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**Full specific status of
Calochroa corbetti (W. Horn, 1899),
and notes on the tiger beetle fauna of Myanmar
(Burma)
(Coleoptera: Cicindelidae)**

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Summary: A poorly known species, *Calochroa corbetti* (W. Horn, 1899), was recently rediscovered in a locality of southern Myanmar (Burma). Its status is reviewed and it is considered to be a distinct species, other than the syntopically occurring *C. bicolor* (Fabricius, 1781). Behavioural and morphological distinctive characters are provided, and one of the two male syntypes (deposited in the DEI), is designated to be the species' lectotype. A full list of the 128 tiger beetle species known to occur in Myanmar is given.

Zusammenfassung: Es wird über den Wiederfund der seltenen und weitgehend unbekannten Art *Calochroa corbetti* (W. Horn, 1899) im südlichen Myanmar (Burma) berichtet. Auf Grund des neuen Materials wird die Berechtigung des Artstatus an Hand morphologischer Charakteristika und ethologischer Beobachtungen dokumentiert. Ein Lectotypus wird festgelegt. Eine Zusammenstellung aller 128 aus Myanmar gemeldeter Arten wird vorgelegt.

Introduction

During several trips to Myanmar (previously known as Burma), the second author (MK) has met various attractive species of the Oriental tiger beetle genus *Calochroa* Hope, 1838. In particular, he had the good luck of observing and collecting three specimens (one male and two females) of a hitherto poorly known species, *Calochroa corbetti* (W. Horn,

1899), which had been described, as a full species by its own, based on two male specimens only, from “Tharrawaddy”, in southern Myanmar (HORN 1899), and apparently had never been collected again subsequently. Full specific status was kept for *corbetti* in later literature too, namely by FOWLER (1912) and by Walther HORN himself in his 1915 and 1926 catalogues, but in 1938 HORN downgraded *corbetti* to a merely sub-specific status, under *Cicindela bicolor* Fabricius, 1781, stating the following: „*C. Corbetti* halte ich jetzt nur noch für eine Rasse von *C. bicolor* F. Die Form des Penis spricht auch dafür“ (HORN 1938). Such a statement was also followed by RIVALIER (1961), who, when ascribing *bicolor* to the genus *Calochroa*, considered *corbetti* to merely be a subspecies of it, a placement more recently kept by WIESNER (1992) too. As to ACCIAVATTI & PEARSON (1989), while treating *bicolor* and its subspecies, they did not mention *corbetti*, quite reasonably, as it occurs outside the political boundaries of the Indian subcontinent.

However, based on second author's field observations, such a sub-specific status cannot be retained anymore, as *corbetti* has clearly shown itself to be a separate full species, other than the co-occurring and closely related *bicolor*. Both species, as a matter of fact, have been collected by the second author while syntopically active on a narrow forest track, sparsely covered by grasses, in shady situations, just in a secondary jungle hilltop (altitude: 500 m above sea level) at the environs of Nyaunggon village, near Taikkyi, approximately 40 km north of Yangon (formerly Rangoon).

In addition to *Calochroa bicolor* and *C. corbetti*, eight other tiger beetle species were collected at the same locality: *Heptodonta arrowi* (W. Horn, 1900), *Prothyma* (*Genoprothyma*) *bouvieri* (W. Horn, 1896), *Calochroa mariae* (Gestro, 1893), *Lophyra* (*Spilodia*) *atkinsonii* (Gestro, 1893), *L. (S.) lineifrons* (Chaudoir, 1865), *Cylindera* (*Ifasina*) *holosericea* (Fabricius, 1801), *C. (I.) paucipilina* (Acciavatti & Pearson, 1989), and *Callytron andersoni* (Gestro, 1889).

Behaviour

Calochroa corbetti showed a very particular, quite unusual, behaviour, other than that of *C. bicolor* from the very same locality or from other Myanmar localities. All the three *corbetti* specimens, in fact, moved around quite slowly and in a markedly jerky way, just as a unknown spe-

cies of parasitic wasp which was also observed in the area. Even the body colour and the elytral markings were roughly similar to the colour and markings of the mentioned wasp. When the *corbetti* specimens were approached in the field, they didn't attempt to escape and rested almost motionless, apparently relying on their strong overall resemblance with the mentioned wasp. Thus, because of such a behaviour, they were quite easily collected. In contrast, all specimens of *bicolor* appeared to be very agile, rapidly running on the ground, and escaping by flight from a distance of three meters at most. Thus, specimens could be collected only by approaching them very slowly and carefully.

C. bicolor was quite common around Pegu and in the Yangon district, as it was found in jungles, small forests and bushy areas, both in shadowed and sunny situations. In contrast, *C. corbetti* was collected just by the mentioned three specimens and was not seen anywhere else. Unfortunately, the site where *corbetti* was found is quite far from the usual roads and it lies within a military area. Therefore, also due to the present political situation of the country, further specimens will unlikely be collected in the near future.

Morphology

Calochroa bicolor (Fabricius, 1781)

Length (without labrum): 15.2–18 mm. Larger in size, with proportionally longer, narrower and immaculate elytra. Head dull black above, finely rugose, with clypeus, frons, antennal plates and genae metallic bluish-green; labrum 6-haired, 5-toothed in front, wholly metallic bluish-green. Scape and segments 2–4 of antennae metallic dark bluish-green, the remaining antennomeres dull black, evenly and finely pubescent. Pronotum dark green with metallic green margins; 5–8 white recumbent setae on lateral margins of middle lobe, 2–3 more on lateral sides of the anterior lobe. Elytra immaculate, dull black with a slight velvety green hue, and with some narrow, metallic, bluish-green reflections on the side borders and the apical edge. Femora metallic green with bluish reflections, tibiae and tarsi metallic bluish-green, trochanters blackish-brown. Sterna laterally setose. Anterior abdominal sternites densely setose at sides; 6th and 7th abdominal sternites, and side margins of 4th and 5th, reddish-testaceous. Aedeagus large, wide, briefly pointed apically, with a slight carina on the left side from below the apex to nearly the middle (fig. 1d).

C. bicolor is quite a variable species, widely distributed from Sri Lanka and India to south-east Asia. Its nominal subspecies is known to occur in Nepal, north-eastern India (Bihar, Assam, West Bengal, Meghalaya, doubtfully Maharashtra), Bangladesh, as well as in Myanmar (Burma) and Thailand. In addition to the nominate form, three more subspecies are presently recognized (ACCIAVATTI & PEARSON 1989):

ssp. *haemorrhoidalis* (Wiedemann, 1823), from Sri Lanka, southern India (Andhra Pradesh, Karnataka, Tamil Nadu) and east-central India (Madhya Pradesh, Orissa, Bihar): it has coppery head and pronotum, and blackish elytra with a small yellow humeral dot and two large yellow spots one behind the other on each elytron;

ssp. *atava* (W. Horn, 1920) from Pakistan and north-western India (Uttar Pradesh, Himachal Pradesh, Punjab), which is coloured as the nominal subspecies but possesses the markings as *Calochroa bicolor haemorrhoidalis* (Wied.).

ssp. *xanthospilota* (Fowler, 1912), also recorded from Sri Lanka and south-western India (Kerala and Tamil Nadu), having smaller spots than the previous subspecies.

Tab. 1: Elytral length (from hind apex of scutellum to the elytral apex; EL) vs. elytral width (both elytra; EW) and forepart length (pronotum + head without labrum; FL), in *Calochroa bicolor* and *C. corbetti*.

	EL	EW	EL/EW	FL	EL/FL
<i>C. bicolor</i>					
Nyaunggon nr Taikkyi, male	9.2 mm	5.5 mm	1.67	5.2 mm	1.77
Nyaunggon nr Taikkyi, male	9.5 mm	5.2 mm	1.82	5.4 mm	1.75
Nyaunggon nr Taikkyi, female	10.5 mm	6.0 mm	1.75	5.7 mm	1.84
Nyaunggon nr Taikkyi, female	10.0 mm	5.8 mm	1.72	5.4 mm	1.85
<i>C. corbetti</i>					
Nyaunggon nr Taikkyi, male	8.1 mm	5.1 mm	1.59	4.9 mm	1.65
Nyaunggon nr Taikkyi, female	9.1 mm	5.9 mm	1.54	5.5 mm	1.65

***Calochroa corbetti* (W. Horn, 1899)**

Length (without labrum): 13.515 mm. Smaller in size, with proportionally shorter and wider elytra, and conspicuous yellow elytral markings (fig. 1a). Head dull black above, finely rugose, with clypeus, frons, antennal plates and genae metallic golden green; labrum 6-haired, 5-toothed in

front (fig. 1b), wholly metallic golden green with some cuprous reflections. Scape and segments 2–4 of antennae metallic coppery, almost glabrous, the remaining segments dull black, evenly and finely pubescent. Pronotum dull black, slightly wider than long, finely rugose, glabrous with 5–7 setae on lateral margins of the middle lobe and 2–3 on sides of the anterior lobe. Elytra dull black, proportionally shorter and wider, with a small yellowish humeral spot and a large, yellow, subtriangular-shaped spot about the middle; apical edge microserrulate, narrowly metallic green. Femora metallic light green with coppery reflections, tibiae and tarsi metallic coppery, briefly metallic dark green at the apex of each segment; trochanters rufous-testaceous. Underside almost glabrous, pubescence reduced to a few white hairs on ventral sides of pro- and mesepisterna, mesepimera and coxae, as well as to a few sparse recumbent fine setae on the sides of metasternum; abdominal sternites glabrous, with just a few setae on sides of 1st and 2nd visible segments. Aedeagus smaller and narrower, with a shorter carina on the left side and with the apex slightly bent downwards (fig. 1c).

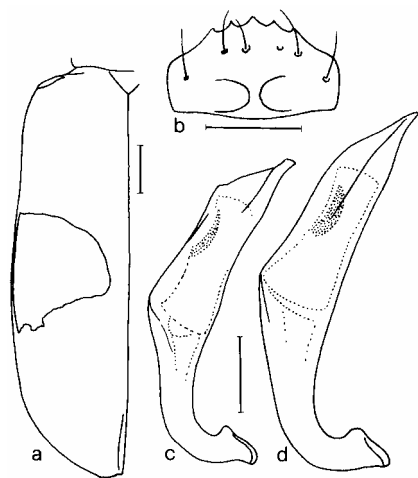


Fig. 1 a–c: *Calochroa corbeti* (W. Horn, 1899), male specimen from Nyaunggon nr Taikkyi, approximately 40 km north of Yangon, Myanmar: a: left elytron; b: labrum; c: aedeagus.

Fig. 1 d: *Calochroa bicolor* (Fabricius, 1781), male specimen from same locality: aedeagus. Scale-lines: 1 mm.

The three recently collected *corbeti* specimens appear to perfectly fit the descriptions provided by HORN (1899) and FOWLER (1912). Moreover, they have been compared to the male syntype specimen deposited in the DEI collection (DÖBLER 1973), and they are absolutely identical with it. Such a type specimen appears to be in good conditions, despite lacking

its left antenna and the front left leg, and it bears the following labels: "Thruddy" (handwritten), "Andrewes" (printed), "Tharrawaddy" (handwritten), "Type! Dr. W. Horn" (printed), "Syntypus" (red printed label), "Coll. W. Horn, DEI Eberswalde" (printed), "Corbetti mihi" (yellowish label, handwritten by W. HORN), and moreover a large, red, handwritten label "Paralectotype (printed), *Cicindela corbetti* W. Horn, by R. E. Acciavatti, 1985" (handwritten). Since the latter designation has been left unpublished so far (ACCIAVATTI & PEARSON 1989), this specimen is herein designated to be the species' lectotype (ICZN, articles 74.1 & 74.7), as it belongs to Horn's collection. Therefore, it was given by the first author (FC) a further red label accordingly.

From the few scanty data which are presently available, *C. corbetti*, unlike *C. bicolor*, seems to be a very localised species, restricted to southern Myanmar only. Besides the large, much different elytral markings, key characters for properly separating it from *bicolor* are the differently coloured labrum and articles 1•4 of antennae, the proportionally shorter and wider elytra, the mostly glabrous underside, the rufous-testaceous trochanters, and the slightly different shape of aedeagus.

Conclusions

The re-establishment of *C. corbetti* as a full species by its own increases now up to 128 the number of tiger beetle species known so far from Myanmar. Historically, the very first list of Burmanese tiger beetles had been given by SCHMIDT-GOEBEL (1846), who listed 24 species in all. Based on Leonardo FEA's material, GESTRO (1888, 1889, 1893) later recorded 39 species, and HORN (1893) added 15 Collyrinae. More recently, PEARSON & CASSOLA (1992) counted 93 species in all (with 12 endemics), CASSOLA & PEARSON (2000) recorded 103 species (19 endemics, or 18%), and SAWADA & WIESNER (2000) listed 111 species, including a few undescribed ones. Our present knowledge indicates 128 species in all (32 or 25% of which are apparently endemic to the country), including a few unpublished records and some species which have been listed by SAWADA & WIESNER (2000) without further data (Table 2). Such a total would make Myanmar to be one of the richest and most diverse countries of South-east Asia (total size: km² 657,740; km²/species ratio: 5,139).

Tab. 2: Up-to-dated checklist of the Tiger Beetles of Myanmar (Burma)

N°	Species	References
1.	<i>Tricondyla (Tricondyla) macrodera</i> Chaudoir, 1860	Naviaux i. l.
2.	<i>Tricondyla (Tricondyla) sp. 1</i> Naviaux i. l. *	Naviaux i. l.
3.	<i>Tricondyla (Tricondyla) tuberculata</i> Chaudoir, 1860	Sawada & Wiesner 2000; Naviaux i. l.
4.	<i>Tricondyla (Tricondyla) g. gestroi</i> Fleutiaux, 1893	Wiesner 1992; Naviaux i. l.
5.	<i>Tricondyla (Tricondyla) mellyi</i> Chaudoir, 1850	Gestro 1893; Wiesner 1992; Sawada & Wiesner 2000; Naviaux i. l.
6.	<i>Tricondyla (Tricondyla) annulicornis</i> Schmidt-Goebel, 1846	Wiesner 1992; Naviaux i. l.
7.	<i>Tricondyla (Tricondyla) sp. 2</i> Naviaux i. l. *	Naviaux i. l.
8.	<i>Protocollyris brevilabris</i> (W. Horn, 1893)	Horn 1893; Naviaux 1995
9.	<i>Neocollyris (Isocollyris) fulgida</i> Naviaux, 1999 *	Naviaux 1999
10.	<i>Neocollyris (Isocollyris) latissima</i> Naviaux, 1999 *	Naviaux 1999
11.	<i>Neocollyris (Isocollyris) sp.</i> Naviaux i. l. *	Naviaux i. l.
12.	<i>Neocollyris (Neocollyris) b. bonellii</i> (Guérin-M., 1834)	Horn 1893, sub <i>ortygia</i> ; Naviaux 1995
13.	<i>Neocollyris (Neocollyris) nepalensis</i> Naviaux, 1994	Sawada & Wiesner 2000
14.	<i>Neocollyris (Neocollyris) m. moesta</i> (Schmidt-G., 1846)	Horn 1893; Naviaux 1995
15.	<i>Neocollyris (Neocollyris) cruentata</i> (Schmidt-G., 1846)	Horn 1893; Naviaux 1995
16.	<i>Neocollyris (Neocollyris) batesi</i> (W. Horn, 1892)	Sawada & Wiesner 2000
17.	<i>Neocollyris (Neocollyris) intermedia</i> Naviaux, 1995	Naviaux 1995; Sawada & Wiesner 2000
18.	<i>Neocollyris (Neocollyris) fuscitarsis</i> (Schmidt-G., 1846)	Horn 1893; Naviaux 1995
19.	<i>Neocollyris (Neocollyris) similis</i> (Lesne, 1891)	Horn 1893, sub <i>lesnei</i> ; Naviaux 1995
20.	<i>Neocollyris (Neocollyris) sp. 1</i> Naviaux i. l. *	Naviaux i. l.
21.	<i>Neocollyris (Neocollyris) sp. 2</i> Naviaux i. l. *	Naviaux i. l.
22.	<i>Neocollyris (Neocollyris) o. orichalcina</i> (W. Horn, 1896)	Naviaux 1995: “..probablement nord de la Birmanie”; Sawada & Wiesner 2000
23.	<i>Neocollyris (Neocollyris) smaragdina</i> (W. Horn, 1894)	Sawada & Wiesner 2000
24.	<i>Neocollyris (Neocollyris) saphyrina</i> (Chaudoir, 1850)	Naviaux 1995: “..probablement dans le nord de la Birmanie”; Sawada & Wiesner 2000
25.	<i>Neocollyris (Neocollyris) rufipalpis</i> (Chaudoir, 1864)	Horn 1893; Sawada & Wiesner 2000
26.	<i>Neocollyris (Orthocollyris) c. crassicornis</i> (Dejean, 1825)	Horn 1893; Naviaux 1995
27.	<i>Neocollyris (Orthocollyris) attenuata</i> (Redtenbacher, 1848)	Sawada & Wiesner 2000
28.	<i>Neocollyris (Leptocollyris) l. linearis</i> (Schmidt-G., 1846)	Horn 1893; Naviaux 1995; Sawada & Wiesner 2000
29.	<i>Neocollyris (Leptocollyris) variicornis</i> (Chaudoir, 1864)	Horn 1893, sub <i>gestroi</i> ; Naviaux 1995; Sawada & Wiesner 1999a, 2000

30. *Neocollyris (Leptocollyris) subtilis* (Chd.)
ssp. *brachycephala* (W. Horn, 1893) Horn 1893; Naviaux 1995
31. *Neocollyris (Leptocollyris) rosea* Naviaux, 1995 Naviaux 1995
32. *Neocollyris (Leptocollyris) v. variitarsis* (Chaudoir, 1860) Horn 1893, sub *schmidtgoebeli*; Naviaux 1995
33. *Neocollyris (Leptocollyris) cylindripennis* (Chaudoir, 1864) Horn 1893; Naviaux 1995
34. *Neocollyris (Leptocollyris) sp. 1* Naviaux i. l. * Naviaux i. l.
35. *Neocollyris (Leptocollyris) sp. 2* Naviaux i. l. * Naviaux i. l.
36. *Neocollyris (Stenocollyris) rubens* (Bates, 1875) Naviaux i. l.
37. *Neocollyris (Pachycollyris)*
sp. *prope assamensis* Naviaux, 1995 Sawada & Wiesner 2000
38. *Neocollyris (Pachycollyris) f. feae* (W. Horn, 1893) Horn 1893; Naviaux 1995
39. *Neocollyris (Pachycollyris) tricolor* Naviaux, 1991 Sawada & Wiesner 2000
40. *Neocollyris (Pachycollyris) smithii* (Chaudoir, 1864) Sawada & Wiesner 2000
41. *Collyris dormeri* (W. Horn, 1898) Naviaux 1995
42. *Collyris mniszechi* Chaudoir, 1864 Horn 1893; Naviaux 1995: "probablement Birmanie"; Sawada & Wiesner 2000
43. *Prothyma (Prothyma) scrobiculata* (Wiedemann, 1823) Wiesner 1992
44. *Prothyma (Paraprothyma) reconciliatrix* (W. Horn, 1900) Rivalier 1964: "Tenasserim"; Wiesner 1992
45. *Prothyma (Paraprothyma) schmidtgoebeli* W. Horn, 1895 Wiesner 1992, Sawada & Wiesner 2000
46. *Prothyma (Genoprothyma) bouvieri* W. Horn, 1896 Cassola & Klícha, this paper
47. *Prothyma (Genoprothyma) birmanica* Rivalier, 1964 * Gestro 1889 & 1893, sub *exornata*?; Rivalier 1964; Wiesner 1992
48. *Prothyma (Genoprothyma) shancola* Sawada & Wiesner, 1998 * Sawada & Wiesner 1998
49. *Heptodonta f. ferrarii* (Gestro, 1893) Gestro 1893; Wiesner 1992
50. *Heptodonta arrowi* W. Horn, 1900 * Wiesner 1992
51. *Heptodonta eugenia* Chaudoir, 1865 Gestro 1889, 1893, Wiesner 1992
52. *Heptodonta pulchella* (Hope, 1831) Sawada & Wiesner 2000
53. *Pronyssa nodicollis* Bates, 1874 Sawada & Wiesner 1999b
54. *Rhytidophaena feae* (Gestro, 1889) * Gestro 1889, 1893; Wiesner 1992; Sawada & Wiesner 1999a
55. *Rhytidophaena werneri* Sawada & Wiesner, 1998 * Sawada & Wiesner 1998
56. *Therates cribratus* Fleutiaux, 1893 Sawada & Wiesner 2000
57. *Therates waagenorum* W. Horn, 1900 Wiesner 1992
58. *Therates concinnus* Gestro, 1888 * Gestro 1888, 1893; Wiesner 1992
59. *Therates chenelli* Bates, 1878 Wiesner 1992
60. *Therates sp. prope chenelli* * Sawada & Wiesner 2000
61. *Therates sp. prope apiceflavus* * Sawada & Wiesner 2000
62. *Therates murzini* Wiesner, 1999 * Wiesner, 1999
63. *Therates myanmarensis* Wiesner, 1999 * Wiesner 1999

64. *Therates obliquus* Fleutiaux, 1893 *
 65. *Therates* sp. *prope obliquus* *
 66. *Therates crebrepunctatus* W. Horn, 1923
 67. *Therates nagaii* Sawada & Wiesner, 2000 *
 68. *Therates miyamai* Sawada & Wiesner, 2000 *
 69. *Therates yamaokai* Sawada & Wiesner, 2000 *
 70. *Therates fruhstorferi* W. H. ssp. *vitalisi* W. Horn, 1913
 71. *Calochroa flavomaculata* (Hope, 1831)
 72. *Calochroa octonotata* (Wiedemann, 1819)
 73. *Calochroa i. interruptofasciata* (Schmidt-G., 1846)
 74. *Calochroa anometallescens* (W. Horn, 1893)
 75. *Calochroa nosei* Sawada & Wiesner, 2000 *
 76. *Calochroa cariana* (Gestro, 1893)
 77. *Calochroa laurae* (Gestro, 1893)
 78. *Calochroa mariae* (Gestro, 1893) *
 79. *Calochroa o. octogramma* (Chaudoir, 1852)
 80. *Calochroa salvazai* (Fleutiaux, 1919)
 81. *Calochroa assamensis* (Parry, 1844)
 82. *Calochroa b. bicolor* (Fabricius, 1781)
 83. *Calochroa corbetti* (W. Horn, 1899)
 84. *Lophyridia plumigera* (W. H.) ssp. *macrograptina* (Acciavatti & Pearson, 1989)
 85. *Lophyridia funerea* (Macleay, 1825)
 86. *Lophyridia a. angulata* (Fabricius, 1798)
 87. *Cosmodela duponti* (Dejean, 1826)
 88. *Cosmodela virgula* (Fleutiaux, 1893)
 89. *Cosmodela fleutiauxi* (W. H.) ssp. *rufosuturalis* (Mandl, 1954)
 90. *Cosmodela nagaii* Sawada & Wiesner, 1999 *
- Wiesner 1992
Sawada & Wiesner 2000
Wiesner 1992
Sawada & Wiesner 2000
Sawada & Wiesner 2000
Sawada & Wiesner 2000
Wiesner 1999
Gestro 1889, 1893, sub *sempunctata* Fabr.; Wiesner 1992
Gestro 1889, 1893; Wiesner 1992; Sawada & Wiesner 2000
Gestro 1889, 1893; Wiesner 1992
Wiesner 1992
Sawada & Wiesner 2000
Gestro 1893; Wiesner 1992
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Gestro 1893; Wiesner 1992; Cassola & Klícha, this paper
Wiesner 1992; Cassola & Klícha, this paper
Wiesner 1992; Sawada & Wiesner 2000
Gestro 1889, 1893, sub *chloris* Hope?; Wiesner 1992; Sawada & Wiesner 2000
Gestro 1889, 1893, sub *sumatrensis* Hbst.; Sawada & Wiesner 2000
Gestro 1893; Wiesner 1992; Sawada & Wiesner 2000
Gestro 1889 & 1893, sub *aurulenta* Fabr.; Wiesner 1992; Sawada & Wiesner 1999a, 2000
Naviaux i. l.
Sawada & Wiesner 1999a

91. *Lophyra (Lophyra) fuliginosa* (Dejean, 1826) Gestro 1889, 1893; Wiesner 1992; Sawada & Wiesner 2000
92. *Lophyra (Lophyra) c. cancellata* (Dejean, 1825) Wiesner 1992; Sawada & Wiesner 1999a
93. *Lophyra (Lophyra) catena* (Fabricius, 1775) Gestro 1889, 1893
94. *Lophyra (Spilodia) s. striolata* (Illiger, 1800) Gestro 1889, 1893; Wiesner 1992; Sawada & Wiesner 1999a, 2000
95. *Lophyra (Spilodia) multiguttata* (Dejean, 1825) Naviaux i. l.
96. *Lophyra (Spilodia) lineifrons* (Chaudoir, 1865) Gestro 1889, 1893; Wiesner 1992; Sawada & Wiesner 2000
97. *Lophyra (Spilodia) atkinsonii* (Gestro, 1893) * Gestro 1893, Wiesner 1992
98. *Naviauxella davisoni* (Gestro, 1889) Gestro 1889, 1893; Cassola 1988; Wiesner 1992
99. *Cylindera (Cylindera) delavayi* (Fairmaire, 1886) Gestro 1893, sub *funebis* Schm.-G.; Wiesner 1992; Sawada & Wiesner 2000
100. *Cylindera (Setinterindenta) rhytidopteroides* (W. Horn, 1924) Sawada & Wiesner 1999a
101. *Cylindera (Leptinomera) brendelliana* Naviaux, 1991 Cassola 1995; Sawada & Wiesner 2000
102. *Cylindera (Ifasina) foveolata* (Schaum, 1863) Gestro 1889, 1893; Wiesner 1992; Sawada & Wiesner 2000
103. *Cylindera (Ifasina) cyclobregma* (Acciavatti & Pearson, 1989) Wiesner 1992; Sawada & Wiesner 2000
104. *Cylindera (Ifasina) holosericea* (Fabricius, 1801) Wiesner 1992
105. *Cylindera (Ifasina) viduata* (Fabricius, 1801) Gestro 1889, 1893, sub *chlorochila* Chd.; Gestro 1893, sub *triguttata* Hbst.; Wiesner 1992
106. *Cylindera (Ifasina) fallaciosa* (W. Horn, 1897) Gestro 1893, sub *viridilabris* Chd.; Wiesner 1992; Sawada & Wiesner 2000
107. *Cylindera (Ifasina) s. spinolae* (Gestro, 1889) Gestro 1889, 1893; Wiesner 1992; Sawada & Wiesner 2000
108. *Cylindera (Ifasina) paucipilina* (Acciavatti & Pearson, 1989) Wiesner 1992
109. *Cylindera (Ifasina) subtilesignata* (Mandl, 1970) Wiesner 1992
110. *Cylindera (Ifasina) decempunctata* (Dejean, 1825) Wiesner 1992
111. *Cylindera (Ifasina) modica* (Gestro, 1893) * Gestro 1893; Wiesner 1992
112. *Cylindera (Ifasina) humillima* (Gestro, 1893) * Gestro 1893; Wiesner 1992
113. *Cylindera (Ifasina) sikhimensis* (Mandl, 1982) Wiesner 1992

114. *Cylindera (Ifasina) k. kaleea* (Bates, 1866) Sawada & Wiesner 1999a
 115. *Cylindera (Eugrapha) iravaddica* (Gestro, 1893) Gestro 1893; Wiesner 1992
 116. *Cylindera (Eugrapha) minuta* (Olivier, 1790) Gestro 1889, 1893; Wiesner 1992
 117. *Cylindera (Eugrapha) mutata* (Fleutiaux, 1893) Wiesner 1992
 118. *Cylindera (Eugrapha) agnata* (Fleutiaux, 1890) Gestro 1893, sub *cognata* Wied.?; Wiesner 1992
 119. *Cylindera (Eugrapha) venosa* (Kollar, 1836) Pearson & Cassola 1992; Acciav. & Pearson 1989 ?; Sawada & Wiesner 1999a
 120. *Cylindera (Verticina) sp.* Naviaux & Werner i. l. * Naviaux & Werner i. l.
 121. *Myriochile (Monelica) f. fastidiosa* (Dejean, 1825) Wiesner 1992
 122. *Myriochile (Myriochile) sinica* (Fleutiaux, 1889) Gestro 1893; Wiesner 1992; Sawada & Wiesner 2000
 123. *Myriochile (Myriochile) dubia* (W. Horn, 1892) Heynes-Wood & Dover 1928; Wiesner 1992
 124. *Hypaetha q. quadrilineata* (Fabricius, 1781) Wiesner 1992
 125. *Hypaetha biramosa* (Fabr.) ssp. *contracta* (Fleutiaux, 1893) Gestro 1893; Wiesner 1992
 126. *Callytron andersonii* (Gestro, 1889) Gestro 1889, 1893; Wiesner 1992
 127. *Callytron limosum* (Saunders, 1834) Wiesner 1992
 128. *Notospira phalangioides* (Schmidt-G., 1846) * Wiesner 1992

*Endemics: 32

Excluded or doubtful species:

- Tricondyla gibba* Chaudoir, 1861: Gestro 1893; Naviaux i. l.
Neocollyris (Leptocollyris) discretegrossesculpta (W. Horn, 1942): Sawada & Wiesner 2000; Naviaux i. l.
Neocollyris (Neocollyris) redtenbacheri (W. Horn, 1894): Fowler 1912; Naviaux 1995 ("Fowler la cite du Tenasserim, ce qui parait surprenant").
Neocollyris (Neocollyris) diardi (Latreille, 1822): Sawada & Wiesner 2000; Naviaux i. l.
Neocollyris (Stenocollyris) dohertyi (W. Horn, 1895): Sawada & Wiesner 2000; Naviaux i. l.
Neocollyris (Pachycollyris) bipartita (Fleutiaux, 1897): Naviaux 1995 ("..très probablement de l'Inde de l'Est, aujourd'hui la Birmanie, ou bien de l'Assam").
Neocollyris (Pachycollyris) apteroides (W. Horn, 1901): Naviaux 1995 (".. Assam, Inde de l'Est").
Prothyma (Paraprothyma) exornata (Schmidt-G., 1846): Gestro 1889, 1993.
Calochroa tritoma (Schmidt-G., 1846): Gestro 1889, 1893; Wiesner 1992.
Cosmodela aurulenta (Fabr.) ssp. *juxtata* (Acciavatti & Pearson, 1989): Acciavatti & Pearson 1989; Wiesner 1992: "Nagaland".
Lophyridia chloris (Hope, 1831): Gestro 1889, 1893.
Cylindera (Cylindera) eoa (W. Horn, 1898): Wiesner 1992 ("?").
Cylindera (Ifasina) reductula (W. Horn, 1915): Wiesner 1992.

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Literature

- ACCIAVATTI, R. E. & PEARSON, D. L. (1989): The tiger beetle genus *Cicindela* (Coleoptera, Insecta) from the Indian subcontinent. – *Annals of Carnegie Museum* **58**:77–353.
- CASSOLA, F. (1988): Studi sui Cicindelidi. L. Nota su *Cicindela davisoni* Gestro (Coleoptera, Cicindelidae). – *Doriana, Suppl. Ann. Mus. civ. St. nat. "G. Doria"* **6**, n° **262**:1–6.
- CASSOLA, F. (1995): Studies on Tiger Beetles. LXXVII. New data on the species of the genus *Cylindera* Westwood, 1831, subgenus *Leptinomera* Rivalier, 1961 (Coleoptera:Cicindelidae). – *Zool. Med. Leiden* **69**:113–119.
- CASSOLA, F. & PEARSON, D. L. (2000): Global patterns of tiger beetle species richness (Coleoptera: Cicindelidae): their use in conservation planning. – *Biological Conservation* **95**:197–208.
- DÖBLER, H. (1973): Katalog der in den Sammlungen des ehemaligen Deutschen Entomologischen Institutes aufbewahrten Typen – IX. Coleoptera, Cicindelidae. – *Beiträge zur Entomologie* **23**:355–419.
- FOWLER, W. W. (1912): The fauna of British India, including Ceylon and Burma. Coleoptera. General introduction and Cicindelidae and Paussidae. Part II. Cicindelidae, 219–443 pp.; London•Calcutta•Bombay•Berlin.
- GESTRO, R. (1888): Viaggio di Leonardo Fea in Birmania e regioni vicine. IV. Nuove specie di Coleotteri. – *Annali del Museo Civico di Storia Naturale di Genova* (2) **6** (26):87–132.
- GESTRO, R. (1889): Viaggio di Leonardo Fea in Birmania e regioni vicine. XV. Primo studio delle Cicindele. – *Annali del Museo Civico di Storia Naturale di Genova* (2) **7** (27):77–91.
- GESTRO, R. (1893): Viaggio di Leonardo Fea in Birmania e regioni vicine. LIII. Enumerazione delle Cicindele. – *Annali del Museo Civico di Storia Naturale di Genova* (2) **13** (33):348–370.
- HEYNES-WOOD, M. & DOVER, C. (1928): Catalogue of Indian Insects. Part 13 – Cicindelidae, V+138 pp.; Calcutta.
- HORN, W. (1893): Les espèces du genre *Collyris* recueillies en Birmanie par Leonardo FEA. – *Ann. Mus. civ. St. nat. Genova* **33**:371–381.

- HORN, W. (1899): Ueber einige alte und neue Cicindeliden. – Deutsche entomologische Zeitschrift **1899**:52–54.
- HORN, W. (1915): Coleoptera, Fam. Carabidae, Subfam. Cicindelinae. – In: P. Wytzman (Ed.), Genera Insectorum, **82C**:209–487, pls. 16•23.
- HORN, W. (1926): Carabidae: Cicindelinae. – In: W. Junk (ed.), Coleopterum Catalogus, Pars 86, 345 pp.; Berlin.
- HORN, W. (1938): 2000 Zeichnungen von Cicindelinae. – Entomologische Beihefte aus Berlin-Dahlem **5**:1–71, pls. 1–90.
- ICZN (INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE) (1999): International Code of Zoological Nomenclature. Fourth Edition. – London, XXIX+306 pp.
- NAVIAUX, R. (1995): Les *Collyris* (Coleoptera Cicindelidae). Revision des genres et description de nouveaux taxons. – Société linnéenne de Lyon **1995**:1–332.
- NAVIAUX, R. (1999): Diagnoses de dix nouveaux taxons du genre *Neocollyris* Horn (Coleoptera Cicindelidae). – Bull. mens. Soc. linn. Lyon **68**:214–219.
- PEARSON, D. L. & CASSOLA, F. (1992): World-Wide Species Richness Patterns of Tiger Beetles (Coleoptera: Cicindelidae): Indicator Taxon for Biodiversity and Conservation Studies. – Conservation Biology **6**:376–391.
- RIVALIER, É. (1961): Démembrement du genre *Cicindela* L. IV. Faune Indomalaise. – Revue française d'Entomologie **28**:121–149.
- RIVALIER, É. (1964): Le genre *Prothyma* Hope. Révision et description de quatre espèces nouvelles. – Revue française d'Entomologie **31**:127–164.
- SAWADA, H. & WIESNER, J. (1998): Zwei neue Sandlaufkäfer-Arten aus Burma (Coleoptera: Cicindelidae). – Entomologische Zeitschrift mit Insektenbörse **108**:338–342.
- SAWADA, H. & WIESNER, J. (1999a): Weiterer Beitrag zur Kenntnis der Cicindelidae von Burma (Coleoptera). – Entomologische Zeitschrift **109**:128–132.
- SAWADA, H. & WIESNER, J. (1999b): Die Arten der Gattung *Pronyssa* (Coleoptera: Cicindelidae). – Entomologische Zeitschrift **109**:250–258.
- SAWADA, H. & WIESNER, J. (2000): Tiger beetles of Myanmar (Burma) collected by Mr. Shinji NAGAI and his fellow workers (Coleoptera: Cicindelidae). – Ent. Rev. Japan **55**:95–110.
- SCHMIDT-GOEBEL, H. M. (1846): Faunula Coleopterorum Birmaniae, adjectis nonnullis Bengaliae indigenis. **I**, VIII+1–17 pp., Tab. I.
- WIESNER, J. (1992): Verzeichnis der Sandlaufkäfer der Welt. Checklist of the Tiger Beetles of the World, 364 pp.; Keltern (Erna Bauer).
- WIESNER, J. (1999): Zwei neue *Therates* Latreille 1817 from Burma (Coleoptera, Cicindelidae). – Entomologische Zeitschrift **109**:369–372.

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