

ARTIGO / ARTÍCULO / ARTICLE

Contribution to the knowledge of the Portuguese Autaliini Thomson, 1859 (Coleoptera: Staphylinidae: Aleocharinae)

Raul Nascimento Ferreira

6 Fairview Dr., Pawcatuck, Connecticut 06379-1223, USA. e-mail: insectcatcher@comcast.net

Abstract: A review of the Portuguese Autaliini Thomson, 1859 (Coleoptera: Staphylinidae: Aleocharinae) is presented, with *Autalia rivularis* (Gravenhorst, 1802) reported as new for the country and with new locations that improve the known geographic distribution of *Autalia impressa* (Olivier, 1795) in Portugal.

Key words: Coleoptera, Staphylinidae, Aleocharinae, Autaliini, *Autalia*, ecology, faunistics, Portugal.

Resumo: Contribuição para o conhecimento dos Autaliini Thomson, 1859 (Coleoptera: Staphylinidae: Aleocharinae portugueses). Procede-se à revisão da fauna portuguesa da tribo Autaliini Thomson, 1859 (Coleoptera: Staphylinidae: Aleocharinae), registando pela primeira vez *Autalia rivularis* (Gravenhorst, 1802) e apresentando novas localidades que aumentam o conhecimento sobre a distribuição geográfica de *Autalia impressa* (Olivier, 1795) no país.

Palavras chave: Coleoptera, Staphylinidae, Aleocharinae, Autaliini, *Autalia*, ecologia, faunística, Portugal.

Recibido: 24 de septiembre de 2024

Publicado on-line: 26 de octubre de 2024

Aceptado: 8 de octubre de 2024

Introduction

The Aleocharinae Fleming, 1821 is one of the largest of the 34 extant subfamilies (including Silphinae) of the family Staphylinidae Latreille, 1802 (Newton, 2022; Sikes et al., 2024), containing 52 tribes with over 1000 genera and 12,000 species (Ashe, 2007), generally small to minute beetles with lengths usually ranging between 3.0 and 5.0 mm, some species reaching a maximum length of about 10 mm and a few species having a length of 1.0 mm. Aleocharines have slender bodies, densely and finely punctured, with more or less round heads. The color may be light to dark brown, reddish-brown or black with color bands or spots of red, yellow or black. They are found in almost all terrestrial habitats. The species are predators in soil communities and leaf litter, humus, dung and some are known to be myrmecophilous (Klimaszewski, 1992; Assing, 1997) and termite nests inhabitants or associated with mushrooms.

The present paper deals with one of the 52 tribes of the subfamily Aleocharinae, the tribe Autaliini Thomson, 1859 which is represented in the Iberian Peninsula by the genus *Autalia* Leach, 1819. This genus currently contains 34 species: ten from the Afrotropical region (Klimaszewski, 1992), five from the Nearctic region (Hoebeke, 1988), seven from the Neotropical region (Hoebeke & Ashe, 1994), ten from the Palearctic region (Assing, 1997) and two from the Oriental region (Assing, 1999; Pace, 2002). It is a distinctive genus, recognized among the other Aleocharine genera by the head with neck; a long and narrow ligula divided into two divergent lobes apically; anterior margin of the mentum deeply and narrowly emarginated; pronotum usually with longitudinal foveae basally; mesosternum with complete carina; tarsal formula 4-4-5; elytra with two basal foveae; abdominal tergites III-V transversely impressed at the base, with strong median carina and lateral carinae (Hoebeke & Ashe, 1994; Ashe, 2001).

With the exclusion of the nomen dubium *Autalia puncticollis* Thomson, 1867, the latest Palaearctic Catalogue (Schülke & Smetana, 2015) includes 17 species within this genus, while in the Iberian Peninsula five species of *Autalia* are known to occur: *Autalia impressa* (Olivier, 1795), *Autalia kabyliana* Fagel, 1959, *Autalia longicornis* Scheerpeltz, 1947, *Autalia puncticollis* Sharp, 1864 and *Autalia rivularis* (Gravenhorst, 1802), all recorded from Spain; of them, *A. impressa* is the only species previously recorded from Portugal (Schülke & Smetana, 2015; Gamarra & Outerelo, 2018). As far as we know, *A. longicornis* has not been found in Portugal yet, despite the question mark presented by Gamarra & Outerelo (2018) in their Iberian distribution map of this species. A second species from Portugal, *A. rivularis*, is hereby reported from Portugal for the first time.

Material and methods

The material studied was collected by the author and the preparation of the specimens follows Ferreira (2021). The nomenclature and classification suggested by Schülke & Smetana (2015) is followed in this study. The morphological study of the species was conducted using a Wild M5 stereomicroscope and the keys by Dauphin (1993). All specimens are deposited in the author's collection (cRNF: collection Raul Nascimento Ferreira) and the new data presented includes Province, District, Town, Village and Place.

Results

Family STAPHYLINIDAE Latreille, 1802

Subfamily Aleocharinae Fleming, 1821

Tribe Autaliini Thomson, 1859

Genus *Autalia* Leach, 1819

Autalia impressa (Olivier, 1795) (Figs. 1a, b)

Staphylinus impressus Olivier, 1795: [42]: 23

This is the type species of the genus. Common throughout Europe and North Africa, it occurs widely in various habitats, more frequently in decaying fungi but also associated with damp compost, humus, litter and old and drier dung. Oliveira (1899) and Ferreira (1962) reported this species from Portugal without any locality. Seabra (1942) recorded it from Buçaco and "Felgueira". Reported from Portugal in the Palaearctic Catalogue (Schülke & Smetana, 2015), Gamarra & Outerelo (2018) compiled records from Douro Litoral and Beira Litoral.

New data: Beira Litoral, Aveiro, Mealhada, Buçaco, 12/06/1966, leg. R.N. Ferreira (cRNF).

Distribution: Widespread in Europe; also present in Algeria, Tunisia and Nepal (Schülke & Smetana, 2015).

Autalia rivularis (Gravenhorst, 1802) (Figs. 2a, b)

Aleochara rivularis Gravenhorst, 1802: 73

Not reported from Portugal by Schülke & Smetana (2015), in the Iberian Peninsula this species was only known from Spain (Gamarra & Outerelo, 2018).

New data: Douro Litoral, Porto, Paços de Ferreira, Penamaior, 06/07/1969, leg. R.N. Ferreira, 5 ex. (cRNF); Beira Litoral, Coimbra, Coimbra, Choupal, 10/05/1960, 1 ex. (cRNF).

Distribution: Widespread in Europe and Asia, and also present in the Nearctic region, where it's introduced (Schülke & Smetana, 2015). New species for Portugal.

Acknowledgements

I would like to thank my daughter Maria A. Ferreira (Kaiser Permanente, Los Angeles California) for the review of the first draft of the manuscript, and to J. Waters, for the pictures. Also to P. Gamarra (Centro Superior de Estudios Universitarios La Salle-UAM, Madrid), R. Outerelo (Universidad Complutense de Madrid) and F. Prieto Pilóña (AEGA), for their comments and suggestions. Special thanks are due to Dr. J.M. Grossó-Silva (Museu de História Natural e da Ciência da Universidade do Porto, Portugal), for the final reviewing of the manuscript and providing additional bibliography.

References

- ASHE, J.S. 2001. VIII. Keys to the tribes and genera of Nearctic Aleocharinae, pp. 299-319. In: Thomas, M.C. & Arnett, R.H. Jr. (eds.). *American Beetles, Volume 1, Archostemata, Myxophaga, Adephaga, Polyphaga: Staphyliniformia*. CRC Press, Boca Raton, Florida. 443 pp.
- ASHE, J.S. 2007. Aleocharinae. Version 25 April 2007. <http://tolweb.org/Aleocharinae/9777/2007.04.25> in The Tree of Life Web Project, <http://tolweb.org/>
- ASSING, V. 1997. Review of the Palaearctic species of *Autalia* Leach in Samouelle, 1819 (Coleoptera, Staphylinidae, Aleocharinae). *Entomologische Blätter*, **93**: 69-85.
- ASSING, V. 1999. On some *Autalia* Leach in Samouelle from Japan and Taiwan (Coleoptera, Staphylinidae, Aleocharinae). *Japanese Journal of Systematic Entomology*, **5**(2):163-165.
- DAUPHIN, P. 1993. Notes sur les *Autalia* de la région paléarctique occidentale (Coleoptera Staphylinidae). *Bulletin de la Société linnéenne de Bordeaux*, **21**(1): 29-38.
- FERREIRA, R.N. 1962. Contribuições para um catálogo da família Staphylinidae da fauna portuguesa. I - Estado actual do conhecimento dos Estaflinídeos Portugueses. *Memórias e Estudos do Museu Zoológico da Universidade de Coimbra*, **280**: 1-21.
- FERREIRA, R.N. 2021. Novos dados para o conhecimento dos Aleocharini Fleming, 1821 (Coleoptera: Staphylinidae: Aleocharinae) portugueses. *Arquivos Entomológicos*, **24**: 69-78.
- GAMARRA, P. & OUTERETO, R. 2020. Tercera actualización del catálogo iberobalear de los Aleocharinae (Coleoptera: Staphylinidae). [Actualización hasta el 1 de julio de 2020 del 'Catálogo iberobalear de los Aleocharinae (Coleoptera: Staphylinidae). Boletín de la Sociedad Entomológica Aragonesa, 37: 1-81']. Available online at: http://bba.bioucm.es/cont/docs/RO_95.pdf.
- HOEBEKE, E.R. 1988. A new species of rove beetle, *Autalia phricotrichosa* (Coleoptera: Staphylinidae: Aleocharinae), from Mexico, with a key to the New World species of *Autalia*. *The Coleopterists Bulletin*, **42**(1): 87-93.
- HOEBEKE, E.R. & ASHE, J.S. 1994. New species of *Autalia* Leach, 1819 from the Neotropics (Coleoptera Staphylinidae Aleocharinae), with new distributional data for *A. phricotrichosa* Hoebeke 1988 and key to the Neotropical species of *Autalia*. *Tropical Zoology*, **7**: 191-208.
- KLIMASZEWSKI, J. 1992. Revision of the Afrotropical species of the genus *Autalia* Leach with description of four new species (Coleoptera: Staphylinidae: Aleocharinae). *Journal of African Zoology*, **106**: 513-525.

NEWTON, A.F. 2022. *StaphBase* (version Aug 2022). In: BÁNKI, O., ROSKOV, Y. et al. Catalogue of Life Checklist (Version 2024-05-20). <https://www.catalogueoflife.org/>[(accessed 23 September, 2024) <https://doi.org/10.48580/dfqf-3gk>]

OLIVEIRA, M.P. 1899. Catalogue de la Collection de Coleoptères du Portugal du feu Dr. M. Paulino d'Oliveira. Imprensa Académica, Coimbra. 93 pp.

PACE, R. 2002. Specie dei generi *Eusteniamorpha* Cameron e *Autalia* Leach del Borneo (Coleoptera, Staphylinidae). *Revue suisse de Zoologie*, **109**: 295-323.

SCHÜLKE, M. & SMETANA, A. 2015. Staphylinidae, pp. 304-1134. In: Löbl, I. & Löbl, D. (eds.). Catalogue of Palaearctic Coleoptera. Volume 2. Hydrophiloidea-Staphyloidea. Revised and Updated Edition. Brill, Leiden. xxvi + 1702 pp.

SEABRA, A.F. 1942. Aditamento ao Catálogo dos Coleópteros de Portugal, do Dr. Manuel Paulino de Oliveira. *Memórias e Estudos do Museu Zoológico da Universidade de Coimbra*, **136**: 1-33.

SIKES, D.S., THAYER, M.K. & NEWTON, A.F. 2024. Large carrion and burying beetles evolved from Staphylinidae (Coleoptera, Staphylinidae, Silphinae): a review of the evidence. *Zookeys*, **1200**: 159-182.

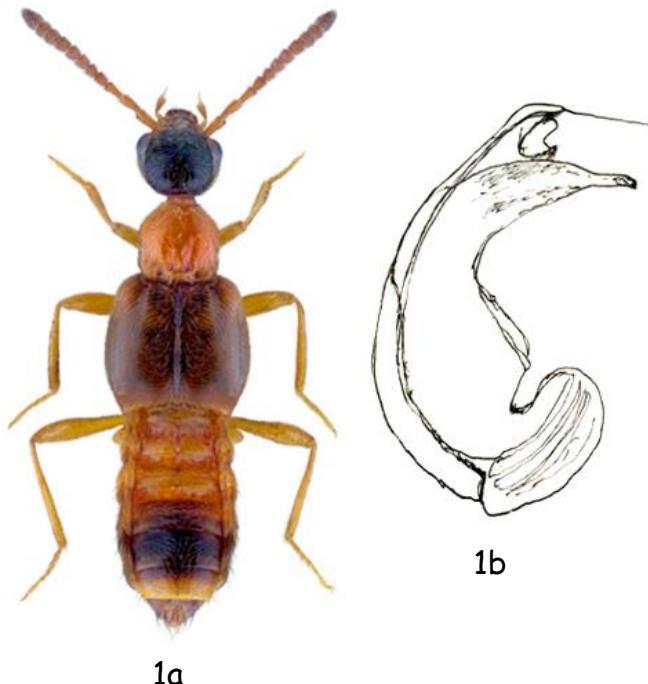


Fig. 1.- *Autalia impressa* (Olivier, 1795). a.- Habitus, adapted with permission from J. Waters. b.- Aedeagus, by the author.

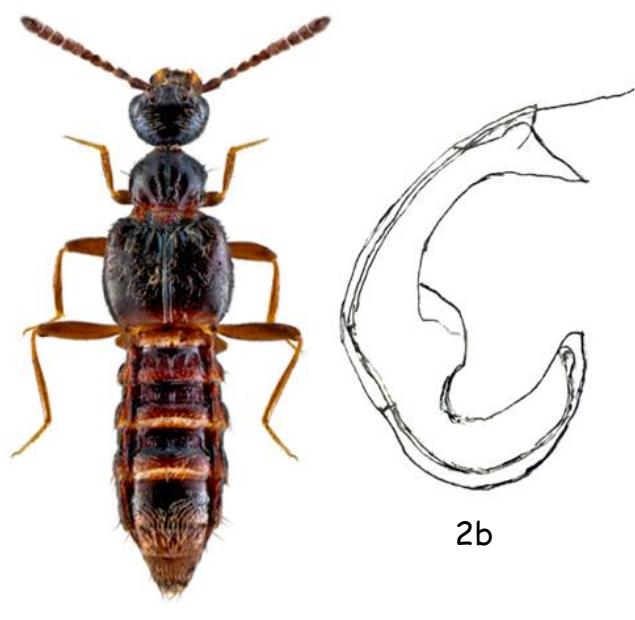


Fig. 2.- *Autalia rivularis* (Gravenhorst, 1802), (Olivier, 1795).
a.- Habitus, adapted with permission from J. Waters. b.- Aedeagus, by the author.