Three new brachypterous Athetini from North Korea
(Coleoptera: Staphylinidae, Aleocharinae)

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Abstract: Two species of Geostiba THOMSON and one species of Tropimenelytron, a genus group name whose author is here argued to be PACE and not SCHEERPZT as previously believed and which is currently treated as a subgenus of Pelioptera KRAATZ, are described and illustrated: Geostiba (Ditroposipalia) myohyangensis sp. n., G. (D.) pasniki sp. n., and Pelioptera (Tropimenelytron) koreana sp. n. Both genera are recorded from North Korea for the first time. The new taxa are distinguished from closely related congeners from the adjacent Russian Far East.

Key words: Coleoptera, Staphylinidae, Aleocharinae, Geostiba, Pelioptera, Tropimenelytron, Palaearctic region, North Korea, taxonomy, new species

Introduction

The staphylinid fauna of the Manchurian subregion of the Palaearctic region is poorly known. This particularly applies - taxonomically - to the subfamily Aleocharinae and - geographically - to North Korea. So far, only few Aleocharinae have been described from the area; none of them in the genera Geostiba THOMSON 1858 and Pelioptera KRAATZ 1857. From the adjacent Russian Far East, however, three species of Geostiba and one of Pelioptera have recently become known: G. (Sipalotricha) vladivostokensis PACE 1997 (Primorskiy Kray), G. (Ditroposipalia) sakhalinensis PACE 1997 (Primorskiy Kray, Sakhalin), G. (D.) kusnetzovi ZERCHE (in press) (Chabarowskiy Kray), and Pelioptera (Tropimenelytron) sakhalinensis PACE 1998.

When treating the genus Tropimenelytron, PACE (1983) attributed the genus to SCHEERPZT (1955) (recte: 1951). The latter author, however, merely suggested the new genus group name for Homalota tuberiventris EPPELSHEIM 1880 separating it from Sipalia auctt. nec MULSANT & REY (now Geostiba) "wegen ihres ganz anderen anatomischen Bautypus sowohl der Mundteile und des Ektoskelettes, als auch des Kopulations-apparates der δ δ ..." (SCHEERPZT 1951). Since no distinguishing characters are actually described, the criteria of availability according to Article 13 of the Code (ICZN 1999) are not met. PACE (1983) was the first to provide a valid description of Tropimenelytron, so that he must be considered the author of this genus group name. In addition to the type species, T. tuberiventris (EPPELSHEIM), five species from the Himalayas were later described in the genus (PACE 1984, 1987). Only recently, PACE (1998) added two more species, one from China and one from Sakhalin, at the same time attributing Tropimenelytron to Pelioptera KRAATZ as a subgenus (together with
Geostibida (PACE 1984) without further comment. Based on a cursory examination of external and sexual characters of species of Tropimenelytron and Pelioptera, I have doubts that, after inclusion of the former in the latter, Pelioptera should represent a monophyletic taxon. Nevertheless, the systematic concept suggested by PACE (1998) is here maintained, mainly for practical reasons and because the systematic position of Tropimenelytron can be clarified satisfactorily only by a comprehensive phylogenetic study of Pelioptera, Tropimenelytron, and allied genera, which is not the object of the present paper.

Descriptions of new species

Geostiba (Ditroposipalia) myohyangensis sp. n. (Figs 1-5)


Paratype ♀: same data as holotype (coll. Assing).

Description: In external appearance, i.e. coloration, size, and proportions, highly similar to G. sakhalinensis PACE (for details see redescription in ZERCHE (in press)), from which the new species is distinguished only by the relatively narrower pronotum and the primary and secondary sexual characters.

Pronotum only slightly (1.11 - 1.12x) wider than head (G. sakhalinensis: 1.15 - 1.25x).

♂: elytra with weakly pronounced sutural carinae; tergum VII with a close pair of minute oblong tubercles in the middle of hind margin; sternum VIII indistinctly pointed posteriorly (Fig. 4). (In G. sakhalinensis, the sutural carinae are much broader and more distinctly elevated, the tubercles on tergum VII are more distinct and wider apart, at least in larger ♂♂, and sternum VIII is more distinctly pointed posteriorly.) Median lobe of aedeagus with relatively longer ventral process; "crista apicalis" more pronounced, longer, and separated from base of ventral process by a greater distance (Figs 1, 2). (A description of the paramerae is not possible, since they were missing in the dissected holotype.)

♀♀: posterior margins of tergum VIII and sternum VIII moderately convex, that of sternum VIII without central concavity (Fig. 5); duct of spermatheca proximally strongly dilated (Fig. 3).

Derivation nominis: The name refers to the type locality of the species.

Comparative notes: For separation from G. sakhalinensis see description above. In G. kusnetzovi ZERCHE (holotype and two paratypes examined), the body is of distinctly lighter colour, the abdomen is only weakly dilated, the pronotum is less distinctly narrowed posteriorly, the elytra are extensively impressed, the sutural carinae on the ♂ elytra are more pronounced, shorter and more widely separated, the tubercles on the ♂ tergum VII are more pronounced, and the primary sexual characters are different (see figures in ZERCHE (in press)). G. vladivostokensis PACE of the subgenus Sipalotricha SCHEERPETZ is distinguished from G. myohyangensis by the much larger eyes and many other characters (see PACE 1997, ZERCHE in press).
Distribution: The new species is known only from the Myohyangsan (40°01N, 126°19E) in North Korea.

**Geostiba (Ditrooposipalia) pasniki** sp. n. (Figs 6-9)


**Description**: Of similar coloration, size, and proportions as *G. kusnetzovi* ZERCHE (types examined), but distinguished as follows:

♂: elytra with shallow, but distinct and also posteriorly delimited impressions; sutural carinae similar to those in *G. myohyangensis*, extending over whole length of suture, but very narrow and weakly elevated; tergum VII near hind margin with a close pair of distinct oblong tubercles, which are separated only by a distance approximately equal to their width. (In *G. kusnetzovi*, the elytral impressions are deeper, more extensive, and posteriorly extending to hind margin; the sutural carinae are shorter, extending only over first half of suture or little more, broader, more strongly elevated, and separated from suture; the tubercles on tergum VII are separated by a distance approximately equal to their length.) Sternum VIII obtusely pointed posteriorly (Fig. 9). Median lobe of aedeagus and apical lobe of paramere as in Figs 6-8, internal sac of aedeagus with several long spines.

♀: unknown.

**Derivation nominis**: The species is dedicated to Grzegorz Pašnik, Krakow, who kindly made the material that the present paper is based on available to me.

**Comparative notes**: For separation from *G. kusnetzovi* see description above. *G. sakhalinensis* and *G. myohyangensis* differ in the darker colour, the more strongly widened abdomen, the absence of distinct elytral impressions, and the primary and secondary sexual characters (see description and comparative notes below *G. myohyangensis*).

**Distribution**: The new species is known only from Pagyon (38°04N, 126°34E) in southern North Korea.

**Pelioptera (Tropimenelytron) koreana** sp. n. (Figs 10-14)


**Paratype**: same data as holotype (coll. Assing).

**Description**: Of similar external appearance as *P. tuberiventris*.

3.4 - 3.6 mm. Colour of body reddish brown to castaneous, with the hind margins of the abdominal segments lighter, the elytra testaceous, and the appendages rufous to testaceous. Microsculpture of forebody microreticulate as in *P. tuberiventris*, but on the whole shallower; punctuation weaker than in average *P. tuberiventris*.

Head similar to that in *P. tuberiventris*, but postgenae in dorsal view at least slightly longer than diameter of eyes, of less convex outline, parallel or diverging behind eyes; eyes apparently of very variable size, in the paratype approximately only half and in the
holotype two thirds the length of postgenae; antennae of similar length and proportions as in *P. tuberiventris*.

\( \delta \): pronotum as long as wide or slightly longer than wide, more slender than in *P. tuberiventris*; surface without larger punctures (in *P. tuberiventris* usually with four larger punctures); posterior margin in the middle emarginate, distinctly projecting caudad and slightly erect (more so than in *P. tuberiventris*). Elytra in anterior half near scutellum with pronounced pair of oblong, approximately parallel tubercles (which, in *P. tuberiventris*, are longer, broader, and more or less strongly bent). Terga III and IV with more or less circular median tubercle at or near posterior margin, that of tergum IV more distant from margin than in *P. tuberiventris*, separated by a distance approximately equal to its diameter; tergum VII with distinctly more oblong median tubercle at posterior margin than in *P. tuberiventris*; tergum VIII serrate posteriorly (Fig. 13); hind margin of sternum VIII moderately convex (Fig. 14). Aedeagus with median lobe and apical lobe of paramere as in Figs 10-12, ventral process of median lobe with lateral margins more or less evenly converging apically.

\( \varphi \): unknown.

**Derivatio nominis:** The name (adj.) is derived from Korea, where the new species is the only known representative of *Tropimenelytron*.

**Comparative notes:** For separation from the type species of *Tropimenelytron, P. tuberiventris*, see description above; for illustrations of external and sexual characters of that species see PACE (1993). In the only geographically close representative of the subgenus, the somewhat smaller *P. sakhalinensis* from Sakhalin (holotype examined), the head is more slender and of more ovoid outline, the antennae are more distinctly incrasate apically and have more transverse penultimate antennomeres, the pronotum has four larger punctures, the \( \delta \) pronotum is less strongly projecting caudad, the tubercles on the \( \delta \) elytra are much less pronounced, the abdominal tubercles are absent, and the aedeagus is of different morphology; for comparison see figures in PACE (1998).

**Distribution:** *P. koreana* is currently known only from the type locality in the northeast of North Korea.

**Acknowledgements**

I would like to extend my sincere thanks to Grzegorz Paśnik, Krakow, for providing me with the material of the species described here and with more details regarding the whereabouts of the type localities. I am also indebted to Lothar Zerche, Deutsches Entomologisches Institut Eberswalde, for the loan of type material and additional specimens of species from the Russian Far East.

**Zusammenfassung**

Zwei Arten der Gattung *Geostiba* THOMSON und eine Art der Gattung *Pelioptera* KRAATZ, Subgenus *Tropimenelytron* PACE (nec SCHEERPETZ), werden aus Nordkorea beschrieben: *G. (Ditropisopatia) myohyangensis* sp. n., *G. (D.) pasniki* sp. n. und *Pelioptera (Tropimenelytron) koreana* sp. n. Ihre primären und sekundären Sexualmerkmale werden abgebildet. Beide Gattungen werden erstmals aus Nordkorea gemeldet.
References


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Figs 1-5: Geostiba myohyangensis sp. n.: 1, 2 – median lobe of aedeagus in lateral and in ventral view; 3 – spermatheca; 4 – posterior margin of ♀ sternum VIII (long setae omitted); 5 – posterior margin of ♂ sternum VIII (long setae omitted). Scale: 0.1 mm.

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Figs 6-9: Geostiba pasniki sp. n.: 6, 7 – median lobe of aedeagus in lateral and in ventral view; 8 – apical lobe of paramere; 9 – posterior margin of ♂ sternum VIII (long setae omitted). Scale: 0.1 mm.
Figs 10-14: *Peliopera (Tropimenelytron) koreana* sp. n. (holotype): 10, 11 - median lobe of aedeagus in lateral and in ventral view; 12 - apical lobe of paramere; 13 - posterior margin of ♂ tergum VIII (long setae omitted); 14 - posterior margin of ♂ sternum VIII (long setae omitted). Scale: 0.1 mm.