

*Pyrrhalta medvedevi* sp. nov., a new species from the Nepal Himalayas (Coleoptera, Chrysomelidae, Galerucinae)EVA SPRECHER-UEBERSAX<sup>1</sup> & STEFANO ZOIA<sup>2</sup>

A new species of *Pyrrhalta* from Nepal is described. Diagnostic characters of *P. digambara* and the new species are figured. Nepalese species of *Pyrrhalta* are keyed and a table of their diagnostic characters is given. The coloration and the surface structure of the new species are very similar to *P. digambara* (MAULIK, 1936), but the body length is smaller and the shape of the edeagus is very different. Now, with the new one, nine species of *Pyrrhalta* are known from Nepal.

Key-words: Coleoptera, Chrysomelidae, Galerucinae, *Pyrrhalta*, new species, taxonomy, Nepal, Himalayas.

## INTRODUCTION

JOANNIS described the genus *Pyrrhalta* in 1866. The type species of the genus is *Galeruca viburni* PAYKULL, 1799 from Europe. The characters of the genus are the following: pronotum completely covered with hairs and more or less convex, in some cases anterior and lateral margins glabrous, head deeply merged into the prothorax, occiput without a longitudinal groove, gena longer than eyes, labrum with a transverse row of 6-8 hairy pores, epipleura clearly visible at least until the middle, elytra hairy.

*Pyrrhalta* is a Palaearctic genus and includes numerous species distributed in Asia and Europe, mainly in China. Several species are known as serious pests. In the last few years some new Himalayan species were described. Besides the new one, till now eight species are known in Nepal:

- Pyrrhalta brevicornis* (JACOBY, 1889), known from Burma and Nepal;
- Pyrrhalta darjeelingensis* KIMOTO, 1979, known from India and Nepal;
- Pyrrhalta digambara* (MAULIK, 1936), known from India and Nepal;
- Pyrrhalta indica* (LABOISSIERE, 1932), known from Sikkim and Nepal;
- Pyrrhalta maculata* GRESSITT & KIMOTO, 1963, known from India, China, Thailand and Nepal;
- Pyrrhalta martensi* MEDVEDEV & SPRECHER, 1999, known from Nepal;
- Pyrrhalta scutellata* (HOPE, 1831), known from Bhutan, China and Nepal;
- Pyrrhalta tatesuji* KIMOTO, 2001, known from Nepal.

## MATERIAL EXAMINED

*Pyrrhalta medvedevi* sp. n.: type material.

*Pyrrhalta digambara* (MAULIK, 1936): all material from Natural History Museum, London. Holotype and 1 ex.: Sunderdhunga V., W Almora Divn., 8000-12000 ft., June 1919, leg. H. G. Champion; 9 paratypes: Northwest Himalayas,

<sup>1</sup> Naturhistorisches Museum, Augustinergasse 2, 4001 Basel, Switzerland

e-mail: eva.sprecher@bs.ch

<sup>2</sup> Via Console Marcello 18/4, 20156 Milano, Italy

e-mail: zoia.polese@tiscalinet.it

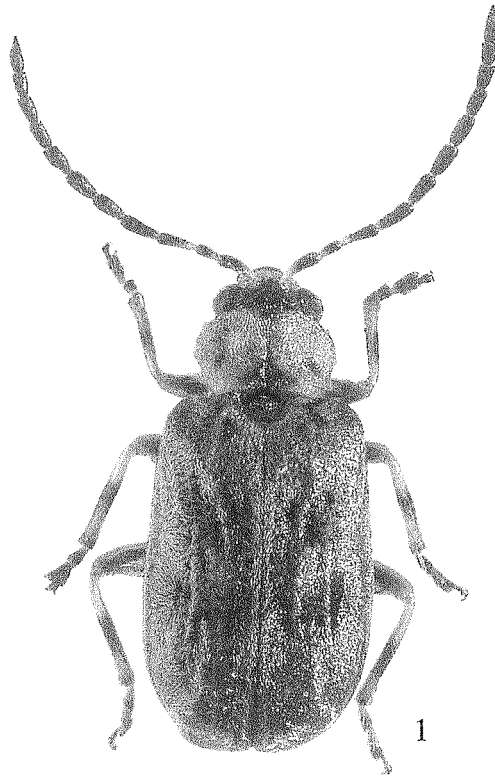


Fig. 1. *Pyrrhalta medvedevi* sp. nov.: 1. habitus.

1901 - 308, leg. E. P. Stebbing; 2 paratypes: Punjab, Bashahr, Kadralla, 9000 ft., leg. H. G. Champion; 3 paratypes: Simla Hills, Huttoo, 10000 ft., leg. H. G. Champion; 1 ex.: Nainital Divn., Kumaon, U. P., September 1917, leg. H. G. Champion; 1 ex.: Nainital U. P., 7000-8600 ft., July 1923, leg. H. G. Champion; 1 ex.: India U. P., Chakrata Div., Mundali, 8000 ft., V.1928, leg. H. G. Champion.

#### TAXONOMY

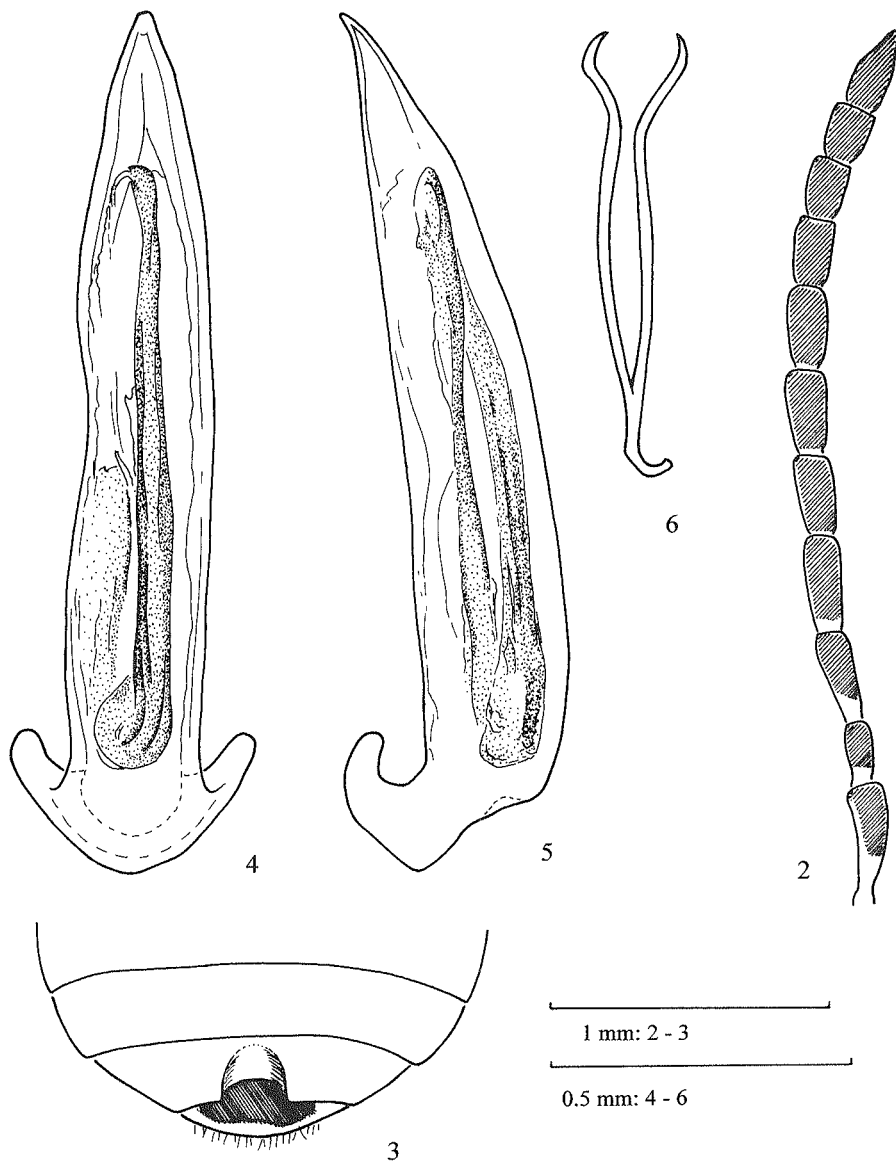
##### *Pyrrhalta medvedevi* sp. nov.

Holotype (male): Nepal, Rasuwa Langtang Nationalpark, Dhunche-Bharkhu-Syabru, 2000-2800 m, 6-13.5.1996, leg. P. Cechovsky (Natural History Museum, Basel). 1 Paratype (male): same locality and data (Collection Zoia).

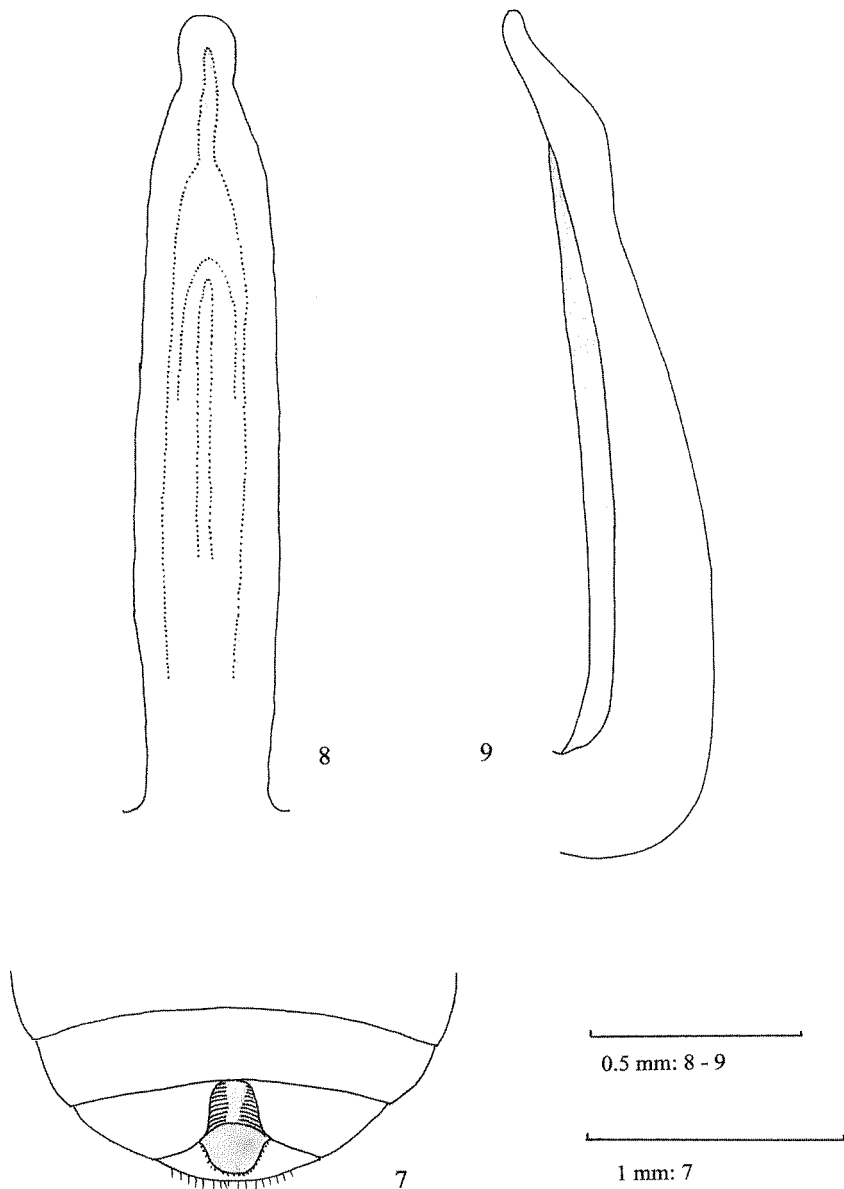
*Description.* Body length: 4.1 mm (holotype), 3.8 mm (paratype); body width: 1.9 mm (holotype and paratype); body elongate, convex; coloration: brown with dark brown patches: parts of clypeus, labrum, palpi, mandibles, flattened area on the vertex and frontal tubercles, upper sides of the apical parts of the first four segments and the whole distal segments of the antennae dark, on the pronotum a central longitudinal band and two lateral spots dark, scutellum dark, on each elytron dark areas irregularly interrupted and distributed from the apex to the base, on the legs median part of the tibiae and femora and apical part of the tarsal segments darkened (Fig. 1).

Head: black area on the vertex punctate and covered with hairs, clypeus and labrum with some silvery hairs. Antennae: slightly thickened towards the apex, third segment about as long as the fourth, second about half the length of the third (Fig. 2).

Prothorax: upper surface depressed, a lateral depression on each side and a longitudinal one in the middle, front margin raised with a channel from one end to the other, hind margin slightly arched, a prominent hair-bearing pore on each cor-



Figs 2-6. *Pyrrhalta medvedevi* sp. nov.: 2. Antenna; 3. Last abdominal segment of male; 4. eedeagus, dorsal view; 5. eedeagus, lateral view; 6. ductus ejaculatorius.



Figs. 7-9. *Pyrrhalta digambara* MAULIK: 7. last abdominal segment of male; 8. eedeagus, dorsal view; 9. eedeagus, lateral view.

ner, lateral margin strongly convex, surface covered with silky hairs radiating outwards from the centre of a depressed area, scutellum with a rough surface, covered with silky hairs and surrounded by a slight depression.

Elytra: surface covered with silky hairs radiating outwards from the centre of depressed areas, uneven with many elevations and depressions, basal area on each

side of the scutellum raised, area between raised part and humerus depressed, post-basal depressed area crossed by a costa, longitudinal lateral area below the humerus channelled, two small depressions on the apical area.

Legs : tibiae with a median longitudinal rib.

Underside : covered with whitish hairs, last abdominal segment of male with a median excavation (Fig. 3).

Edeagus : straight and slim with an acute apex (Figs 4-6).

*Differential diagnosis.* The new species is similar to *P. digambara* (MAULIK, 1936) but differs from it by the distinctly smaller size and the shape of the edeagus.

*Derivatio nominis.* The species is dedicated to Dr. Lev MEDVEDEV (Moscow), our friend and expert chrysolimidologist.

#### DISCUSSION

The comparison of the specimens of the new species with the type material of *P. digambara* revealed clearly that the new specimens belong to another species. Although the surface structure and the coloration is similar to *P. digambara*, the new species is distinctly smaller, the coloration of the elytra is slightly less dark, the punctures are slightly finer, the frontal tubercles and the apical segments of the antennae are black, prothorax less transverse, sides of the elytra more parallel, the median excavation of the last abdominal segment of male is shallower, and the edeagus is much smaller and with a different shape (Figs 7-9). Without comparing the edeagus the differentiation of the two species is difficult.

A summary of the nine species known in Nepal is given in Tab. 1, and the key below allows the identification of all known Nepalese species.

#### Key to the species of *Pyrrhalta* of Nepal

- |    |                                                                             |   |
|----|-----------------------------------------------------------------------------|---|
| 1. | Body at least 5 mm long .....                                               | 2 |
| -  | Body less than 4.5 mm long .....                                            | 8 |
| 2. | Surface of elytra without impressions .....                                 | 3 |
| -  | Surface of elytra uneven .....                                              | 7 |
| 3. | Elytra unicolor, yellow, testaceous or ochraceous .....                     | 4 |
| -  | Elytra bicolorous, dark with fulvous or reddish brown with black .....      | 6 |
| 4. | Elytra yellow shining, densely punctured and pubescent .....                |   |
|    | ..... <i>indica</i> (LABOISSIERE)                                           |   |
| -  | Elytra not shining, narrowly or coarsely punctured .....                    | 5 |
| 5. | Elytra obscure testaceous, surface flat, narrowly punctured .....           |   |
|    | <i>brevicornis</i> (Jacoby)                                                 |   |
| -  | Elytra pale ochraceous, partly subrugose, subtransverse lines or arcs ..... |   |
|    | ..... <i>scutellata</i> (HOPE)                                              |   |
| 6. | Elytra reddish brown with a broad longitudinal blackish marking .....       |   |
|    | ..... <i>tatesuji</i> KIMOTO                                                |   |
| -  | Elytra dark bronze, lateral margins, short stripes and suture fulvous ..... |   |
|    | ..... <i>martensi</i> MEDVEDEV & SPRECHER                                   |   |

7. Elytra brown with irregular dark brown patches, very uneven .....  
 .....*digambara* (MAULIK)  
 - Elytra yellowish-brown, surface closely impressed .....  
 .....*darjeelingensis* KIMOTO
8. Elytra reddish ochraceous with distinct black spots .....  
 .....*maculata* GRESSITT & KIMOTO  
 - Elytra brown with irregular dark brown patches, very uneven .....  
 .....*medvedevi* sp. nov.

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Tab. 1. Diagnostic characters of the species of *Pyrhulta* of Nepal.

species	pronotum	elytra	tibiae, tarsi	antennae	size
<i>brevicornis</i>	2x as large as long, depressions at each side and in the middle	obscure testaceous, narrowly punctured, scarce pubescence	black, middle tibiae with a short thorn	black except member 1-2, which are fulvous	6-7 mm
<i>darjeelingensis</i>	1,66x as wide as long, widest almost at middle	yellowish-brown, surface closely impressed, distinct punctures, fine white hairs, distinct costa	yellowish-brown, sometimes infuscate	yellowish-brown, sometimes infuscate, second segment shortest, third longest	5.5-6 mm
<i>digambara</i>	with a impression, hairy pore on each edge	brown, very uneven, covered with silky white hairs	small median black spots on tibiae, diffuse spots on femora	upper side of apical part of 1-4 black, apical part of 5-11 black	5.5 mm
<i>indica</i>	2x as large as long, large impression on each side	yellow shining, convex, densely punctured and pubescent	slightly red, member 3-4 of tarsi darker	first 6 segments filiforme, third much longer than fourth	5 mm
<i>maculata</i>	nearly 2x as broad as long, disk with shallow concave area, 3 small rounded pitchy spots	reddish ochraceous, 5 large black spots, coarsely rugose-punctate	with oblique golden hairs	moderately stout, second segment 1 1/2 as long as first, third nearly as long as first and second	4.2 mm
<i>martensi</i>	fulvous with 3 black spots, 2.5x as wide as long	dark bronze, lateral margin, suture and short stripe fulvous, densely punctate, without impressions or ridges	fulvous, apices of tibiae and tarsi black	segment 2 moderately elongate, third almost 2x as long as second	7.6-7.9 mm
<i>medvedevi</i>	lateral depression on each side, hairy pore on each edge	brown, very uneven, covered with silky white hairs	small median black spots on tibiae and femora	upper side of apical part of 1-4 black, segments 5-11 black	4.1 mm
<i>scutellata</i>	2x as large as long, disk feebly convex	pale ochraceous, coarsely punctured, partly subrugose with subtransverse lines or arcs	reddish brown, apices of femora and tibiae black	member 1-2 reddish, beyond segment 2 black	7.2 mm
<i>tatesuji</i>	black, marginal area narrowly reddish brown, 13/4x as wide as long	reddish brown with broad longitudinal blackish marking, rugosely punctate, covered with fine hairs	black	black, robust, third segment about 3x as long as second	5.2-5.3 mm

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