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# Studies of Tiger Beetles. CLXXXI. A new *Cylindera* (subgenus *Ifasina*) from Andhra Pradesh, Central India (Coleoptera: Cicindelidae)

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#### Abstract

A new tiger beetle species, *Cylindera (Ifasina) karli* n. sp. (Coleoptera: Cicindelidae), a relative of *C. (I.) viridilabris* (Chaudoir, 1852), *C. (I.) decempunctata* (Dejean, 1825), *C. (I.) spinolai* (Gestro, 1889) and allied species, is described from Mamandur (Renigunta), Andhra Pradesh, Central India. It is easily distinguished because of the many green punctures and areoles which cover almost entirely its elytral surface and give it a somewhat "pitted" appearance.

Key words: Tiger beetles, Cicindelidae, Cylindera (Ifasina), new species, Andhra Pradesh, India.

#### Zusammenfassung

Eine neuer Sandlaufkäfer, *Cylindera* (*Ifasina*) *karli* n. sp. (Coleoptera: Cicindelidae), wird aus Mamandur (Renigunta), Andhra Pradesh, Zentralindien beschrieben. Er ist mit *C. (I.) viridilabris* (Chaudoir, 1852), *C. (I.) decempunctata* (Dejean, 1825), *C. (I.) spinolai* (Gestro, 1889) und ähnlichen Arten verwandt, kann aber leicht durch die vielen grünen Punkturen und runden Höfen unterschieden werden, die fast die gesamte Fläche der Elytren bedecken und ihm ein etwas "genarbtes" Aussehen verleihen.

#### Riassunto

Una nuova Cicindela, *Cylindera (Ifasina) karli* n. sp. (Coleoptera: Cicindelidae), vicina a *C. (I.) viridilabris* (Chaudoir, 1852), *C. (I.) decempunctata* (Dejean, 1825), *C. (I.) spinolai* (Gestro, 1889) e specie affini, viene descritta di Mamandur (Renigunta), Andhra Pradesh, India centrale. Essa è contraddistinta in particolare dalle molte punturazioni ed areole verdi che ricoprono quasi interamente la superficie elitrale e le conferiscono un aspetto alquanto "butterato".

My Colleague Georg Werner recently submitted for identification a nice series of a small *Cylindera (Ifasina)* species collected by him and his brother, the late Karl (Charly) Werner (CASSOLA 2007), in Andhra Pradesh, central India. This species appears to be new to science and is described below. Together with this new species, the tiger beetle fauna of India (Fowler 1912), a huge country indeed, is thus raised, in my own present reckoning (including non-published information), to a grand total of 223 species (116 or 52% of which are Indian endemics), what makes it to be the third largest tiger beetle fauna in the world (after Indonesia and Brazil) (CASSOLA & PEARSON 2000).

#### Cylindera (Ifasina) karli n. sp. (figs 1-5)

Material examined: Holotype,  $\delta$ , and fourteen paratypes (11  $\delta \delta$ , 3  $\varsigma \varsigma$ ) from Central India (Andhra Pradesh): Mamandur, Renigunta, 27.VII.2005, K. & G. Werner leg. Holotype and eight paratypes (6  $\delta \delta 2 \varsigma \varsigma$ ) in Werner's collection (Munich Museum, ZSM), six paratypes (5  $\delta \delta 1 \varsigma$ ) in author's collection (FCC).

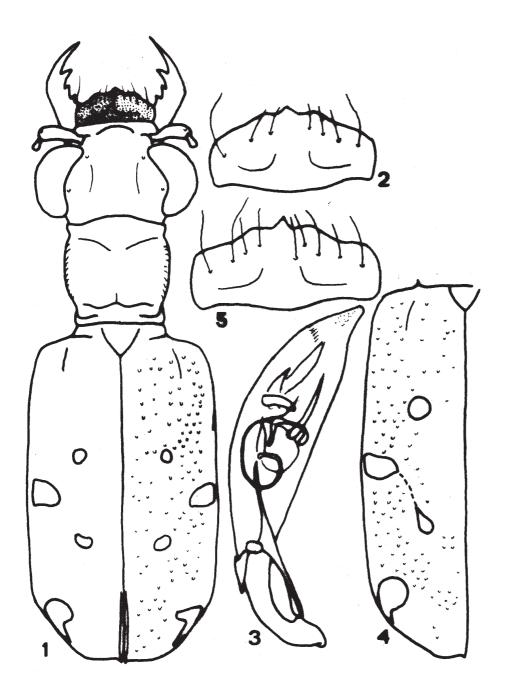
Diagnosis. A small *Cylindera* species of the subgenus *Ifasina*, close relative to its congeners *C. (I.) viridilabris* (Chaudoir, 1852), *C. (I.) decempunctata* (Dejean, 1825), *C. (I.) spinolai* (Gestro, 1889) and allied species, with a bronze coloured labrum and strong longitudinal striations on head and vertex. Elytra with a bronze reddish ground colour, but appearing mostly metallic green (especially on the lateral sides) because of the many green punctures and areoles which cover their surface. Humeral area shiny metallic, with stronger, deeper and more evident punctures. Elytral markings lacking a humeral dot in both sexes, made of a posthumeral roundish spot in the anterior part of the elytral disc, a transversal submarginal spot in the middle (sometimes emitting a narrow lineole towards the discal round spot behind it), a discal posterior round spot (about the size of the anterior spot) and a subapical spot (sometimes comma-shaped and narrowly elongated along the lateral margin towards the suture). Male aedeagus rather short, subparallel-sided, ending in a rounded straight point apically; inner sac of the *Cylindera*-type (RIVALIER 1950).

Description. Head bronze coloured with some green or reddish reflections. Strong fine longitudinal striations on head and vertex, becoming oblique and more granular behind on neck. Genae glabrous. Labrum bronze coloured, with a short pointed tooth in the middle of forward edge, with 6 to 10 white hairs near forward edge. Mandibles widely testaceous, shiny black on inner and apical teeth. Maxillary and labial palpi testaceous with the last joints metallic dark. Antennae as long as to the middle of the elytral length, slightly shorter in female; scape and antennomeres 2-4 shiny metallic with red or green reflections, antennomeres 5-11 dull black, finely and evenly pubescent.

Thorax: pronotum approximately as long as wide, bronze couloured with cupric reflections, finely sculptured transversally, the sculpture becoming more rough and granular on the lateral sides. A few recumbent white hairs on the lateral sides. Proepisterna coppery bronze, covered with long white setae. Mesepisterna glabrous; female mesepisternal coupling sulcus a deep pit in the middle, below the mesepimeral rim. Mesepimera, metepisterna and sides of sternum with short, white, even pubescence.

Elytra with a bronze reddish ground colour, but appearing mostly metallic green (especially on the lateral sides) because of the many green punctures and areoles which cover their surface. Humeral area shiny metallic, with stronger, deeper and more evident punctures. Elytral markings lacking a humeral dot in both sexes, made of a posthumeral round spot in the anterior part of the elytral disc, a transversal submarginal spot in the middle (sometimes emitting a narrow lineole towards the discal round spot behind it), a discal posterior round or transversal spot (about the size of the anterior spot) and a subapical spot (sometimes comma-shaped and narrowly elongated along the lateral margin towards the suture). Females devoid of any elytral mirror. Elytral apex rounded, narrowly metallic blue along the margin, with a small but evident sutural tooth in both sexes.

Underside green with coppery reflections. Lateral sides of abdominal sternites pubescent, the last sternite more or less glabrous. Trochanters piceous black, slightly rufescent;



Figs 1-5: *Cylindera (Ifasina) karli* n. sp., holotype  $\delta$  from Mamandur, Andhra Pradesh, Central India: habitus (1), labrum (2), aedeagus (3); paratype,  $\mathfrak{P}$ , from same locality: left elytron (4) labrum (5).

femora green below, bronzed above, with a few rows of spiniform setae; tibiae bronze coloured, with a few rows of white spiniform setae; tarsi tinged with metallic blue.

Male aedeagus rather short, parallel-sided, ending in a rounded straight point apically; inner sac of the *Cylindera*-type (RIVALIER 1950).

Length: 6.5-8 mm (without labrum).

Etymology. This new *Cylindera* species is dedicated to the memory of my late Colleague and Friend, Karl (Charly) Werner, from Peiting, Germany (Cassola 2007), who found and collected the type specimens at Mamandur together with his brother Georg.

Remarks. The many small *Cylindera* species of the subgenus *Ifasina* are probably not yet fully known and more species will possibly be discovered when the whole of the huge Indian country will be fully explored. Almost thirty species are presently known from South-east Asia and the Indian subcontinent (RIVALIER 1961; ACCIAVATTI & PEARSON 1989). *C. (I.) karli* is apparently close to its congeners *C. (I.) decempunctata* (Dejean, 1825), *C. (I.) viridilabris* (Chaudoir, 1852) and *C. (I.) spinolai* (Gestro, 1889), but it is easily distinguished because of the many green punctures and areoles which cover almost entirely its elytral surface and give it a definitely "pitted" appearance. The new species herein described has to be added to those recently listed by the Zoological Survey of India (2007).

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