

# Description of new species of the genera *Pronyssa* BATES, 1874, and *Therates* LATREILLE, 1817, with notes on others (Coleoptera: Cicindelidae)

● JIRÍ MORAVEC & JÜRGEN WIESNER<sup>1</sup>

**Abstract.** Three new tiger beetle species, *Pronyssa andrsi* sp. nov. from Nepal, *Therates haucki* sp. nov. from Thailand, Nan Province, and *Therates rihai* sp. nov. from Thailand, Loei Province are described. Moreover, *Pronyssa nodicollis* BATES, 1874, is reported the first time from Nepal and a new provincial record of *Therates pseudochenelli pseudochenelli* PROBST & WIESNER, 1994, from Nan Province, Thailand, is reported.

**Key words.** Coleoptera, Cicindelidae, *Pronyssa*, *Therates*, *Pronyssa andrsi* sp. nov., *Therates haucki* sp. nov., *Therates rihai* sp. nov., Nepal, Thailand, taxonomy, faunistic, new records, new species; Taxonomie, Faunistik, neuer Nachweis, neue Art.

**Zusammenfassung.** Drei neue Sandlaufkäferarten werden beschrieben, *Pronyssa andrsi* sp. nov. aus Nepal, sowie aus Thailand die Arten *Therates haucki* sp. nov. (Nan Province) und *Therates rihai* sp. nov. (Loei Province). Außerdem wird *Pronyssa nodicollis* BATES, 1874, neu für Nepal gemeldet sowie *Therates pseudochenelli pseudochenelli* PROBST & WIESNER, 1994, neu für die thailändische Nan Province.

*Thorax.* Pronotum as long as wide, shallowly wrinkled and furrowed, greenish coppery; laterally smooth and green blue.

*Elytra* (fig. 1). Slightly extended laterally, coppery brown with greenish reflections, deeply punctate, punctures connected to form transverse rows; lateral margin smooth with greenish colour; with oblique central and round apical dot, central dot with impression at the inner side. Elytral apex rounded, with retracted sutural tooth.

*Underside.* Venter black green, last abdominal segment yellowish laterally. Legs brown, setose, single segments darkened apically.

**Diagnosis.** Resembles *Pronyssa assamensis* SAWADA & WIESNER, 1999, but pronotum not as round as that of *assamensis*, sides dull, not shiny, elytral punctures much coarser, connected to form transverse rows, greenish (not violet as in *assamensis*) lateral sides, with an impression besides the central dot.

**Remarks.** The key given by SAWADA & WIESNER (1999: 251) is revised as follows:

- 1 Elytra clear green with blackish green reflections; dorsal and lateral colour similar ..... *nodicollis* BATES, 1874
- Elytra not clear green, dorsal and lateral colour different ..... 2
- 2 Elytra with long humeral lunula ..... *ingridae* SAWADA & WIESNER, 1999
- Elytra with humeral dot or without any dot at the shoulders ..... 3
- 3 Central dot of the elytra thin and long, ground color of dorsum blue green .... *montanea* SAWADA & WIESNER, 1999
- Central dot of the elytra roundish, ground colour of dorsum coppery .... 4
- 4 Lateral margin of female labrum dark *kraatzi* (HORN, 1899)
- Lateral margin of female labrum yellowish ..... 5

## Introduction

Recently collected specimens of the tiger beetle genera *Pronyssa* BATES, 1874, and *Therates* LATREILLE, 1817, from Nepal and Thailand were brought to the attention of the authors. Among these specimens were three undescribed species as well as specimens from locations representing significant extensions to the known ranges of two species.

## *Pronyssa nodicollis* BATES, 1874

**Records.** 1 ♂, 10.–14.6.1999, Nepal, Rasuwa Distr., Dhunche, 1800–2500 m, PETR KRESL lgt., coll. KUDRNA; 1 ♀, 4.7.2000, E-Nepal, Kangchenjunga Himal Mts., Gyabla vill., 2720 m, 27.37N 87.52E, JAN SCHNEIDER lgt., coll. VOTRUBA.

**Remarks.** New state record for Nepal. So far known from Sikkim, Assam, Meghalaya, NE Burma and NW Vietnam.

## *Pronyssa andrsi* sp. nov. (Figs 1, 7)

**Holotype.** ♀; Nepal, Chandrakot, 25 km NW of Pokhara, Z. ANDRS lgt., 19.6.1999; in coll. J. WIESNER (Wolfsburg) (later SMNS).

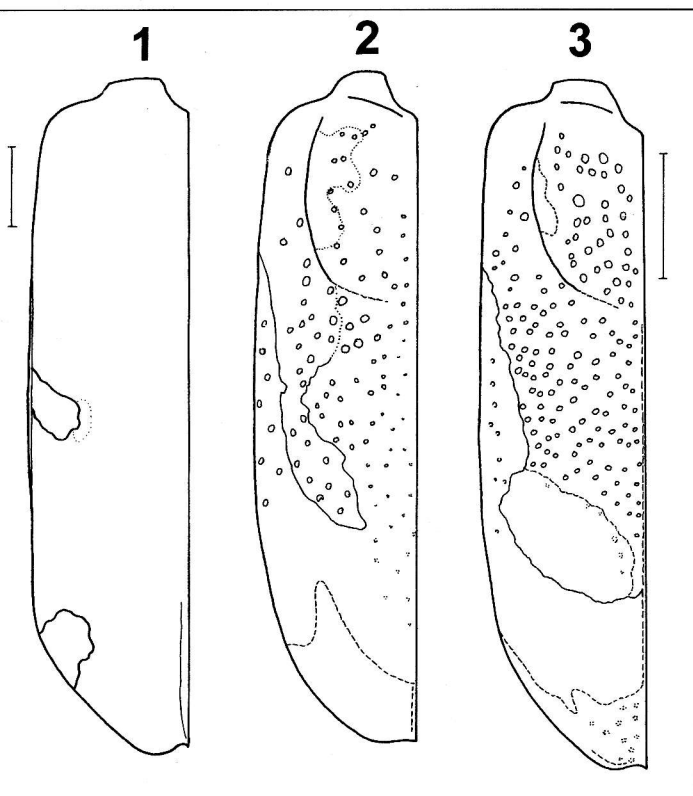
**Paratype.** ♀; Nepal, Annapurna Himal., Lumle, 17.–22.6.1999, A. KUDRNA jr. lgt.; in coll. KUDRNA (Česke Budejovice).

**Derivatio nominis.** The new species is dedicated to one of the two discoverers of this species, Z. ANDRS.

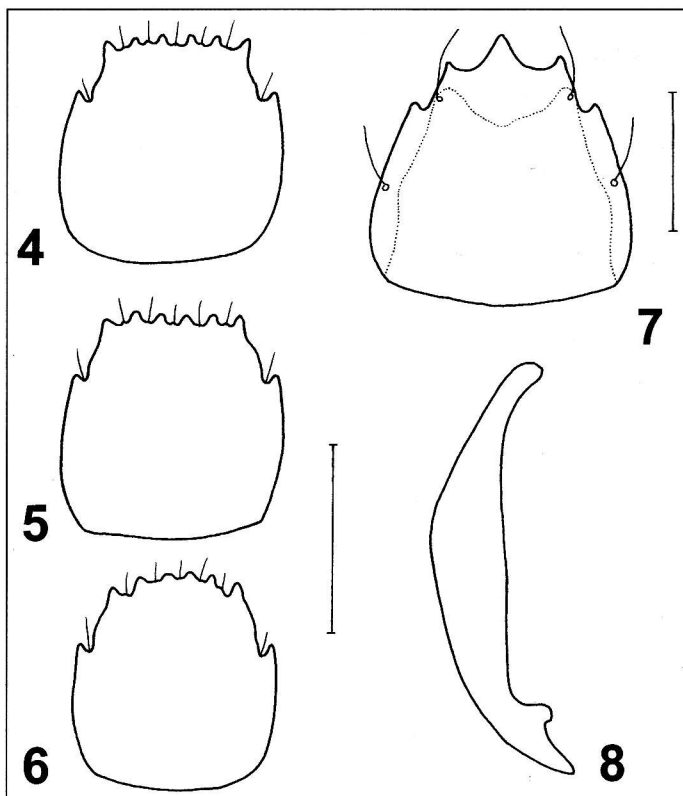
**Description.** Total length (without labrum) 11.8 mm (n = 2). Male unknown.

**Head.** Mandibles yellow with four blackish teeth. Labrum (fig 7) barely longer than wide, with five teeth and four lateral setae, greenish coppery with small yellowish lateral border and apex. Palpi light yellowish. Antennae extended back to posterior center of the elytra, first two antennal segments shining black, three and four brownish, rest dull black. Frons hairless. Forehead and orbital plates greenish coppery, wrinkled and furrowed, with two supra-orbital setae. Genae shallowly furrowed, with green blue violet reflections.

<sup>1</sup> 76th contribution towards the knowledge of Cicindelidae



Figs 1–3. Left elytron 1: *Pronyssa andsi* sp. nov., holotype ♀. 2: *Therates haucki* sp. nov., holotype ♀. 3: *Therates rihai* sp. nov., holotype ♂. Scales: 1 mm.



Figs 4–8. Labrum. 4: *Therates rihai* sp. nov., holotype ♂. 5: *Therates rihai* sp. nov., paratype ♀. 6: *Therates haucki* sp. nov., holotype ♀. 7: *Pronyssa andsi* sp. nov., holotype ♀. Fig. 8. Aedeagus, *Therates rihai* sp. nov., holotype ♂. Scales: 1 mm.

- 5 Punctures on elytra connected into transverse rows, central dot with impression at inner side ..... *andsi* sp. nov.  
 – Punctures on elytra isolated, central dot without impression ..... *assamensis* SAWADA & WIESNER, 1999

### *Therates haucki* sp. nov.

(Figs 2, 6)

**Holotype.** ♀; THAI, N. Nan prov., Doi Phu Kha N. P., Headq., 19°13'N, 101°07'E, 22–26. IV. 1999, D. HAUCK leg.; coll. J. WIESNER (Wolfsburg) (later SMNS).

**Paratype.** ♀; THAI, N. Nan prov., Doi Phu Kha N. P., Headq., 19°13'N, 101°07'E, 22–26. IV. 1999, D. HAUCK leg.; coll. J. MORAVEC (Adamov u Brna).

**Derivatio nominis.** The new species is dedicated to the discoverer of the species, D. HAUCK.

**Description.** Total length (without labrum) 6.8–7.4 mm (mean: 7.1 mm; n = 2). Male unknown.

**Head.** Shining black, with green reflections. Mandibles yellowish, teeth brownish. Labrum (fig. 6) barely longer than wide, yellowish, with six apical teeth and one lateral tooth. Labial and maxillary pal-

pi yellowish. Antennae of medium length (segments nine to eleven missing in both specimens), scape with a single apical bristle, segments two to five glabrous, the others finely and evenly pubescent; scape yellowish above, black on underside, all the other antennal segments brownish black. Clypeus hairless. Frons smooth, with a transverse furrow and two depressions in the posterior part of the orbital plates.

**Thorax.** Pronotum shining black, with green reflections, barely longer than wide, slightly more constricted in front than at back, transverse furrows strong, middle line and lateral lines nearly obsolete, middle line with several transverse short branches.

**Elytra.** Shining brownish black, with basal and apical humps, distinctly punctuated in anterior two thirds, shallower in posterior third, with sutural corner and rounded lateral edge at apex, straight between them. Elytral markings (fig. 2) comprising a brownish yellow humeral lunula connected with a yellow transverse central dot, a blunt brownish yellow basal dot and a light yellow apical dot, pointed out to the

front medially, the remainder of the basal hump being darker brown, as are the elytra as a whole at their lateral margin.

**Underside.** Venter black, abdominal segments yellowish laterally. Legs yellowish, femora darker above, tibiae and tarsal joints darkened at apex.

**Diagnosis.** The elytral coloration resembles that of *Th. murzini* WIESNER, 1999, from N Myanmar. The central dot of the new species, however, is more oblique and the abdominal segments are yellow only at the lateral sides, remainder black.

### *Therates rihai* sp. nov.

(Figs 3–5, 8)

**Holotype.** ♂; THAI, NE. Loei prov., Phu Rua N. P., 1100 m, 17°30'N, 101°21'E, 6–9. IV. 1999, M. RIHA leg.; coll. J. WIESNER (Wolfsburg) (later SMNS).

**Paratype.** 2 ♂ 2 ♀; THAI, NE. Loei prov., Phu Rua N. P., 1100 m, 17°30'N, 101°21'E, 6–9. IV. 1999, M. RIHA leg.; 1 ♀ coll. J. WIESNER (Wolfsburg) (later SMNS), 1 ♂ 2 ♀ coll. J. MORAVEC (Adamov u Brna).

**Derivatio nominis.** The new species is dedicated to the discoverer of the species, M. RIHA.

**Description.** Total length (without labrum) 7.2–7.8 mm (mean: 7.6 mm;  $n = 5$ ).

**Head.** Shining black, with blue green reflections. Mandibles yellowish, teeth blackish laterally. Labrum (figs 4, 5) as long as wide, yellowish, with six apical teeth and one lateral tooth. Labial and maxillary palpi yellowish. Antennae filiform, extending back towards behind the shoulders in females and somewhat longer in males, scape with a single apical bristle, antennal segments two to five glabrous, the others finely and evenly pubescent; scape yellowish above, black on underside; other segments black to brownish black; segments ten and eleven flattened and enlarged in males. Clypeus hairless. Frons with some shallow furrows frontally and two sparsely depressions between the orbital plates.

**Thorax.** Pronotum shining black with blue green reflections, slightly longer than wide, constricted equally anteriorly and posteriorly, transverse furrows strong, middle line and lateral lines obsolete.

**Elytra.** Shining black, with basal and apical humps, strongly punctuated in anterior two thirds, shallower in posterior third, with tiny sutural tooth and rounded lateral edge at apex, slightly concave between them. Elytral markings (fig. 3) comprising a humeral lunula, a basal dot and a central

dot, all yellow and connected with each other, leaving open only a small blackish dot at the lateral margin of the basal hump; finally a light yellow apical dot is present too.

**Underside.** Venter black, abdominal segments yellowish laterally. Legs yellowish, tibiae and tarsal segments darkened at apex.

**Male Genitalia.** As illustrated (fig. 8). Total length 2.2 mm.

**Diagnosis.** The elytral coloration is similar to that of *Therates pseudochenelli* PROBST & WIESNER, 1994, but the black dot on the basal hump is absent or reduced, the male aedeagus is of different shape and the two apical segments of the male antennae are larger and flatter. Similar in elytral coloration to *Therates pseudoconfluens* SAWADA & WIESNER, 1999, from N Laos which can be separated by the smaller aedeagus; the apical tip is shorter and the male antennal segments are not as large and flat.

### *Therates pseudochenelli pseudochenelli* PROBST & WIESNER, 1994

**Records.** 1 ♂ 4 ♂; 22–26. IV. 1999, THAI, N. Nan prov., Doi Phu Kha N. P., Headq., 19°13'N, 101°07'E, D. HAUCK leg., coll. VOTRUBA (Prague).

**Remarks.** New provincial record for Nan Province, Thailand. Presently known only from the Thai provinces Mae Hong Son and Chiang Mai.

### Acknowledgements

Special thanks are due to Mr. Z. ANDRS (Černosín/Tachov), Mr. A. KUDRNA (Česke Budejovice) and Dr. P. VOTRUBA (Praha), who kindly gave us the opportunity to study their material and allowed us to retain some of the specimens for our own collections. Thanks, too, to Prof. D. L. PEARSON for proof reading the English text.

### References

- SAWADA, H. & WIESNER, J. 1999: Die Arten der Gattung *Pronyssa* (Coleoptera: Cicindelidae). *Ent. Z., Frankfurt a. M.* **109**: 250–258.

● JIRÍ MORAVEC, P. O. Box 17/A, CZ-679 04 Adamov u Brna, Czech Republic; E-mail: jirmor@quick.cz. — JÜRGEN WIESNER, Dresdener Ring 11, D-38444 Wolfsburg, Germany; E-mail: juergen.wiesner@wolfsburg.de.