Descriptions of two new species in the genus Agapanthia (Coleoptera, Cerambycidae)

M. Sláma

U Školské zahrady 718/3, 182 00 Praha 8- Kobylisy, Czechia e-mail: m.e.f.slama@seznam.cz

Key words: Taxonomy, Coleoptera, Cerambycidae, Agapanthia, new species, Czechia, Greece.

Abstract: Two new species of Agapanthia Audinet-Serville, 1835 are described as follows: Agapanthia bohemica n. sp. from the Czechia and Agapanthia uxoria n. sp. from Greece (Coleoptera, Cerambycidae).

Introduction

Two new species from the family Cerambycidae Latreille, 1802, subfamily Lamiinae Latreille, 1825, genus *Agapanthia* Audinet-Serville, 1835 are described. In the Palearctic Region, the genus has been divided into ten subgenera. It comprises numerous species, all of them being developed in host plants. The newly described species *Agapanthia bohemica* n. sp. belongs to the subgenus *Agapanthia* Audinet-Serville, 1835 and was found in South Bohemia. The second new species *Agapanthia uxoria* n. sp. belongs to the subgenus *Epoptes* Gistel, 1857 and was found in Greece under Ossa mountain range.

Material and methods

All the material studied came from collections of Staatliche Museum für Naturkunde in Karlsruhe. A Wild microscope with circular illumination and ocular grid was used for the observation of the specimens. Photographs were taken with the use of the Nikon 7000 photographic camera with objective 105 mm and supplementary lenses.

Agapanthia bohemica sp. n. Figs 1-7

Head densely, finely punctate, with punctures moderately finer than those on pronotum. In lateral view, height of visible part of eye as large as its width. Whole anterior side of head up to insertion of antennae and up to eyes shortly, densely setose with decumbent setae. Vertex and posterior part of head behind eyes not setose in this way. Head vertex with only indicated short longitudinal stripe having similar setation. Entire head with exception of vertex with sparse, long, black, erect setae.

Antennae. Colour of first antennomere black but joint in antennal fossa dark reddish black. Second antennomere black, reddish brown at base. All other antennomeres prevalently dark reddish brown, narrowly blackened or black at end. First antennomere with long black pubescence, denser inside and sparser outside. Black setae about as long as ¹/₂ to ³/₄ antennomere width. Other antennomeres also with long, black setae, but only on inner side. Setation of third antennomere denser, further antennomeres with sparser setae, antennomeres 7 and 8 with individual setae only. Setae 1.5 to 2 times longer than antennomere width. All antennomeres from antennomere 4 with very short decumbent setae, basal 3/5 with whitish grey setae, further parts toward end with black setae.

Pronotum longer than wide. Shortly narrow (=96%) in basal part, only very weakly widened backward (=100%) in last 1/5 to 1/6 weakly narrowed (=96%). Pronotum surface punctate throughout. Puncture diameter small, about half puncture diameter on elytra. Interspaces between punctures as wide as 1/4 to 1/3 puncture diameter. Pronotum with three longitudinal stripes, two on sides and one at middle, consisting of yellowish grey setae. Stripes not very distinct, middle stripe almost indistinct.

Scutellum shape rather unusual. Basal margin wider, posterior one narrower (0.7 anterior width). Sides moderately oblique backward, arcuately merging into straight posterior side. Scutellum length about as large as width at base. Scutellum black, glabrous. Scutellum surface with very fine wrinkles obliquely directed backward and inward.

Elytra widest in basal part, strongly convergent backward. Elytra width at midlength of 0.92 width at base; width at $\frac{3}{4}$ of 0.84 width at base. Elytra shining, black. Deeply punctate throughout their surface, interspaces between punctures about half puncture diameter. Elytra also with two types of pubescence. With sparse, long, black setae throughout. Setation at base longer and upright erect, moderately oblique backward. In last third moderately shorter and denser. Elytral margins with short, decumbent, grey pubescence. Pubescence sparse, surface not continuously covered. From 2/5 pubescence extending from sides upward to elytral surface area and thus fused at about apical 1/6. As sparse as on sides. A light sutural stripe is characteristic of species of the subgenus *Agapanthia*. In the new species, there is an inconspicuous, very narrow, dark (almost black) sutural stripe, having sparse grey setae before the apex only.

Body underside black, its surface covered with whitish grey, decumbent pubescence throughout. Tomentum dense, almost completely covering the body. For terminal abdominal ventrites, aedeagus and parameres see the photo.

Legs. All legs black, only claws of all legs reddish brown. Legs also with double pubescence. Sparse, long, black setae, particularly on tibiae and femora, directed outward. Shorter whitish grey denser setae covering legs throughout. Ratio of tarsomere lengths: basal tarsomere always longest (1.0). Protarsi: tarsomere 2:1 = 0.72, 3:1 = 0.68; mesotarsi: 2:1 = 0.59, 3:1 = 0.45; metatarsi: 2:1 = 0.48, 3:1 = 0.37.

Body length: 11 mm.

Holotype: ♂, Bohemia mer., Terezín env. Kunžak, 26.8.1985, M. Sláma lgt. Coll. Staatliche Museum für Naturkunde in Karlsruhe.

Derivatio nominis. The species was named based on the Latin name of the country - Bohemia, where the holotype was found.

Discussion. I decided to describe the species after more than 30 years, after I found the second specimen; thereafter, I saw the third specimen which I held in my hand, but it unfortunately escaped. I found all the specimens quite randomly at the same location, all of them in flight. This year, I paid enhanced attention to the location, but I unfortunately did not meet with success. In my opinion, the new species belongs to the subgenus *Agapanthia* Audinet-Serville, 1835,

which includes from Europe only two other species, *Agapanthia cardui* (Linnaeus, 1767) and *Agapanthia suturalis* (Fabricius, 1787). The new species differ from both of them by its body shape, particularly narrowing elytra; the two other species have prevalently parallel elytra. From the Central-European individuals of *Ag. cardui*, it also differs by a sharp termination of the elytra. The colour of antennae is also different.

Agapanthia uxoria sp. n. Figs 8-14

Head black. Densely and coarsely punctate. Punctures of about same size as those on pronotum. Head with very sparse, erect, long, black setation. Short, decumbent, yellowish grey pubescence also present throughout the surface; pubescence not dense, only on genae rather denser under eyes.

Antennomeres prevalently black, only at base narrowly reddish. Joint at base of first antennomere can be partially reddish. Antennomere 2 black. Antennomere 3 long, very narrowly reddish only at base; from antennomere 4, reddish colour is extending from base to 1/4 - 1/3 antennomere length. First antennomere very densely punctate, surface apparently transversally wrinkled. Punctures about as large as 1/3 puncture size on pronotum. All further antennomeres even more finely, densely punctate. Male antennae length exceeding elytra by 1/3- 1/2 elytra length. Antennomere 3 1.62- 1.67 times longer than antennomere 4. First antennomere with long and dense, black pubescence almost throughout its circumference. Length of moderately erect setae about equal to half antennomere width. Antennomeres from antennomere 3 with long, black setation prevalently on underside and rather inside, setae long, about 1.5-2 times or possibly 2.5 times longer than antennomere width. Setae on antennomere 3 densest, stepwise sparser on further antennomeres, from antennomere 6 setae rather individual. Antennomere 3 also with short grey pubescence up to 3/4, sometimes only on inner side. From antennomere 4, all further antennomeres also with short grey pubescence along whole circumference from base to about middle.

Pronotum black, moderately longer than wide, 1.06- 1.18x, widened behind middle, 1.13- 1.21x wider than at base. Basal margin

1.06-1.13x wider than anterior margin. Roughly and relatively finely punctate. Puncture diameter about three times smaller compared to punctures on elytra. Pronotum with three densely tomentous stripes, a middle stripe and two lateral ones. Stripes yellowish grey. Very sparse and long, thin pubescence present throughout pronotum surface.

Scutellum wider than long, with very dense, yellow pubescence.

Elytra parallel, black. Elytra length 2.93- 3.18 times larger than basal width. More or less strongly narrowed toward apex, rounded apically. Roughly and densely punctate. Punctures larger than interspaces between them, about three times larger than those on pronotum. Mostly appearing to form transversal or oblique irregular rows. With long, erect, fine setae from base, shortening and rather becoming decumbent toward elytral apex. Elytra covered with short, yellowish grey, irregularly distributed tomentum throughout.

Body on underside black, surface with decumbent, yellowish grey setae throughout. For terminal abdominal ventrites, aedeagus and parameres see the photo.

Legs black throughout, with yellowish grey adjacent tomentum. Anterior tibiae with very sparse, long, erect black setae. **Body length:** 13-15 mm.

Holotype: \mathcal{J} , Graecia, Thess., Stomion, 6.1984, J. & M. Sláma lgt. **Paratypes:** 4 $\mathcal{J}\mathcal{J}$, same location and date. Everything in coll. Staatliche Museum für Naturkunde in Karlsruhe.

Derivatio nominis. The species is named in memory of my wife (=uxor) Jarmila, who collected it together with me.

Discussion. The newly described species is relative to *Agapanthia villosoviridescens* DeGeer, 1775 (Fig. 15) and *Agapanthia cynarae* Germar, 1817 (Fig. 16). In general, it is closer to *A. villosoviridescens*. It differs from it in a number of characters. Longer elytra (in A. *villosoviridescens* the elytra length to elytra width is only of 2.81- 2.93). Furthermore, for example antennomere 3 is longer 1.39- 1.54 times than antennomere 4, etc. At first sight it is also different in the tomentum, which does not form as distinct spots as in *A. villosoviridescens*, is sparser and shorter. However, the colour of antennae at base is considerable; they are similarly reddish as in *A. cynarae*. From A. cynarae, it is different by having elytra

margins not densely tomentous (without marginal densely tomentous yellow stripe), and tomentum of the elytra is not as regular as in *A. cynarae*. Compared to *A. cynarae*, the new species is slimmer; its body length to body width ratio is larger. In a work by Sláma & Slámová (1995), we reported the species from the location Stomion under *A. villosoviridescens*.

Acknowledgement. I would like to thank Dr. A. Riedel from the Museum in Karlsruhe for the loan of the material, Mr. M.L. Danilevski from Moscow for valuable advices and prof. M. Rakovič for the translation of my manuscript.

REFERENCES

- Bense U. 1995. Longhorn beetles. Illustrated key to the Cerambycidae and Vesperidae of Europe. Margraf Verlag, Germany. 512 pp.
- Heyrovský L. 1955. Fauna ČSR. Svazek 5. Tesaříkovití Cerambycidae. ČSAV, Praha. 347 pp.
- Löbl I. & Smetana, A. 2010. Catalogue of Paleartic Coleoptera. 6. Chrysomeloidea. Apollo Books, Stenstrup. 924 pp.
- Plavilščikov N.N. 1968. Obzor roda *Agapanthia* Serv. (Coleoptera, Cerambycidae) fauny SSSR. Sbornik trudov Zool. muzea. 11: 113-168.
- Rapuzzi P., Sama G. & Kotán A. 2013. Two new Agapanthia Audinet-Serville, 1835 species from Greece (Coleoptera: Cerambycidae). - Munis Entomology & Zoology Journal. Vol. 8. No. 2: 582.
- Sláma M. 1998. Tesaříkovití Cerambycidae České republiky a Slovenské republiky (Brouci-Coleoptera). Sláma, Krhanice. 384 pp.
- Sláma M. 2006. Icones Insectorum Europae Centralis. Coleoptera, Cerambycidae. -Folia Heyrovskyana. 4. 40 pp.
- Sláma M., Slámová J. 1995. Contribution to the recognition of Greek and Yugoslavian longicorn beetles (Coleoptera, Cerambycidae). - Biocosme Mésogéen, Nice. 12: 117-143, 1996 [1995].
- Steiner S. & Schmid H. 2013. Eine neue Agapanthia-Art (Coleoptera: Cerambycidae: Lamiinae: Agapanthiini) aus Griechenland. - Zeitschrift der Arbeitsgemeinschaft Österreichischer Entomologen. 65: 1-4.



Figs 1-7. Agapanthia bohemica sp. n.

Holotypus, male, Bohemia mer., Terezín env., Kunžak, 26.8.1985, M.Sláma lgt.

1 - imago, dorsal vieu; 2 - aedeagus, dorsal vieu; 3 - aedeagus, lateral vieu; 4 - parameres, dorsal vieu; 5 - sternite VIII; 6 - tergite VIII; 7- tergite IX.

Figs 8-14. Agapanthia uxoria sp. n.

Holotypus, male, Graecia, Thess., Stomion, 6.1984, J. & M.Sláma lgt.

8 - imago, dorsal vieu; 9 - aedeagus, dorsal vieu; 10 - aedeagus, lateral vieu; 11 - parameres, dorsal vieu; 12 - sternite VIII; 13 - tergite VIII; 14 - tergite IX.

Fig. 15. Agapanthia villosoviridescens DeGeer, 1775.

male, Bohemia, Terezín u Kunžaku, 6. 1987, J. & M.Sláma lgt.

Fig. 16. Agapanthia cynarae Germar, 1817.

male, Graecia, Thes., Omolio, 6.1981, J. & M.Sláma lgt.

Received: 12.10.2016 Accepted: 11.11.2016