labroclypeus moderately shiny.

Labroclypeus subtrapezoidal, slightly wider than long, widest at base; lateral margins weakly convergent and straight; anterior angles weakly rounded, lateral margin and ocular canthus produce a distinct angle; anterior margin shallowly concave; margins well reflexed; surface slightly convex and moderately shiny, base narrowly dull, coarsely and densely punctate, with numerous erect setae, between coarse punctures numerous tiny ones interspersed. Frontoclypeal suture distinctly incised and moderately curved medially. Smooth area anterior to eye approximately 1.5 times as wide as long. Ocular canthus long and narrow, finely and densely punctate, with a single terminal seta. Frons completely dull, finely and sparsely punctate, with a few erect setae beside eyes and behind frontoclypeal suture. Eyes moderately large, ratio diameter/interocular width: 0.72. Antenna with ten antennomeres, club with four antennomeres and strongly reflexed, 1.7 times as long as remaining antennomeres combined. Mentum elevated and flattened anteriorly. Labrum transverse, moderately short, not produced, without median sinuation.

Pronotum slightly transverse, slightly wider than long, widest at base; lateral margins in basal half slightly concavely sinuate, but nearly straight and distinctly convergent anteriorly, in anterior half moderately convex and convergent; anterior angles weakly produced and blunt; posterior angles nearly right-angled; anterior margin convexly produced medially, fine marginal line complete; surface moderately densely and coarsely punctate, with minute setae in punctures, otherwise glabrous; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with coarse, moderately dense punctures, glabrous.

Elytra elongate, widest at middle; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with sparse, fine punctures concentrated along striae, with minute setae in punctures, odd intervals with a few single short setae. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur, with a few irregular robust setae, but without semicircular ridge. Ratio of length of metepisternum/metacoxa: 1/1.34. Pygidium strongly convex and dull, coarsely and densely punctate, with a narrow midline and a few short setae at apex.

Legs narrow and slender. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate; anterior margin acute, behind anterior margin without serrated line; posterior margin neither serrated ventrally nor dorsally, moderately widened at apex, with dense short setae. Metatibia narrow and long, widest at apex, ratio of width/length: 1/4.3; dorsal margin sharply carinate, with two groups of spines; basal group shortly before middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face longitudinally convex, coarsely but sparsely punctate, punctures on sides denser; ventral margin finely serrated, with four robust equidistant setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, finely punctate dorsally; metatarsomere 1 slightly longer than dorsal metatibial spur and distinctly shorter than following two tarsomeres combined. Protibia long, bidentate, not widened laterally; anterior claws asymmetrical, basal tooth of inner claw small and lobiform.

Aedeagus: Fig. 12E–G. Habitus: Fig. 12H.

Female unknown.

Diagnosis. *Neoserica qingyinica* sp. n. is in the shape of the male genitalia very similar to *N. funiushanensis* sp. n. *Neoserica qingyinica* differs from the latter by the shape of the parameres, which are more widened towards the

base (in lateral view), and in the widened appearance of the apex of both parameres.

Etymology. This new species is named after the type locality, Qingyin (adjective in the nominative singular).

Neoserica (s.l.) *pariliforceps* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:DF065D10-9C04-46BC-BFA3-6819E35ABC16
Figs 13A–D, 22

Type material examined. Holotype: ♂ "DA1426 Neoserica spnCHINA1 China Yunnan, Dali Bai Auton. Pref., Wuliang Shan, 9 km SW Weishan, 2450–/ 2500 m, oaks and pines, sifted, 25°10'14''N, W slope, 100°14'22''E 13.VI.2007 leg. A. Pütz" (ZFMK). Paratypes: 2 ♂♂ "Micangshan, Hanzhong, S. Shaanxi, III-2004 leg. Ying" (ZFMK), 3 ♂♂, 2 ♀♀ "China: Guizhou, Leishen pref., Mt. Leigongshan, 4-IV-1994 W. Kitawaki leg./ Coll. Takeshi Itoh, Osaka (Japan)" (ZFMK).

Description. Body length: 9.6 mm, length of elytra: 6.6 mm, width: 4.6 mm. Body oblong, dark reddish brown, antennal club yellowish brown, dorsal surface dull or weakly shiny, nearly glabrous, labroclypeus shiny.

Labroclypeus subtrapezoidal, slightly wider than long, widest at base; lateral margins moderately convergent and straight; anterior angles weakly rounded, lateral margin and ocular canthus produce a distinct angle; anterior margin nearly straight; margins well reflexed; surface flat and shiny, base narrowly dull, coarsely and densely punctate, with a few erect setae. Frontoclypeal suture distinctly incised and moderately curved medially. Smooth area anterior to eye approximately 1.5 times as wide as long. Ocular canthus long and narrow, finely and densely punctate, with a single terminal seta. Frons completely dull, finely and sparsely punctate, with a few erect setae beside eyes. Eyes moderately large, ratio diameter/interocular width: 0.67. Antenna with ten antennomeres, club with four antennomeres and slightly reflexed, 1.6 times as long as remaining antennomeres combined. Mentum elevated and flattened anteriorly. Labrum transverse, moderately short, not produced, without median sinuation.

Pronotum slightly transverse, slightly wider than long, widest at base; lateral margins in basal half slightly concave and distinctly convergent anteriorly, in anterior half moderately convex and convergent; anterior angles weakly produced and blunt; posterior angles nearly right-angled; anterior margin convexly produced medially, fine marginal line complete; surface moderately densely and coarsely punctate, with minute setae in punctures, otherwise glabrous; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with coarse, moderately dense punctures, glabrous.

Elytra elongate, widest at middle; striae weakly impressed, finely and moderately densely punctate; intervals weakly convex, with sparse, fine punctures concentrated along striae, with minute setae in punctures, penultimate lateral intervals with a few single short setae. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur, with a few irregular robust setae. Ratio of length of metepisternum/metacoxa: 1/1.68. Pygidium strongly convex and dull, coarsely and moderately densely punctate, without midline, with a few long setae at apex.

Legs narrow and slender. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur dull and sparsely finely punctate; anterior margin acute, behind anterior margin without serrated line or marginal line; posterior margin neither serrated ventrally nor dorsally, moderately widened at apex, with dense short setae. Metatibia narrow and long, widest at apex, ratio of width/length: 1/3.6; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at four fifths of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face longitudinally convex, finely but sparsely punctate; ventral margin finely serrated, with four robust equidistant setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, finely punctate dorsally; metatarsomere 1 slightly longer than dorsal metatibial spur and slightly shorter than following two tarsomeres combined. Protibia long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw narrow and truncate at apex.

Aedeagus: Fig. 13A–C. Habitus: Fig. 13D.

Female unknown.

Diagnosis. *Neoserica* (s.l) *pariliforceps* sp. n. new species is very similar in its external appearance to the species of the *N. funiushanensis* group, it differs from both species of the group by the symmetric parameres and the shape of its anterior tarsal claws.

Etymology. The species name (adjective in the nominative singular) is derived from the combined Latin words,

parilis (equal) and *forceps* (forceps, pincers), with reference to the symmetric parameres of the species.

Variation. Body length: 9.6–10.8 mm, length of elytra: 6.6–7.2 mm, width: 4.6–5.8 mm. Female: Slightly larger, eyes slightly smaller than in male; antennal club short, as long as remaining antennomeres combined and composed of three antennomeres; pygidium moderately evenly convex.

Neoserica (s.l.) *multifoliata* group

Neoserica (s.l.) *dilatipennis* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:1F8E7FA7-8EB2-4CF0-80B0-C9E322F2D183
Figs 13E–H, 23

Type material examined. Holotype: ♂ "[China] Yunnan, Nabanhe nature reserve, 2009-VI-26/ LW-1255" (IZAS).

Description. Body length: 9.8 mm, length of elytra: 7.0 mm, width: 5.8 mm. Body oval, dark brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins strongly convergent and weakly convex, lateral margin and ocular canthus produce a blunt angle; anterior angles strongly rounded; anterior margin slightly sinuate medially; margins moderately reflexed; surface nearly flat and shiny, base narrowly dull, finely and densely punctate, with a few single setae anteriorly. Frontoclypeal suture indistinctly incised, moderately curved medially. Smooth area anterior to eye approximately 1.5 times as wide as long. Ocular canthus moderately long and wide, finely and densely punctate, with a single terminal seta. Frons shiny, finely and densely punctate, with a few erect setae beside each eye. Eyes very small, ratio diameter/interocular width: 0.45. Antenna with ten antennomeres, club with six antennomeres and straight, 1.2 times as long as remaining antennomeres combined, all joints of club equal in length. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, with weak median sinuation.

Pronotum moderately transverse, widest at base; lateral margins convex and moderately convergent anteriorly; anterior angles moderately produced and sharp; posterior angles blunt and moderately rounded at tip; anterior margin with a fine and complete marginal line, straight; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border densely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, dull, with fine, dense punctures, glabrous.

Elytra oval, widest at middle; striae distinctly impressed, finely and moderately densely punctate; intervals moderately convex, with dense, fine punctures concentrated along striae, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur, with a semi-circular ridge of long setae. Ratio of length of metepisternum/metacoxa: 1/1.83. Pygidium moderately convex and dull, coarsely and moderately densely punctate, without smooth midline, with a few long setae on apical margin.

Legs short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur dull and sparsely finely punctate; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line, anterior row of setae completely reduced; posterior margin neither serrated dorsally nor ventrally, glabrous, ventral posterior margin strongly widened at apex. Metatibia wide and short, widest at middle, ratio of width/length: 1/2.1; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at three quarters of metatibial length; in basal quarter with a finely serrated line beside dorsal margin and a few robust single spines; external face nearly flat, finely punctate on sides, along middle nearly smooth; ventral margin finely serrated, with four robust equidistant setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 slightly longer than dorsal metatibial spur and distinctly shorter than following two tarsomeres combined. Protibia short, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 13E–G. Habitus: Fig. 13H.

Female unknown.

Etymology. The name (adjective in the nominative singular) is derived from the combined Latin words *dilatus* (widened) and *penna* (wing), with reference to its body shape.

Diagnosis. *Neoserica dilatipennis* sp. n. differs from the similar *Neoserica multifoliata* Moser, 1920 from Myanmar by the relatively long and narrower parameres, as

well as in the strongly asymmetric phallobase, which is in the left side strongly produced and exceeding beyond the right side of the phallobase. Both species share an antennal club being in the female composed of more than 3 antennomeres, and in the male composed of more than 4 antennomeres, as well as the metatibia being short and wide, and the body size being larger than 9 mm.

Species incertae sedis

***Neoserica* (s.l.) *longwangshanica* Ahrens, Fabrizi & Liu sp. n.**

urn:lsid:zoobank.org:act:A1156497-AA5D-4AD7-8B47-D899838EC902
Figs 14A–D, 23

Type material examined. Holotype: ♂ "[China] Mt. Longwangshan, Anji, Zhejiang, 17.V.1996, leg. Wu Hong" (IZAS).

Description. Body length: 5.6 mm, length of elytra: 4.0 mm, width: 3.1 mm. Body oblong, yellowish brown, frons, two dark large spot on pronotum and numerous small spots on elytra dark brown, antennal club yellowish brown, dorsal surface dull, nearly glabrous, labroclypeus moderately shiny.

Labroclypeus subrectangular, little wider than long, widest at base; lateral margins subparallel and nearly straight; anterior angles strongly rounded, lateral margin and ocular canthus produce a distinct angle; anterior margin distinctly sinnuate; margins well reflexed; surface flat and shiny, coarsely and densely punctate, with numerous erect setae. Frontoclypeal suture distinctly incised and moderately curved medially. Smooth area anterior to eye large, approximately 1.5 times as wide as long. Ocular canthus long and narrow, finely and densely punctate, with a single terminal seta. Frons shiny, in posterior half dull, finely and densely punctate, with a few erect setae behind frontoclypeal suture. Eyes moderately large, ratio diameter/interocular width: 0.64. Antenna with ten antennomeres, club with five antennomeres and strongly reflexed, 3.5 times as long as remaining antennomeres combined. Mentum moderately elevated and convex. Labrum transverse, moderately short, not produced, without median sinuation.

Pronotum transverse, distinctly wider than long, widest at base; lateral margins in basal half straight and subparallel, in anterior half convex and convergent anteriorly; anterior angles weakly produced and blunt; posterior angles nearly right-angled; anterior margin convexly produced medially, fine marginal line complete; surface moderately densely and coarsely punctate, with minute setae in punctures, otherwise glabrous; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with coarse, moderately dense punctures, with minute setae in punctures.

Elytra elongate, widest at posterior third; striae weakly impressed, finely and moderately densely punctate; intervals flat, with sparse, fine punctures concentrated along striae, with minute setae in punctures, with numerous dark impunctate spot on the elytra; odd intervals with a few single short setae an apical declivity. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.4. Pygidium moderately convex and dull, finely and densely punctate, without midline, with a few short setae at apex.

Legs narrow and slender. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur with iridescent shine, sparsely and finely punctate; anterior margin acute, behind anterior margin without serrated line; posterior margin ventrally and dorsally serrated, moderately widened at apex, glabrous. Metatibia narrow and moderately long, widest at apex, from middle to apex equal in width, ratio of width/length: 1/3.3; dorsal margin sharply carinate, with two groups of spines; basal group shortly before middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face longitudinally convex, coarsely and densely punctate; ventral margin finely serrated, with three robust equidistant setae with the distal one being more distant; medial face impunctate, glabrous; apex sharply trunctate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, impunctate dorsally; metatarsomeres laterally sharply carinate; metatarsomere 1 nearly twice as long as dorsal metatibial spur and slightly shorter than following two tarsomeres combined. Protibia long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw narrow and truncate at apex.

Aedeagus: Fig. 14A–C. Habitus: Fig. 14D.

Female unknown.

Diagnosis. *Neoserica longwangshanica* sp. n. differs from all other Chinese *Neoserica* species by the posterior margin of metafemur being ventrally and dorsally serrate, as well as in the acute and moderately produced anterior angles of the pronotum, and the reflexed antennal club in the male being composed of five antennomeres.

Etymology. The new species is named after the type locality, Mt. Longwangshan (adjective in the nominative singular).

Neoserica (s.l.) *anmaxinzhaiensis* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:2476501E-DD7B-4314-80EA-0BA873DD9623
Figs 14E–H, 23

Type material examined. Holotype: ♂ "[China] Yunnan, Nabanhe, Anmaxinzhai, 2009-VI-16/ LW-1363" (IZAS).

Description. Body length: 7.2 mm, length of elytra: 5.4 mm, width: 4.6 mm. Body oval, dark reddish brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, head and anterior pronotum shiny.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins strongly convergent and weakly convex, lateral margin and ocular canthus produce an indistinct blunt angle; anterior angles strongly rounded; anterior margin slightly sinuate medially; margins moderately reflexed; surface weakly convex and shiny, finely and very densely punctate, with a few single setae anteriorly. Frontoclypeal suture indistinctly incised, moderately curved medially. Smooth area anterior to eye approximately 1.5 times as wide as long. Ocular canthus short and wide, finely and densely punctate, with a single terminal seta. Frons shiny, finely and densely punctate, with a few erect setae beside each eye. Eyes moderately small, ratio diameter/interocular width: 0.64. Antenna with ten antennomeres, club with four antennomeres and straight, as long as remaining antennomeres combined, first joint of club nearly half of club length. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, with weak median sinuation.

Pronotum moderately transverse, widest at base; lateral margins convex and moderately convergent anteriorly; anterior angles moderately produced and sharp; posterior angles blunt and moderately rounded at tip; anterior margin with a fine and complete marginal line, straight; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border densely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, dull, with fine, dense punctures, glabrous.

Elytra oval, widest at middle; striae distinctly impressed, finely and moderately densely punctate; intervals moderately convex, with moderately dense, fine punctures concentrated along striae, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.7. Pygidium moderately convex and dull, coarsely and densely punctate, without smooth midline, with a few long setae on apical half.

Legs moderately short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur dull and sparsely finely punctate; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line; posterior margin finely serrated only dorsally, ventrally smooth, glabrous, posterior margin strongly widened at apex. Metatibia wide and short, widest at middle, ratio of width/length: 1/3.1; dorsal margin sharply carinate, with two groups of spines; basal group shortly behind middle, apical group at three quarters of metatibial length; in basal half with a finely serrated line beside dorsal margin; external face nearly flat, sparsely finely punctate on sides, along middle smooth; ventral margin very finely serrated, with four robust equidistant setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with very dense, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 distinctly longer than dorsal metatibial spur and as long as following two tarsomeres combined. Protibia moderately long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 14E–G. Habitus: Fig. 14H.

Female unknown.

Diagnosis. *Neoserica* (s.l.) *anmaxinzhaiensis* sp. n. differs from all other *Neoserica* species of China which have the ventral posterior margin of metafemur smooth in four characters: (1) by having a serrated longitudinal line or carina beside the dorsal margin of the metatibia, (2) by having the anterior two thirds of the frons shiny, (3) by lacking a continuous serrated line beside the anterior margin of the metafemur, and (4) by having an asymmetric aedeagus, with a long, lateral apophysis at the right side of the phallobase.

Etymology. The new species is names after its type locality, Anmaxinzhai (adjective in the nominative singular).

***Neoserica* (s.l.) *costisquamosa* Ahrens, Fabrizi & Liu sp. n.**

urn:lsid:zoobank.org:act:E624C3A6-44E5-4643-96F8-6D0288FFDC8E

Figs 14I–L, 23

Type material examined. Holotype: ♂ "[China] Libo, V.1998, No.1-036" (CAU).

Description. Body length: 7.8 mm, length of elytra: 5.8 mm, width: 4.3 mm. Body oval, dark reddish brown, antennal club yellowish brown, frons disc of pronotum and centre of elytral intervals darker with greenish shine; dorsal surface dull and glabrous except for a few white large scale-like setae on odd intervals, labroclypeus shiny.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins moderately convergent and convex, lateral margin and ocular canthus produce a distinct angle; anterior angles strongly rounded; anterior margin slightly sinuate medially; margins moderately reflexed; surface weakly convex and shiny, finely and densely punctate, with a few single setae. Frontoclypeal suture indistinctly incised, moderately curved medially. Smooth area anterior to eye approximately as wide as long. Ocular canthus short and wide, impunctate, with a single terminal seta. Frons will iridescent-dull toment, finely and moderately densely punctate, with a few erect setae beside each eye. Eyes moderately small, ratio diameter/interocular width: 0.56. Antenna with ten antennomeres, club with four antennomeres and straight, as long as remaining antennomeres combined, first joint of club subequal club length. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, with weak median sinuation.

Pronotum moderately transverse, widest at posterior third; lateral margins convex and moderately convergent anteriorly and posteriorly; anterior angles moderately produced and sharp; posterior angles strongly rounded; anterior margin with a fine and complete marginal line, convexly produced medially; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border densely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, dull, with fine, dense punctures, glabrous.

Elytra oval, widest at middle; striae distinctly and broadly impressed, finely and moderately densely punctate; intervals convex, with moderately dense, fine punctures concentrated along striae, nearly impunctate at centre of intervals; punctures with minute setae in punctures and a few white large scale-like setae on odd intervals. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur; mesosternum with dense setae. Ratio of length of metepisternum/metacoxa: 1/1.54. Pygidium moderately convex and dull, coarsely and densely punctate, without smooth midline, with a few long setae on apical half.

Legs moderately short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur dull and sparsely finely punctate; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line; posterior margin neither dorsally nor ventrally serrated, glabrous, posterior margin moderately widened at ventral apex. Metatibia wide and moderately long, widest at middle, ratio of width/length: 1/3.8; dorsal margin longitudinally convex, with two groups of spines; basal group shortly before middle, apical group at four fifths of metatibial length; in basal half with single fine setae; external face longitudinally convex, sparsely finely punctate; ventral margin very finely serrated, with three robust setae of which the apical one is more distant; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with very dense, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 more than twice as long as dorsal metatibial spur and nearly as long as following two tarsomeres combined. Protibia moderately long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 14I–K. Habitus: Fig. 14L.

Female unknown.

Diagnosis. *Neoserica costisquamosa* sp. n. differs from all other known *Neoserica* species by the shape of the aedeagus, the elytra bearing single scale-shaped setae, and the metatibia being longitudinally convex along the dorsal margin.

Etymology. The name of the new species (adjective in the nominative singular) is derived from the combined Latin words, *costa* (ridge) and *squama* (scale), with reference to the large scales on odd elytral intervals.

***Neoserica* (s.l.) *gracilisetosa* Ahrens, Fabrizi & Liu sp. n.**

urn:lsid:zoobank.org:act:7BA8E5D5-D3D6-4E97-A032-C4D66E3D2C53

Figs 15A–D, 23

Type material examined. Holotype ♂ "[China] Foping, Shaanxi, 27.VI.1999, 900m, leg. Yao Jian" (IZAS).

Paratypes: 1 ♂ "[China] Baotianman, Neixiang, Henan, 11–14.VIII.2006, leg. Wang Fengyan, Huang Wenjing" (HBUM), 1 ♂ "[China] Mts. Huaguoshan, Yiyang, Henan, 2–5.VIII.2006, leg. Wang Fengyan, Huang Wenjing" (HBUM), 1 ♂ "[China] Makehe, Qinghai, 25.VI.1981, leg. Qinghai Forestry Bureau" (IZAS), 1 ♂ "[China] Mt. Huaguoshan, Yiyang, Henan, 2–5.VIII.2006, leg. Wang Fengyan, Huang Wenjing" (HBUM), 1 ♂ "China, Shaanxi, Taibashan Range, 1900m, Houzhenzi vill. env., 1–12.viii.1999, 33°53N, 107°49E, V. Siniaev & A. Plutenko lgt." (CP).

Description. Body length: 7.8 mm, length of elytra: 7.0 mm, width: 4.5 mm. Body oblong, dark reddish brown, antennal club yellowish brown, dorsal surface dull, dorsal and ventral surface densely setose, labroclypeus moderately shiny.

Labroclypeus subtrapezoidal, little wider than long, widest at base; lateral margins weakly convergent and straight; anterior angles weakly rounded, lateral margin and ocular canthus produce a distinct angle; anterior margin distinctly and widely concave medially; margins well reflexed; surface flat and moderately shiny, coarsely and densely punctate, with numerous erect setae. Frontoclypeal suture distinctly incised and moderately bent medially. Smooth area anterior to eye small but approximately 3 times as wide as long. Ocular canthus long and narrow, finely and sparsely punctate, with a single terminal seta. Frons completely dull, finely and densely punctate, with dense erect setae. Eyes large, ratio diameter/interocular width: 0.75. Antenna with ten antennomeres, club with four antennomeres and weakly reflexed, 1.5 times as long as remaining antennomeres combined. Mentum elevated and flattened anteriorly. Labrum transverse, produced in length, with deep median sinuation.

Pronotum transverse, wider than long, widest at base; lateral margins in basal half nearly straight and subparallel, in anterior half moderately convex and convergent; anterior angles weakly produced and blunt; posterior angles blunt; anterior margin convexly produced medially, fine marginal line complete; surface densely and finely punctate, with dense long setae; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with coarse, moderately dense punctures, glabrous.

Elytra elongate, widest at middle; striae weakly impressed, finely and densely punctate; intervals weakly convex, with dense, fine punctures and dense long setae. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum densely setose, with numerous longer setae on disc. Metacoxa glabrous, but with numerous setae laterally. Abdominal sternites finely and densely punctuate, densely setose, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur, with a few irregular robust setae, but without a semi-circular ridge. Ratio of length of metepisternum/metacoxa: 1/1.44. Pygidium moderately convex and dull, finely and densely punctate, without midline, entirely covered with dense setae.

Legs narrow and slender. Femora with two longitudinal rows of setae, finely and densely punctate and setose. Metafemur dull; anterior margin acute, behind anterior margin without serrated line; posterior margin serrated ventrally and dorsally, moderately widened at apex. Metatibia narrow and moderately long, widest shortly before apex, ratio of width/length: 1/3.3; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at three quarters of metatibial length; in basal half with a few short robust setae in single robust punctures with serrated margin; external face longitudinally convex, coarsely and densely punctate, densely setose; ventral margin finely serrated, with six robust equidistant setae; medial face finely punctate and minutely setose; apex concavely sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, finely densely punctate dorsally; metatarsomere 1 distinctly longer than dorsal metatibial spur and as long as following two tarsomeres combined. Protibia long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shape, and sharply truncate at apex.

Aedeagus: Fig. 14A–C. Habitus: Fig. 14D.

Female unknown.

Diagnosis. This new species resembles in its habitus the species of *Neoserica* (s. str.), however, several synapomorphies of this group are lacking, such as the serrated line beside the dorsal margin of the metatibia, the double pilosity of the dorsal surface, the reduced anterior angles of the pronotum etc. From all other Chinese *Neoserica* species *N. gracilisetosa* sp. n. differs by the dense pilosity of the entire body.

Etymology. The name of the new species (adjective in the nominative singular) is composed of the combined Latin words *gracilis* (fine) and *setosa* (hairy, setose), with reference to the fine, simple pilosity of dorsal surface.

Variation. Body length: 7.4–8.5 mm, length of elytra: 5.6–7.0 mm, width: 4.2–4.5 mm.

Neoserica (s.l.) *jianfenglingica* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:83373AE4-F8EF-4712-9FA8-91F1895D5442

Figs 15E–H, 23

Type material examined. Holotype ♂ "[China] Mt. Jianfengling, Hainan, 16.III.1980, 75m, light trap, leg. Wang Shuyong" (IZAS).

Description. Body length: 6.8 mm, length of elytra: 5.4 mm, width: 4.5 mm. Body oval, dark reddish brown, antennal club yellowish brown, dorsal surface dull and with numerous erect setae, labroclypeus shiny.

Labroclypeus subtrapezoidal, little wider than long, widest at base; lateral margins weakly convergent and convex, lateral margin and ocular canthus produce a distinct angle; anterior angles weakly rounded; anterior margin slightly sinuate medially; margins moderately reflexed; surface nearly flat and shiny, finely and densely punctate, with a few single setae anteriorly. Frontoclypeal suture indistinctly incised, moderately curved medially. Smooth area anterior to eye approximately 2.5 times as wide as long. Ocular canthus short and wide, finely and densely punctate, with a single terminal seta. Frons dull, finely and densely punctate, with numerous erect setae. Eyes large, ratio diameter/interocular width: 0.83. Antenna with ten antennomeres, club with four antennomeres and slightly reflexed, twice as long as remaining antennomeres combined, all joints of club equal length. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, with weak median sinuation.

Pronotum transverse, widest at base; lateral margins convex and moderately convergent anteriorly; anterior angles moderately produced and sharp; posterior angles blunt and moderately rounded at tip; anterior margin with a fine and complete marginal line, straight; surface densely and finely punctate, with dense erect setae; lateral and anterior border densely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, dull, with fine, dense punctures, pilosity similar to that of pronotum.

Elytra oval, widest at middle; striae distinctly impressed, finely and moderately densely punctate; intervals moderately convex, with moderately dense, fine punctures concentrated along striae, with numerous fine, erect setae. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.6. Pygidium weakly convex and dull, coarsely and densely punctate, without smooth midline, with dense, long setae.

Legs moderately short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur dull and sparsely finely punctate; anterior margin acute, without marginal line, behind anterior margin without serrated line; posterior margin coarsely serrated dorsally and ventrally, glabrous, ventral posterior margin strongly widened at apex. Metatibia wide and short, widest at middle, ratio of width/length: 1/2.8; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at three quarters of metatibial length; in basal half with a finely serrated line beside dorsal margin; external face weakly longitudinally convex, finely punctate on sides, along middle smooth; ventral margin very finely serrated, with four robust equidistant setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 distinctly longer than dorsal metatibial spur and as long as following two tarsomeres combined. Protibia moderately long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 15E–G. Habitus: Fig. 15H.

Female unknown.

Diagnosis. *Neoserica jianfenglingica* sp. n. differs from all other dorsally setose Chinese species of *Neoserica* by the acute and moderately produced anterior angles of the pronotum, as well as in the serrated longitudinal line of the metatibia in the basal half beside the dorsal margin.

Etymology. The new species is named after the type locality, Jianfengling (adjective in the nominative singular).

Neoserica (s.l.) *jinpingica* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:B89B52F7-FFD0-4C0F-829D-E81539E2A0FE

Figs 15I–L, 23

Type material examined. Holotype: ♂ "[China] Mengla, Jinping, Yunnan, 13.IV.1956, 370m, leg. Huang Keren" (IZAS). Paratype: 1 ♂ "[China] Menghun, Xishuangbanna, Yunnan, 17.V.1958, 1200–1400m, leg. Zheng Leyi" (IZAS).

Description. Body length: 7.4 mm, length of elytra: 5.5 mm, width: 4.5 mm. Body oval, dark reddish brown, antennal club yellowish brown, dorsal surface dull and glabrous, labroclypeus shiny.

Labroclypeus subtrapezoidal, little wider than long, widest at base; lateral margins weakly convergent and convex, lateral margin and ocular canthus produce an indistinct angle; anterior angles moderately rounded; anterior margin slightly sinuate medially; margins weakly re-

flexed; surface nearly flat and shiny, coarsely and densely punctate, with a few single setae anteriorly. Frontoclypeal suture indistinctly incised, moderately curved medially. Smooth area anterior to eye approximately 1.5 times as wide as long. Ocular canthus short and wide, finely and densely punctate, with a single terminal seta. Frons dull, finely and moderately densely punctate, with a few single setae beside eyes. Eyes small, ratio diameter/interocular width: 0.5. Antenna with ten antennomeres, club with four antennomeres and straight, 1.2 times as long as remaining antennomeres combined, all joints of club of equal length. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, with weak median sinuation.

Pronotum transverse, widest at base; lateral margins convex and moderately convergent anteriorly; anterior angles moderately produced and sharp; posterior angles blunt and moderately rounded at tip; anterior margin straight, its marginal line widely absent; surface densely and coarsely punctate, glabrous; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, dull, with coarse, moderately dense punctures, glabrous.

Elytra oval, widest at middle; striae distinctly impressed, finely and moderately densely punctate; intervals moderately convex, with moderately dense, fine punctures concentrated along striae, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.55. Pygidium weakly convex and dull, coarsely and densely punctate, without smooth midline, with a few long setae at apical margin.

Legs moderately short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur dull and sparsely finely punctate; anterior margin acute, without marginal line, behind anterior margin with a fine and continuous serrated line; posterior margin neither dorsally nor ventrally serrated, glabrous, ventral posterior margin moderately widened at apex. Metatibia wide and short, widest at middle, ratio of width/length: 1/2.9; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at three quarters of metatibial length; in basal half with a finely serrated line beside dorsal margin; external face weakly longitudinally convex, finely punctate on sides, along middle smooth; ventral margin very finely serrated, with three robust setae of which the apical one is more distant; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 distinctly longer than dorsal metatibial spur and as long as following two tarsomeres combined. Protibia moderately long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 15I–K. Habitus: Fig. 15L.

Female unknown.

Diagnosis. *Neoserica jinpingica* sp. n. differs from all other Chinese *Neoserica* species by having the aedeagus and the parameres symmetric, the phallobase has no lateral apophysis, and the labroclypeus does not possess a longitudinal median carina.

Etymology. The new species is named after the type locality, Jinping (adjective in the nominative singular).

Variation. Body length: 7.1–7.4 mm, length of elytra: 5.4–5.5 mm, width: 4.2–4.5 mm.

Neoserica (s.l.) *martinui* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:22A66516-A162-4574-A781-051DC8F8375F

Figs 16A–D, 23

Type material examined. Holotype: ♂ "N. Vietnam: Vinh Phu Tam Dao 28–30/V/1995 coll. C.L. Li" (ZFMK). **Thailand:** Paratypes: 1 ♂ "Thai-N, 1.–19.v.1998 Chiang Mai prov. Ban San Pakia, 1400m Ivo Martinu leg." (ZFMK), 1 ♂ "836045/ 836045 Thailand N. Thailand: Doi Inthanon Nat. Res. 1250m 22.–31.v.2008, leg. S. Murzin Neoserica spTHAIx1" (ZFMK), 2 ♂♂ "N-Thailand 10.–12.IV.1990 Doi Inthanon lg. Malicky" (ZSM), 1 ♂ "N-Thailand 27.XI.1990 Doi Inthanon lg. Malicky" (ZSM), 2 ♂♂ "N-Thailand 25.–29.V.1990 Doi Inthanon Malicky leg." (ZSM), 1 ♂ "N-Thailand 29.5.–5.6.1989 Doi Inthanon, Lichtfalle, Bang Khun Klang 1200m, 98°32'E, 18°32'N Chantamonkol & Malicky leg." (ZSM), 1 ♀ "N-Thailand 20.III.1990 Doi Inthanon lg. Malicky" (ZSM), 1 ♂ "Thai 28–31/5 1995 19.27N 98.20E Soppong 1500m Vit Kuban leg./ TS52" (CP), 3 ♂♂, 1 ♀ "Doi Saket Chiang Mai Prov. N. Thailand 18. Mar. 2002 Y. Nishiyama leg." (ZFMK), 1 ♂ "Ban Angkhai, alt. 750m, Samoeng Distr. Chiang Mai pref. Thailand 15–20-V-1998 K. Masumoto leg." (ZFMK), 1 ♀ "Phu Rua NO (900m alt.), Loei P., NE Thai, 26–30. IV.2006 Takakuwa, M. leg." (ZFMK), 1 ♂ "N. Thailand: Mae Hong Son Pref. Soppong Pai Dist. Alt. 1290 m 20–21.V.1998 K. Masumoto leg." (ZFMK), 3 ♀♀ "Soppong, 1290m alt., Pai Dist. Mae Hong Son pref. Thailand 20–

21-V-1998 K. Masumoto leg." (ZFMK), 1 ♂ "Mt. Doi Ku Sathan, Na Noi Nan. N. Thailand 16/V/'93 S. Ohmomo leg." (ZFMK), 1 ♂ "N. Thailand: Chiang Mai Pref., Ban Angkhai, Samoeng Dist., 750 m, 15–20.V.1998 K. Matsumoto leg." (ZFMK), 1 ♂ "Thailand bor. Chiang Mai, 56km NW, 99°25' 19°05' 7–14.6.19954 lgt. Snizek M." (ZFMK). **Vietnam:** 3 ♂♂, 4 ♀♀ "N-Vietnam Vinh Phu Prov., Tam Dao, ca. 1000m 17.–30.VI.1999 A. Kallies leg." (ZFMK), 9 ♂♂, 7 ♀♀ "N-Vietnam Tam Dao, N21°27'18; E105°38'58; 900–1000m, 2.–5.VI.1999 leg. Ahrens, Jäger, Fabrizi" (ZFMK), 2 ♂♂ "Vietnam-N (Tam Dao), 55km NW Hanoi, Tam Dao vill. env. 1998 850–900m lg. A. Napolov 22.–30.7." (CNA), 1 ♂ "Vietnam-N (Tam Dao), 55km NW Hanoi, Tam Dao vill. env. 15–23.9.1997 h=800m lg. A. Napolov" (CNA), 1 ♂ "Vietnam-N (Tam Dao), 55km NW Hanoi, Tam Dao vill. env. 27.07.–11.08.1998 h=800–900m lg. A. Napolov" (CNA), 1 ♂ "Vietnam N (Sa Pa) Lao Cai Prov., 250 km from Hanoi bearing 31°, Sa Pa vill. env. Hoang Lien Son Nat. Res. 16.–20.6.1998 1250m leg. A. Napolov" (CNA), 1 ♂ "Vietnam N (Sa Pa) Lao Cai Prov., 250 km from Hanoi bearing 31°, Sa Pa vill. env. Hoang Lien Son Nat. Res. 27.5.–3.6.1998 1250m leg. A. Napolov" (CNA), 1 % "N Vietnam: Tam Dao, near Hanoi; 18.V.1993 leg. H. Karube" (ZFMK), 2 ♂♂ "N Vietnam: Vinh Phu Tam Dao, 02.–04.V.1993 leg. M. Hori" (ZFMK), 1 ♂ "N. Vietnam: Vinh Phu Tam Dao 28–30/V/1995 coll. C.L. Li" (CA), 1 ♀ "N-Vietnam Vinh Phu Prov., Tam Dao 01.–07.V.1998 Y. Arita leg." (ZFMK), 4 ♂♂, 1 ♀ "Vietnam N 1989 Tam Dao 12–24.5. Vinh Phu prov. Strnad Jan lgt." (ZFMK), 1 ♂, 1 ♀ "Vietnam N., 15.5./16.6. 75km NW from Hanoi Tam Dao 1991 E. Jendek leg." (ZFMK), 1 ♀ "Vietnam Tam dao Vinh Phu pr. 3./11.6.1985 M. Hradsky leg." (ZFMK), 3 ♂♂, 1 ♀ "N. Vietnam: Vinh Phu prov., Tam Dao 900m, 14.V.1962 leg. O. Kabakov" (ZIN), 1 ♂ "Vietnam N (Sa Pa) Lao Cai Prov., 250 km from Hanoi bearing 31°, Sa Pa vill. env. Hoang Lien Son Nat. Res. 25.VI.–5.VII.1998 1250m leg. A. Napolov" (CNA), 1 ♂ "Vietnam Tam dao 3.6.–11.6.1985 Vinh vhu prov. Strnad Jan lgt." (CP). **Laos:** 1 ♂ "Laos P.D.R. Xieng Khowang 14–20. May 1994 K. Miura leg." (ZFMK), 1 ♂ "Laos, 21°09'N 101°19'E Louangnamtha pr. Namtha → Muang Sing, 5–31.v.1997, 900–1200m Vit Kuban leg./ LS9" (CP), 1 ♂ "NE Thailand, 19.19N 97.59E Mae Hong Son, 1991 Ban Huai Po, 1600–2000m 9.–16.5., L. Dembicky leg." (NHMW), 8 ♂♂, 3 ♀♀ "Laos-NE Hua Phan prov., 20°12'N, 104°01'E, Phu Phan Mt., 1500–1900m, 17.5.–3.6.2007, leg. Vit Kuban" (ZFMK), 1 ♂, 2 ♀♀ "NE-Laos: Hua Phan prov., Ban Saleui, Phou Pan (Mt.) - 20°12'N, 104°01'E; 14.iv.–15.v.2012; 1300–1900m; leg. C. Holzschuh Ankauf ZFMK Bonn 2012/13" (ZFMK), 9 ♂♂, 1 ♀ "NE-Laos: Hua Phan prov., Ban Saleui, Phou Pan (Mt.) - 20°12'N, 104°01'E; 11.iv.–15.v.2012; 1300–1900m; leg. C. Holzschuh Ankauf ZFMK Bonn 2012" (ZFMK), 1 ♂ "NE-Laos: Hua Phan prov., Ban Saleui, Phou Pan (Mt.) ~20°12'N, 104°01'E; 1300–1900m; 01.–31.V.2011; leg. C. Holzschuh Ankauf ZFMK Bonn 2011" (ZFMK), 6 ♂♂ "Laos-NE, Houa Phan prov., 20°13'09-19''N 103°59'54''-104°00'03''E, 1480–1510m Phou Pane Mt., 22.IV.–14.V.2008 Vit Kuban leg. (NMPC), 1 ♂, 2 ♀♀ "Laos-NE Hua Phan prov., 20°12'N, 104°01'E, Phu Phan Mt., 1500–1900m, 17.5.–3.6.2007, leg. C. Holzschuh" (ZFMK), 1 ♂ "Laos, Attapeau prov.; Annam Highlands Mts Dong Amphan; NBCA, ca. 1160m Nong Fa (crater lake) env., 15°05.9'N, 107°25.6'E St. Jakl lgt, 30.4.–6.5.2010" (ZFMK), 2 ♂♂ "Laos, Xiengkouang VI. 1996" (ZFMK), 1 ♂ "Suifu Szechuen April 1923 D.C. Graham" (USNM), 1 ♂ "Mag. 1900 Laos> Phu Soai Dao 13/VI/1996 Local collectors" (MZUF). **China.** 1 ♂ "Banbaxiang, Fangcheng, Guangxi, 3.VI.2000, 250m, leg. Li Wenzhu" (IZAS), 1 ♂ "Menghun, Xishuangbanna, Yunnan, 18.V.1958, 1200–1400m, leg. Zhang Yiran" (IZAS), 1 ♂ "Suifu Apr. 23. '25 Szechuen China" (USNM).

Description. Body length: 11.2 mm, length of elytra: 8.4 mm, width: 7.6 mm. Body oblong, dark brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, anterior labroclypeus shiny.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins moderately convergent and weakly convex, lateral margin and ocular canthus produce a blunt angle; anterior angles strongly rounded; anterior margin slightly sinuate medially; margins moderately reflexed; surface flat and moderately shiny, base narrowly covered with dull toment, surface finely and densely punctate, with a few single robust setae anteriorly. Frontoclypeal suture finely incised, moderately curved medially. Smooth area anterior to eye approximately 2.5 times as wide as long. Ocular canthus moderately long and wide, finely and sparsely punctate, with a single terminal seta. Frons dull, finely and sparsely punctate, with a single erect seta anteriorly beside each eye. Eyes moderately large, ratio diameter/interocular width: 0.68. Antenna with ten antennomeres, club with four antennomeres and straight, 1.2 times as long as remaining antennomeres combined, all joints of club equal in length. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, without median sinuation.

Pronotum transverse, almost twice as wide as long, widest at base; lateral margins convex and moderately convergent anteriorly; anterior angles distinctly produced and sharp; posterior angles blunt, moderately rounded at tip; anterior margin with a fine and complete marginal line, slightly convex medially; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, dense punctures, glabrous.

Elytra oblong, widest at middle; striae weakly impressed, finely and densely punctate; intervals flat, with moderately dense, fine punctures, with minute setae in punctures. Epipleural edge fine, ending at moderately

curved external apical angle of elytra; epipleura densely setose; apical border with a fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur; with a semicircular median ridge bearing dense setae. Ratio of length of metepisternum/metacoxa: 1/1.9. Pygidium moderately convex and dull, coarsely and densely punctate, without smooth midline, with a few short setae at apex.

Legs short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate, anterior row of setae completely reduced; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line; posterior margin serrated neither ventrally nor dorsally, glabrous, posterior margin strongly widened at apex. Metatibia wide and short, widest at middle, ratio of width/length: 1/2.2; dorsal margin sharply carinate, with three groups of spines; basal group at one third, median group at middle, and apical group at three quarters of metatibial length; basally with a few single, short setae; external face nearly flat, finely and sparsely punctate, smooth along posterior middle; ventral margin very finely serrated, with six robust equidistant setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 slightly longer than dorsal metatibial spur and slightly shorter than following two tarsomeres combined. Protibia moderately long, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 16A–C. Habitus: Fig. 16D.

Diagnosis. This new species differs from all Chinese *Neoserica* in which the antennal club in the female is also composed of more than three antennomeres by having the metatibia short and wide and the base of the labroclypeus covered with a dull toment, the asymmetric parameres are not even partly fused with the phallobase.

Etymology. The new species is dedicated to one of its collectors, Ivo Martinů (noun in genitive case).

Variation. Body length: 9.8–11.4 mm, length of elytra: 7.0–8.4 mm, width: 6.2–7.6 mm. Female: Antennal club composed of four antennomeres, as long as remaining antennomeres combined, first joint of club ¼ as long as antennal club; eyes as large as in male; pygidium evenly convex.

Neoserica (s.l.) *menglaensis* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:CCB49D8A-5DF9-4354-96C9-C5F5F27BB137

Figs 16E–H, 23

Type material examined. Holotype: ♂ "[China] Mengla, Jinping, Yunnan, 29.IV.1956, 370m, leg. Huang Keren etc." (IZAS). Paratype: 1 ♂ "[China] Mengla, Jinping, Yunnan, 17.IV.1956, 370m, leg. Huang Keren" (ZFMK).

Description. Body length: 7.8 mm, length of elytra: 5.5 mm, width: 4.5 mm. Body oblong, reddish brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous, labroclypeus shiny.

Labroclypeus short, subtrapezoidal, wider than long, widest at base; lateral margins moderately convergent and weakly convex, lateral margin and ocular canthus produce a blunt angle; anterior angles moderately rounded; anterior margin slightly sinuate medially; margins moderately reflexed; surface flat and shiny, base narrowly covered with dull toment, surface finely and densely punctate, with a few single robust setae. Frontoclypeal suture indistinctly incised, moderately curved medially. Smooth area anterior to eye approximately twice as wide as long. Ocular canthus long and wide, finely and densely punctate, with a single terminal seta. Frons dull, finely and sparsely punctate, with a single erect seta behind the frontoclypeal suture and beside each eye. Eyes large, ratio diameter/interocular width: 0.84. Antenna with ten antennomeres, club with six antennomeres and straight, 1.2 times as long as remaining antennomeres combined, all joints of club equal in length, third antennomere elongated, as long as first one. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, with very shallow median sinuation.

Pronotum transverse, almost twice as wide as long, widest at base; lateral margins in basal half straight and subparallel, in anterior half convex and moderately convergent anteriorly; anterior angles moderately produced and nearly right-angled; posterior angles blunt; anterior margin with a fine and complete marginal line, slightly convex medially; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border sparsely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, with fine, dense punctures, with minute setae in punctures.

Elytra oblong, widest at middle; striae weakly impressed, finely and densely punctate; intervals weakly convex, with moderately dense, fine punctures concentrated along striae, with minute setae in punctures. Epipleural edge fine, ending at moderately curved exter-

nal apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except a few short setae on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with a few single setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur; with irregularly dense setae. Ratio of length of metepisternum/metacoxa: 1/1.62. Pygidium weakly convex and dull, coarsely and densely punctate, without smooth midline, with a few short setae at apex.

Legs short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur shiny and sparsely finely punctate, anterior row of setae completely reduced; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line; posterior margin serrated neither ventrally nor dorsally, glabrous, posterior margin strongly widened at apex. Metatibia wide and short, widest at middle, ratio of width/length: 1/2.4; dorsal margin sharply carinate, with three groups of spines; basal group shortly before middle, median group shortly behind middle, and apical group at four fifths of metatibial length; basally with a few single, short setae; external face nearly flat, finely and sparsely punctate, smooth along posterior middle; ventral margin very finely serrated, with five robust equidistant setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 slightly shorter than dorsal metatibial spur and as long as following two tarsomeres combined. Protibia moderately long, bidentate, not widened laterally; anterior claws asymmetrical, basal tooth of inner claw large and lobiform.

Aedeagus: Fig. 16E–G. Habitus: Fig. 16H.

Female unknown.

Diagnosis. *Neoserica menglaensis* sp. n. differs from all other Chinese *Neoserica* species by the antennal club being composed of six antennomeres, the short and wide metatibia, as well as in the shape of the aedeagus, being not completely symmetric.

Etymology. The new species is named after the type locality, Mengla (adjective in the nominative singular).

Variation. Body length: 7.2–7.8 mm, length of elytra: 5.1–5.5 mm, width: 4.1–4.5 mm.

***Neoserica* (s.l.) *xingdoushanana* Ahrens, Fabrizi & Liu sp. n.**

urn:lsid:zoobank.org:act:1EFB6B00-D3D2-49C2-A8EB-B8D0653EC6BE

Figs 17A–D, 23

Type material examined. Holotype: ♂ "[China] Mt. Xingdoushan, Lichuan, Hubei, 6.VI.1989, 800–1000m, light trap, leg. Ma Wenzhen" (IZAS).

Description. Body length: 11.3 mm, length of elytra: 8.6 mm, width: 7.7 mm. Body oval, dark brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins strongly convergent and weakly convex, lateral margin and ocular canthus produce an indistinct blunt angle; anterior angles strongly rounded; anterior margin straight; margins moderately reflexed; surface nearly flat and shiny, base narrowly dull, finely and moderately densely punctate, with a few single setae anteriorly. Frontoclypeal suture indistinctly incised, moderately curved medially. Smooth area anterior to eye approximately twice as wide as long. Ocular canthus short and wide, finely and sparsely punctate, without terminal seta. Frons dull, finely and densely punctate, with a few erect setae beside each eye. Eyes very small, ratio diameter/interocular width: 0.48. Antenna with ten antennomeres, club with four antennomeres and straight, 1.1 times as long as remaining antennomeres combined, all joints of club equal in length. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, without median sinuation.

Pronotum transverse, widest at base; lateral margins convex and moderately convergent anteriorly; anterior angles distinctly produced and sharp; posterior angles blunt and moderately rounded at tip; anterior margin with marginal line widely interrupted, straight; surface densely and finely punctate, with minute setae in punctures; lateral and anterior border densely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, dull, with fine, dense punctures, glabrous.

Elytra oval, widest at middle; striae distinctly impressed, finely and densely punctate; intervals moderately convex, with dense, fine punctures concentrated along striae, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with numerous setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with

a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur, with numerous long setae. Ratio of length of metepisternum/metacoxa: 1/1.67. Pygidium weakly convex and dull, coarsely and moderately densely punctate, without smooth midline, with a few long setae on apical margin.

Legs short and wide. Femora with two longitudinal rows of setae, finely and sparsely punctate. Metafemur dull and sparsely finely punctate; anterior margin acute, with narrow marginal line, behind anterior margin without serrated line, anterior row of setae completely reduced; posterior margin neither serrated dorsally nor ventrally, glabrous, ventral posterior margin strongly widened at apex. Metatibia wide and short, widest at middle, ratio of width/length: 1/2.4; dorsal margin sharply carinate, with two groups of spines; basal group at one third, apical group at three quarters of metatibial length; in basal quarter with a finely serrated line beside dorsal margin and a few robust single spines; external face nearly flat, finely punctate on sides, along distal middle nearly smooth; ventral margin finely serrated, with four robust equidistant setae; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 as long as dorsal metatibial spur and distinctly shorter than following two tarsomeres combined. Protibia short, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 17A–C. Habitus: Fig. 17D.

Female unknown.

Diagnosis. *Neoserica xingdoushanana* sp. n. differs from all other Chinese *Neoserica* species by having the phallobase strongly asymmetric, with both parameres being strongly different in length (left paramere being much shorter than the right one).

Etymology. The new species is named after the type locality, Mt. Xingdoushan (adjective in the nominative singular).

Neoserica (s.l.) *yanshanica* Ahrens, Fabrizi & Liu sp. n.

urn:lsid:zoobank.org:act:0D7480A1-19FB-4C56-A2C7-703CF8DF4EEA

Figs 17E–H, 23

Type material examined. Holotype: ♂ "[China] Mt. Yanshan, Guilin, Guangxi, 17.V.1963, 200m, leg. Wang Chunguang" (IZAS).

Description. Body length: 9.0 mm, length of elytra: 6.6 mm, width: 5.9 mm. Body oval, dark brown, antennal club yellowish brown, dorsal surface dull and nearly glabrous.

Labroclypeus subtrapezoidal, wider than long, widest at base; lateral margins strongly convergent and convex, lateral margin and ocular canthus produce an indistinct blunt angle; anterior angles moderately rounded; anterior margin weakly sinuate medially; margins moderately reflexed; surface flat and shiny, coarsely and densely punctate, with a few single setae anteriorly. Frontoclypeal suture indistinctly incised, moderately curved medially. Smooth area anterior to eye approximately twice as wide as long. Ocular canthus short and wide, finely and sparsely punctate, with a short terminal seta. Frons dull, toment immediately behind frontoclypeal suture absent and thus here surface shiny, finely and very densely punctate, with a few long setae beside each eye. Eyes small, ratio diameter/interocular width: 0.54. Antenna with ten antennomeres, club with four antennomeres and straight, 1.5 times as long as remaining antennomeres combined, all joints of club equal in length. Mentum elevated and flattened anteriorly. Labrum transverse, short, not produced medially, with a weak median sinuation.

Pronotum transverse, widest at base; lateral margins convex and moderately convergent anteriorly; anterior angles distinctly produced and sharp; posterior angles blunt and moderately rounded at tip; anterior margin with complete fine marginal line, straight; surface very densely and finely punctate, distance between punctures less than their diameter, with minute setae in punctures; lateral and anterior border densely setose; basal margin without marginal line; hypomeron distinctly carinate basally. Scutellum long, dull, with fine, very dense punctures, glabrous.

Elytra oval, widest at middle; striae distinctly impressed, finely and densely punctate; intervals moderately convex, with dense, fine punctures concentrated along striae, with minute setae in punctures. Epipleural edge fine, ending at moderately curved external apical angle of elytra; epipleura densely setose; apical border with a very fine rim of microtrichomes (visible at 100x magnification).

Ventral surface dull, finely and densely punctate. Metasternum sparsely setose except numerous long seta on disc, otherwise sparsely covered with minute setae in punctures. Metacoxa glabrous, with numerous setae laterally. Abdominal sternites finely and densely punctuate, glabrous except minute setae in punctures, sternites with a transverse row of coarse seta-bearing punctures. Mesosternum between mesocoxae as wide as mesofemur, with numerous long setae on a semi-circular ridge. Ratio of length of metepisternum/metacoxa: 1/1.54. Pygidium weakly convex and dull, coarsely and moderately densely punctate, without smooth midline, with a few long setae on apical margin.

Legs short and moderately wide. Femora with two longitudinal rows of setae, finely and sparsely punctate.

Metafemur shiny, densely and finely punctate; anterior margin acute, without marginal line but behind anterior margin with a fine, partly undulating serrated line; posterior margin serrated neither dorsally nor ventrally, glabrous, ventral posterior margin moderately widened at apex. Metatibia wide and short, widest at middle, ratio of width/length: 1/2.6; dorsal margin sharply carinate, with two groups of spines; basal group at middle, apical group at four fifths of metatibial length; in basal quarter with a finely serrated line beside dorsal margin and a few robust single spines; external face longitudinally convex, finely punctate, along distal middle smooth; ventral margin finely serrated, with four robust setae of which the distal one is more distant; medial face impunctate, glabrous; apex shallowly sinuate near tarsal articulation. Tarsomeres ventrally with sparse, short setae, not carinate laterally, impunctate dorsally; metatarsomeres ventrally glabrous, metatarsomere 1 distinctly longer than dorsal metatibial spur and as long as following two tarsomeres combined. Protibia short, bidentate, not widened laterally; anterior claws symmetrical, basal tooth of inner claw normally shaped and sharp at apex.

Aedeagus: Fig. 17E–G. Habitus: Fig. 17H.

Female unknown.

Diagnosis. *Neoserica yanshanica* sp. n. differs from all other Chinese *Neoserica* species with an antennal club composed of four antennomeres in males by having the phallobase symmetric, with both of the parameres being short and subdivided into a distal and a basal lobe, both being of nearly similar length and rounded at the apex.

Etymology. The new species is named after the type locality, Mt. Yanshan (adjective in the nominative singular).

***Neoserica* (s.l.) *insubida* (Brenske, 1898) comb. n.**
Figs 18A–D, 23

Serica immutabilis Fairmaire, 1893: 308.
Autoserica insubida Brenske, 1898: 360 (replacement name for *Serica immutabilis* Fairmaire, 1893 nec Gyllenhall, 1817).
Maladera insubida: Krajcik 2012: 154.
Serica picea auctorum (nec Nonfried, 1891: 359).

Type material examined. Lectotype (here designated): ♂ "Museum Paris Tonkin Sept. Ha-Lang Lamey 1904/ *Serica immutabilis*/ spec. 2 ♂ det. D. Ahrens 1999" (MNHN).

Additional material examined. Vietnam: 15 ex. "Annam Phuc-Son Nov.Dez. H. Fruhstorfer" (ZMHB), 1 ex. (♂) "Annam Phuc-Son Nov.Dez. H. Fruhstorfer/ *picea* Nonfried [Handschrift Moser]" (ZMHB), 1 ex. (♀) "Cochinchina/ *picea* Nonfried [Handschrift Moser]" (ZMHB), 1 ♀ "Saigon Pipitz/ Serica pilosula [Saigon] Pipitz/ coll. Brenske" (ZMHB), 1 ♀ "Cochinchina/ ♀ N.28/ Unicum No. 23/ Neoserica picea Nonfr./ Coll. Brenske/ Abdomen war ausgenommen" (ZMHB), 3 ex. (♂) "Cochinchina" (ZMHB), 1 ♀ "Cochinchina/ picea simile/ Coll. Brenske" (ZMHB), 1 ♂ "Annam/ *Autoserica annamensis*" (ZSM), 15 ex. "Annam Phuc-Son Nov. Dez. Fruhstorfer" (MNHN), 10 ex. "Museum Paris Cochinchine Amiral Vignes 1893" (MNHN), 1 ex. "Museum Paris Cochinchine Barmand 1872" (MNHN), 1 ex. "Museum Paris Lang-Son et Cao-Bang Girad 1894" (MNHN), 1 ex. "Museum Paris Annam Hue (Parna) Coll. A. Bonhoure 1909" (MNHN), 1 ex. "Museum Paris/ Tourane (Annam)/ G.B." (MNHN), 8 ex. "Annam, Phuc Son Nov–Dez H. Fruhstorfer/ Collectie C. & O. Vogt Acq. 1960" (RMNH), 6 ex. "South Vietnam, 60 km N Ho Chi Minh env., Phu Giao vill. 3–13.X.1994 leg. A. Napolov" (CNA), 3 ex. "S. Vietnam (Cat Tien) 120 km NNE Ho Chi Minh, Cat Tien Nat. Park, 27.6.–10.7.1995 leg. A. Napolov" (CNA), 1 ♂ "S Vietnam, 14.10N 108.30E 40 km NW of An Khe Buon Luoi, 620–750m 28.3.–12.4.1995 Pacholátko & Dembicky leg." (CP). **Thailand:** 1 ♂ "Thailand (S) Prov. Ranon, Bang Bean Beach 05.VII.2008 leg. M. Langer/ N09°35'84,5" E 098°30'09,2" h=2–3m (NF) Mangroven" (CMLN), 1 ♂ "E. Thailand, Klaeng Rayong; Song Phi Nong; 24.V.2002; leg. S. Ohmomo" (ZFMK), 1 ♂ "Thailand mer. N.P. Khao Sok Rejsek 20.11.94" (ZFMK), 1 ex. "Thailand 1/1989 25km NW Lan Sak 110m lg. W. Thielen" (ZFMK), 2 ex. "Thailand, Prov. Nakhon Ratchasima (Korat), Khon Buri, h=217m 14°27,4'N, 102°06,7'E, forest, 02.08.2009 V.K. Zichenko leg." (ISEA Novosibirsk), 6 ex. "Thailand, Chowburi Khao Khieo Wildlife Sanct. Headquarters area at Bang Phra Reservoir 24–25.5.1984 Matti Hämäläinen leg." (RMNH), 2 ex. "RMNH Leiden Thailand: Ubon Ratchathani Ban Chik, at light 15–17. ii.2015 leg. K. Alders" (RMNH). **Laos:** 1 ♂ "Laos, Borikhamai, 07.V.1994; leg. Wakahara" (ZFMK). **China:** 1 ♂ "Yuanmentung, Hainan, 8.IV.1936, leg. G. Ros" (IZAS), 1 ♂ "Tunchang, Hainan, VII.1956" (IZAS), 1 ♂ "Mt. Liulianling, Wanning, Hainan, 25.VII.2008, 100m, light trap, leg. Gao Cuiqing" (NKU), 1 ♂, 2 ♀♀ "Xiangshui, Boluo, Guangdong, 30, 31.V.1965, leg. Zhang Youwei" (IZAS), 1 ♂ "Mts. Mihouling, Dongfang, Hainan, 11.VI.2008, leg. Ba Yibin, Lang Juntong" (HBUM). **Cambodia:** 1 ex. "Cambodia: Shihanouk ville env.- Pnom Penh rd., 11°11'48''N 104°E 20–25.III.02 V. Murzin leg." (ZFMK), 1 ex. "Cambodia: Shihanouk ville env., h=20m 10°40'2''N 103°33'4''E 23–24.XI.99 M. &. S. Murzin leg." (ZFMK), 9 ex. "Cambodia: Pailin, Juni 1999 coll. H. Lehmann" (ZFMK). Malaysia: 3 ex. "Kuatan Cempedak, Pahang Malaysia VII.1982 light, 3m/ Leg. P.J.J.H. Kuijten, F. Bouricius" (RMNH).

Redescription. Length: 8.5 mm, length of elytra: 5.9 mm, width: 4.9 mm. Body oblong-oval, reddish to dark brown, antenna yellowish, dorsal surface dull, glabrous.

Labroclypeus wide and subtrapezoidal, widest at base, lateral margins straight and convergent anteriorly, anterior angles weakly rounded, anterior margin weakly sinuate medially, margins moderately reflexed; lateral margin and ocular canthus produce a blunt angle; surface with a moderately sharp, longitudinal median carina in anterior half, finely, densely punctate, glabrous; frontoclypeal suture distinctly incised, not elevated, curved medially; smooth area anterior to eye convex, twice as wide as long; ocular canthus short and wide (1/3 of ocular diameter), finely densely punctate, with one terminal seta. Frons dull, with sparse, fine punctures, with a few single setae beside eyes. Eyes large, ratio diameter/ interocular width: 0.73. Antenna with ten antennomeres; club in both sexes with four antennomeres and straight, in male 1.2 times as long as remaining antennomeres combined, in female as long as remaining antennomeres combined. Mentum elevated and slightly flattened anteriorly.

Pronotum moderately transverse, widest shortly behind middle, lateral margins in basal half weakly convex and slightly convergent basally, in anterior half moderately evenly convex and convergent anteriorly, anterior angles distinctly produced and sharp, posterior angles strongly rounded; anterior margin slightly convex, with fine but complete marginal line, base without marginal line; surface densely and finely punctate, with minute setae in punctures; anterior and lateral margin finely and sparsely setose; hypomeron carinate, not produced ventrally. Scutellum wide, triangular, with fine, dense punctures.

Elytra widest at middle, striae finely impressed, finely and densely punctate, intervals nearly flat, with fine, moderately dense punctures and with minute setae in punctures, penultimate lateral interval with a few single short setae; epipleural edge robust, ending at nearly blunt external apical angle of elytra, epipleura sparsely setose; lateral and apical border of elytra membranous, with a fine rim of microtrichomes (visible at ca 100x magnification).

Ventral surface dull, partly shiny, 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: 1/1.74. Pygidium moderately convex, shiny, finely and densely punctate, without smooth midline, with long setae along apical margin.

Legs short and wide, dull; 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 finely serrate, shortly densely setose. Metatibia moderately long and wide, widest at middle, ratio of width/ length: 1/2.8, 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, sparsely punctate, widely glabrous along middle; ventral margin finely serrate, with four equidistant robust setae; 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, ventrally glabrous; first metatarsomere slightly longer than following tarsomere and little shorter than dorsal tibial spur. Protibia moderately long, bidentate; anterior claws symmetrical, basal tooth of both claws bluntly truncate at apex.

Aedeagus: Fig. 18A–C. Habitus: Fig. 18D.

Remarks. The following paralectotypes could be identified as *Maladera drescheri* (Moser, 1913): 1 ♀ "Museum Paris Tonkin Sept. Ha-Lang Lamey 1904/ *Serica immutabilis* (Gyll.) Fairm A.B. 1893/ 308" (MNHN), 1 ♀ "Museum Paris Tonkin Sept. Ha-Lang Lamey 1904/ Tonkin N. Ha-lang Lamey/ *Serica immutabilis* (Gyll.) Fairm Ann. Bel. 1893 [308]" (MNHN). The lectotype is virtually identical in the shape of its parameres with the specimen from "Conchinchine" photographed in Fig. 18. Due to the formal synonymy of *Autoserica* sensu auctorum with *Maladera* Mulsant & Rey, 1871, the species has been placed by Krajcik (2012) into *Maladera*. Due to its multilamellate antenna we classify it here as a *Neoserica* (sensu lato), although either idea might not be the definitive solution for this species until the classification of Sericini genera is finally resolved based on a robust phylogenetic tree comprising most major species lineages.

Additional new records and remarks

***Neoserica rutilans* Ahrens & Fabrizi, 2009**

Additional material examined. 1 ♂ "Lushui County, Yunnan, 9.VI.1981, 1810m, leg. Wang Shuyong" (IZAS), 1 ♂, 1 ♀ "Yigong, Xizang, 11,15.VI.1978, 2300m, leg. Li Fasheng" (CAU).

Remarks. The species was originally described from western Arunachal Pradesh (India), now it is for the first

time recorded from Yunnan province and Xizang (China).

Neoserica sakoliana Ahrens, Fabrizi & Liu, 2016

Additional material examined. 4 ex. "China Tsha-jiu-san, VIII.10, Mell S.V." (ZMHB), 2 ex. "China Tsha-jiu-san, VII–IX. 10, Mell S.V." (ZMHB), 8 ex. "China Ting-wu-san, Bergeb. A. Westfl., 3.VI.11, Mell S.V." (ZMHB), 6 ex. "China Lu-fau-zan, 14.–19.VI.12, Mell S.V." (ZMHB), 1 ex. "China, Wang-lung-kum, Berggebiet d. Lo-fau-zan/ am Ostfluss in Kuangtung 4.–5.12 Mell S.V." (ZMHB).

Neoserica (s. str.) *schoolmeestersi* Ahrens nom. n.

Neoserica (s. str.) *vicina* Ahrens, 2003 nec Moser, 1915: 364.

Remarks. My dear colleague, Paul Schoolmeesters indicated to me recently a flaw that happened in Ahrens (2003) leading to a primary homonymy between *Neoserica* (s. str.) *vicina* Ahrens, 2003 and *Neoserica vicina* Moser, 1915. This is corrected here by a replacement name, *Neoserica schoolmeestersi* Ahrens nom. n., for the younger homonym, *Neoserica vicina* Ahrens, 2003 (which is due to the Code not available). The new name is dedicated to Paul Schoolmeesters (Herent, Belgium).

Acknowledgements. Part of this research was supported by the National Basic Research Program of China (973 Program) (No. 2011CB302102), the National Natural Science Foundation of China (Nos. 31010103913, 31172143), the Knowledge Innovation Program of Chinese Academy of Sciences (No. KSCX3-IOZ-1004). Many thanks to the editor of this volume as well as to the reviewer A. Bezděk for their numerous comments which greatly improved the here presented work. We are grateful for the loan of specimens to the following colleagues: M. Nikodým (Prague), P. Pacholátko (Brno), G. Sabatinelli (Prevessin), K.A. Johanson (NHRS), J. Hájek (NMPC), I. Löbl (MHNG), E. Sprecher-Uebersax, M. Brancucci (CF, NHMB), M. Uhlig, F. Hieke, J. Schulze, J. Frisch (all ZMHB), Pang Hong, Jia-Yao Hu (SNUC), Ren Guodong (HBUM), Wang Xinli, Liu Xingyue (CAU), Chen Jun, Liang Hongbin, Yao Jian (IZAS), Liu Guoqing (NKU), M. Brendell, M. Barclay (BMNH), R. de Jong (RMNH), B. Ratcliffe, A. Smith, M. Paulsen (USNM, UNSM, BYU), H. Schönmann, H. Schillhammer (NHMW), G.A. Samuelson (BPBM), Y. Cambefort, N. Berti, O. Montreuil (MNHN), and D. Kovac (SMFD).

REFERENCES

Ahrens D (2003): Zur Identität der Gattung *Neoserica* Brenske, 1894, nebst Beschreibung neuer Arten (Coleoptera, Melolonthidae, Sericini). Koleopterologische Rundschau 73: 169–226

Ahrens D (2004) *Monographie der Sericini des Himalaya (Coleoptera, Scarabaeidae)*. Dissertation.de – Verlag im Internet GmbH, Berlin, 534pp.

Ahrens D & Fabrizi S (2009) New species of Sericini from the Eastern Himalaya and Tibet (Coleoptera, Scarabaeidae): 249–284. In: Hartmann, M. & Weipert, M. (eds) Biodiversität und Naturausstattung im Himalaya III. Verein der Freunde und Förderer des Naturkundemuseums Erfurt e.V., Erfurt

Ahrens D & Fabrizi S (2011) New species of Sericini from the Himalaya and adjacent mountains (Coleoptera: Scarabaeidae). Bonn Zoological Bulletin 60 (2): 139–164

Ahrens D & Fabrizi S (2016) A Monograph of the Sericini of India (Coleoptera: Scarabaeidae). Bonn Zoological Bulletin 65: 1–355

Ahrens D, Liu WG, Fabrizi S, Bai M, Yang XK (2014a) A taxonomic review of the *Neoserica* (sensu lato) *septemlamellata* group (Coleoptera: Scarabaeidae: Sericini). ZooKeys 402: 76–102

Ahrens D, Liu WG, Fabrizi S, Bai M, Yang XK (2014b) A taxonomic review of the *Neoserica* (sensu lato) *abnormis* group (Coleoptera: Scarabaeidae: Sericini). ZooKeys 439: 28–82

Ahrens D, Liu WG, Fabrizi S, Bai M, Yang XK (2014c) A revision of the species of the *Neoserica* (sensu lato) *vulpes* group (Coleoptera: Scarabaeidae: Sericini). Journal of Natural History (printed: 2015) 49(17–18): 1073–1130. https://doi.org/10.1080/00222933.2014.974707.

Arrow GJ (1946) Entomological results from the Swedish Expedition 1934 to Burma and British India. Coleoptera: Melolonthidae. Arkiv for Zoologi 38A (9): 1–33

Brenske E (1897) Die *Serica*-Arten der Erde. Berliner Entomologische Zeitschrift 42: 345–468

Brenske E (1898) Die *Serica*-Arten der Erde. Berliner Entomologische Zeitschrift 43: 205–403

Krajcik M (2012) Checklist of the World Scarabaeoidea. Animma.x, supplement 5: 1–278

Liu WG, Fabrizi S, Bai M, Yang XK, Ahrens D (2014a) A taxonomic revision of the *Neoserica* (s.l.) *pilosula* group (Coleoptera, Scarabaeidae, Sericini). ZooKeys 440: 89–113

Liu WG, Fabrizi S, Bai M, Yang XK, Ahrens D (2014b) A taxonomic revision of the *Neoserica* (sensu lato) *calva* group (Coleoptera, Scarabaeidae, Sericini). ZooKeys 448: 47–81

Liu WG, Fabrizi S, Bai M, Yang XK, Ahrens D (2014c) A review of the *Tetraserica* species of China (Coleoptera, Scarabaeidae, Sericini). ZooKeys 448: 83–121

Liu WG, Bai M, Yang XK, Ahrens D (2015) New species and records of the *Neoserica* (sensu stricto) group (Coleoptera, Scarabaeidae, Sericini). Journal of Natural History 49 (39–40): 2379–2395

Liu WG, Fabrizi S, Bai M, Yang XK, Ahrens D (2016) A taxonomic revision of Neoserica (sensu lato): the species groups *N. lubrica, N. obscura*, and *N. silvestris* (Coleoptera, Scarabaeidae, Sericini). ZooKeys 635: 123–160

Moser J (1915) Neue *Serica*-Arten. Deutsche Entomologische Zeitschrift 1915: 337–393

FIGURES

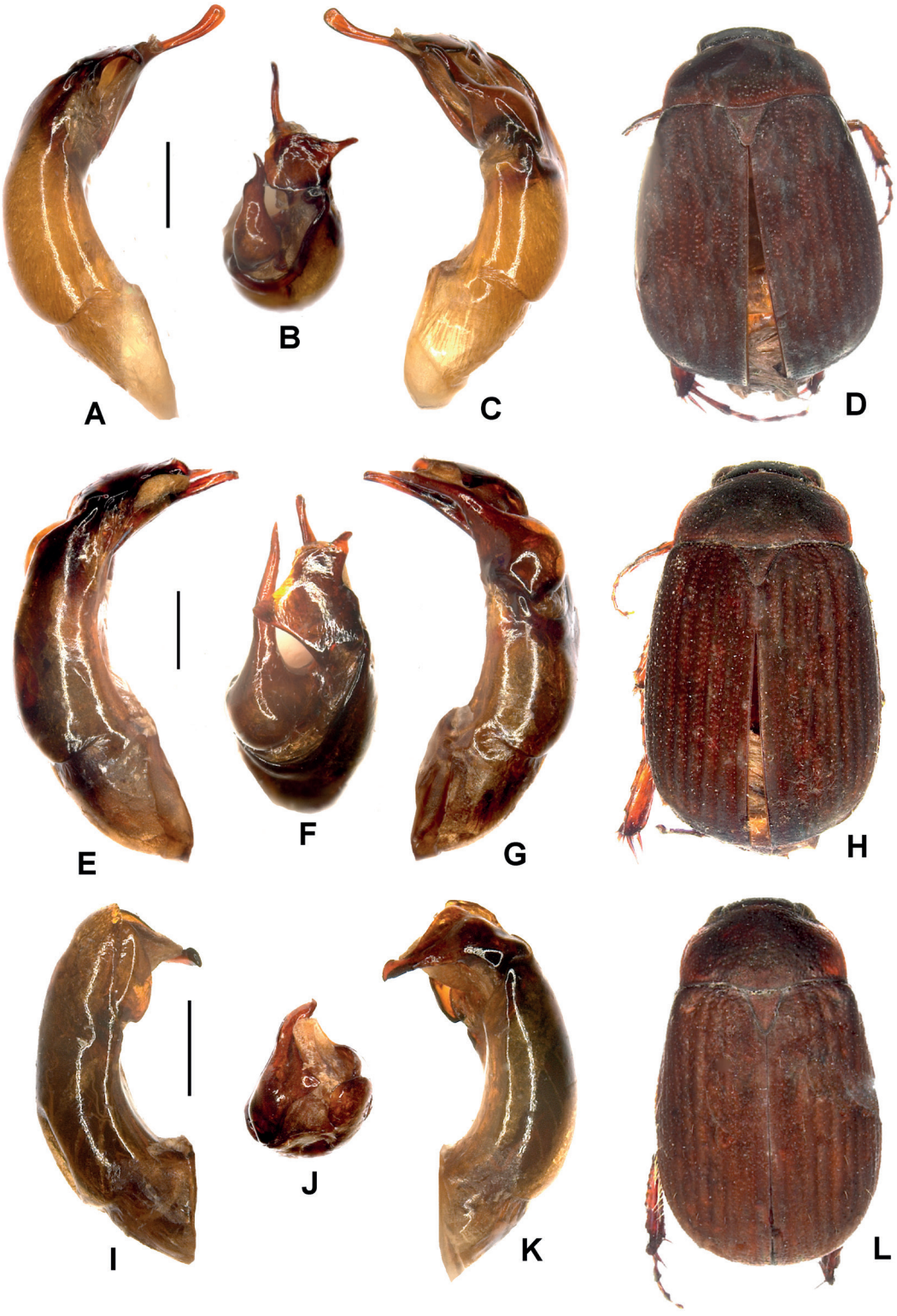

Fig. 1. A–D. *Neoserica dashanensis* sp. n. (holotype). **E–H**. *N. defuensis* sp. n. (holotype). **I–L**. *N. huangjingensis* sp. n. (holotype). **A, E, I**. Aedeagus, left side lateral view. **C, G, K**. Aedeagus, right side lateral view. **B, F, J**. Parameres, dorsal view. **D, H, L**. Habitus. Scale: 0.5 mm. Habitus not to scale.

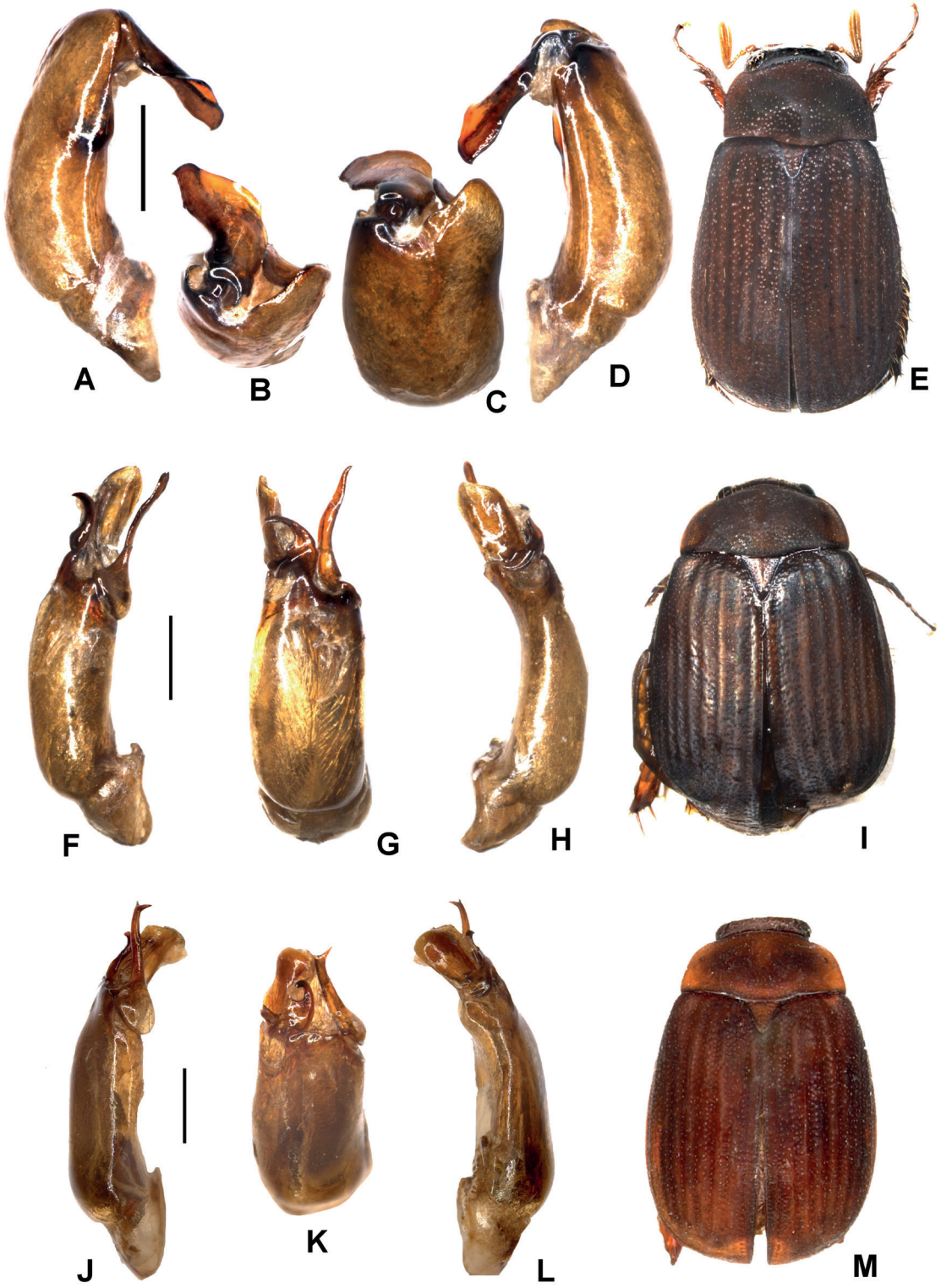

Fig. 2. A–D. *Neoserica bailongshanica* sp. n. (holotype). **E–H**. *N. sigillata* (Brenske) (China: Foochow), I–L: *N. napoensis* sp. n. (holotype). **A, F, I**. Aedeagus, left side lateral view. **D, H, L**. Aedeagus, right side lateral view. **B, G, K**. Parameres, dorsal view. **E, I, M**. Habitus. Scale: 0.5 mm. Habitus not to scale.

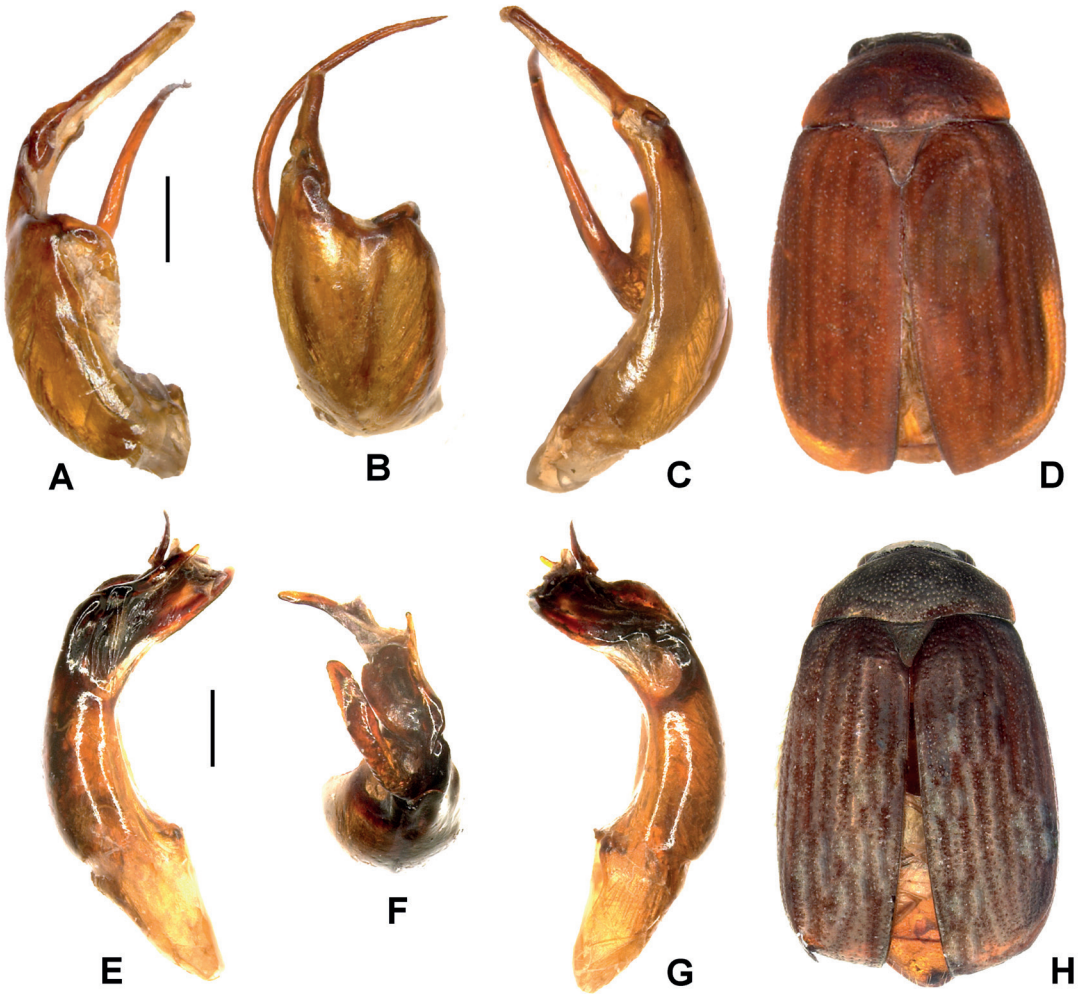

Fig. 3. A–D. *Neoserica pingbianensis* sp. n. (holotype). **E–H**. *N. nannuoshanica* sp. n. (holotype). **A, E**. Aedeagus, left side lateral view. **C, G**. Aedeagus, right side lateral view. **B, F**. Parameres, dorsal view. **D, H**. Habitus. Scale: 0.5 mm. Habitus not to scale.

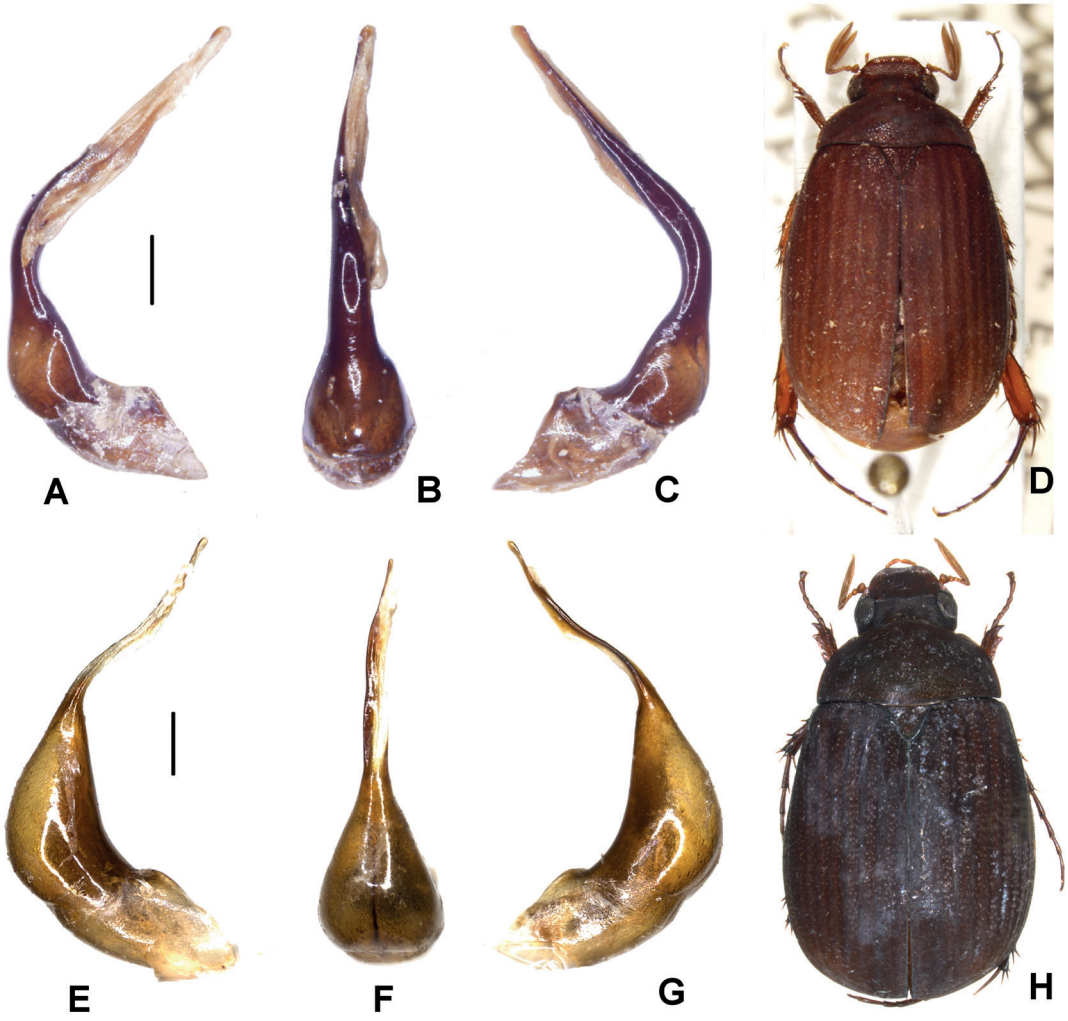

Fig. 4. A–D. *Neoserica major* Arrow (syntype). **E–H**. *N. paramajor* sp. n. (holotype). **A, E**. Aedeagus, left side lateral view. **C, G**. Aedeagus, right side lateral view. **B, F**. Parameres, dorsal view. **D, H**. Habitus. Scale: 0.5 mm. Habitus not to scale.

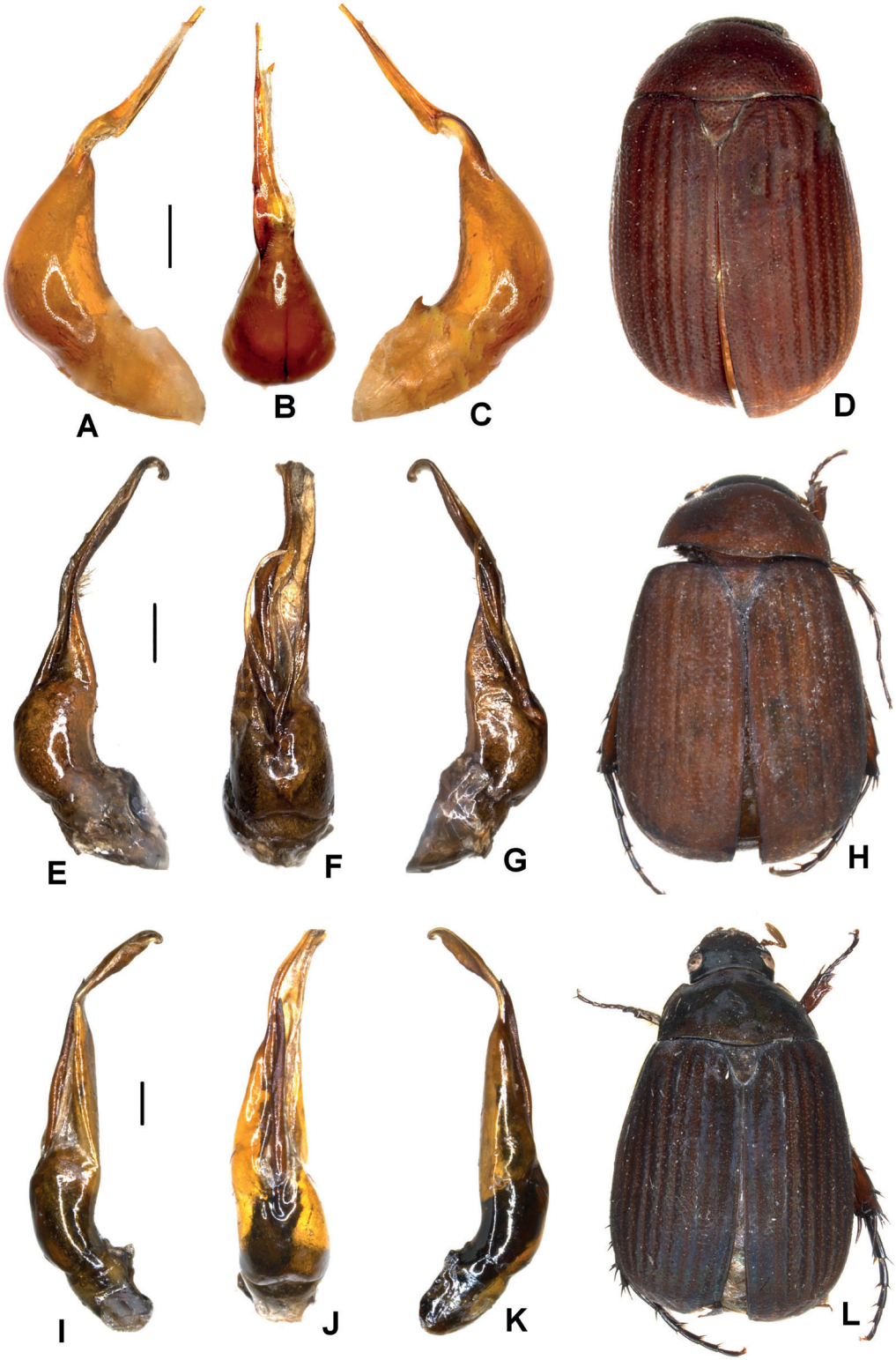

Fig. 5. A–D. *Neoserica sangangensis* sp. n. (holotype). **E–H**. *N. tsinlingensis* sp. n. (holotype). **I–L**. *N. shuizhouensis* sp. n. (holotype). **A, E, I**. Aedeagus, left side lateral view. **C, G, K**. Aedeagus, right side lateral view. **B, F, J**. Parameres, dorsal view. **D, H, L**. Habitus. Scale: 0.5 mm. Habitus not to scale.

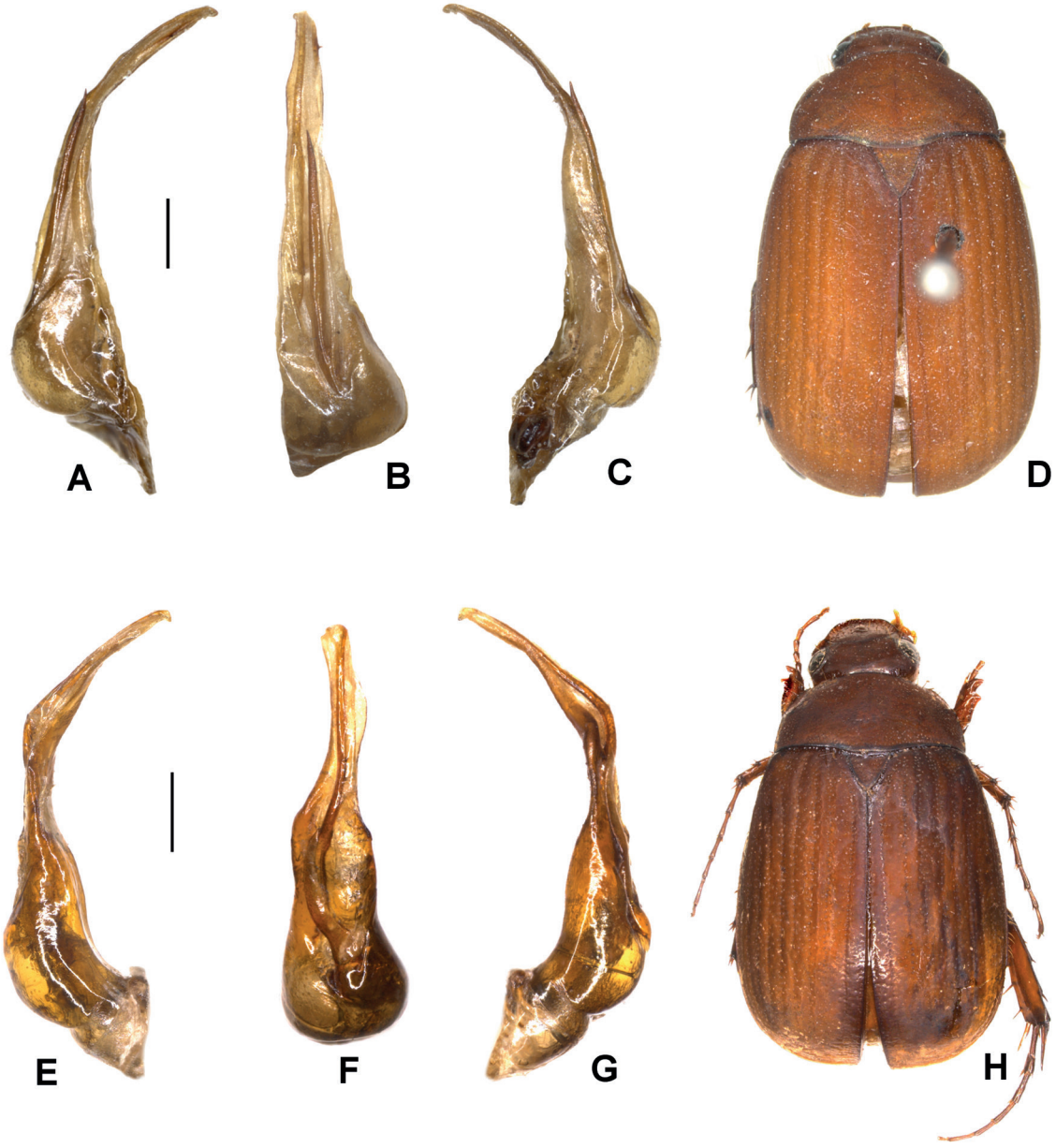

Fig. 6. A–D. *Neoserica rubiginea* Moser (syntype). **E–H**. *N. yulongensis* sp. n. (holotype). **A, E**. Aedeagus, left side lateral view. **C, G**. Aedeagus, right side lateral view. **B, F**. Parameres, dorsal view. **D, H**. Habitus. Scale: 0.5 mm. Habitus not to scale.

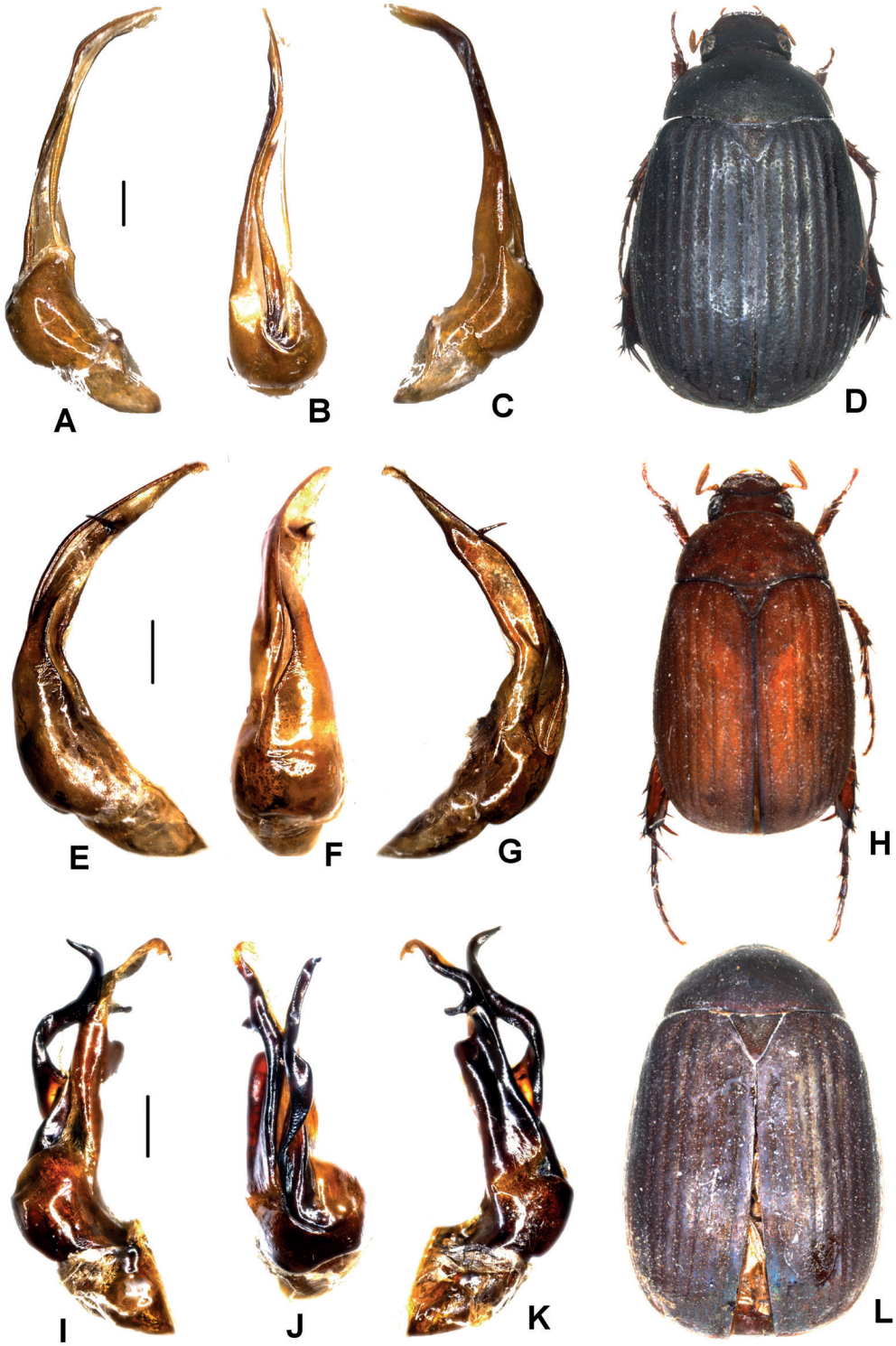

Fig. 7. A–D. *Neoserica allorubiginea* sp. n. (holotype). **E–H**. *N. milani* sp. n. (holotype). **I–L**. *N. strenua* sp. n. (holotype). **A, E, I**. Aedeagus, left side lateral view. **C, G, K**. Aedeagus, right side lateral view. **B, F, J**. Parameres, dorsal view. **D, H, L**. Habitus. Scale: 0.5 mm. Habitus not to scale.

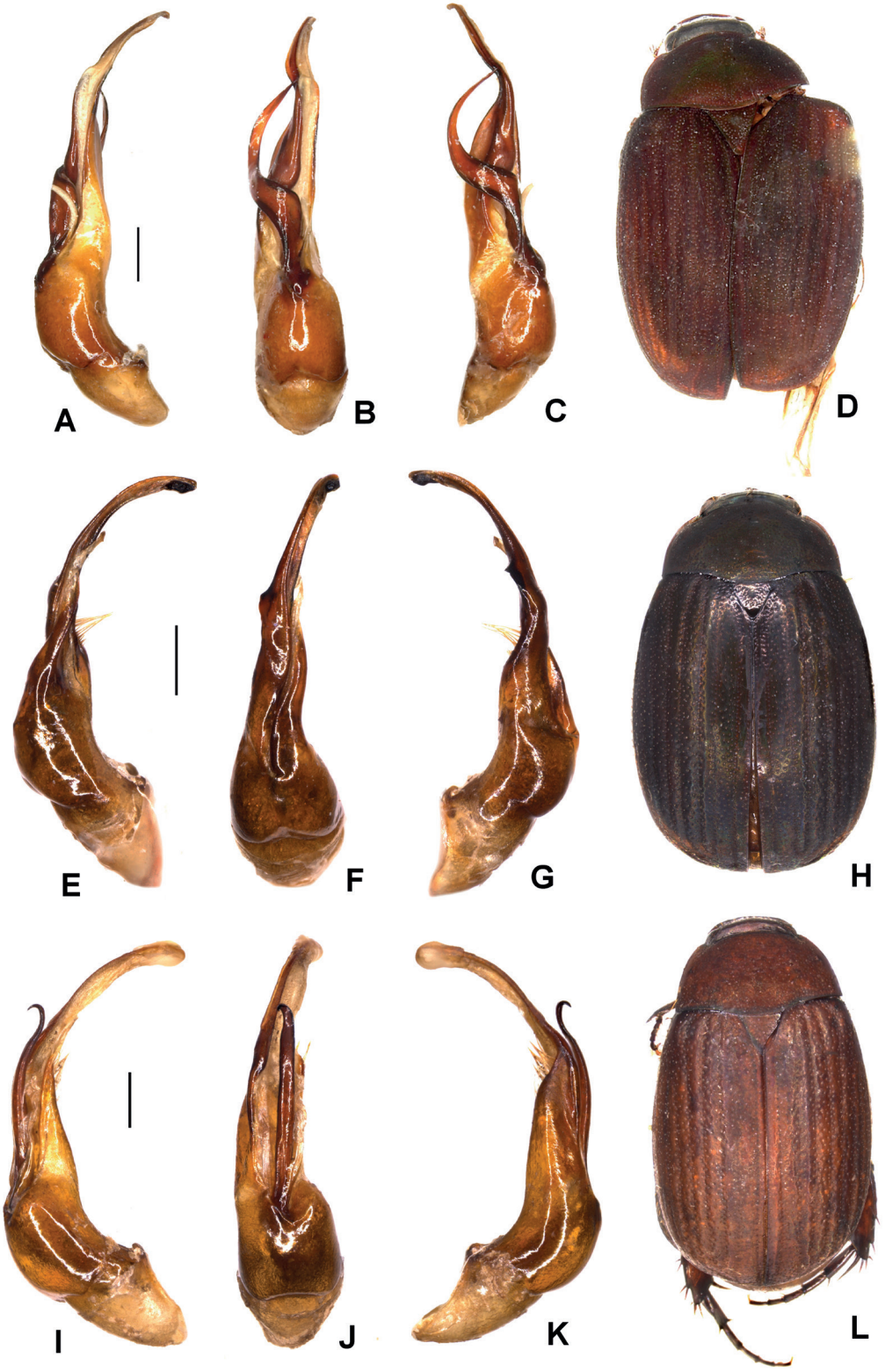

Fig. 8. A–D. *Neoserica pararubiginea* sp. n. (holotype). **E–H**. *N. reni* sp. n. (holotype). **I–L**. *N. caiyangheensis* sp. n. (holotype). **A, E, I**. Aedeagus, left side lateral view. **C, G, K**. Aedeagus, right side lateral view. **B, F, J**. Parameres, dorsal view. **D, H, L**. Habitus. Scale: 0.5 mm. Habitus not to scale.

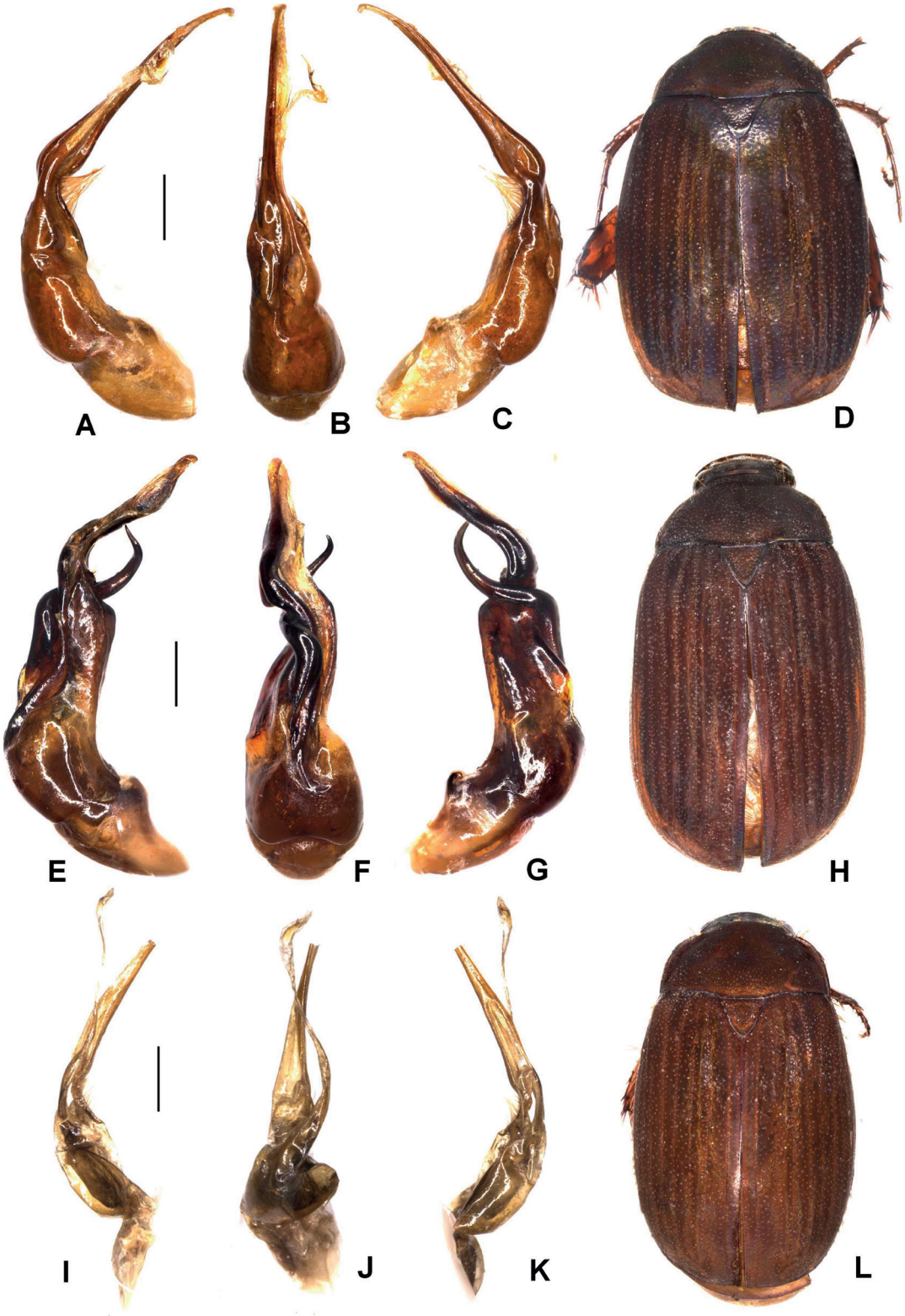

Fig. 9. A–D. *Neoserica liangshandingensis* sp. n. (holotype). **E–H**. *N. nanhuaensis* sp. n. (holotype). **I–L**. *N. pui* sp. n. (holotype). **A, E, I**. Aedeagus, left side lateral view. **C, G, K**. Aedeagus, right side lateral view. **B, F, J**. Parameres, dorsal view. **D, H, L**. Habitus. Scale: 0.5 mm. Habitus not to scale.

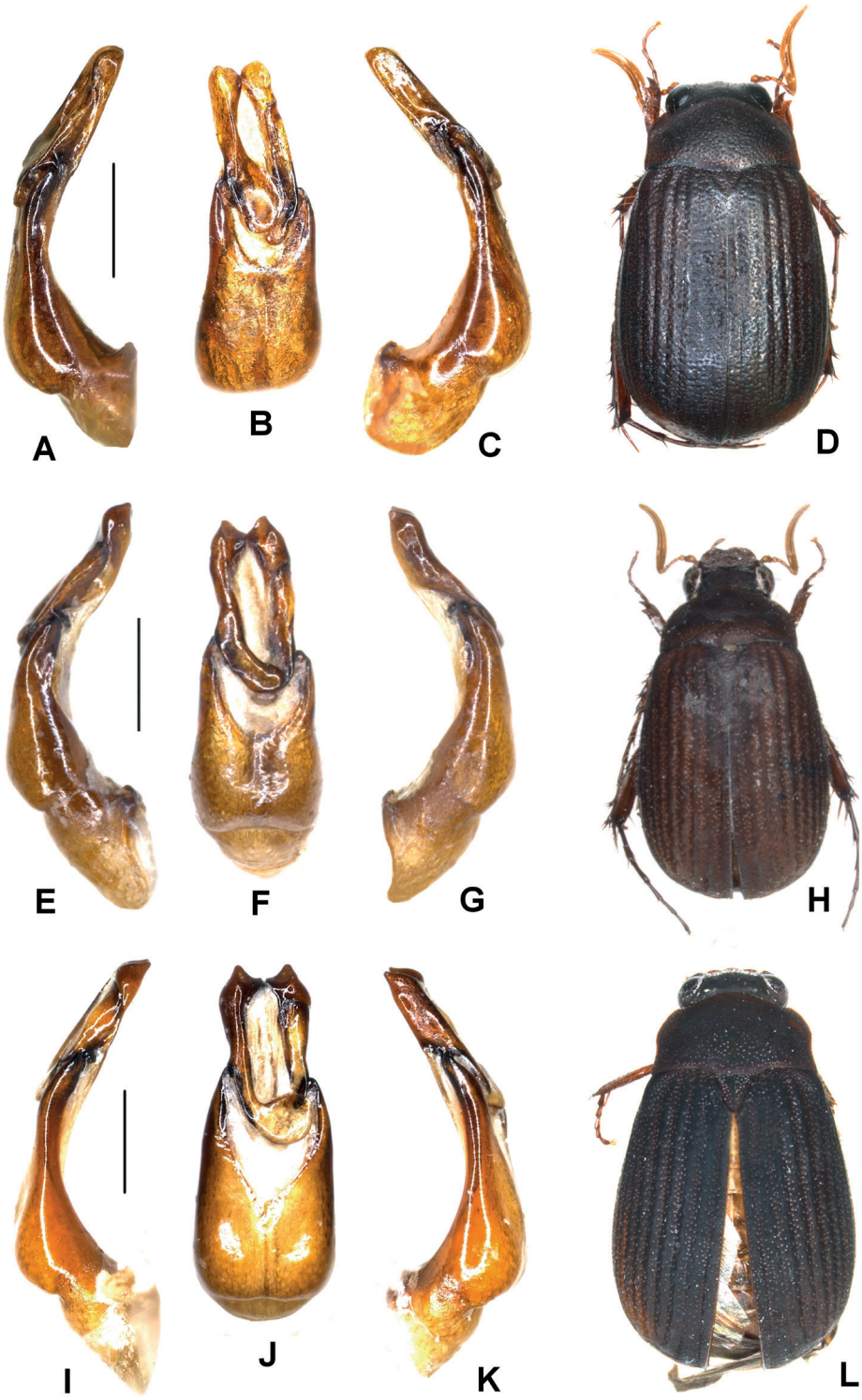

Fig. 10. A–D. *Neoserica dianae* sp. n. (holotype). **E–H**. *N. fopingensis* sp. n. (holotype). **I–L**. *N. tianmushanica* sp. n. (holotype). **A, E, I**. Aedeagus, left side lateral view. **C, G, K**. Aedeagus, right side lateral view. **B, F, J**. Parameres, dorsal view. **D, H, L**. Habitus. Scale: 0.5 mm. Habitus not to scale.

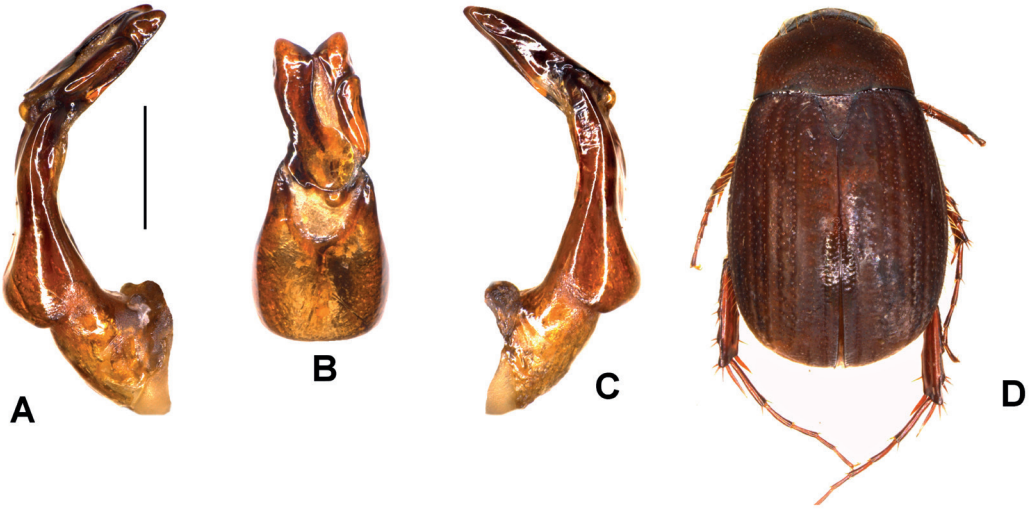

Fig. 11. A–D. *Neoserica leigongshanica* sp. n. (holotype). **A**. Aedeagus, left side lateral view. **C**. Aedeagus, right side lateral view. **B**. Parameres, dorsal view. **D**. Habitus. Scale: 0.5 mm. Habitus not to scale.

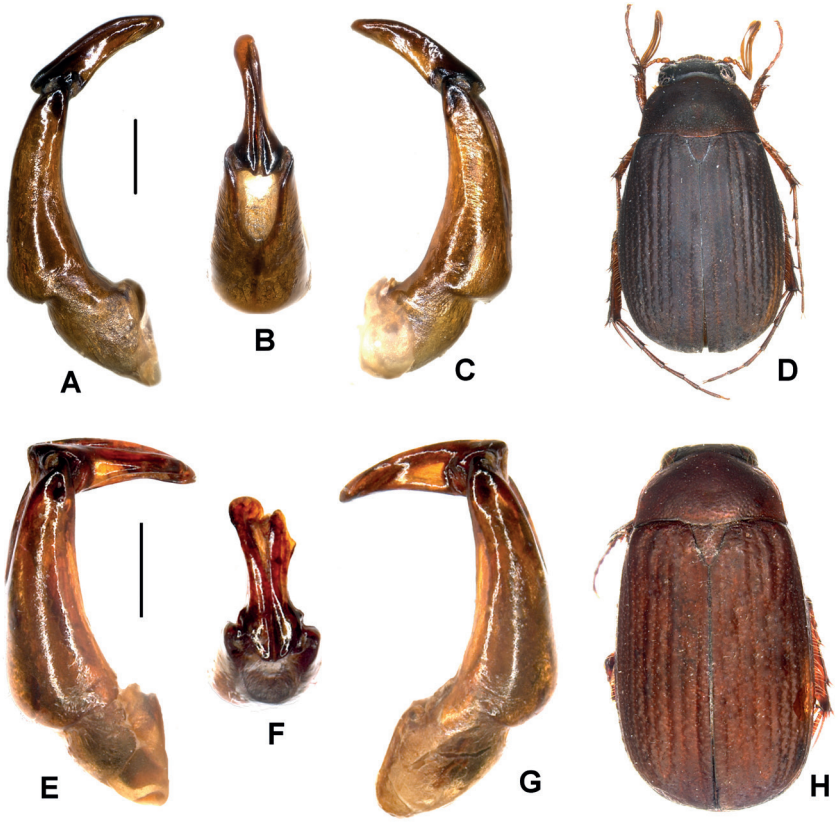

Fig. 12. A–D. *Neoserica funiushanensis* sp. n. (holotype). **E–H**. *N. qingyinica* sp. n. (holotype). **A, E**. Aedeagus, left side lateral view. **C, G**. Aedeagus, right side lateral view. **B, F**. Parameres, dorsal view. **D, H**. Habitus. Scale: 0.5 mm. Habitus not to scale.

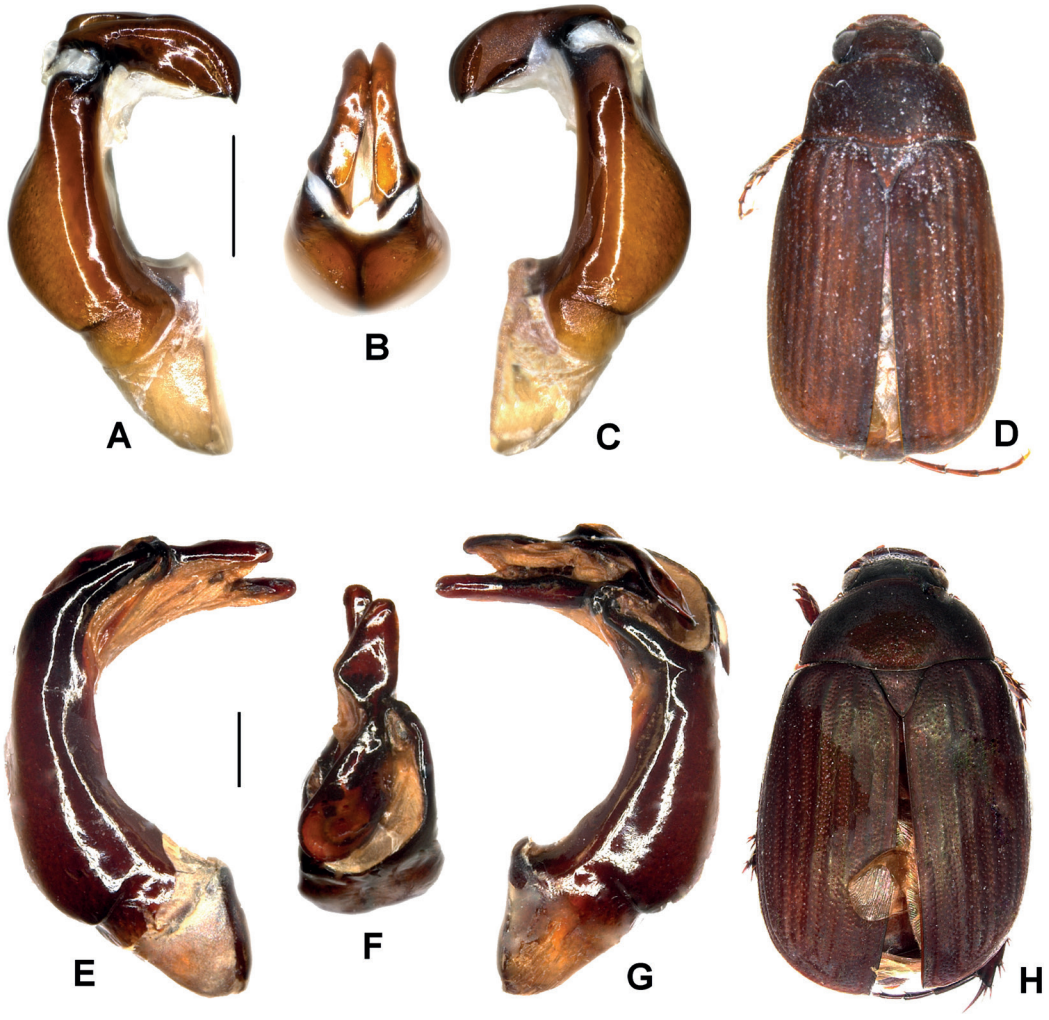

Fig. 13. A–D. *Neoserica pariliforceps* sp. n. (holotype). **E–H**. *N. dilatipennis* sp. n. (holotype). **A, E**. Aedeagus, left side lateral view. **C, G**. Aedeagus, right side lateral view. **B, F**. Parameres, dorsal view. **D, H**. Habitus. Scale: 0.5 mm. Habitus not to scale.

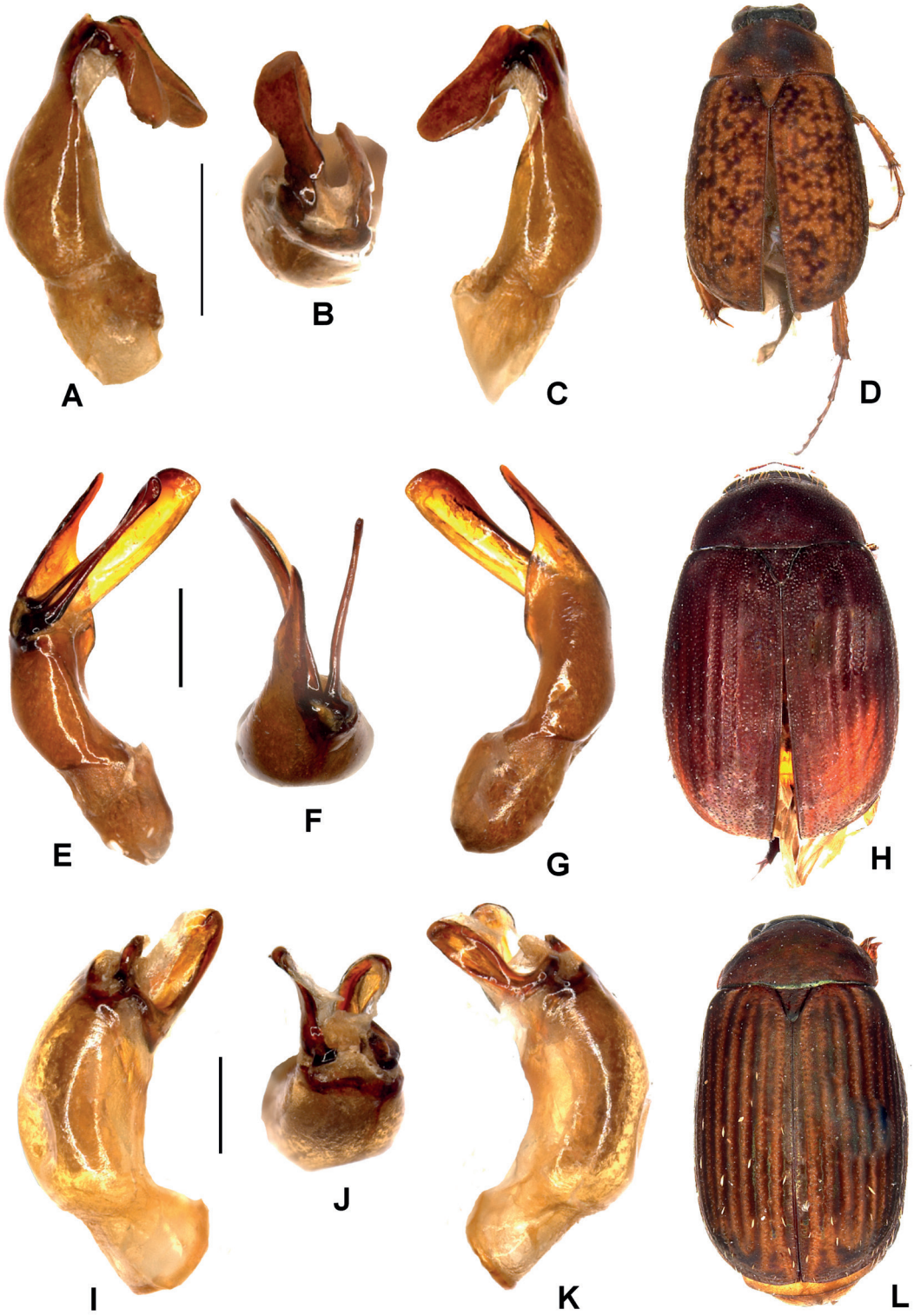

Fig. 14. A–D. *Neoserica longwangshanica* sp. n. (holotype). **E–H**. *N. anmaxinzhaiensis* sp. n. (holotype). **I–L**. *N. costisquamosa* sp. n. (holotype). **A, E, I**. Aedeagus, left side lateral view. **C, G, K**. Aedeagus, right side lateral view. **B, F, J**. Parameres, dorsal view. **D, H, L**. Habitus. Scale: 0.5 mm. Habitus not to scale.

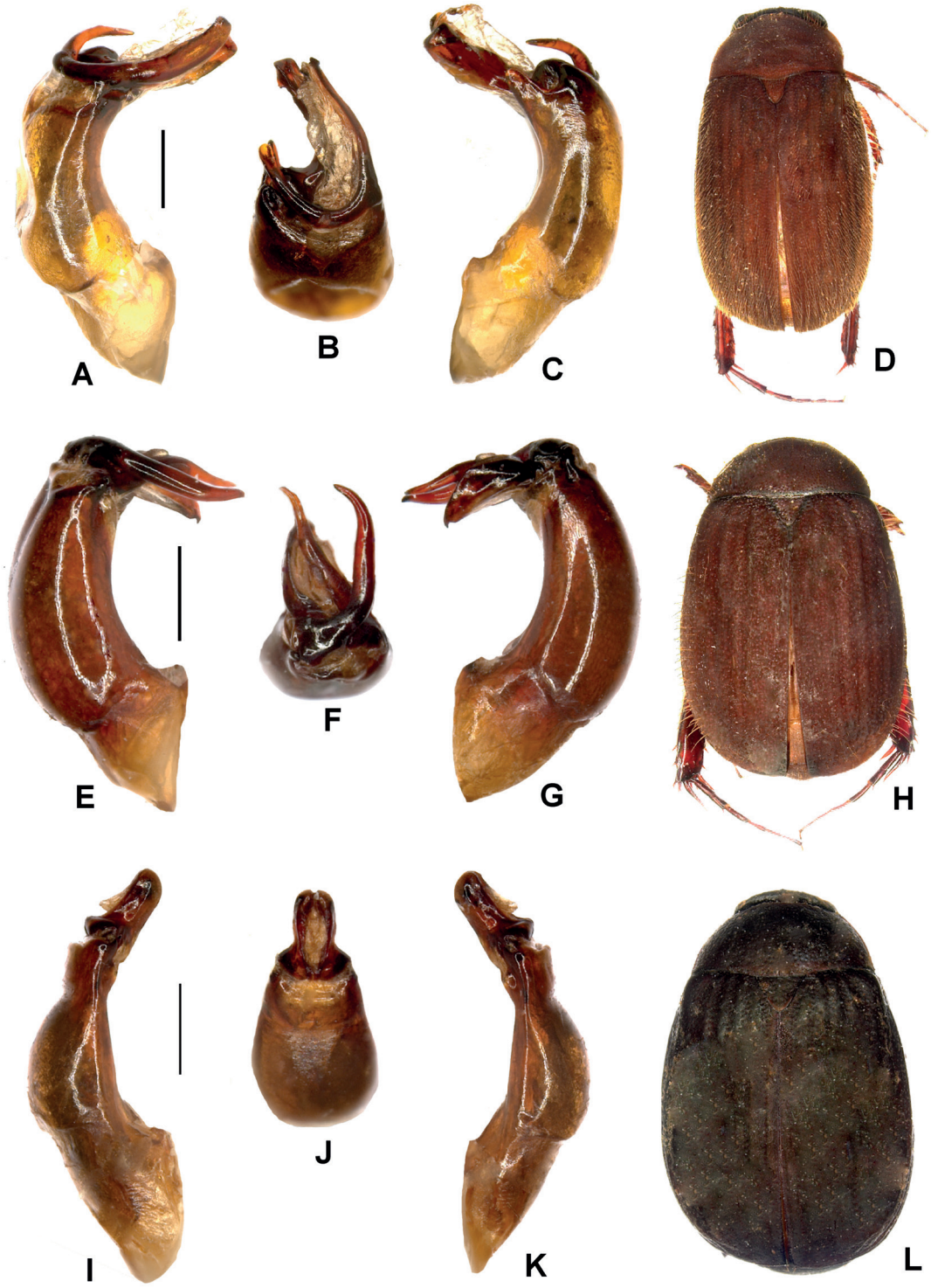

Fig. 15. A–D. *Neoserica gracilisetosa* sp. n. (holotype). **E–H**. *N. jianfenglingica* sp. n. (holotype). **I–L**. *N. jinpingica* sp. n. (holotype). **A, E, I**. Aedeagus, left side lateral view. **C, G, K**. Aedeagus, right side lateral view. **B, F, J**. Parameres, dorsal view. **D, H, L**. Habitus. Scale: 0.5 mm. Habitus not to scale.

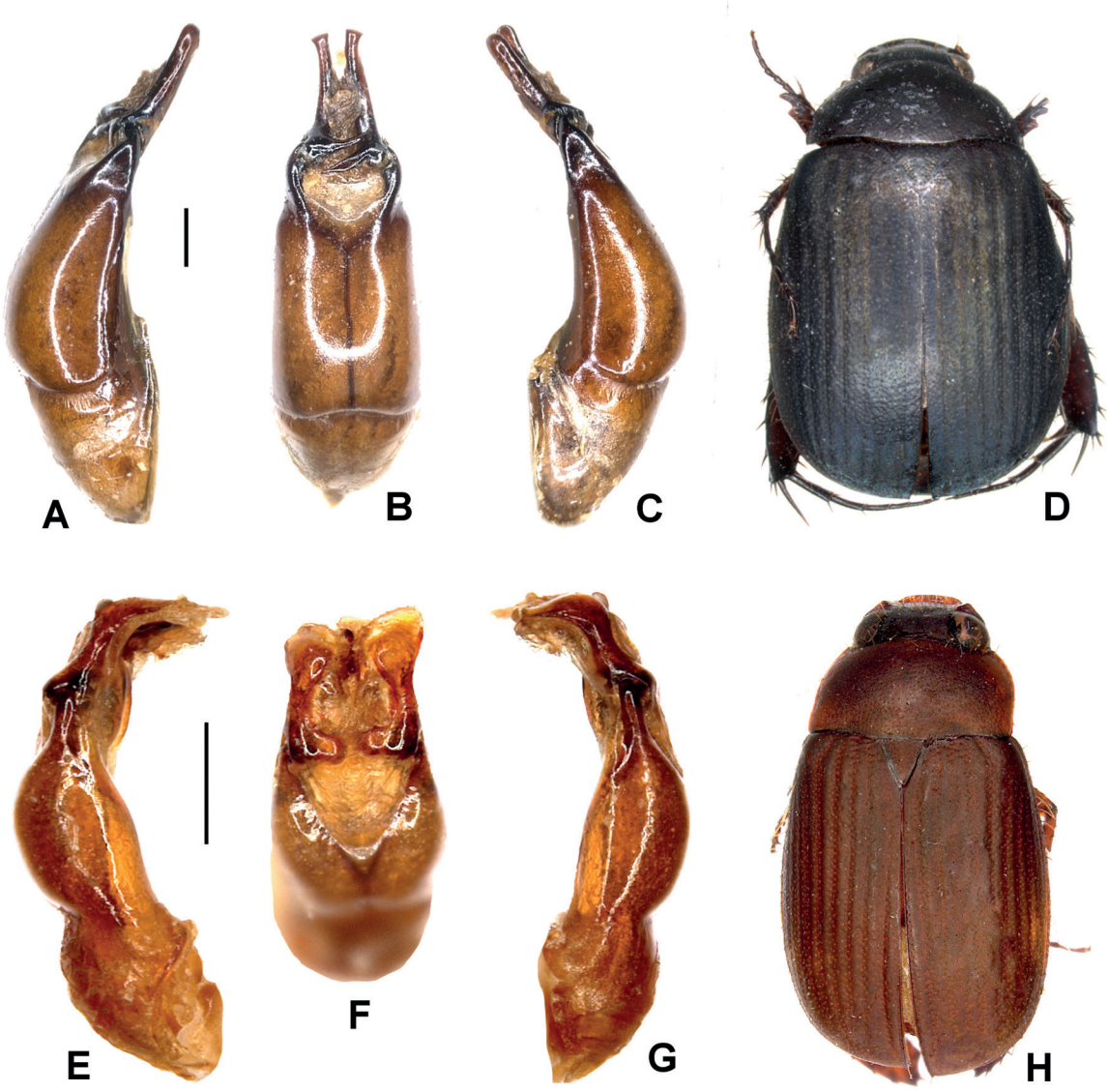

Fig. 16. A–D. *Neoserica martinui* sp. n. (holotype). **E–H**. *N. menglaensis* sp. n. (holotype). **A, E**. Aedeagus, left side lateral view. **C, G**. Aedeagus, right side lateral view. **B, F**. Parameres, dorsal view. **D, H**. Habitus. Scale: 0.5 mm. Habitus not to scale.

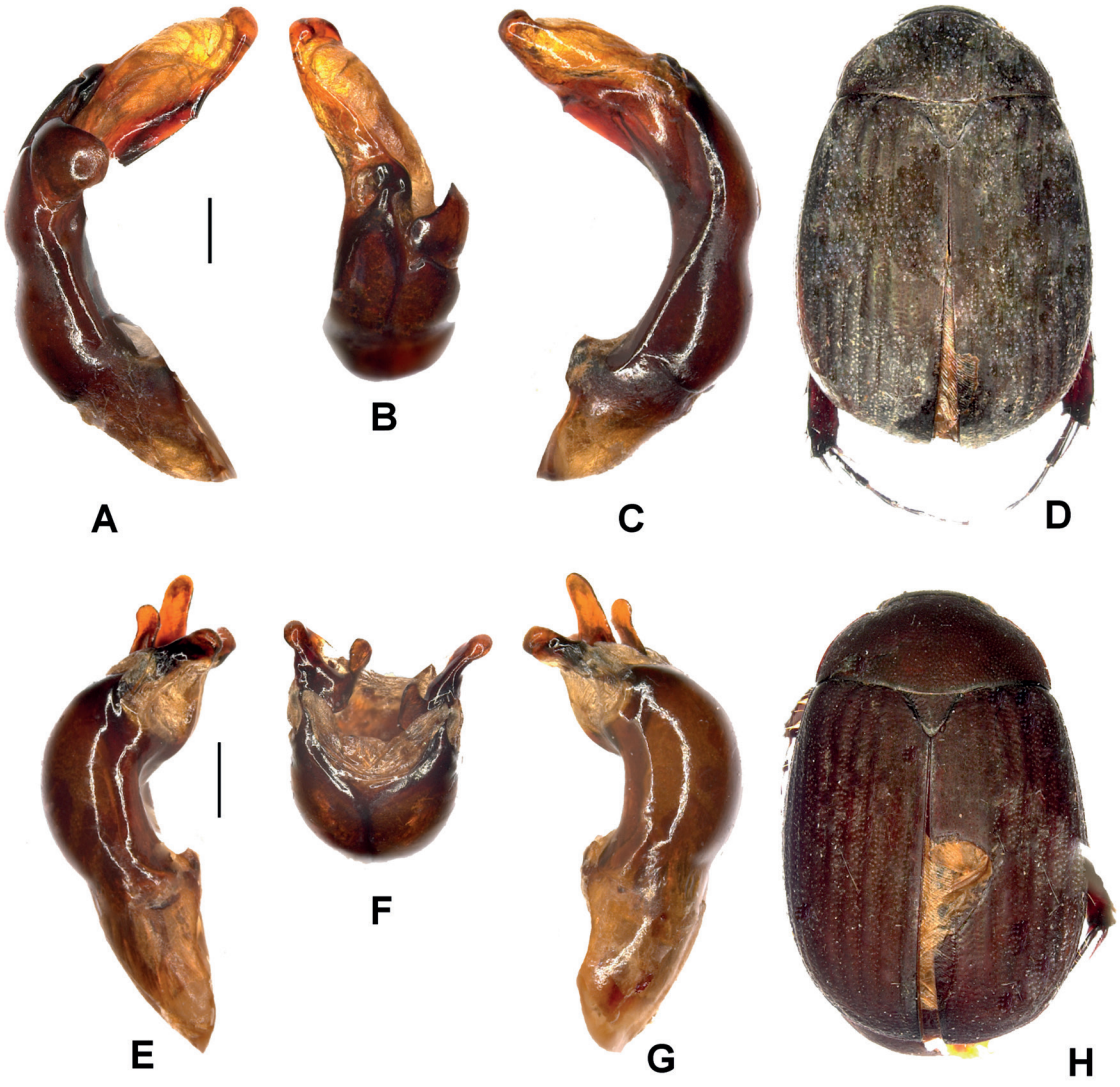

Fig. 17. A–D. *Neoserica xingdoushanana* sp. n. (holotype). **E–H**. *N. yanshanica* sp. n. (holotype). **A, E**. Aedeagus, left side lateral view. **C, G**. Aedeagus, right side lateral view. **B, F**. Parameres, dorsal view. **D, H**. Habitus. Scale: 0.5 mm. Habitus not to scale.

Fig. 18. A–D. *Neoserica insubida* ("Conchinchine"). **A**. Aedeagus, left side lateral view. **C**. Aedeagus, right side lateral view. **B**. parameres, dorsal view. **D**. habitus. Scale: 0.5 mm. Habitus not to scale.

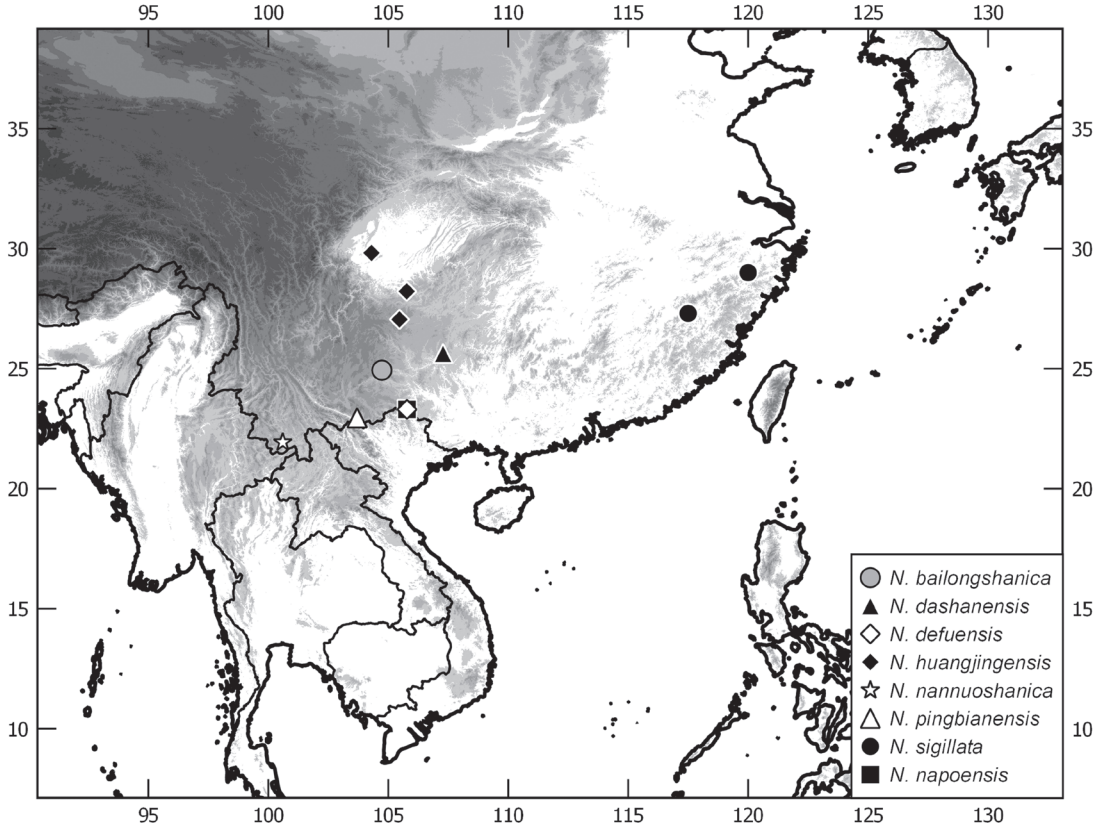

Fig. 19. Distribution map of the newly added taxa of the *Neoserica calva* group.

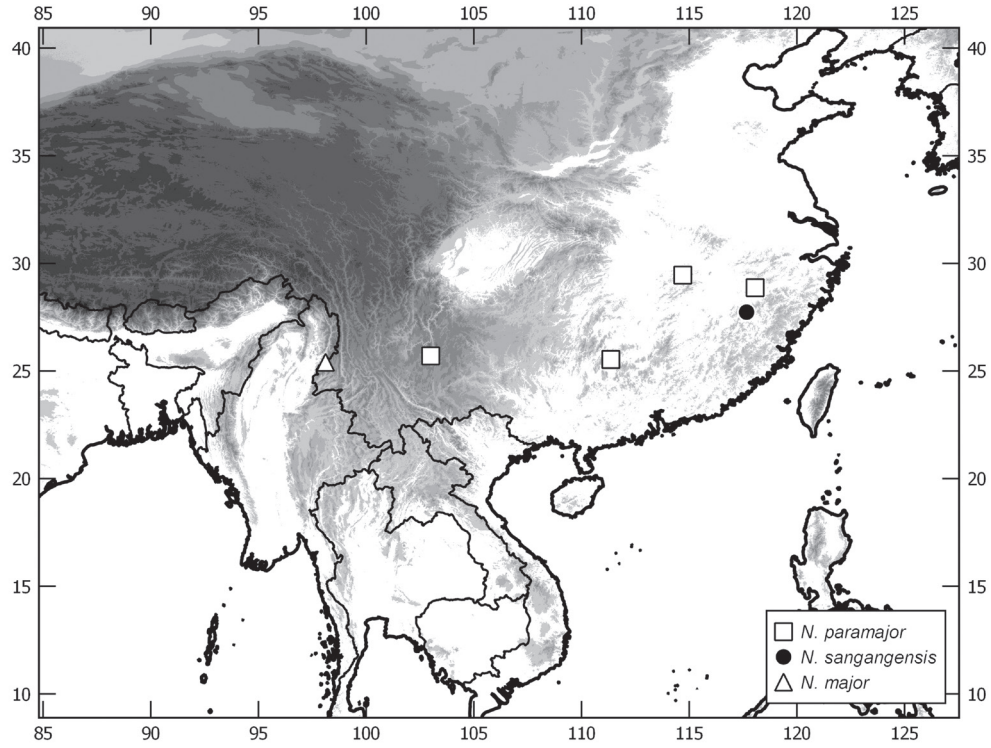

Fig. 20. Distribution map of the *Neoserica major* group.

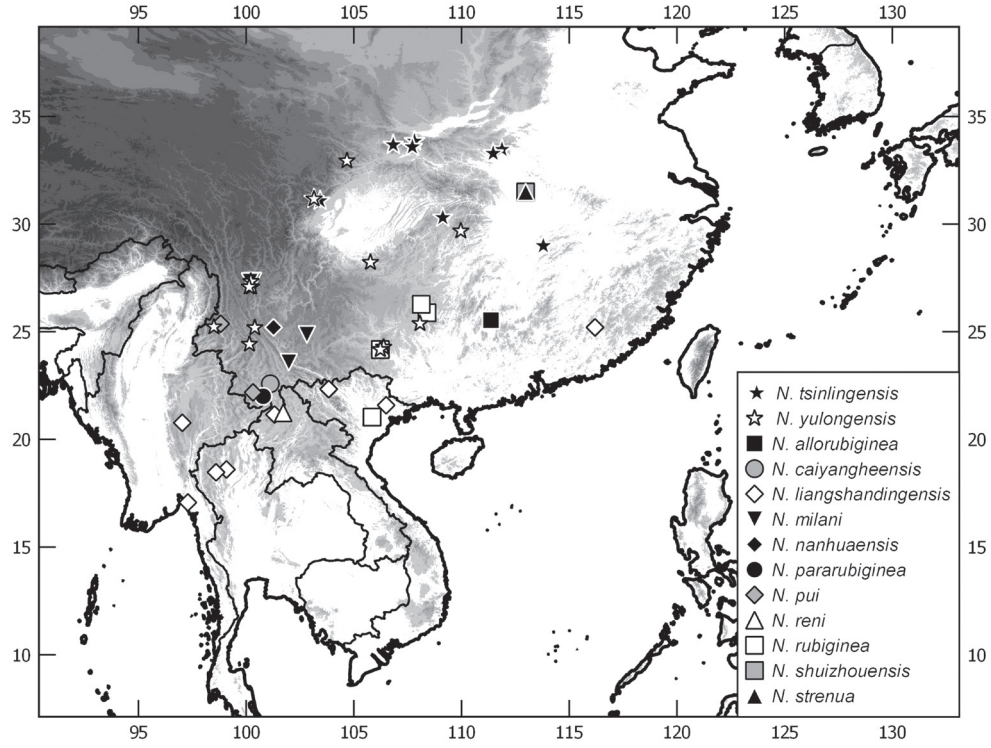

Fig. 21. Distribution map of the *Neoserica uniformis* group.

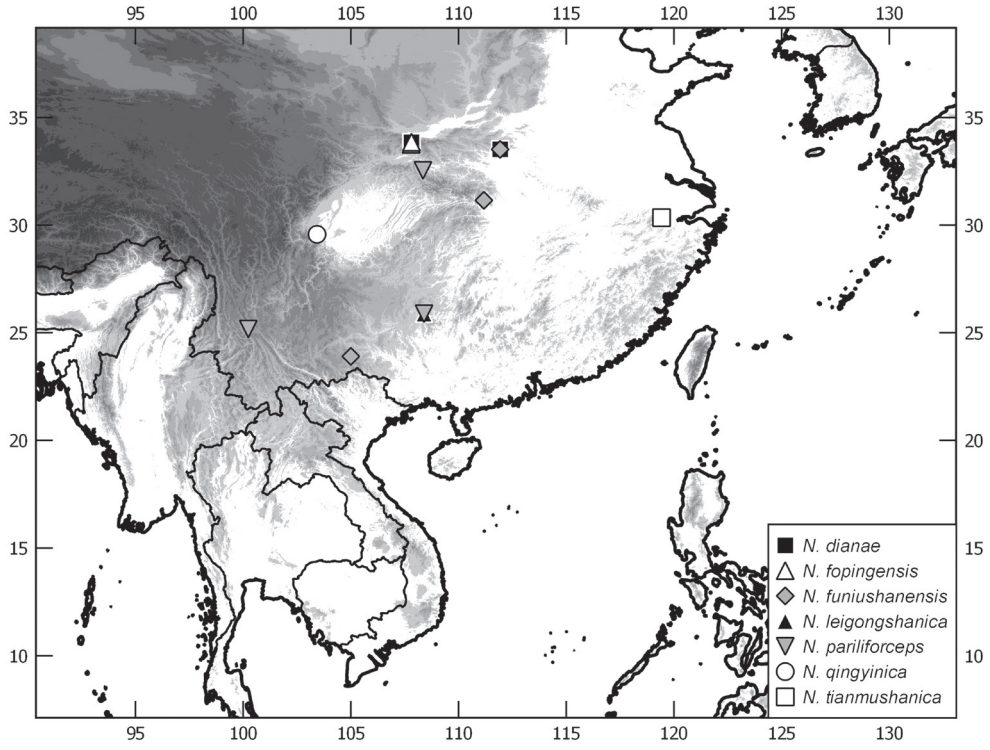

Fig. 22. Distribution map of the *Neoserica dianae* and *N. funiushanica* group.

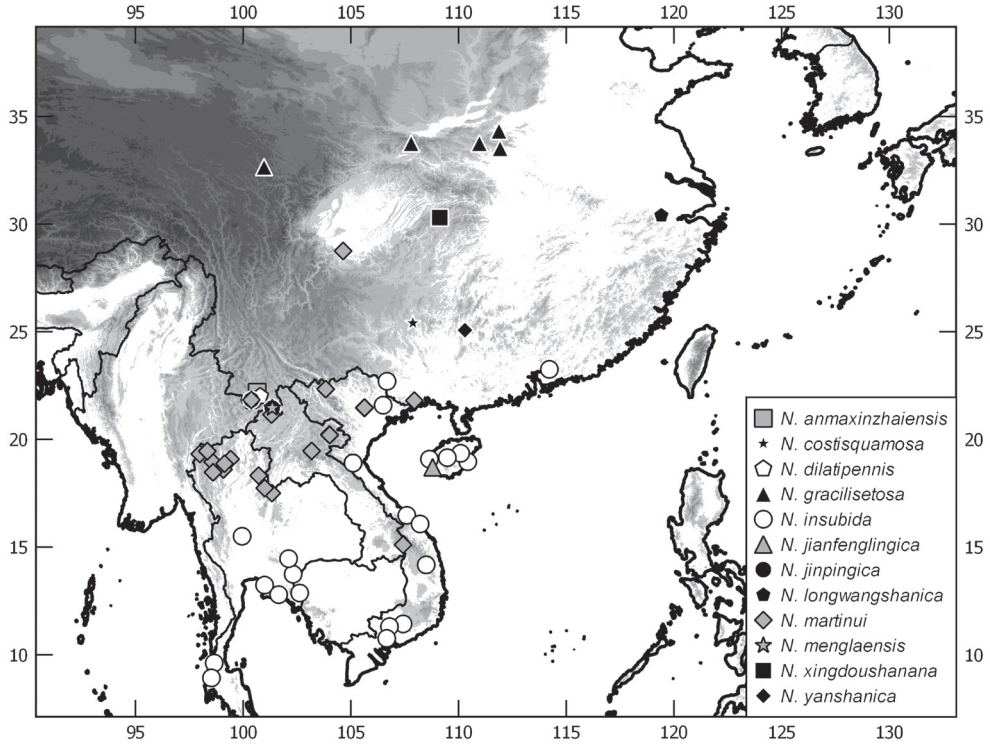

Fig. 23. Distribution map of the *Neoserica* species incertae sedis

INDEX*

*page number in **bold** – species description; page number in *italics* –figure with aedeagus

Summary

This monograph represents the final part of the treatment of the Chinese *Neoserica* (sensu lato) species which were part of the PhD thesis project of Wangang Liu. In this part, the taxonomy of the species of the *Neoserica major*, *N. uniformis*, *N. dianae*, *N. funiushanensis*, *N. multifoliata* species groups, as well as all other species incertae sedis of *Neoserica* Brenske, 1894 is revised, while additional taxa were discovered for the *N. calva* group. The study resulted in three new combinations and the description of 39 new species from China. The lectotypes of two species are designated. The monograph contains a key to the genera of Sericini with multilamellate antennae, to species-groups of *Neoserica* from mainland Asia, as well as a key to the individual species of the species-groups examined here. Species diagnostic characters and species distribution are illustrated.

Bonn zoological Bulletin – Supplementum Vol. 64 (2019)
Managing Editor: Thomas Wesener

Zoologisches Forschungsmuseum Alexander Koenig –
Leibniz-Institut für Biodiversität der Tiere (ZFMK)
Adenauerallee 160, D-53113 Bonn, Germany

ISSN: 0302-671X

Cover illustration:
Illustration of the habitus of *Neoserica dianae* sp. n. (holotype) in front of a map of the Peoples Republic of China.

Leibniz-Gemeinschaft
Bundesministerium für Bildung und Forschung
Ministerium für Innovation, Wissenschaft und Forschung des Landes Nordrhein-Westfalen