

Linzer biol. Beitr.	44/2	1195-1205	28.12.2012
---------------------	------	-----------	------------

**A new species of genus *Chlaenius* BONELLI 1810, subgenus
Haplochlaenius LUTSHNIK 1933 from China
(Coleoptera, Carabidae, Chlaeniini) and notes on two species
previously described**

D.W. WRASE

Abstract: *Chlaenius* (*Haplochlaenius*) *evae* nov.sp. (type locality: China, Sichuan prov., Qingcheng Hou Shan, 70 km NW Chengdu, 1500 m) is described. *Chlaenius* (*Haplochlaenius*) *klapperichi* JEDLIČKA 1956 and *Chl. nanlingensis* DEUVE & TIAN 2005 are re-described and illustrations of the habitus, the mentum and submentum, and the male genitalia of the first two species are presented. *Chl. nanlingensis* is recorded as new for the Chinese provinces of Guangxi, Guizhou, Hunan, and Sichuan.

Key words: Coleoptera, Carabidae, Chlaeniini, *Chlaenius*, *Haplochlaenius*, *Vachinius*, new species, new records, China.

Introduction

Recent entomological activity by field workers in China has yielded some interesting material with an undescribed species belonging to the tribe Chlaeniini BRULLÉ 1834, genus *Chlaenius* BONELLI 1810. The purpose of this short paper is to make known the new species, to re-describe a species not well known, and to provide new information about this and a further species previously described. In addition some problems in the classification within the subtribe Chlaeniina are mentioned, concerning the genus *Vachinius* CASALE 1984.

Material

The material examined is housed in the collections listed below:

NMPC Národní muzeum, Prague, Czech Republic (Jiří Hájek)
 NMW Naturhistorisches Museum Wien, Austria (H. Schillhammer, E. Kirschenhofer)
 cHÄCK Collection M. Häckel, Prague, Czech Republic
 cREUT Collection Chr. Reuter, Hamburg, Germany
 cSEHN Collection R. Sehnal, Unhost, Czech Republic
 cTURN..... Collection J. Turna, Kostelec na Hané, Czech Republic
 cWR Collection D.W. Wrase, Berlin, Germany

Methods

Total body length (BL) is measured from the tip of the mandibles to the apex of the right elytron as the maximum linear distance; the width of the head (HW) as the maximum linear distance across the head, including the compound eyes; the length of the pronotum (PL) from the anterior to the posterior margin along the midline; the length of the elytra (EL) from the tip of scutellum to the apex of the right elytron as the maximum linear distance; the width of the pronotum (PW) and elytra (EW) at their broadest point; the width of the pronotal base (PBaW) between the tip of the posterior angles at insertion of seta, and the width of the pronotal anterior margin (PAW) between the tips of the anterior angles.

These measurements, made at a magnification of 1.25 \times and using an ocular micrometer in a Leica MZ 16 stereobinocular microscope, were combined as ratios and/or added as follows:

PW/PL..... width /length of pronotum
 PW/HW..... width of pronotum /width of head
 PW/PBaW width of pronotum/width of the pronotal base
 PBaW/PAW width of the pronotal base/ width of pronotal anterior margin
 EL/EW length/width of elytra

Microsculpture was examined at a magnification of 100 \times .

Line drawings were prepared using an ocular grid (15 \times 15 squares) attached to a Leica MZ 16 stereobinocular microscope. Dissections were made using standard techniques; genitalia were glued to separate labels, and pinned beneath the specimens from which they had been removed. The habitus photographs were taken with a Canon EOS 450D digital camera fitted with a Canon EF 50 mm Compact Macro Lens. Post-processing was done in Adobe Photoshop CS 3. To achieve sufficient depth of focus, 3 planes were captured which were copied to separate layers, and the out-of-focus planes are masked by the stacking programme Combine ZP.

Description/redescriptions

Chlaenius (Haplochlaenius) evae nov.sp.

Type material: Holotype ♂: China, Sichuan prov., Qingcheng Hou Shan, 70 km NW Chengdu, 1500 m, 6.-13.VIII.2010, S. Murzin leg. (cWR).

Diagnosis: A *Haplochlaenius* species of large size with hindwings reduced, body unicolorous black, head and pronotum middle-sized, the latter cordate, elytra oblong-ovate, with carinate intervals, legs black, antennae with antennomeres 1 to 3 black, the remaining ones brownish. Head and pronotum shiny, elytra only moderately shiny (male). Habitus see Fig. 2.

Description: Body length 25.3 mm; width 9.4 mm.

Colour, microsculpture: Body unicolorous black, antennae with antennomeres 1 to 3 black, the remaining ones brownish. Microsculpture mesh pattern on head and pronotum

consisting of weakly engraved isodiametric meshes, somewhat stronger on pronotum, causing a surface shiny, on elytra isodiametric meshes strongly engraved, surface only moderately shiny (male).

Head (Fig. 2) medium-sized, somewhat narrower than pronotum (ratio PW/HW: 1.31), frons and vertex moderately convex, almost coarsely but sparsely punctured towards margins, between eyes unpunctured, frontal furrows shallow, elongate, with some wrinkled punctuation, clypeus coarsely punctured, bisetose. Eyes medium-sized, almost hemisphaerically protruding, temples short, rectilinear, of about one fourth of eye diameter (seen from above). Mandibles short and broad, palpi elongate, slender, apical palpomeres not dilated. Mentum (Fig. 6) bisetose, with no distinct mentum tooth but with a weak bilobed protuberance, submentum bisetose. Ligula wide, bisetose. Antennae long and slender, in males reaching scarcely to middle of elytra, and with about antennomere 6 reaching pronotal base, antennomeres 1 and 2 with some fine setae apically except obligatory setae, antennomere 3 with fine setae of different length, sparsely arranged, about 3.2 times as long as 2 in males, antennomere 4 to 11 pubescent.

Pronotum (Fig. 2) medium-sized, cordate, only somewhat wider than long (ratio PW/PL: 1.15), widest somewhat before basal half. Basal margin only a little wider than anterior margin (ratio PBaW/PAW: 0.88), and somewhat narrower than pronotum at middle (ratio PW/PBaW: 1.27). Anterior margin weakly emarginate, anterior angles somewhat acutely projecting forward, weakly rounded at tip, from there slightly curved laterally to basal two thirds, from there basad distinctly sinuately narrowed to posterior angles which are somewhat obtuse-angled and widely rounded at tip. 1 lateral seta behind posterior angles at end of apical fifth at left side only, (in holotype) lacking at right side (there no pore puncture present), setae in posterior angles positioned well forward at about length of antennomere 2. Disc weakly convex, lateral channel relatively wide (about as wide as antennomere 2), in basal fourth somewhat widened and reaching basal foveae. Basal fovea large but shallow, continuing apicad in a narrow furrow and reaching the end of basal third. Midline distinct, deeply engraved, especially in apical third, not reaching anterior margin and hardly reaching basal margin. Base and basal foveae with dense and coarse seta bearing punctures, continuing along lateral margins, base at middle with some vertical wrinkles. Disc with sparse and fine punctures, bearing finest short setae, toward lateral and anterior margin with somewhat more dense and more coarse seta bearing punctures.

Elytra (Fig. 2) long-ovate with humeri very weakly suggested and widely rounded, moderately convex, base about as wide as pronotal base (ratio EL/EW: 1.48), widest shortly behind middle. Scutellar pore puncture small, at beginning of stria 1, scutellar stria long. Striae finely punctured. Intervals 1 to 7 carinate, the intervals 2 and 4 somewhat weaker formed and somewhat less raised behind base, interval 8 almost flat behind humerus, then with a suggested carina toward apex. Without subapical excision, each elytron at apex weakly obtuse-angled, rounded at tip, elytra slightly gaping. The faces of the carina and the other non-carinate intervals with dense, somewhat granulate punctures bearing yellowish-brownish setae, the edge of the carina glabrous and shiny. Hindwings reduced, about half as long as elytra.

Sterna: Pro- and mesosternum, mesepisterna and abdomen with fine and scattered punctures bearing fine, short setae, metepisterna and metasternum with somewhat denser and stronger punctures. Prosternal process elongate, somewhat acutely narrowed, unmar-

gined, somewhat deepened at middle. Metepisterna very short, somewhat wider at anterior margin than long at ventral margin.

Legs: Average for *Haplochlaenius* species, protarsi of males with protarsomeres 1-3 strongly widened and with ventral spongy pubescent vestiture.

Median lobe of aedeagus: Large, voluminous, gently arcuate, with well developed apical capitulum, somewhat inclined to apical part in lateral view (Fig. 4a), apical lamella in dorsal view Fig. 4b.

C o m p a r i s o n s : The new species is closest to *Chl. klapperichi* JEDLIČKA 1956 and *Chl. nanlingensis* DEUVE & TIAN 2005 in habitus, which also are brachypterous and hence have about the same form of the elytra. While the first species differs distinctly by a metallic coloured head and pronotum, *Chl. nanlingensis*, though sharing habitus and colour, can be separated by a somewhat different shape of the elytra, with maximum width somewhat before the beginning of the apical fourth (somewhat behind middle in *Chl. evae* nov.sp.), by more flattened elytral disc (distinctly convex in *Chl. evae* nov.sp.), a narrower pronotal lateral channel which is less wide than antennomere 2 (about as wide as antennomere 2 in *Chl. evae* nov.sp.), and a somewhat different median lobe (Compare Fig. 4a with Figs 15, 16 in DEUVE & TIAN 2005). *Chl. pecirkai* JEDLIČKA 1932 having body and appendages black and also the elytral intervals carinate, differs distinctly by a smaller head in relation to the pronotum, which is convexely narrowed toward the posterior angles (distinctly sinuately narrowed in *Chl. evae* nov.sp.), by a different shape of the elytra with distinct, though widely rounded humeri (humeri only very weakly suggested in *Chl. evae* nov.sp.), and by a different median lobe and hence can be separated easily. Obviously *Chl. pecirkai* is also of smaller body size. Kirschenhofer has examined the holotype of *Chl. pecirkai* with the body size of 23.0 mm and some paratypes (in the Natural History Museum, London). Supposingly *Chl. pecirkai* has the hindwings not as strong reduced as in *Chl. evae* nov.sp. and *Chl. klapperichi* (a specimen of *Chl. pecirkai* from South Yunnan: "Tche-Ping-Tcheou", body size 21.6 mm, cWR) investigated concerning this character has the hindwings about as long as elytra and not folded apically).

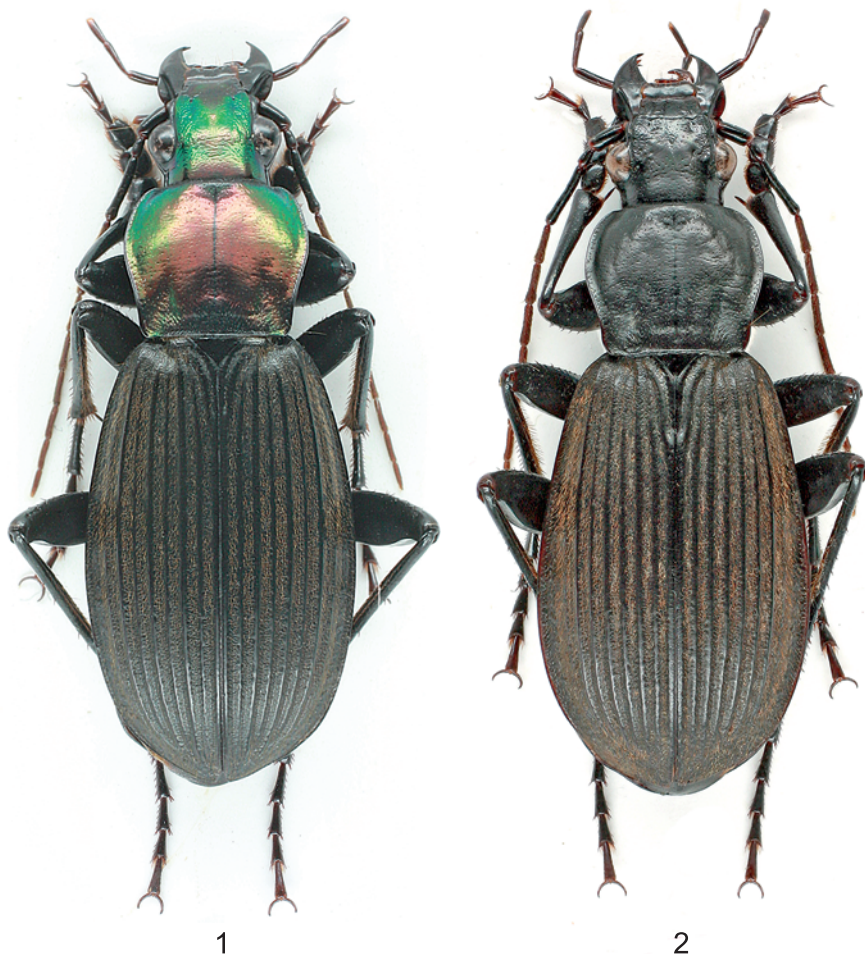
E t y m o l o g y : It is with great pleasure I dedicate this species to my mother, a constant encouragement throughout my life, and who has supported my entomological experiences and studies with great but understated interest. The epithet is formed as a noun (name) on the genitive.

D i s t r i b u t i o n : Up to now only known from the type locality.

H a b i t a t : Unknown.

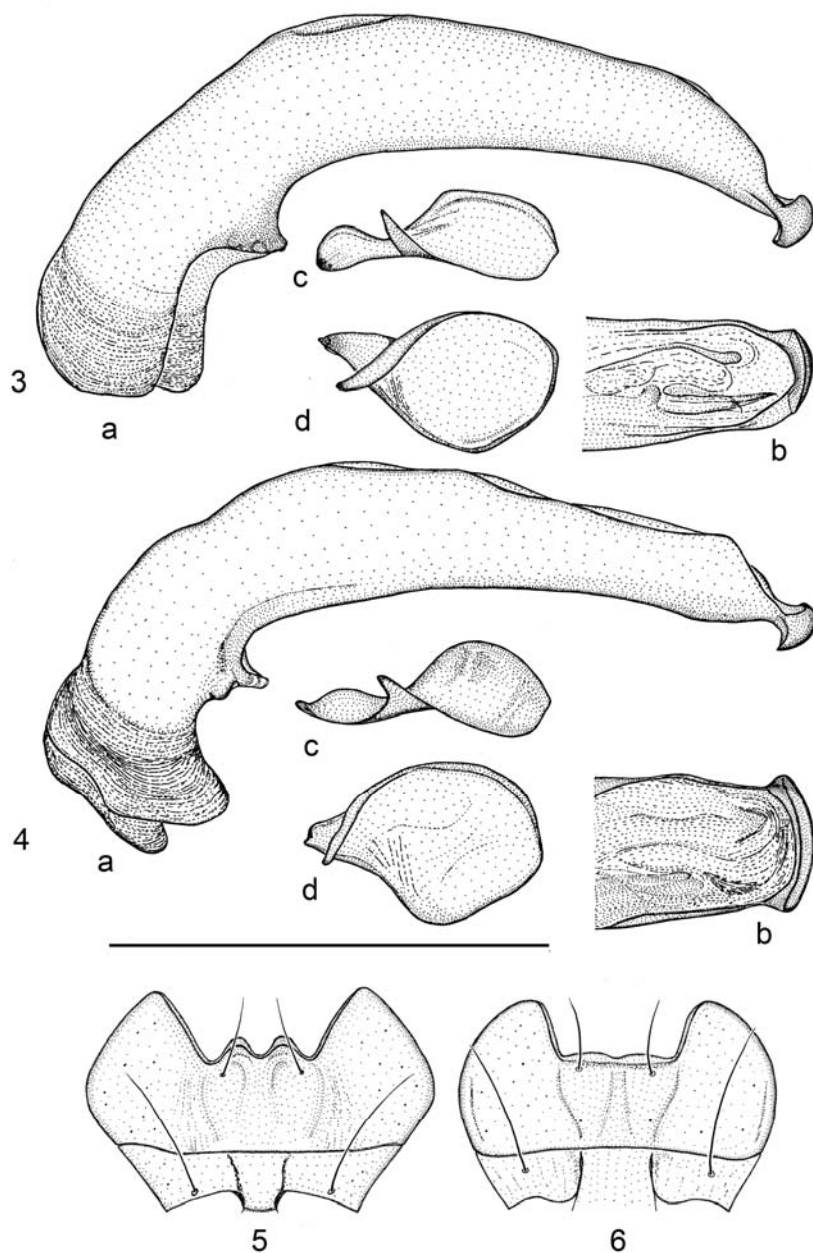
***Chlaenius (Haplochlaenius) klapperichi* JEDLIČKA 1956**

T y p e m a t e r i a l : Holotype ♂ (NMPC), with labels: "KUATUN FUKIEN / China, 15.7.46 / leg. Tschung-Sen" /black print on white label); "Typus" (black printed and framed on red label); "Mus. Nat. Pragae / 25 175 / Inv." (black printed on red label, number handwritten); "Klapperichi / sp. n. / det. Ing. JEDLIČKA" (red label, species name and "sp. n." handwritten in black by Jedlička, last line printed); with labels subsequentl added: "40 II" handwritten with pencil on white label); "CHLAENIUS / (Haplochlaenius) / klapperichi / Jedlicka 1956 / det. M. Hartmann" (black print on white label). Paratype ♀ (NMPC) with labels: "KUATUN FUKIEN / China, 14.9.46 / leg. Tschung-Sen" /black print on white label); "Cotypus" (black printed and framed on red label); "Mus. Nat. Pragae / 25 176 / Inv." (black printed on red label, number handwritten); Klapperichi / sp. n. / det. Ing. Jedlička" (white label, species name and "sp. n." handwritten in black by Jedlička, last line printed); with labels subsequentl added: "40 II" handwritten with pencil on white label); "CHLAENIUS / (Haplochlaenius) / klapperichi / Jedlicka 1956 / det. M. Hartmann" (black print on white label).



Figs 1-2: *Chlaenius*, habitus: (1) *Chl. klapperichi* JEDLIČKA; (2) *Chl. evae* nov.sp.

Notes on types: Jedlička founded his species on four specimens and noted that the "Type" (=holotype) would be stored in his collection (which is now in the Prague museum) and "Cotypen" (= paratypes) in the Klapperich collection (today stored in several collections, among them also in the Paris museum, as proved by a photograph). But the distribution of the type material was obviously later changed, as in the Prague museum the holotype and a female paratype are extant. The holotype was originally pinned, later glued to card with genitalia extracted, the right middle leg is missing, the hind leg is separated from the body and glued separately to card, so also is part of the right antennae, the median lobe, partly broken, is in an embedding agent in ventral position together with both parameres. The paratype is pinned and in good condition, only the right antennomeres 6 to 11 are missing.



Figs 3-6: *Chlaenius*: 3, 4: Male genitalia: (3) *Chl. klapperichi* JEDLIČKA; (4) *Chl. evae* nov.sp.; (a) Median lobe, lateral aspect; (b) Median lobe, apical lamella, dorsal aspect; (c) Right paramere; (d) Left paramere. 5-6: Mentum and submentum, ventral aspect; (5) *Chl. klapperichi* JEDLIČKA; (6) *Chl. evae* nov.sp.; scale bar: 4.8 mm (3, 4); 1.5 mm (5, 6).

D i a g n o s i s : A *Haplochlaenius* species of large size with hindwings reduced, head middle-sized with green-brassy reflection, pronotum middle-sized, cordate, with red-coppery reflection (sometimes also with an additional greenish tinge), elytra oblong, black, with carinate intervals, legs black, antennae with antennomeres 1 to 3 black, the remaining ones brownish. Habitus see Fig. 1.

R e d e s c r i p t i o n : Body length 22.7-25.8 mm; width 8.7 - 9.5 mm.

Colour, microsculpture: Elytra, abdomen, and legs black, head with green-brassy reflection, pronotum with red-coppery reflection (often also with an additional greenish tinge), palpi dark, antennae with antennomeres 1 to 3 black, the remaining ones brownish. Microsculpture pattern on head consisting of very weakly engraved isodiametric meshes, somewhat stronger on pronotum, hence surface shiny, on elytra isodiametric meshes in males strongly engraved, surface only moderately shiny, in females meshes more strongly engraved, causing a completely matt surface.

Head (Fig. 1) middle-sized, somewhat narrower than pronotum (ratio PW/HW: 1.25-1.35, holotype), frons and vertex moderately convex, finely and sparsely punctured, between eyes unpunctured, with frontal furrows shallow, elongate, clypeus finely punctured, bisetose. Eyes medium-sized, almost hemisphaerically protruding, temples short, rectilinear, of about one sixth of eye diameter (seen from above). Mandibles short and broad, palpi elongate, slender, apical palpomeres not dilated. Mentum (Fig. 5) bisetose, with mentum tooth bilobed, lobes distinctly protruding, hardly one third as long as lateral lobes, submentum bisetose. Ligula wide, bisetose. Antennae long and slender, in males reaching scarcely to middle of elytra, and with about antennomere 5 reaching pronotal base, antennomeres 1 and 2 with some fine setae apically except obligatory setae, antennomere 3 with fine setae of different length, sparsely arranged, about 3.4 times as long as 2 in males, antennomere 4 to 11 pubescent.

Pronotum (Fig. 1) medium-sized, cordate, only somewhat wider than long (ratio PW/PL: 1.10-1.14 (holotype), widest somewhat before basal half. Basal margin only a little wider than anterior margin (ratio PAW/PBaW: 0.85 [holotype] - 0.91), and somewhat narrower than pronotum at middle (ratio PW/PBaW: 1.25-1.27 [holotype]). Anterior margin weakly emarginate, anterior angles rounded, somewhat projecting forward, from there slightly curved laterally to basal two thirds, from there basad distinctly sinuately narrowed to posterior angles which are somewhat obtuse-angled and widely rounded at tip. Only 1 lateral seta in posterior angles, distinctly positioned forward at about length of antennomere 2. Disc weakly convex, lateral channel relatively wide (about as wide as antennomere 2), in some specimens somewhat narrower. Basal fovea large but shallow, continuing apicad in a narrow furrow and reaching the end of basal third. Midline distinct, deeply engraved, especially in apical half, hardly reaching anterior and basal margin. Base and basal foveae with dense and coarse seta bearing punctures, base at middle with some vertical wrinkles. Disc with sparse and fine punctures, bearing finest short setae, toward lateral and anterior margin with somewhat more dense and more coarse seta bearing punctures, setae on disc mostly rubbed off.

Elytra long-ovate with humeri completely rounded, moderately convex, base about as wide as pronotal base (ratio EL/EW: 1.44-1.56 (holotype), widest distinctly behind middle. Scutellar pore puncture small, at beginning of stria 1, scutellar stria long. Striae finely punctured. Intervals 1 to 7 keel-like elevated, the odd intervals more strongly formed and more raised than the even ones, interval 8 in the basal half flat or weakly

convex, with a weak or suggested carina in the apical half. Without subapical excision, each elytron weakly obtuse-angled at apex, rounded at tip or slightly dentate, elytra slightly gaping. The faces of the carina and the other not carinate intervals with dense, somewhat granulate punctures bearing yellowish-brownish setae, the edge of the keels glabrous and shiny. Hindwings reduced, about half as long as elytra.

Sterna: Pro- and mesosternum, mesepisterna and abdomen with fine and scattered punctures bearing fine, short setae, metepisterna and metasternum with somewhat denser and stronger punctures. Prosternal process elongate, somewhat acutely narrowed, unmarginated, somewhat deepened at middle (ventral view). Metepisterna very short, somewhat wider at anterior margin than long at ventral margin.

Legs: Average for *Haplochlaenius* species, protarsi of males with protarsomeres 1-3 strongly widened and with ventral spongy pubescent vestiture.

Median lobe of aedeagus: Large (with basal part partly open), voluminous, gently arcuate, with well developed apical capitulum at about right angle to apical part in lateral view (Fig. 3a), apical lamella in dorsal view Fig. 3b.

C o m p a r i s o n s : *Chl. klapperichi* JEDL. can be compared with the macropterous species *Chl. costiger* CHAUDOIR 1856, *Chl. insularis* (UENO 1964), and *Chl. sabahensis* KIRSCHENHOFER 1998, also having the head and pronotum with metallic reflection, the legs completely black, and the elytra carinate, but is readily separated by the stouter body with long-ovate elytra with humeral angle almost completely reduced (caused by brachyptery), the male genitalia are also different. In habitus it is closest to *Chl. evae* nov.sp. and *Chl. nanlingensis* DEUVE & TIAN 2005 which are also brachypterous and hence have about the same form of the elytra (humeri only somewhat more suggested) with intervals carinate but these species are completely black (with exception of the light antennomeres 4-11), additionally the construction of the median lobes is different (see Figs 3a, b, 4a, b, and Fig. 15 in DEUVE & TIAN 2005).

D i s t r i b u t i o n : Described from the Chinese Province of Fujian, the species was recorded as new for Jiangxi (KIRSCHENHOFER 2012), based on some specimens I have sent him and coming from the series mentioned below (Unfortunately the shown habitus photograph of a specimen said as coming from the locality "Wufugang" has a different origin. It deals with a paratype now in the Paris museum).

In the collection of the Institute of Zoology, Chinese Academy of Sciences, Beijing, there is a male specimen, documented by a photograph, with following data: Jiangxi, Anfu, Wugongshan, N27.44591, E114.18827, 1220m, 2006.6.27, Liu Ye, Liang Hongbin, Teiji Sota leg., confirming, together with the material cited below, the assumption that this species (as in the case of *Chl. nanlingensis*, see below) has a wider distribution than originally thought.

M a t e r i a l e x a m i n e d (except types):

15♂♂, 33♀♀: China, NE Jiangxi, Wufugang, 1100-1300 m, eastern slopes, 27°59'N/118°02'E, 14.V.-20.VI.2011 (NMW, cTURN, WR). 1♂, 1♀ with same data but: 1140-1500 m, 29.IV.-27.V.2010 (cWR).

H a b i t a t : No notes on the biotope or circumstances of collecting were made in the description. The specimens from Wufugang were collected in a secondary mixed forest with *Pinus* sp. and *Castanopsis* sp., mostly in dry places with rich shrub undergrowth, with the help of pitfall traps provided with a mixture of beer and ethylene glycol.

***Chlaenius (Haplochlaenius) nanlingensis* DEUVE & TIAN 2005**

Material examined: China: Guangxi: 1♂, 7♀: NE Guangxi, Xing'an Co., Mao'er Shan, Mao'er Mountain Nature Reserve, 823 m, N 25.51.497'/E 110.29.803', V 2007, M. Häckel & R. Sehna leg. (cHÄCK, cSEHN, cWR, NHW). 1♂, 4♀: Mao'er Shan, 493 m / N 25.51.11' / E 110. 29.15', R. Sehna leg. (cSEHN, cWR). 2♀: Mao'er Shan, 800-1100 m, 25°52'N/110°29'E (dense primary forest with strong bamboo, steep slopes), 28.V.-9.VI.2009, Chr. Reuter leg. (cREUT, cWR). - Guizhou: 2♀: SE.Guizhou, Dushan, Gengding Shan env., 1445 m, N 25°52.5'/E 107°38', M. Häckel & R. Sehna leg. (cSEHN, cWR.)

The description based on one male, coming from the slopes of the Mount Shikengkong situated in the Nanling Nature reserve (Dadongshan, Lianzhou) in the Chinese Province of Guangdong, close to the border to Hunan. The material from the Mao'er Shan fits very well the description, and, though not having investigated the type which is stored in the collection of the South China Agricultural University, I refer the name *Chl. nanlingensis* to the material noted above. A habitus photograph of the holotype kindly provided by M. Tian enabled the species to be recognised beyond doubt without having to examine the specimen itself. The species is brachypterous (this fact was not mentioned in the description), one specimen investigated has the hindwings hardly as long as half of elytral length, but it is obviously able to have a wider range, the distance between the Mount Shikengkong and the Mao'er Shan is about 270 km, with a landscape surely forming no considerable geographical barriers which could stop an expansion of brachypterous species, also the findings in the Gengding Shan in the southeast of the Province Guizhou, still more north-westwards, speaks for this assumption. Just recently I received some habitus photographs of specimens stored in the Institute of Zoology, Chinese Academy of Sciences, Beijing and identified as *Chl. nanlingensis*, coming from Hunan (Shaoshan-shihu) and from Sichuan (Ya'an), confirming that the species has a wider range than originally thought. New records for the Chinese provinces of Guangxi, Guizhou, Hunan, and Sichuan.

Notes: The genus *Vachinius* CASALE 1984 was founded on several species: *V. subglaber* (ANDREWES 1937), type species from Sikkim, *V. pseudoglaber* CASALE 1984, from northern India, *V. holzschuhi* CASALE 1984 from eastern Nepal, and *V. pilosus* CASALE 1984 from Vietnam, underlining that these species are typical Chlaeniini, near to species of the genus *Macrochlaenites* KUNTZEN 1919 but are distinguished by having a cordate pronotum, strongly sinuate toward base, a dimorphic apex and integument of elytra in males and females, a different construction of the male genitalia, and reduced wings. Later, further species were described, one from Thailand: *V. thailandensis* MORVAN 1991, three from China: *V. deuvei* MORVAN 1997 (Guangxi), *V. hunanus* MORVAN 1997 (Hunan), and *V. wrasei* KIRSCHENHOFER 2003 (Guangdong), one from Sulawesi: *V. baehri* KIRSCHENHOFER 1998, and one from Burma: *V. burmanensis* LASSALLE 2001. Investigating a larger number of *Chlaenius* species belonging to subgenus *Haplochlaenius* LUTSHNIK 1933 (a part of them placed under *Macrochlaenites* in older taxonomic classifications) I found partly the same characters peculiar to species of *Vachinius*, such as the construction of the mentum, the sinuate pronotum, the partly occurring carinate elytral intervals, a reduction of the hindwings and the morphology of the male genitalia. The classification of the new species described above posed problems and I decided to describe it in the genus *Chlaenius*, subgenus *Haplochlaenius*. So it seems necessary to clarify the systematic position and the taxonomic rank of the genus *Vachinius* within the tribe Chlaeniini and especially its relationship to *Haplochlaenius* by

Careful examination of all taxa (see also the remarks in DEUVE & TIAN 2005), including also genetic techniques. Just recently KIRSCHENHOFER (2012) described two further *Vachinius* species from Laos: *V. hajeki* and *V. laosensis*, and at this occasion he transferred *Chl. klapperichi* to the genus *Vachinius*, subgenus *Sphodromimus* CASALE 1984, on the basis of exoskeletal characters ("aufgrund der ekto skelettalen Merkmale") but without conclusively substantiated discussion. As the problem of the systematic position of *Vachinius* is not yet solved this decision is not followed here.

Acknowledgements

I am pleased to express my heartfelt gratitude to the following colleagues and friends. I am very thankful to the owners of the specimens examined in this study, Jiří Hájek (National Museum Prague), Martin Häckel, Christoph Reuter, Rostislav Sehnal, and Jaroslav Turna, for loan of this material including types. I have to thank Hongbin Liang, Hongliang Shi, and Ye Liu (Institute of Zoology, Chinese Academy of Sciences, Beijing) and Mingyi Tian (South China Agricultural University, Wushan) for much advice and sending some photographs of *Chlaenius* species (showing habitus, details of morphology, and median lobe of aedeagus) by way of comparison, and for allowing me to quote their data. I appreciate very much the support of Jon Cooter (Oxford) for reading a previous draft of the manuscript on which this paper is based. Further on I would like to thank Bernd Jaeger (Museum für Naturkunde der Humboldt-Universität, Berlin) for preparing the habitus photographs, for technical support, and much help in literature.

Zusammenfassung

Chlaenius (Haplochlaenius) evae nov.sp. (locus typicus: China, Sichuan prov., Qingcheng Hou Shan, 70 km NW Chengdu, 1500 m) wird beschrieben, *Chl. (Haplochlaenius) klapperichi* JEDLIČKA 1956 und *Chl. (Haplochlaenius) nanlingensis* DEUVE & TIAN 2005 wiederbeschrieben und der Habitus, das Mentum und Submentum und die männlichen Genitalien der ersten beiden Arten abgebildet. *Chl. (Haplochlaenius) nanlingensis* wird als neu für die chinesischen Provinzen Guangxi, Guizhou, Hunan und Sichuan gemeldet.

References

- BONELLI F.A. (1810): Observations entomologiques. Première partie (cicindélètes et portion des carabiques) [with the "Tabula synoptica exhibens genera carabicornum in sectiones et stirpes disposita"]. — Turin, 58 pp. + 1 table. [Reissued in 1812 in: Memorie della Reale Accademia della Science di Torino **18**: 21-78.]
- CASALE A. (1984): The new Asiatic genus *Vachinius* (Carabidae: Callistinae) with three new species. — Bollettino del Museo Regionale di Scienze Naturali, Torino **2**: 371-382.
- CHAUDOIR M. DE. (1856): Mémoire sur la famille des Carabiques. 6-e partie. — Bulletin de la Société Impériale des Naturalistes de Moscou **29** (3): 187-291.
- DEUVE Th. & M.-I. TIAN (2005): Nouveaux *Leistus* et *Haplochlaenius* de Chine (Coleoptera, Caraboidea). — Coléoptères **11** (11): 109-121.
- JEDLIČKA A. (1932): Noví Carabidi z jižní Číny (III. díl). Neue Carabiden aus Süd-China (III. Teil). — Časopis Československé Společnosti Entomologické **29**: 38-48.
- JEDLIČKA A. (1956): Příspěvek k poznání palearktických Carabidů. Beitrag zur Kenntnis der palearktischen Carabiden. (Coleoptera). — Sborník Entomologického Oddělení Národního Muzea v Praze **30** [1955]: 207-220.

- KIRSCHENHOFER E. (1998): Neue Chlaeniinae der palaearktischen und orientalischen Region (Coleoptera, Carabidae). — *Entomofauna* **19** (20): 317-332.
- KIRSCHENHOFER E. (2003): Über neue und wenig bekannte Carabidae aus der äthiopischen und orientalischen Region (Coleoptera: Carabidae, Chlaeniinae, Pterostichinae). — *Entomofauna* **24** (3): 29-60.
- KIRSCHENHOFER E. (2012): Neue Arten der Gattung *Vachinius* CASALE, 1984 von Laos (Coleoptera: Carabidae). — *Mitteilungen des internationalen entomologischen Vereins* **37** (1/2): 83-90.
- KUNTZEN H. (1919): Die Carabidenfauna Deutsch-Südwestafrikas. — *Mitteilungen aus dem Zoologischen Museum in Berlin* **9** (2): 91-156.
- LASSALLE B. (2001): Chasses en Birmanie (Coleoptera Carabidae). — *L'Entomologiste* **57** (6): 239-243.
- LUTSHNIK V.N. (1933): Synopsis subgenerum palaearcticorum generis *Chlaenius* BON. — *Časopis Československé Společnosti Entomologické* **30**: 169-172.
- MORVAN P. [D]. (1991): Contribution à la connaissance des coléoptères Carabidae de Thaïland. — *Elytron* **5**: 55-62.
- MORVAN P. [D]. (1997): Etude faunistique des coléoptères du Népal avec extension aux provinces chinoises du Yunnan et du Sichuan. Genre *Andrewesius* JEDLIČKA et *Vachinius* CASALE. — *Loened Aziad Amprevaned Feuraskelleged C'Hwiledig* **2**: 1-23.
- UÉNO S.-I. (1964): Notes on carabid beetles from the Amami group of the Ryu-Kyu islands. — *Kontyû* **32**: 249-263.

Author's address:

David W. WRASE
Dunckerstr. 78
D-10437 Berlin, Germany
E-mail: carterus@gmx.de

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Linzer biologische Beiträge](#)

Jahr/Year: 2012

Band/Volume: [0044_2](#)

Autor(en)/Author(s): Wrase David W.

Artikel/Article: [A new species of genus Chlaenius BONELLI 1810, subgenus Haplochlaenius LUTSHNIK 1933 from China \(Coleoptera, Carabidae, Chlaeniini\) and notes on two species previously described 1195-1205](#)