

Two new *Amaurobius* species (Araneae: Amaurobiidae) from Greece

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Summary

Two new species of *Amaurobius* are described from Greece: *A. paon* n.sp. (♂ ♀) from Peloponnese, Taiyetos mts, and *A. ossa* n.sp. (♂ ♀) from Ossa mts, Thessalia. Some comparative remarks on *A. pallidus* L. Koch (♂) are included, together with a tentative key to the *Amaurobius* species of south-eastern Europe (males only). *A. provisoricus* Kolosvary, 1939 from Dalmatia is indicated as a junior synonym of *A. erberi* (Keyserling, 1863).

Introduction

Endemic *Amaurobius* species with small ranges occur in four regions of Europe: along the southern macroslope of the Alps and in the northern Apennines (4 species, Thaler, 1990; Pesarini, 1991: *A. crassipalpis* Canestrini & Pavesi, *A. pavesii* Pesarini, *A. ruffoi* Thaler, *A. scopolii* Thorell), in Corsica (1 species: *A. latebrosus* Simon), in the atlanto-mediterranean (5 nominal species, Hubert, 1965), and in the ponto-mediterranean subregion (5 nominal species in Yugoslavia, Lehtinen, 1967: *A. annulatus* (Kulczynski), *A. drenskii* Kratochvil, *A. hercegovinensis* Kulczynski, *A. kratochvili* Miller, *A. minor* Kulczynski; 1 in Greece: *A. pelops* Thaler & Knoflach, 1991). They are woodland species, apparently confined to the glacial refugia of the arboreal fauna (De Lattin, 1949). As they are diplochronous, maturing in late autumn, additional discoveries might be expected. We here describe two further new species from Greece and provide comparative remarks and figures of *A. pallidus* L. Koch. Until recently, only 2–3 widely spread *Amaurobius* species were known

from that region (Bristowe, 1935; Hadjissarantos, 1940). The affinities of European *Amaurobius* are not yet understood, partially due to the lack of information about males of some species.

Type specimens have been deposited in the following institutions: MHNG = Muséum d'Histoire naturelle, Genève; NMW = Naturhistorisches Museum Wien. CTh = Thaler collection. All measurements are in mm.

Amaurobius paon, new species (Figs. 1, 4, 7, 10, 13–14)

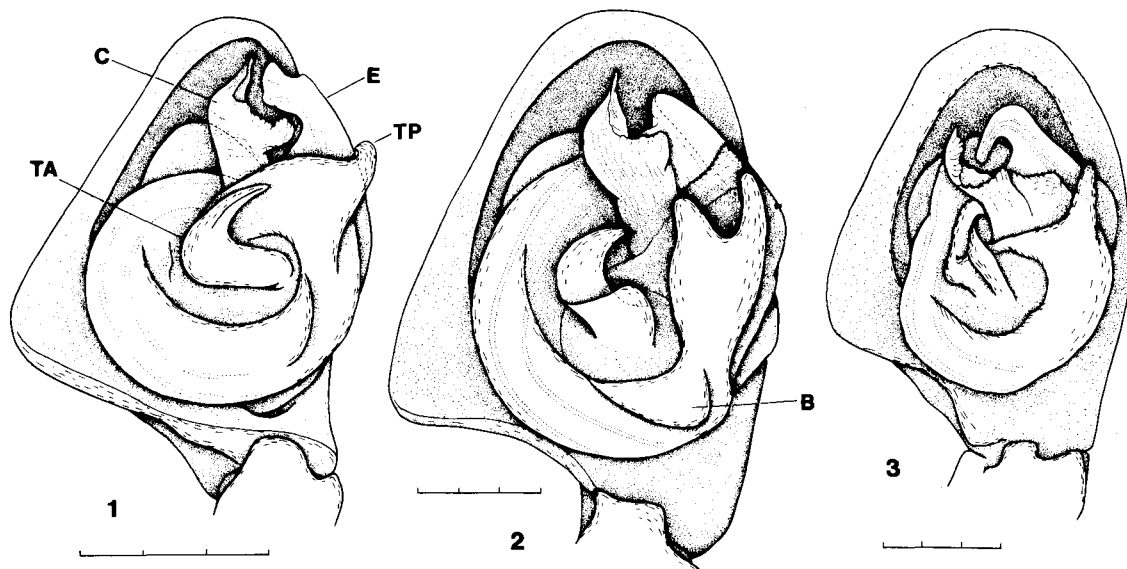
Material examined: Peloponnese, Mani, Taiyetos mts, M. Pan. i Giatrissa, 3♂, 1♀, 30 Sept. 1991. 1♂ holotype NMW; 1♂ paratype MHNG; 1♂, 1♀ CTh.

Etymology: Paon = Pan, Greek rural god. Proper name in apposition, hence invariable.

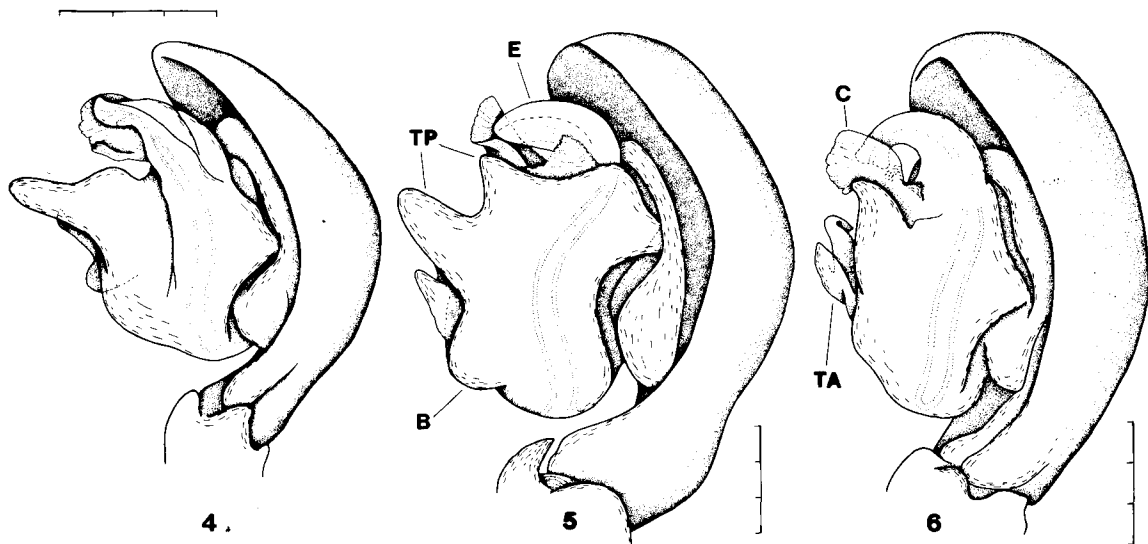
Diagnosis: Endemic species of the *fenestralis* group in the Peloponnese; distinguished most readily by strong development of the prolateral apophysis of the male palpal tibia (Fig. 10) and by the tegular process, which is pointed and projecting (Figs. 1, 4). Epigynum: Fig. 13.

Description (♂/♀): Total length 4.0/4.1, prosoma length 2.0–2.1/2.1, width 1.4–1.5/1.4. Femur I 2.0/1.6. Prosoma yellow, legs yellow, not annulated. Abdomen greyish, with basic pattern of *fenestralis* group (e.g. Loksa, 1969: 22). **Palp:** Dorsal-prolateral tibial apophysis striking, its base oblique and voluminous, distal half sickle-shaped, lamellar (Figs. 7, 10). Intermediate tibial apophysis inconspicuous. Bulbus (Figs. 1, 4): tegular process pointed and projecting, tegular apophysis unmodified. **Epigyne and vulva** (Figs. 13–14): Epigynal plate transverse, narrow, with rounded anterior corners. Sperm ducts very short, receptacles far apart. Apparently similar to *A. pelops*.

Affinities: The vulva suggests affinities to the first endemic *Amaurobius* species in the Peloponnese, *A. pelops*, discovered recently in the Killini mts (Thaler & Knoflach, 1991). However, the tibial apophyses are quite different.



Figs. 1–3: Male palp, ventral view. 1 *Amaurobius paon* n.sp.; 2 *A. ossa* n.sp.; 3 *A. pallidus* L. Koch. Abbreviations: B = bulge of tegulum, C = conductor, E = embolus, TA = tegular apophysis, TP = tegular process. Scale lines = 0.3 mm.



Figs. 4–6: Male palp, prolateral view. 4 *Amaurobius paon* n.sp.; 5 *A. ossa* n.sp.; 6 *A. pallidus* L. Koch. Abbreviations as in Figs. 1–3. Scale lines = 0.3 mm.

Distribution: Known only from the type locality in southern Peloponnese, Taygetos mts. Specimens taken under stones and logs in woodland with *Abies*, *Juniperus*, *Quercus*; c. 1100 m, ground covered with a dense layer of moss.

***Amaurobius ossa*, new species** (Figs. 2, 5, 8, 11, 15–16)

Material examined: Thessalia, Ossa mts, road from Stomio to Melivio, 5♂, 6♀, 27 Sept. 1987. 1♂ holotype NMW; 1♂, 2♀ paratypes NMW; 1♂, 2♀ paratypes MHNG; 2♂, 2♀ CTh.

Etymology: Noun in apposition, hence invariable.

Diagnosis: Apparently close to *A. pallidus*; distinguished most readily by the bifid tegular process (Figs. 2, 5) and the male palpal tibia (Fig. 8). Epigynum: Fig. 15. Type locality: Ossa mts, Thessalia.

Description (♂/♀): Total length 6.2–8.0/7.2–9.6, prosoma length 3.0–3.9/3.8–4.5, width 2.2–2.7/2.3–3.0. Femur I 3.1–3.9/2.8–3.3. Prosoma brownish, legs not annulated. Abdomen greyish, basic pattern indistinct.

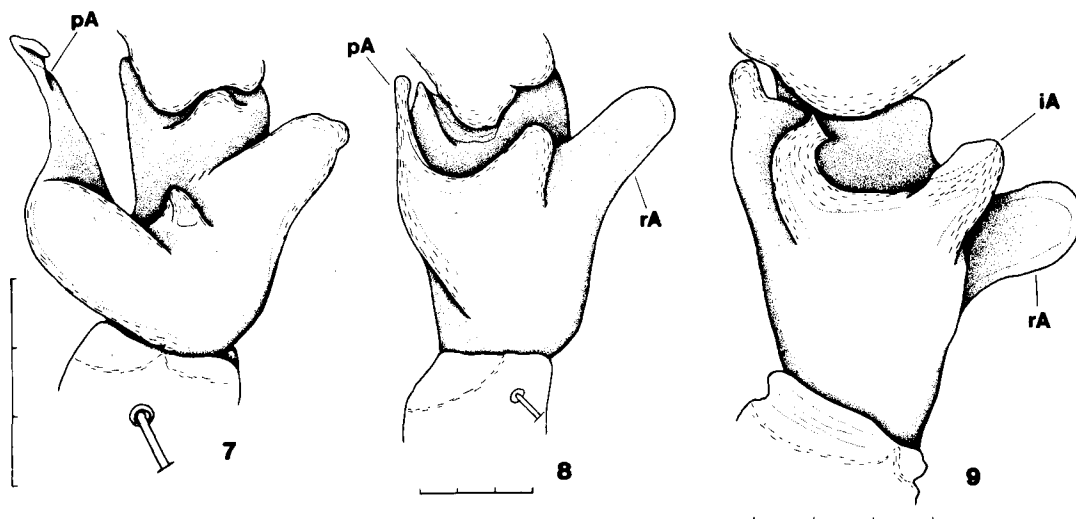
Palp: Tibia as in *pallidus* with short dorsal apophyses, prolateral apophysis in dorsal view narrow and straight, but slightly bent dorsally when seen from the side; intermediate apophysis strong, conical, with a ventral accessory tooth (Figs. 8, 11). Bulbus (Figs. 2, 5): Tegulum with a distinct bulge at its posterior end. Tegular process bifid, tegular apophysis with protruding base. **Epigyne and vulva** (Figs. 15–16): Epigynal plate transverse, narrow, width 0.7–0.8. Side lobes indistinct, receptacles strongly sclerotised at anterior corners of epigynal plate. Sperm ducts short, receptacles close together.

Affinities: Apparently close to *A. pallidus*.

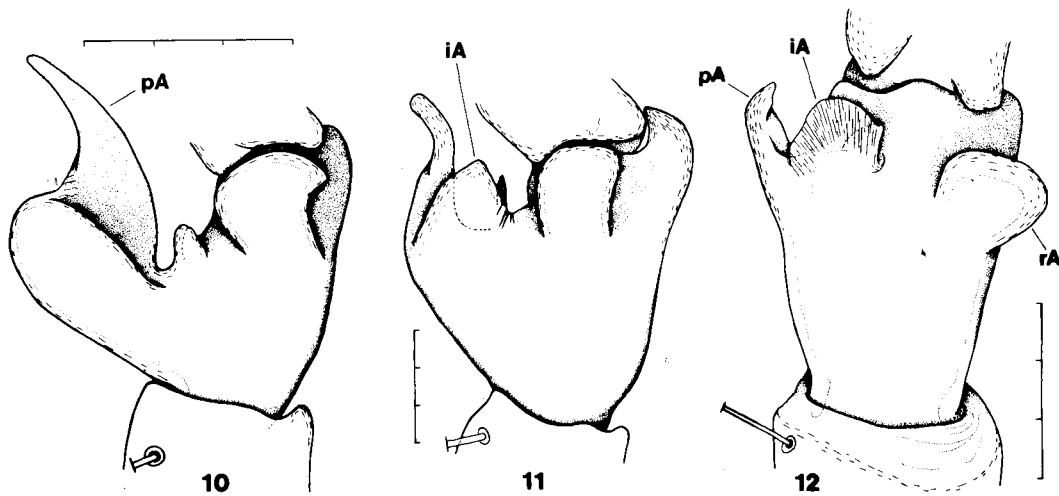
Distribution: Known only from the type locality in Thessalia, Ossa mts, c. 850 m. Specimens taken under stones in dense woodland with *Fagus* along a small brook; ground covered with a thick layer of leaf litter.

***Amaurobius pallidus* L. Koch, 1868** (Figs. 3, 6, 9, 12)

Material examined: North-eastern Bulgaria, Silistra distr., Srebarna, 1♂, 11 July 1986 (Coll. Deltshv).



Figs. 7–9: Male palpal tibia, dorsal view. 7 *Amaurobius paon* n.sp.; 8 *A. ossa* n.sp.; 9 *A. pallidus* L. Koch. Abbreviations: iA = intermediate apophysis, pA = prolateral-dorsal apophysis, rA = retrolateral apophysis. Scale lines = 0.3 mm.

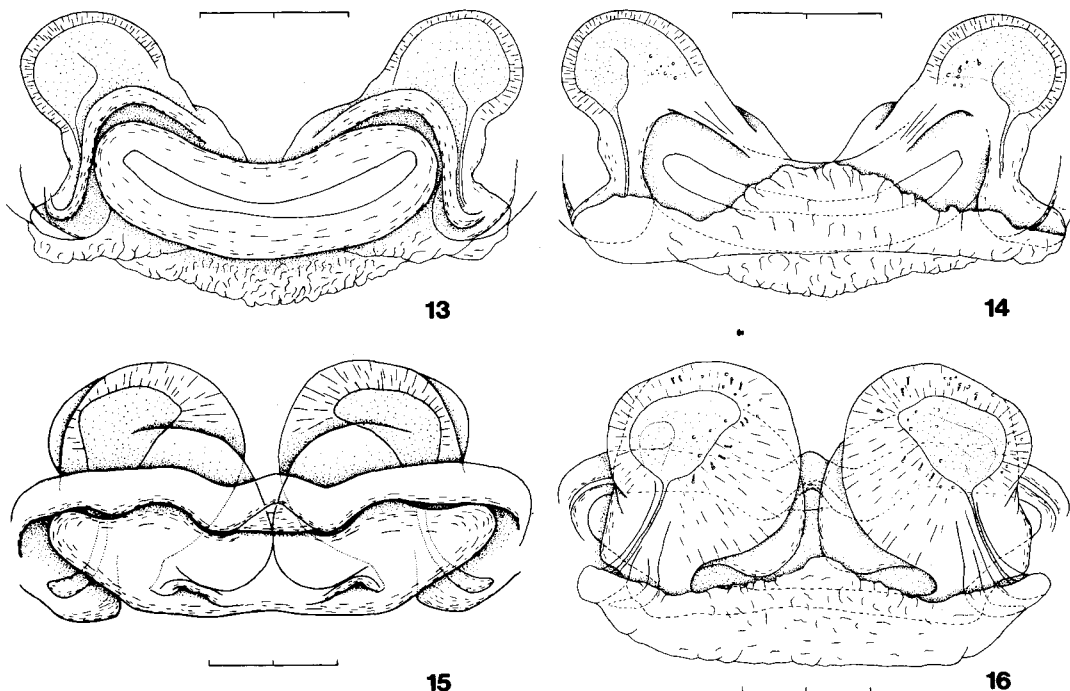


Figs. 10–12: Male palpal tibia, retrolateral view. **10** *Amaurobius paon* n.sp.; **11** *A. ossa* n.sp.; **12** *A. pallidus* L. Koch. Abbreviations as in Figs. 7–9. Scale lines = 0.3 mm.

Taxonomic remarks (δ): The species can be recognised easily from the dorsal apophyses of the palpal tibia (Figs. 9, 12) which are short and equal in length, the prolateral apophysis hooked, the intermediate blade-like. The tegular process is lamellate-triangular, pointing forwards; tegular apophysis with protruding base (Figs. 3, 6).

Distribution: This is a poorly known species. It can be recognised clearly from male characters, which have been illustrated only twice, by Chyzer & Kulczynski (1891: Tab. VI, fig. 40a, left palpal tibia in dorsal view) and by Bösenberg (1902: right palpal tibia from dorsal, right palp from retrolateral). Kulczynski's figure has been used in Wiehle (1953) and was redrawn in Heimer & Nentwig (1991). The latter authors misinterpret (fig. 997.2) the retrolateral apophysis of the tibia as the dorsal-prolateral apophysis. The ♀ holotype was discovered in Mehadia (Romania, South Carpathian mountains; Koch, 1868), so

the interpretation of the species in Chyzer & Kulczynski should be correct. The vulva is characterised by its strongly sclerotised receptacles (Loksa, 1969) closely attached to the anterior corners of the epigynal plate and close together as also in *A. ossa* n.sp. The epigyne is a rather unmodified, narrow transverse structure. Identifications based on females only therefore may be wrong. Kulczynski's (1903) record from Crete was published with a question mark. *A. p. strandi* Charitonov from Crimea presumably is a distinct species, as the receptacles stand wide apart (Charitonov, 1937). Even the vulva illustrated by Wiehle (1953: fig. 271) does not necessarily belong to *pallidus* as it was drawn from a specimen from "Greece". The figures given by Drensky (1940, ♂ ♀) and by Bösenberg (1902, ♀) cannot be used for an exact identification. Therefore the distribution area of *A. pallidus* as summarised by Bonnet (1955) and Drensky (1936), extending from Germany and Russia (Moscow) to



Figs. 13–16: Epigyne/vulva. **13** *Amaurobius paon* n.sp., ventral view; **14** Ditto, dorsal view; **15** *A. ossa* n.sp., ventral view; **16** Ditto, dorsal view. Scale lines = 0.2 mm. Figs. 1–16 drawn by B. Knoflach.

Crete and even Calabria, may be too large. In Germany, the species has never been refound since 1903. At least in Greece there is a further species, *A. ossa* n.sp., whose females previously could have been mistaken as *pallidus*. So presumably the range of *A. pallidus* is confined to Romania (recent records by Weiss, 1980, 1984) and adjacent parts of Hungary, Yugoslavia (Nikolic & Polenec, 1981) and Bulgaria. Peripheral records should be corroborated by the capture of males.

Tentative key to *Amaurobius* of South-east Europe (males only)

Three species are not included as they are known only from females: *A. annulatus* (Kulczynski, 1906) (Crna Gora, Zelenika), *A. drenskii* Kratochvil, 1934 (Bosnia, near Sarajevo; ?=*A. minor*; Lehtinen, 1967), and *A. kratochvili* Miller, 1938 (Dalmatia, island of Brac).

1. Palpal tibia with 2 apophyses, tegular process inconspicuous *A. ferox* group
[2 species in Slovenia, Polenec (1989). For identification see Pesarini (1991). The occurrence of *A. scopoli* Thorell, 1871 in Montenegro (Nikolic & Polenec, 1981) and in Greece (Bristowe, 1935) is improbable.]
- Palpal tibia with 3 apophyses (prolateral-dorsal, intermediate, retrolateral) 2
2. Tegular process projecting in ventral/anterior direction 3
- Tegular process closely adjacent to bulbus 7
3. Tegular process ending blunt
. *A. hercegovinensis* Kulczynski, 1915
[Bulbus and tibia as in Kulczynski (1915). Hercegovina: Bilek.]
- Tegular process triangular *A. erberi* (Keyserling, 1863)
[Holomediterranean species, northernmost localities in Slovakia and around Vienna. Tibia and bulbus: Simon, 1914; Loksa, 1969; Pesarini, 1991. We have no doubt that *A. provisoricus* Kolosvary, 1939, is a junior synonym of *A. erberi* (1♂ from Brac, Dalmatia, not seen, **new synonym**). Fig. 4 in Kolosvary (1939) is an unmistakable drawing of the tibia of *erberi*.]
- Tegular process lamellate 4
4. Tegular process bifid (Figs. 2, 5); Thessalia
. *A. ossa* n.sp.
- Tegular process pointed 5
5. Prolateral and intermediate tibial apophyses equal in length 6
- Prolateral-dorsal apophysis strongly developed (Figs. 7, 10); Peloponnese, Taygetos mts *A. paon* n.sp.
6. Prolateral apophysis of tibia hooked (Fig. 9)
. *A. pallidus* L. Koch, 1868
[Romania and adjacent regions.]
- Prolateral apophysis triangular
. *A. pelops* Thaler & Knoflach, 1991
[Northern Peloponnese, Killini mts.]
7. Tegular process straight, distally truncate
. *A. obustus* L. Koch, 1868
[Main distribution area Slovenia and Southern Alps to Southern Tyrol and Trentino. Tibia and bulbus:

Denis, 1963; Loksa, 1969; Thaler, 1990; Pesarini, 1991.]

- Tegular process directed to retrolateral side 8
- 8. Tegular process rounded, prolateral apophysis very long and rod-like (Polenec, 1978)
. *A. minor* Kulczynski, 1915
[Croatia and Slovenia, few records.]
- Tegular process truncate, its anterior edge projecting.
Palpal tibia: e.g. Wiehle, 1953; Pesarini, 1991
. *A. fenestralis* (Ström, 1768)
[Common European species, not in Spain.]

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***Cyrba simoni*, replacement name for *Cyrba bimaculata* Simon, 1886 (Araneae: Salticidae)**

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The species *Cyrba bimaculata* was described by Keyserling (1883: 1439) from Sydney, Australia. This species and several others placed by Keyserling in the genus *Cyrba* Simon were subsequently transferred by Simon (1901: 561, 564, 566) to the genus *Salpesia* Simon, though this author was evidently not familiar with these species (Simon, 1901: 561, *footnote*). The correct generic position of *bimaculata* Keyserling is currently unknown; Wanless (1984b: 67) considered it "almost certainly not congeneric with *Salpesia*", but the species continues to be listed in the latter genus (e.g. Prószyński, 1990: 307).

Cyrba bimaculata Simon (1886: 392) is an unrelated African species which has been shown to be a true *Cyrba* (Wanless, 1984a). As it was described in 1886 it is a junior primary homonym of *Cyrba bimaculata* Keyserling, 1883 (International Code of Zoological Nomenclature, Article 57). In accordance with Article 60 of the International Code, the former name requires a replacement and I

hereby propose *Cyrba simoni* as a replacement name for *Cyrba bimaculata* Simon, 1886. A description of this species is provided by Wanless (1984a) in his revision of the genus *Cyrba*.

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