

On the *Aradidae* - fauna of Greece (*Heteroptera*)

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Received: Sept. 3rd, 1989

Keywords: Heteroptera, Aradidae, Greece

ABSTRACT The literature between 1859 and 1988 reports only 13 species of *Aradidae* (10 *Aradus*, 2 *Quilnus*, 1 *Brachyrhynchus*) from Greece to date. Two of them are to be deleted from the list due to misidentification (*Quilnus discedens* Hv.) and synonymy (*Brachyrhynchus basalis* Fieb.). Now additional faunistical data for 10 species can be given and one more species (*Aneurus laevis laevis* F.) is recorded as new to the Greek fauna.

IZVLEČEK - O GRŠKI FAVNI STENIC IZ FAM. ARADIDAE (HETEROPTERA) - V literaturi iz obdobja 1859 do 1988 je za Grčijo navedenih samo 13 vrst aradid (10 rodu *Aradus*, 2 *Quilnus*, 1 *Brachyrhynchus*). Od teh je dve vrsti potrebno brisati iz seznama zaradi napačne določitve ((*Quilnus discedens* Hv.) in sinonimije (*Brachyrhynchus basalis* Fieb.). V prispevku so navedeni novi favnistični podatki za 10 vrst in ena vrsta (*Aneurus laevis laevis* F.) je nova za favno Grčije.

Introduction

Due to its geographical situation and the differentiated topography Greece comprises some of the zoogeographically most interesting areas of the Balkan Peninsula. The present knowledge of the *Heteroptera*-fauna of Greece in general and that of the family *Aradidae* in particular is still comparatively poor.

According to data from the literature, there are 13 species of *Aradidae* belonging to 3 genera known to date. But those data are mostly without precise localities and their source remains unknown, but once published they have been repeated by succeeding authors. The following table presents a review of the literature data.

A u t h o r	S p e c i e s	A r a d u s												
		betulae	betulae simulans ¹	brenskei	cinnamomeus	conspicuus	(crenatus auct.)	var. nigricans ²	flavicornis	krueperi	obtectus	pictus	ribauti	versicolor
BAERENSPRUNG	1859													*
CHICOTE	1882	●											●	
REUTER	1884		*	*					*					
REUTER	1891				●		*		●	●				
LETHIERRY & SEVERIN	1896													○
PUTON	1899			○				○	○					○ ○
OSHANIN	1912		○						○					○ ○
STICHEL	1938	○	○	○					○	○	○		○	○ ○
BEIER & WAGNER	1956										●			
STICHEL	1957	○	○	○	○				○	○	○	○		○ ○
JOSIFOV	1958											●		
JOSIFOV	1959												●	
JOSIFOV	1970	○	○	○					○	○	○	○		○ ○
DETHIER	1976	●											●	
DROSPOULOS	1980	○	○	○	○				○	○	○		○	○
HEISS	1983			●										
HEISS & GÜNTHER	1986							●						
JOSIFOV	1986	○	○ ○	○					○ ○	○	○	○	○ ○	○
VASARHELYI	1988									*	●			

Table 1: Synopsis of published records of *Aradidae* from Greece.

* description based on Greek material; ○ only general indication "Greece" given; ● locality indicated

Note 1/ This taxon was described as *betulae* var. *simulans* Rt. and has been given subspecific rank by some later authors. Today it is recognised as a mere synonym of *betulae*, as the differences described range within the variability of the species.

Note 2/ *Aradus conspicuus* (*crenatus* auct.) var. *nigrescens* Rt. is also without nomenclatorial importance and only represents a colour variation within the variability of the species.

Note 3/ *Quilnus discedens* Hv. was first reported by JOSIFOV, 1959, from the island of Thasos. The specimen was reinvestigated and it proved to be *Qu. parvicollis* Stal. Therefore, it is to be deleted from the list although it may occur in Greece as well.

Note 4/ *Brachyrhynchus basalis* Fieb., 1861 has been described on material from "Andalusia" in Spain. LETHIERRY & SEVERIN, 1899: 42 mentioned Greece referring to PUTON, 1886: 35, but there is no such reference for this country. Later, this published reference for Greece was repeated, but I was unable to trace the source of it. A female specimen kept under this name in Puton's collection (Mus. Paris) could be examined and corresponds well to Fieber's description and might belong to the original series. This specimen belongs to and is synonymous with one of the oriental species of the *B. crenatus - hispidus* group. As it is obviously a case of wrong locality labels (or simply introduced to Spain) it is to be deleted from the European fauna.

Faunistical survey

The following faunistical data comprise the few detailed references from the literature and in addition, also data of material which has been collected or its determination has been checked by the author.

1/ *Aradus betulae* (L.) Recorded as "varius F" (= *betulae* L.) from Parnass, lg. Krueper, REUTER, 1882; description of *betulae* var. *simulans* from Aetolia, REUTER, 1884; Kephallinia Mt. Aenos, 1350 m under bark of *Abies* 1 ♂ 1 ♀ 14 L, 31 III 71 lg. Hauser, DETHIER, 1976; to be verified, might be *pictus* Baer.

Pindos, Smolikas 2000 m, 3 ♀ 2 L, 1 - 10 VIII 81 lg. Mühle in coll. He.

2/ *Aradus brenskei* Reut. Description from Morea (= Peloponnisos), Cumani, 1 ♂ 1 ♀ lg. Brenske, REUTER, 1884.

Pendayi 380 35' N, 220 5' O, 900 m, 2 ♂ lg. Aspöck, Rausch & Hüttinger, 4 VI 69, coll. He; Makedonia, Oros Vermio Rodohori, ♂♂♀♀ 2 VII 82, lg. Rieger in div. coll.; 20 km E Mikrolimni (Florina), under loose bark of *Populus*, VIII 86, lg. et coll. He.

3/ *Aradus cinnamomeus* Panz. Island of Crete, Thrypti-Afendis at 1000 m on *Pinus brutia*, ♂♂♀♀ 24 VI 3 V 80 lg. et coll. He, HEISS, 1983.

Mikrolimni on young living *Pinus*, ♂♂♀♀ VIII 86, lg. et coll. He; Limni Vegeritis, east side, some specimens under the same conditions, VIII 86 He.

4/ *Aradus conspicuus* H. S. Description of *dilatatus* var. *nigricans* Rt. from Morea, Divri under bark of *Abies cephalonica*, VII, and citation of "*dilatatus*" (= synonym of *conspicus*) from Attika, REUTER, 1891.

Morea and Attika lg. Oertzen, specimens in Mus. Amsterdam vid. He; Pindos, Smolikas 2000 m, 1 ♀ 3 L, 1 - 10 VIII 81, lg. Mühle in coll. He; 20

km E Mikrolimni under loose bark of *Populus*, 2 ♂ VIII 86, lg. et coll. He; Florina 1 ♂, 25 V 88 lg. Freude in coll. He.

5/ *Aradus flavicornis* Dalm. Crete, Sisses at light, ♂♂♀♀ VII IX 77, lg. Malicky in coll. He and Günther, HEISS & GÜNTHER, 1986.

Mt. Athos IX 67, 1 ♀ lg. Wellschmied, coll. He; Mikrolimni at light, 1 ♀ VIII 86 lg. et coll. He; Pelop. Monemvasia 1 ♂ 1 ♀ at light, VII VIII 86 in coll. Rieger.

6/ *Aradus krueperi* Rt. Description based on 1 ♀ from Aetolia lg. Krueper, REUTER 1884; Attika nr. Athens under bark of *Quercus*, REUTER, 1891.

Pelop. Vasilaki on *Quercus*, 1 ♂ 2 ♀ 3 L, lg. Bouver in coll. Rieger; Larissa, Mt. Ossa, 1 ♂ 1 ♀ V 88, lg. Mühle in coll. He.

7/ *Aradus obtectus* Vás. This species has been described only recently and was mixed with *pictus* Baer. The following records are from Greece: 2 ♂ 2 ♀ Morea, Cumani lg. Brenske in Mus. Helsinki and Mus. Budapest; 1 ♂ Kephallinia lg. Paganetti; 1 ♂ 1 ♀ Zagradenjy Drama 15 IX 86 in coll. He, VÁSÁRHELYI, 1988.

8/ *Aradus pictus* Baer. Description of *pictus* from "Graecia, Parnas", BAERENSPRUNG, 1859; Attica lg. Krueper, CHICOTE, 1882; Attika on *Pinus halepensis*, Parnassos, Euboea, REUTER, 1891; the record from Kephallinia Mt. Ainos on *Abies cephalonica* as "*varius* F." (= *betulae* L.) refers most probably to *pictus*, as this species is the only one of the "*betulae*"- group feeding on *Pinus*, REUTER, 1891; Kephallinia Mt. Ainos V 29, Pelop. Voidia V 29 lg. Beier, BEIER & WAGNER, 1956; specimens from old collections have been checked by Vásárhelyi from "Parnass", under bark of *Picea*, "Graecia Parnas" and "Anavriti, Ellas", VÁSÁRHELYI, 1988.

Pelop., Lakonia, Anavriti 950 1120 m, 1 ♂ X, 76 coll. He; Pelop. Erimanthos 800 m, 1 ♀ 23 VIII 81, lg. Osella in coll. He; Euboea Dirphys 1000 m, 1 ♂ 2 ♀ 5 L, lg. Sette coll. Mus. Verona and He; Parnass Dr. Eger 87, 1 ♂ coll. He; Pelop. Lakonia on *Pinus nigra*, in coll. Mus. Amsterdam, vid. He; Pelop. Mega Spileo 1 ♂ III 79 in coll. Rieger; Pendayi 380 35' N, 220 5' O, 900 m, 1 ♀ 4 VI 86 lg. Aspöck, Rausch & Hüttinger in coll. He.

Old records reported from *Pinus* or *Picea* are most probably the real *pictus*; otherwise the specimens might also belong to *obtectus* Vás., which should be verified.

9/ *Aradus ribauti* Wgn. Delta of Nestos (Mesta) river in Northern Greece, XI 42 lg. Vishodzevski, JOSIFOV, 1958.

10/ *Aradus versicolor* H. S. Pelop. Kalavrita gorge under *Platanus*, 3 VI 71 and Epirus, Poldiroson 20 km N Neraida, 1 ♀ lg. Hauser, DETHIER, 1976.

Delphi 2 ♂♂ VIII 58, lg. Eckerlein, coll. Mus. Genève, vid. He; "Graecia" 1 ♀ in Mus. Helsinki, vid. He.

11/ *Quilnus parvicollis* Stal. Literature data are without localities. Thasos X 42, 1 ♂ lg. Vishodzevski, reported as *Qu. descendens* Hv., JOSIFOV, 1959.

Parnass V 66, 1 ♂ lg. Saunders in coll. Mus. Prague, vid. He; Karpathos 2 ♀♀ IV 64, lg. Pieper in coll. Eckerlein, vid. He; Pelop. Olympia on decaying *Pinus*, 2 ♀ lg. Bouwer III 80, in coll. Niehuis, vid. He; Pelop. Mega Spileo 1 ♂ 1 ♀ lg. Niehuis in coll. Rieger and He; Pindos, Smolikis, 1 ♂ 1 ♀ lg. Niehuis in coll. Rieger.

12/ *Aneurys laevis laevis* (F.) Makedonia, Aridea nr. Edessa on *Fagus* and *Quercus* ♂♂♀♀ VIII 86, lg. et coll. He; Thessalia, Larissa Mt. Ossa, 2 ♂ 3 ♀ 23 V 87, lg. Brachat in coll. He.

This is a new record from Greece.

Summary: As 26 valid species of *Aradidae* are reported from the Balkan Peninsula by JOSIFOV, 1986: 80, it can be expected that future intensive collecting will raise the number of *Aradidae* from Greece too. The few available data are not yet sufficient for a zoogeographical analysis.

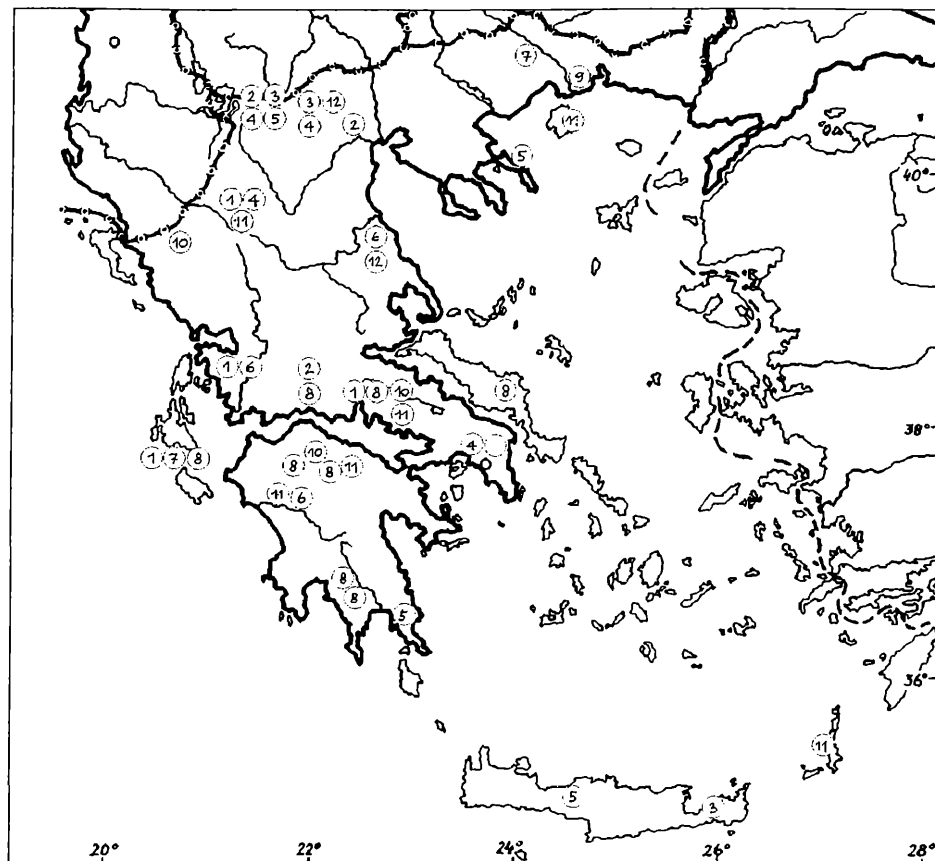
Acknowledgements

For information and loan of material of their collection I thank Dr. M. Josifov (Sofia), Dr. H. Günther (Ingelheim) and Dr. Ch. Rieger (Nürtingen).

References

- BAERENSPRUNG, F., 1859: Neue und seltene Rhynchoten der europäischen Fauna. Berl. ent. Z., 3: 329 - 338.
- BEIER, M. & WAGNER, E., 1956: Zoologische Studien in Westgriechenland V. Teil *Hemiptera-Heteroptera*. Sitzungsber. öst. Ak. Wiss. math. natw. Kl. I, 165 (4 - 5): 281 - 322.
- CHICOTE, C., 1882: Notice sur quelques Hémiptères de la Grèce. Ann. Soc. Ent. Belg., 26: 87 - 90.
- DETHIER, M., 1976: Hétéroptères de Grèce. Mitt. Schweiz. Ent. Ges., 49: 17 - 29.
- DROSOPOULOS, S., 1980: Hemipterological Studies in Greece, Part I *Heteroptera*, a catalogue of the reported species. Biol. Gallo-Hellenica IX (1): 163 - 185.
- HEISS, E., 1983: Heteropteren aus Kreta I. Ber. nat. med. Verein Innsbruck, 70: 135 - 144.

- HEISS, E. & GÜNTHER, H., 1986: Heteropteren aus Kreta IV. Ber. nat. med. Verein Innsbruck, 73: 119 - 131.
- JOSIFOV, M., 1958: Hemipterologische Mitteilung III. - Bull. Inst. Zool. Acad. Sciences Bulg., 7: 343 - 349.
- JOSIFOV, M., 1959: *Hemiptera-Heteroptera* von der Insel Thasos. - Bull. Zool. Inst. Acad. Sciences Bulg., 8: 265 - 269.
- JOSIFOV, M., 1970: Ergebnisse der Albanien Expedition 1961 des Deutschen Entomologischen Institutes. 82. Beitrag *Heteroptera*. Beitr. Ent., 20 (7 8): 825 - 956.
- JOSIFOV, M., 1986: Verzeichnis der von der Balkanhalbinsel bekannten Heteropterenarten (*Insecta, Heteroptera*). Faun. Abh. Staatl. Mus. Tierk. Dresden, 14 (6): 61 - 93.
- JOSIFOV, M. & GÖLLNER-SCHEIDING, U., 1984: Bibliographie der faunistischen Literatur über die Heteropteren der Balkanhalbinsel (*Insecta*). Faun. Abh. Staatl. Mus. Tierk. Dresden, 12 (2): 25 - 37.
- KANELLIS, A., 1967: Bibliographia faunae graecae. 1960 1966 et Supplementum. Ann. Fac. phys. math. Univ. Thessaloniki, 10: 183 - 207.
- KANELLIS, A. & HADJISSARANTOS, CH., 1950: Bibliographia faunae graecae (1800 1950). Rev. Club alp. Hell. "To Vouno", Vol. 1949 1950, 78 pp.
- KANELLIS, A. & HADJISSARANTOS, CH., 1960: Bibliographia faunae graecae 1950 1960 und Nachträge. Verh. zool. botan. Ges. Wien, 100: 96 105.
- KANELLIS, A. & LEGAKIS, A., 1979: Bibliographia faunae graecae (1967 1978) et complementa. Biol. Gallo-Hellenica VII, Suppl., 69 pp.
- LETHIERRY, L. & SEVERIN, G., 1896: Catalogue général des Hémiptères. Berlin, 3: 31 - 49, 247 - 258 (*Aradidae*).
- OSHANIN, B., 1912: Katalog der paläarktischen Hemipteren (*Heteroptera, Homoptera-Auchenorrhyncha* und *Psylloideae*). Berlin, 187 pp.
- PUTON, A., 1899: Catalogue des Hémiptères (Hétéroptères, Cicadines et Psyllides) de la faune paléarctique, quatrième édition. - Caen, 121 pp.
- REUTER, O. M., 1884: Ad cognitionem Aradidarum palaearticularum I. Genus *Aradus* Fabr. Wien. Ent. Zeitg., III (5): 129 - 137.
- REUTER, O. M., 1891: Griechische *Heteroptera*, gesammelt von E. v. Oertzen und E. Emge. Berl. Ent. Zeitschr., 36 (1): 17 - 34.
- STICHEL, W., 1925 1938: Illustrierte Bestimmungstabellen der Deutschen Wanzen, Berlin, 499 pp (*Aradidae* 1938: 408 - 411 distr.).
- STICHEL, W., 1955 1962: Illustrierte Bestimmungstabellen der Wanzen II. Europa (*Hemiptera-Heteroptera* Europaeae), Berlin. (Vol. IV, 1957: 2 34. *Aradidae*).
- VÁSÁRHELYI, T., 1988: New Palaearctic *Aradus* species in the *betulae* group (*Heteroptera, Aradidae*). - Ann. hist. - nat. Mus. Hung., 80: 57 - 63.



Map 1: Presently known distribution of *Aradidae* in Greece. The numbers correspond to those of the faunistic list given in the text.

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Zeitschrift/Journal: [Scopolia, Journal of the Slovenian Museum of Natural History, Ljubljana](#)

Jahr/Year: 1990

Band/Volume: [Suppl_1](#)

Autor(en)/Author(s): Heiss Ernst

Artikel/Article: [On the Aradidae - fauna of Greece \(Heteroptera\). 31-37](#)