

## Two new species of Oriental Chrysomelidae (Insecta: Coleoptera) in the collection of the Naturkundemuseum Erfurt

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### Abstract

The two species: *Nodina mandibularis* n. sp. (Eumolpinae) and *Pseudadimonia hartmanni* n. sp. (Galerucinae) are described as new for science. Three species are firstly recorded for China (Yunnan). A key to the genus *Pseudadimonia* Duvivier, 1891 is given.

### Zusammenfassung

Die beiden Arten *Nodina mandibularis* n. sp. (Eumolpinae) und *Pseudadimonia hartmanni* n. sp. (Galerucinae) werden neu für die Wissenschaft beschrieben. Drei Arten können als neu für die Fauna Chinas (Yunnan) gemeldet werden. Ein Bestimmungsschlüssel für die Gattung *Pseudadimonia* Duvivier, 1891 wird vorgestellt.

**Key words:** Chrysomelidae, Oriental region, new species, new records, determination key

### Introduction

Thanks to amiability of Matthias Hartmann I had an opportunity to study large new materials from the Naturkundemuseum Erfurt, collected mostly in Mongolia, Yunnan and Vietnam. As a result of this study 2 species are described as new for science and 3 species are firstly recorded for Yunnan and China. Taxonomy and distribution for Chinese species are given according catalogue of LÖBL & SMETANA (2009), for other species according the catalogue of WILCOX (1973). Next abbreviations are used for depository places of new species:

NME – Naturkundemuseum Erfurt, Erfurt, Germany.  
LM – author's collection, Moscow, Russia.

### Taxonomical part

#### *Nodina mandibularis* sp. nov.

**Holotype (male):** N. Vietnam, Cao Bang prov., vic. Tinh Tuk, Song Dong Nui Pia Oac Nature Res., 22°37'55"N,

105° 52'98"E, 9–15.V.2014, 850–1300 m, by light, leg. A. Weigel (NME).

**Description.** Metallic bronze with underside blackish bronze, labrum, antennae and legs fulvous, 4 apical antennal segments slightly darker than preceding, pygidium dark fulvous (fig. 1).

Body short ovate, robust, 1.55 times as long as wide. Head shining, finely and sparsely punctate, punctures on frons a little denser, anterior margin of clypeus broadly concave, mandibles enlarged (fig. 2), about as long as 4 basal antennal segments united, impressed line near inner margin of eye straight, sharp and deep. Antennae reach base of elytra, proportions of segments are as 11-9-5-6-7-7-7-7-6-11, segments 5–11 moderately thickened, preapical segments about as long as wide. Prothorax 1.35 times as wide as long, feebly narrowed anteriorly, anterior margin arcuately produced, lateral margins feebly arcuate, hind margin with produced basal lobe, surface shining, without microsculpture, distinctly punctate, more strongly in middle, interspaces comparable with diameter of punctures. Scutellum semicircular, practically impunctate. Elytra as long as wide and almost twice as long as prothorax, surface shining, with regular rows of punctures, which are larger than on prothorax, but diminished on apical slope. Prosternum 1.2 times as wide as long, densely punctate and microsculptured. Propleurae impunctate, densely microsculptured. Segment 1 of fore and mid tarsi distinctly widened. Aedeagus with elongate triangular apex, longitudinally grooved on underside (fig. 4). Length of body 2.4 mm.

**Diagnosis.** Near *N. punctatostriata* (Fairmaire, 1888), differs with enlarged mandible (as well as from other continental species), deeply arcuate anterior margin of clypeus and other sculpture of clypeus.

**Derivatio nominis.** The name is connected with strongly enlarged mandibles.

#### *Pseudadimonia hartmanni* sp. nov.

**Holotype (male):** N. Vietnam, Cao Bang prov., vic. Tinh Tuk, Song Dong Nui Pia Oac Nature Res.,

22°37'55" N, 105°52'98" E, 9-15.V.2014, 850-1300 m, by light, leg. A. Weigel (NME).

**Paratypes:** same locality and date, 5 ex. (NME, 2 ex. – LM).

**Description.** Black, two apical antennal segments fulvous, apical abdominal sternite and pygidium with fulvous hind margin (fig. 3).

Body elongate, distinctly widened to behind. Head very roughly sculptured, with deep large punctures, frontal tubercle triangular, partly produced in interantennal space, shining, without distinct sculpture. Antennae reach apical slope of elytra, proportions of segments are as 10-5-7-8-8-7-6-6-6-6-8, preapical segments about 4 times as long as wide. Prothorax 1.1 times as wide as long, broadest near middle, with arcuate protuberance in middle third of side margin, surface shining, very uneven, with oblique impression on each side and deep,

partly foveate punctures. Scutellum subquadrate with rounded apex, surface shining, practically impunctate. Elytra 1.25 times as long as wide, distinctly widened to behind and broadest at preapical area, surface shining, with deep punctures and irregular, but mostly longitudinal short ribs. Pygidium feebly convex, with fine and very sparse punctures, very thinly microsculptured. Hind margin of the fifth abdominal sternite almost straight. Segment 1 of fore and mid tarsi not widened in male. Length of body 8.0–8.8 mm. Aedeagus with triangular apex, in lateral view distinctly curved inwards on both ends (fig.5). Length 8.0–8.8 mm.

**Diagnosis.** Near *P. dilatata* Jiang, 1991 from Thibet, differs with structure of lateral margins of prothorax, other form of aedeagus and smaller size.

**Derivatio nominis.** I dedicate this species to my friend and colleague Matthias Hartmann.

**Species of the genus *Pseudadimonia* Duvivier, 1891 might be divided as follow:**

- 1 (2) Upperside with hairs. Black, upperside deep blue, antennal segments 10–11 fulvous. Length 7.0–9.0 mm.  
China: Tibet. .... *P. hirtipes* Jiang, 1991
- 2 (1) Upperside not pubescent.
- 3 (16) Legs entirely black
- 4 (5) Sides of prothorax subparallel. Body black with apices of elytra more or less fulvous. Length 10.0 mm.  
China: Yunnan. .... *P. rugosa* Laboissiere, 1927
- 5 (4) Prothorax usually broadest near middle.
- 6 (7) Prothorax gradually widened from base to middle, usually without distinct protuberance in middle of side margin. Antennal segment 4 distinctly shorter than 3. Body black with a faint bluish tint.  
Length 10.0 mm. China: Sichuan. Poorly known species. .... *P. microphthalma* Achard, 1922
- 7 (6) Prothorax widest near middle, mostly with distinct protuberance. Antennal segments 3 and 4 subequal.
- 8 (13) Antennae entirely black. Body black, apex of abdomen mostly fulvous.
- 9 (10) Body small, 5.0–5.8 mm. Frons fulvous. China: Tibet. .... *P. punctipennis* Jiang, 1991
- 10 (9) Body larger than 7 mm. Head black.
- 11 (12) Scutellum dull, microsculptured, with sparse punctures. Elytral punctures mostly longitudinal. Aedeagus - fig.8. Length 7.0–14.5 mm. North India, Nepal, Bhutan, Myanmar, Thailand, indication for Yunnan needs confirmation. .... *P. variolosa* (Hope, 1831)
- 12 (11) Scutellum shining, very thinly microsculptured, with a few deep punctures. Elytral punctures mostly roundish. Aedeagus- fig.7. Length 9.6–10.6 mm. North Vietnam. .... *P. vietnamica* Samoderzhenkov, 1988
- 13 (8) Antennae black with apical segments more or less fulvous.

- 14 (17) Species from South-West China (Tibet).  
 15 (16) Antennal segments 10 and 11 fulvous. Prothorax strongly widened in middle.  
 Length 9.1–10.0 mm. .... *P. dilatata* Jiang, 1991
- 16 (15) Apical half of antennal segment 11 fulvous. Prothorax feebly widened in middle.  
 Length 8.1–9.7 mm. .... *P. pararugosa* Jiang, 1991
- 17 (14) Species from North Vietnam. Antennal segments 10 and 11 fulvous. Prothorax feebly widened in middle (fig. 3). Aedeagus – fig. 5. Length 8.0–8.8. mm. .... *P. hartmanni* sp. nov.
- 18 (3) Femora black with fulvous middle part.  
 19 (20) Apical segments of antennae black. Sides of prothorax strongly and angulately widened in middle.  
 Length 10.0 mm. India: Assam. .... *P. topali* Mandl, 1974
- 20 (119) Apical antennal segments fulvous.  
 21 (22) Apices of elytra slightly arcuate or truncate, not cover at least pygidium. Wings absent. 2 apical antennal segments fulvous. Length 6.0–7.0 mm, one male from Nepal is only 4.6 mm.  
 India: (Darjeeling, Sikkim), Nepal. .... *P. debria* Maulik, 1936
- 22 (21) Apices of elytra broadly rounded, cover pygidium (sometimes except its apex). Wings present.  
 Body larger, not less than 8.5 mm.  
 23 (26) Species from China.
- 24 (25) Antennal segments 10 and 11 fulvous. Piceus or castaneous, head and prothorax violet. Prothorax in middle widened and subangulate, surface largely and densely punctate. Aedeagus with elongate-triangular apex. Length 8.5–9.0 mm. China: Tibet. .... *P. femoralis* Jiang, 1991
- 25 (24) Antennal segment 11 fulvous. Upperside black. Prothorax in middle feebly widened and arcuate.  
 Length 9.5–10.0 mm. China: Yunnan. .... *P. parafemoralis* Jiang, 1991
- 26 (23) Species from North Vietnam. One to three apical antennal segments fulvous. Upperside black.  
 Prothorax very feebly widened in middle. Aedeagus rather thick, broadly rounded on apex (fig. 6).  
 Length 9.0–10.3 mm. .... *P. medvedevi* Samoderzhenkov, 1988

## New localities

### *Pagria signata* (Motschulsky, 1958)

**Material.** China, S-Yunnan (Xishuangbanna), MF-1, 23 km NW Jinghong, vic. Na Ban (NNNR), N 22°09'49", E 100°39'92", 15.VI.2008, 730 m, transition zone, leg. A. Weigel, 2 females (NME).

**Remark.** Firstly found in China, was known from Vietnam, Laos, Thailand, Myanma, India. Indication needs confirmation after male finding.

### *Lema (Petauristes) jansonii* Baly, 1861

**Material.** China, S-Yunnan (Xishuangbanna), MF-1, 23 km NW Jinghong, vic. Na Ban (NNNR), N

22°09'49", E 100°39'92", 15.VI.2008, 730 m, transition zone, leg. A. Weigel, 1 ex. (NME).

**Remark.** Firstly found in China, was known from India, Nepal, Thailand, Laos, Vietnam, Malaysia (Malacca), Java, Sulawesi.

### *Palpoxena indica* (Jacoby, 1889)

**Material.** China, S-Yunnan (Xishuangbanna), MF-1, 23 km NW Jinghong, vic. Na Ban (NNNR), N 22°09'49", E 100°39'92", 15.VI.2008, 730 m, transition zone, leg. A. Weigel, 1 ex. (NME).

**Remark.** Firstly found in China, was known from Myanmar, Thailand, Laos and Vietnam.

## Acknowledgements.

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## References

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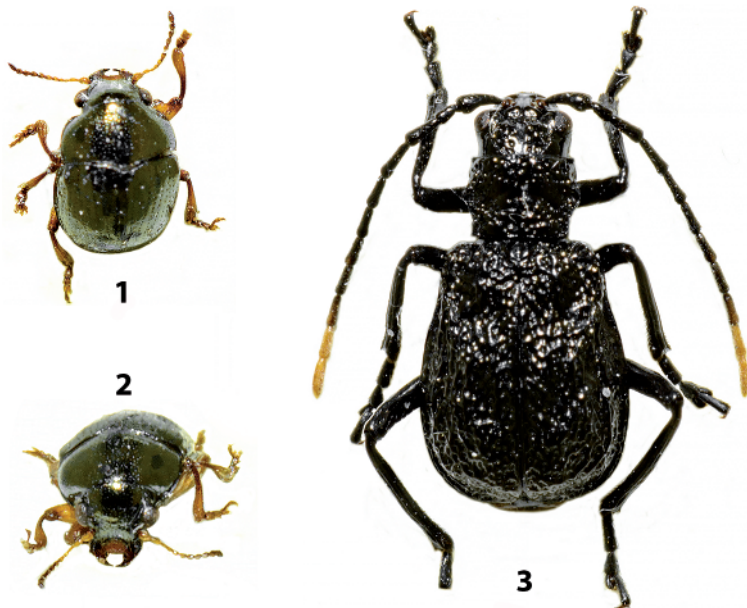


Fig.: 1–3 General view. 1–2 – *Nodina mandibularis*, dorsal view and head with mandibles; 3 – *Pseudadimonia hartmanni*

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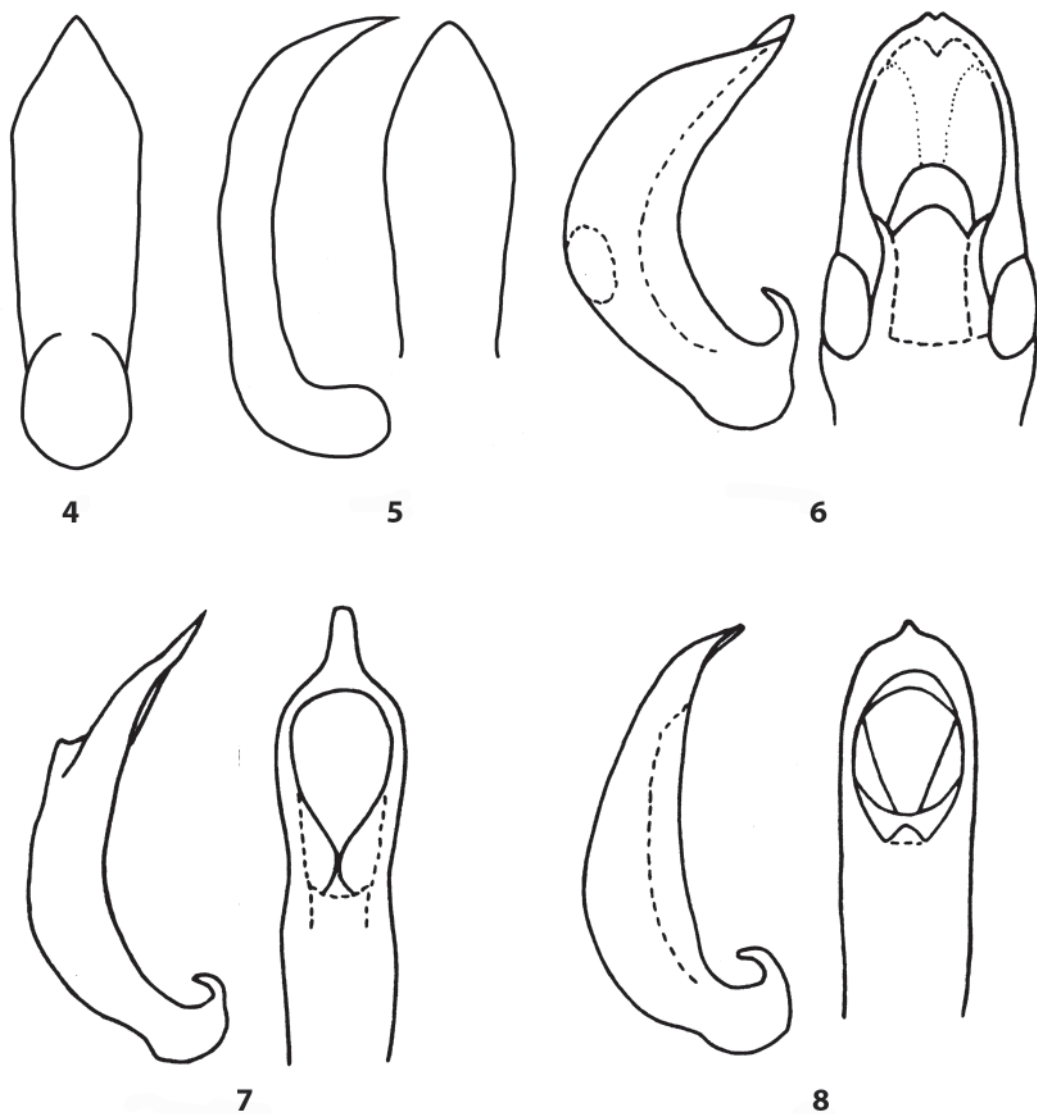


Fig. 4–8. Aedeagus: 4 – *Nodina mandibularis*, 5 – *Pseudadimonia hartmanni*, 6 – *P. medvedevi*, 7 – *P. vietnamica*, 8 – *P. variolosa*

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