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## NEW RECORDS OF ROVE BEETLES (COLEOPTERA: STAPHYLINIDAE) FROM ROMANIA

MELANIA STAN

Abstract. *Pronomaea korgei* Lohse, 1974, *Gyrophaena hanseni* Strand, 1946, *Plataraea elegans* (Benick, 1934) and *Astenus lyonessius* (Joy, 1908) are newly recorded for the rove beetle fauna of Romania. The sexual characters are illustrated. The collecting sites of these species are mapped. Modifications and additions to the Romanian checklist of rove beetles are presented.

Résumé. *Pronomaea korgei* Lohse, 1974, *Gyrophaena hanseni* Strand, 1946, *Plataraea elegans* (Benick, 1934) et *Astenus lyonessius* (Joy, 1908) sont nouveaux pour la faune des Staphylinides de Roumanie. On présente l'illustration des caractères sexuels. Les localités où ces espèces ont été collectées sont présentées sur une carte. On présente les modifications et les mises-à-jour de la liste des Staphylinides de Roumanie.

Key words: Coleoptera, Staphylinidae, *Pronomaea*, *Gyrophaena*, *Plataraea*, *Astenus*, Romania, new records.

*Pronomaea korgei* Lohse (Pronomaeini), *Gyrophaena hanseni* Strand (Homalotini: Gyrophaenina) and *Plataraea elegans* (Benick) (Athetini: Athetina) belong to the Aleocharinae, *Astenus lyonessius* (Joy) (Paederini: Astenina) belongs to the Paederinae. For the identification the following taxonomic papers were used: Lohse, 1974, Coiffait, 1984, Assing, 1999. The paper presents the material examined and a redescription of these species. For the distribution of these species Smetana (2004) was referred to. The specimens of *Pronomaea korgei*, *Gyrophaena hanseni*, *Plataraea elegans* and *Astenus lyonessius* are deposited in the Coleoptera Collection of the “Grigore Antipa” National Museum of Natural History – Bucharest.

### *Pronomaea korgei* Lohse, 1974

*Material examined*: 1 ♂, Alba (Tulcea county), 20.VII.2006, leg. Melania Stan; 1 ♂, Baassen (Bazna, Sibiu county), 1909; 1 ♀ Bukarest (Bucharest), coll. Fleck; 1 ♀, without collecting data.

Up to 1974 the specimens belonging to *Pronomaea korgei* were identified as *Pronomaea rostrata*, but there are differences both in the morphology of the aedeagus and the spermatheca and in the external characters of these species.

*Redescription*: length of body 3-3.2 mm. Coloration of body yellowish brown to brown with head and tergite IV darker, posterior margin of elytra and apex of abdomen yellowish-brown; antennomeres I, II and XI, maxillary palpi, except penultimate palpomere and legs yellowish brown.

*Head* slightly wider than long (length measured from posterior margin of head to anterior margin of eyes and width measured behind eyes; ratio: 21/15); postocular region in dorsal view 1.3 times as long as eyes; dorsal surface with fine and sparse puncturation, shiny integument and erect pubescence. Maxillary palpi with articles II and III very long. Antennae relatively long, antennomere II as long as

III; V as wide as long; VI, VII weakly transverse, VIII, IX twice as wide as long, X of similar shape as IX, but slightly longer, almost twice as wide as long.

*Pronotum* slightly transverse (ratio length of pronotum along midline/maximal width of pronotum: 22/26); 1.2 times as wide as head; maximal width in anterior half; puncturation slightly denser than that of head, interstices wider than diameter of punctures; integument shiny; pubescence along midline directed posteriad, except near anterior margin, the remaining pubescence erect and directed diagonally postero-laterad.

*Elytra* wider than pronotum (ratio: maximal width of elytra/maximal width of pronotum: 34/26); at suture as long as pronotum; posterior margins strongly sinuate near posterior angles; surface shiny; puncturation similar to that of pronotum; pubescence directed diagonally postero-laterad. Hind wings fully developed. Legs long and slender; first metatarsomere approximately as long as the combined length of the two following tarsomeres (ratio: 0.4/0.5).

*Abdomen* subparallel and narrower than elytra; tergites III-V anteriorly with pronounced transverse impressions; these impressions with dense puncturation; posterior parts of tergites with finer and sparser punctures; tergites VI and VII with fine and sparser punctures; pubescence relatively long, erect and yellow, posterior margin of tergite VII with palisade fringe. Male: tergite VIII as in fig. 1 D; sternite VIII as in fig. 1 E; median lobe of the aedeagus as in fig. 1 A, B. Female: tergite VIII as in fig. 1 F; sternite VIII as in fig. 1 G; spermatheca as in fig. 1 C.

*Distribution and bionomics*: Europe: Belgium, Czech Republic, France, Germany, Italy, Portugal, Slovakia, Spain, Switzerland. The male specimen was collected, from the sandy and stony bank of the Alba stream, with very thin litter layer, in deciduous forest (*Quercus* sp., *Carpinus* sp. *Fraxinus* sp. *Tilia* sp., *Robinia* sp.). The collecting sites of this species is mapped in fig. 4.

#### *Gyrophaena hanseni* Strand, 1946

*Material examined*: 37 ♂♂, 28 ♀♀, Bălteni (Periş, Ilfov county), 24.VIII. 2006, leg. Melania Stan.

*Redescription*: length of body 1.8-2.2 mm. Coloration: head brown; pronotum, elytra except the postero-lateral angles darker and abdomen except the tergite VI and sometimes anterior half of tergite VII, yellowish-red, antennae with the basal 3 antennomeres yellow, the rest of antenna yellowish-brown; legs yellow. Body shiny.

*Head* wider than long (1.8 times as wide as long, width measured across eyes, length from posterior margin of head to clypeus), microreticulation distinct, puncturation rather sparse, but well-defined; antenna with antennomere V twice as wide as long; VI-X transverse, slightly wider than antennomere V.

*Pronotum* transverse 1.4 times as wide as long (maximal width/median length) with smooth median line limited by dorsal rows of punctures, some of them coarser and setiferous, others shallower; surface with distinct microsculpture. Lateral margin with four long setae.

*Elytra* wider than long, 1.3 times as wide as pronotum, microsculpture similar to that of pronotum, puncturation weaker than pronotum, sparser in inner half than lateral half of elytra.

*Abdomen* approximately as wide as elytra, with microsculpture; tergites III-VI with fine puncturation at posterior margin, tergite VII with 4 prominences in posterior half, the 2 central ones more pronounced and the 2 lateral ones weaker.

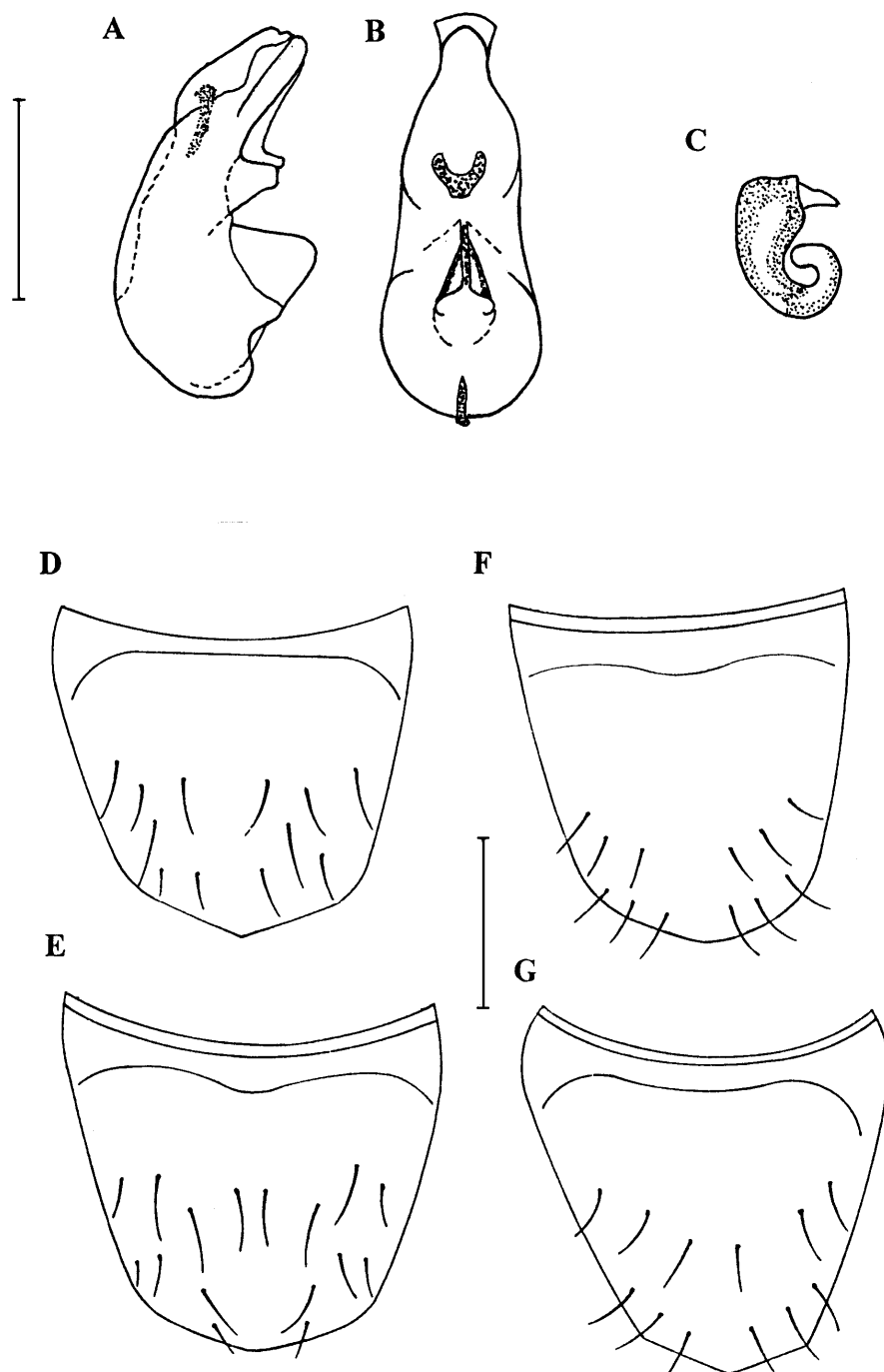


Fig. 1 – *Pronomaea korgei* Lohse. Median lobe of aedeagus: A, lateral view; B, ventral view; C, spermatheca; D, male tergite VIII; E, male sternite VIII; F, female tergite VIII; G, female sternite VIII. Scales (in mm): A-C 0.25; D-G 0.5.

Tergite VIII as in fig. 2 B. Median lobe of aedeagus as in fig. 2 A.

The habitus of *Gyrophæna hanseni* is similar to that of *G. congrua*. The females are difficult to identify, but the males can be identified based on the male sexual characters (morphology of the median lobe and posterior margin of tergite VIII).

*Distribution and bionomics*: Europe: Bulgaria, Denmark, Great Britain, Germany, Ireland. The specimens were collected from fungi (*Pholiota* sp., identified by Dr. Gavril Negrean) on an elm trunk, in a deciduous forest. The collecting site of this species is mapped in fig. 4.

*Plataræa elegans* (Benick, 1934)

*Material examined*: 1 ♂ Crucea de Piatră (Călugăreni, Giurgiu county), 29.IV.1995, leg. Corneliu Pârveu.

*Redescription*: length of body 4 mm. Coloration: head light brown, pronotum and elytra yellowish brown; abdomen yellowish brown, with tergites V-VI slightly darker, antenna with the basal 2 antennomeres yellow, antennomeres III-XI light-brown, legs yellow.

*Head* as wide as long (width measured across eyes, length measured from posterior margin of head to anterior margin of clypeus), with a shallow central depression; eyes moderately large, slightly shorter than postocular region in dorsal view, temples 1.2 times as long as eyes. Microsculpture weaker than that of pronotum; puncturation fine and sparse; pubescence yellow. Antenna with antennomere IV longer than wide, V 1.2 times as long as wide, VI-X as long as wide.

*Pronotum* 1.2 times as wide as head, slightly wider than long (ratio: maximal width/length along midline: 35/32); microsculpture distinct; puncturation fine, distance between punctures much wider than diameter of punctures; pubescence of midline directed caudad in posterior two thirds and cephalad in anterior third of midline, the remaining pubescence directed diagonally postero-laterad.

*Elytra* 1.5 times as wide as pronotum, wider than long (ratio: maximal width of elytra/length of suture: 54/30); microsculpture distinct similar to that of pronotum; puncturation fine, barely noticeable.

*Abdomen* approximatively parallel, tergites III-VI with anterior transverse impression; tergite VII with palisade fringe; surface shiny, microsculpture weaker than that of forebody; puncturation fine, denser on tergites III-VI than on tergite VII. Tergite VIII as in fig. 2 E. Median lobe of aedeagus as in fig. 2 C, D.

*Distribution*: Europe: Austria, Czech Republic, Germany, Poland, Slovakia, Switzerland.

The collecting site of this species is presented in fig. 4.

*Astenus lyonessius* (Joy, 1908)

*brevelytratus* Lohse, 1987

*brunneus* Stephens, 1833

*longelytratus* Palm, 1936

*Material examined*: 2 ♂♂, Bucharest, Montandon collection, originally identified as *Astenus angustatus* Paykull. *Astenus angustatus* Payk. was placed in the synonymy with *Astenus gracilis* (Payk.). The study of the aedeagus is very important for the identification of *Astenus gracilis* (Payk.) and *A. lyonessius* (Joy).

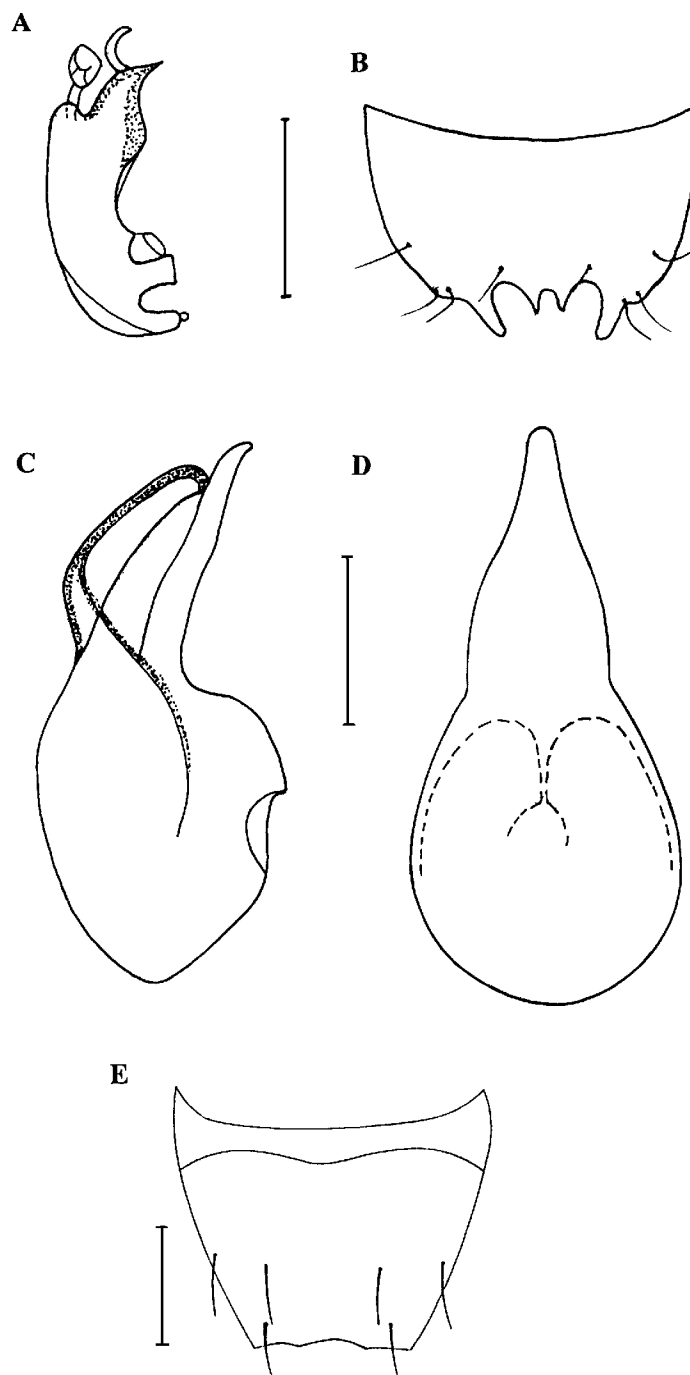


Fig. 2 – *Gyrophaena hanseni* Strand. A, median lobe of aedeagus (lateral view); B, male tergite VIII; *Plataraea elegans* (Benick). Median lobe of aedeagus: C, lateral view; D, ventral view; E, male tergite VIII. Scales (in mm): A-D 0.25; E 0.5.

Three female specimens of doubtful identity from Comana Forest, (south of Bucharest – Giurgiu county) are preserved in the Montandon collection.

*Redescription:* length of body 3.8-4 mm. Coloration: body blackish brown, elytra with large reddish-yellow spot at apical margin, extending along suture (four tenths of length of suture in males, less than four tenth in studied females), scutellum and adjacent area, the external half of elytra, without humeral angle black, the remainder of elytra reddish-brown, abdomen with posterior margin of tergites III-VI yellow; antennae and legs yellow.

*Head* large, narrowed before eyes, as long as wide (length measured from posterior margin of head to anterior margin of clypeus, width measured immediately behind the eyes), its surface densely and coarsely punctate. Temples 1.4 times as long as length of eyes in dorsal view. Antennae with antennomeres III and IV of equal length, 1.2 times longer than antennomere V, antennomere X twice as long as wide.

*Pronotum* narrower than head, length of midline equal to head length; 1.15 times as long as wide (length of midline/maximal width), puncturation dense and coarse. Lateral margins with four long setae.

*Elytra* 1.3 times as wide and 1.4 times as long as pronotum (ratio: maximal length of elytra/length of midline of pronotum); maximal width of elytra equal to length of suture; surface shiny; puncturation dense, well-defined; anterior margin of each elytron with two setae, these setae shorter than those of pronotum. Metatarsus shorter than metatibia, metatarsomere I 1.2 times as long as the combined length of the two following tarsomere, IV strongly bilobate.

*Abdomen:* tergites III 2.3 times as wide as long; tergites III-VI with dense, well defined puncturation, finer than that of elytra; tergite VII with sparser and finer puncturation than that of anterior tergites; posterior margin with palisade fringe. Sternite VII as in fig. 3 C. Aedeagus as in fig. 3 A, B.

*Distribution:* Europe: Azerbaijan, Czech Republic, Denmark, Finland, France, Great Britain, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Malta, Poland, Slovakia, Spain, Russia (South European Territory), Sweden, Switzerland; North Africa: Algeria, Morocco, Madeira Archipelago; Asia: Turkey.

For Romania the collecting site of this species is mapped in fig. 4.

#### DISCUSSIONS

The *Pronomaea* specimens (1 ♂, 2 ♀♀) preserved in the Collection of “Grigore Antipa”, National Museum of Natural History and originally identified as *Pronomaea rostrata* actually belong to *Pronomaea korgei*. Two specimens of *Pronomaea korgei* collected from Romania, Dicsöszentmárton = Târnăveni, Mureş county are preserved in Csiki’s Collection in the Hungarian Natural History Museum (Makranczy, pers. comm.). We think that *Pronomaea rostrata* does not belong to the Romanian fauna.

To the fourteen species of *Gyrophana* listed for Romania by Stan (2004) the following species are added: *Gyrophana joyi* Wendeler and *G. joyioides* Wüsthoff (Stan, 2005), *G. congrua* Erichson (Smetana, 2004; Stan, 2006) and *G. hanseni* Strand (present paper), *G. pseudonana* A. Strand, 1939 (material in the Collection of the Hungarian Natural History Museum, (Makranczy, pers. comm.) and *G. rugipennis* Mulsant & Rey, 1861 (Smetana, 2004). The record of *G. polita*

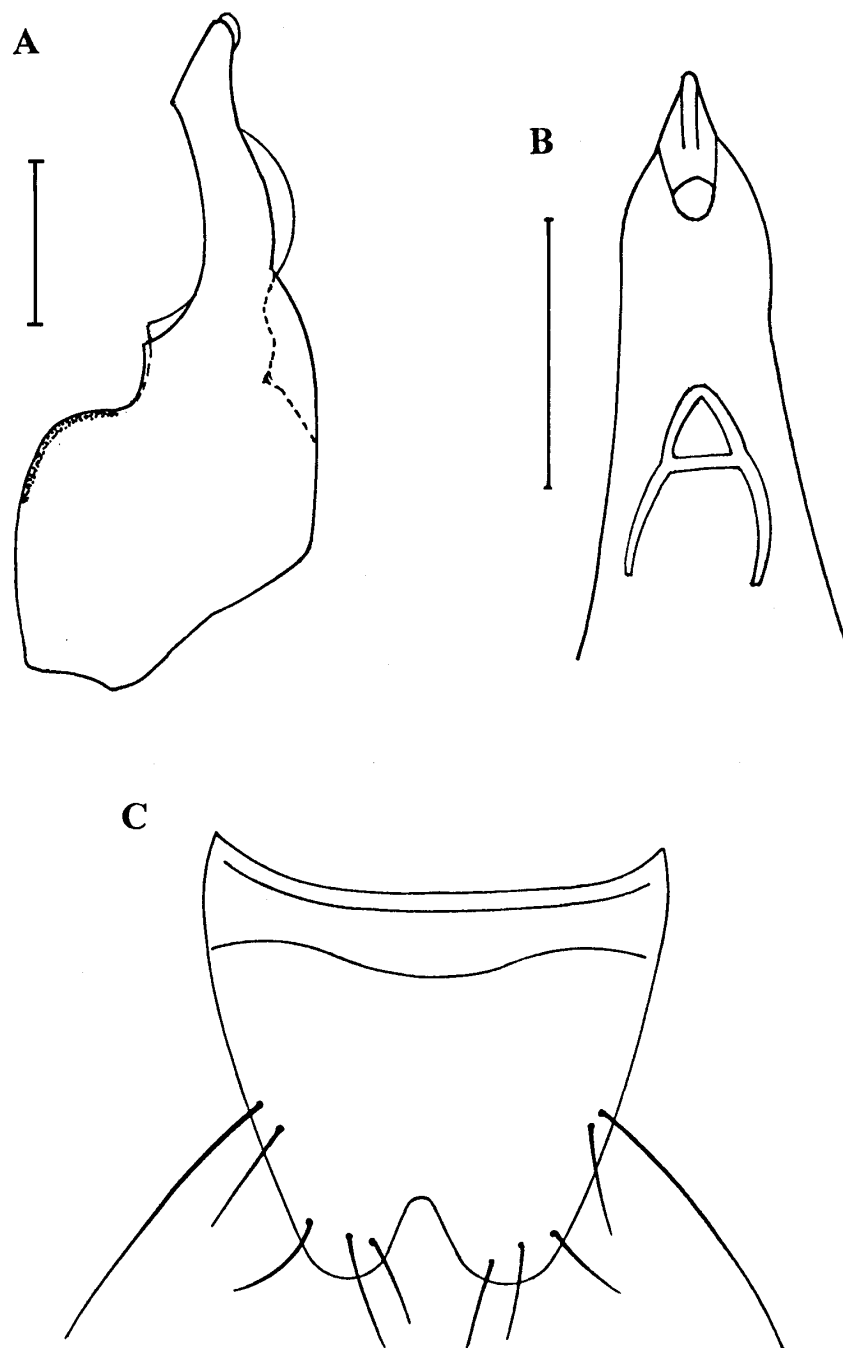


Fig. 3 – *Astenus lyonessius* (Joy). A, aedeagus (lateral view); B, apex of the median lobe (ventral view); C, male sternite VIII. Scales (in mm): A, C 0.5; B 0.25.

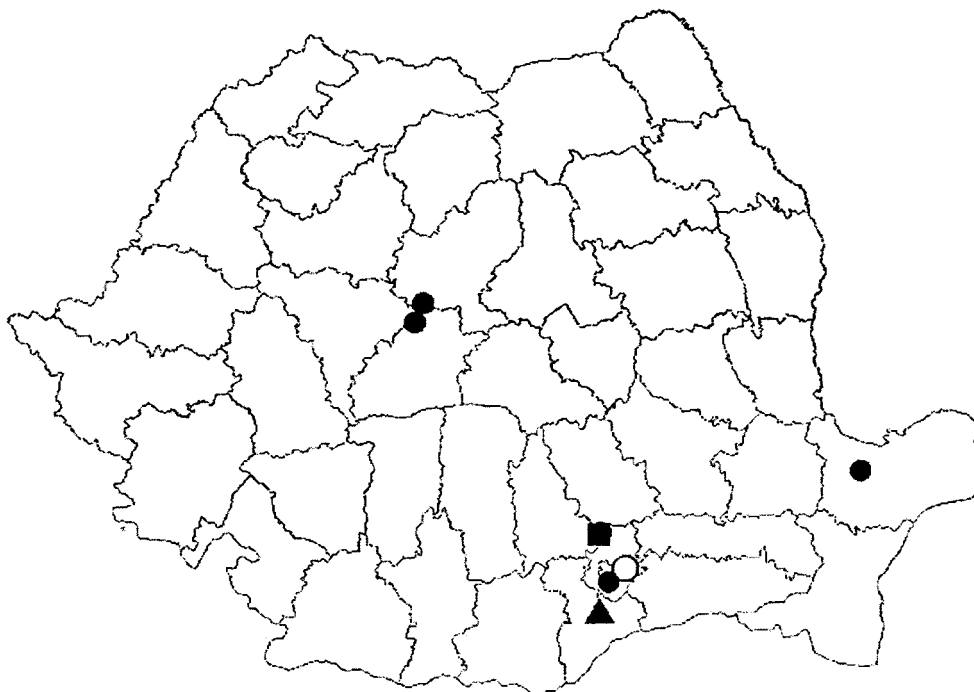


Fig. 4 – The map of the collecting sites for: ● *Pronomaea korgei* Lohse; ■ *Gyrophaena hanseni* Strand; ▲ *Plataraea elegans* (Benick); ○ *Astenus lyonessius* (Joy)

(Gravehorst, 1802) in Romania is uncertain and possibly based on a misidentification (Ádám, pers. comm.).

Six species of the genus *Plataraea* have been recorded from Romania: *P. brunnea* (Fabricius, 1798), *P. elegans* (G. Benick, 1934), *P. nigrifrons* (Erichson, 1939), *P. spaethi* (Bernhauer, 1898), *P. verbekei* Haghebaert, 1990 and *P. dubiosa* (G. Benick, 1935), the latter reported by Smetana (2004). Several specimens of *P. dubiosa* in the Collection of Hungarian Natural History Museum were collected in Maramureş (Makranczy, pers. comm.).

*Astenus lyonessius* is the seventh species of *Astenus* in the Romania fauna.

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NOI SEMNALĂRI DE STAFILINIDE (COLEOPTERA: STAPHYLINIDAE)  
ÎN FAUNA ROMÂNIEI

## REZUMAT

*Pronomaea korgei* Lohse, 1974, *Gyrophaena hanseni* Strand, 1946, *Plataraea elegans* (Bénick, 1934) și *Astenus lyonessius* (Joy, 1908) sunt semnalate pentru prima dată în fauna României. Se prezintă redescriseri ale celor 4 specii și se ilustrează caracterele sexuale. Sunt aduse completări și modificări la lista speciilor de stafilinide a României.

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Muzeul Național de Istorie Naturală "Grigore Antipa"

Șos. Kiseleff nr.1, 011341 București 2, România

e-mail: mstan@antipa.ro