

A new species of the mygalomorph spider genus
Brachythele Ausserer, 1871 (Aranei: Nemesiidae) from Greece

Новый вид мигаломорфных пауков
рода *Brachythele* Ausserer, 1871 (Aranei: Nemesiidae) из Греции

S.L. Zonstein
С.Л. Зонштейн

Department of Zoology, The George S. Wise Faculty of Life Sciences, Tel-Aviv University, 69978 Tel-Aviv Israel. Email: znn@post.tau.ac.il
Отдел зоологии, Факультет естественных наук им. Дж. С. Визе, Тель-Авивский университет, 69978 Тель-Авив Израиль.

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КЛЮЧЕВЫЕ СЛОВА: Aranei, пауки, Nemesiidae, *Brachythele*, Греция.

ABSTRACT. *B. bentzieni* sp.n., can be distinguished from related species by the unique configuration of a shortened and keeled embolus, is described from a single male.

РЕЗЮМЕ. Приведено описание самца *B. bentzieni* sp.n., отличающегося от близких видов уникальной конфигурацией укороченного и снабженного килем эмболюса самца.

The Mediterranean representatives of *Brachythele* Ausserer, 1871 include 7 species, distributed from North- and North-Western Balkans to Cyprus and South-Western Turkey (see Platnick, 2007). At least one more species, whose description is given below, occurs in Eastern Greece.

The following abbreviations applied in spider systematics are used: ALE — anterior lateral eyes, AME — anterior median eyes, PLE — posterior lateral eyes, PME — median lateral eyes; PLS — posterior lateral spinnerets, PMS — posterior median spinnerets; Fm — femur, Pt — patella, Tb — tibia, Mt metatarsus, Tr — tarsus; M — megaspine; d — dorsal, v — ventral, p — prolateral, r — retrolateral positions; pd, rd, pv, rv — the corresponding intermediate states.

The number of some symmetrically located structures such as cheliceral teeth and denticles, and maxillary cuspules is shown as the number of structures located left of the longitudinal body axis (from an observer's point of view) plus a corresponding number on the right side, respectively. The total body length measured does not include the length of the chelicerae. All measurements are given in millimeters, except eye diameters/interspaces shown as a ratio of the microscope scale units. All references are given according to Platnick [2007].

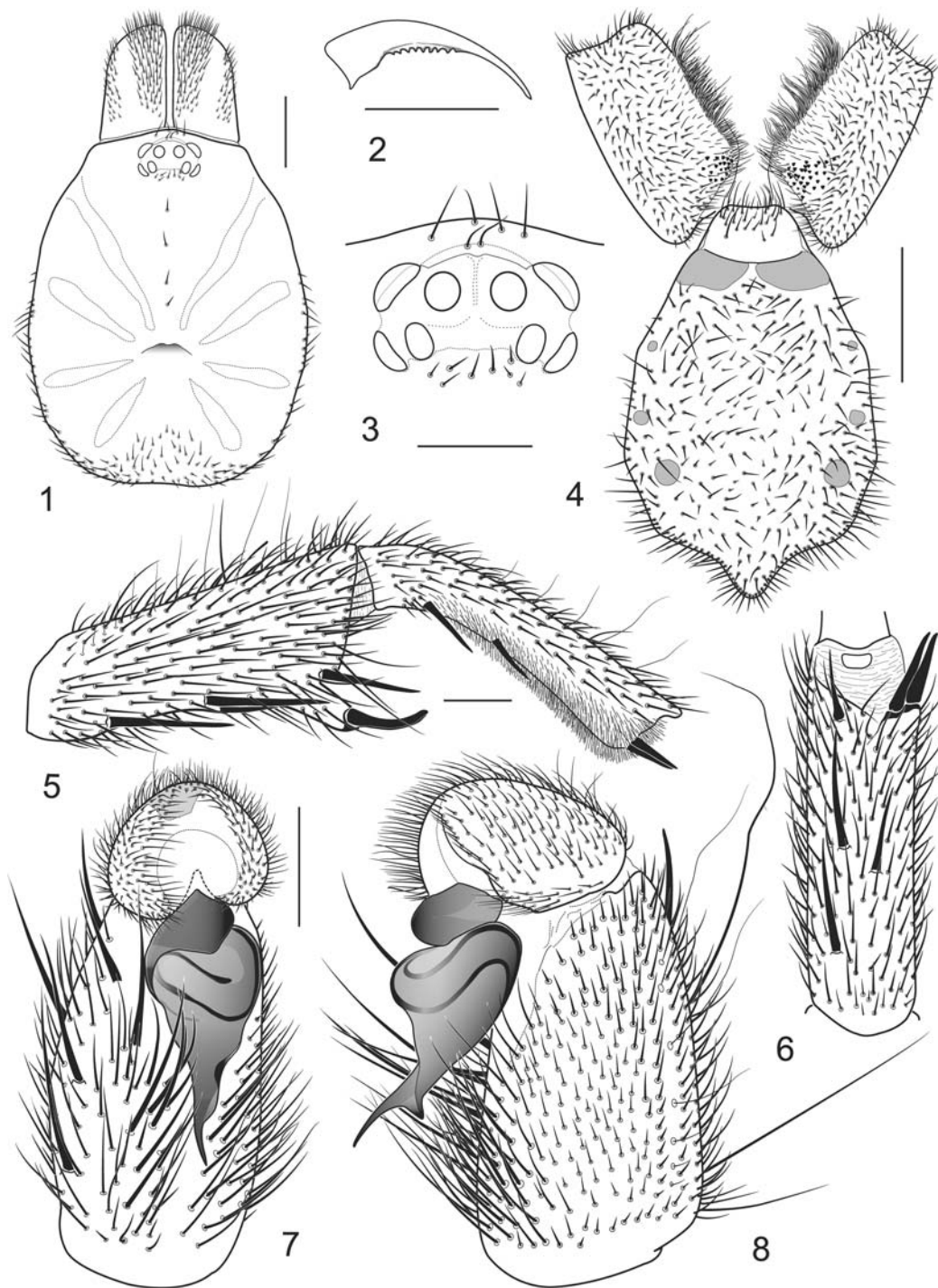
Brachythele bentzieni sp.n.

Figs 1–8.

TYPES. ♂ holotype labeled: „14038“, „*Brachythele icterica* C. K., Volo (St. Nil.)“, „*Brachythele* new species, det. M. Bentzien, Dec. 1975“; dep. MNHN.

DIAGNOSIS. The new species can be easily distinguished from males of *B. icterica* (C.L. Koch, 1838), *B. media* Kulczyński, 1897, *B. denieri* (Simon, 1916) and *B. varrialei* (Dalmat, 1921), which share a uniformly tapering embolus, by the presence of a well developed embolic keel (sf. Koch, 1838, Abb. 351; Drenski, 1937, fig. 8; Poleneč, 1978, fig. 2; Raven, 1985, fig. 89). The same character is found in a recently described Bulgarian congener, *B. langourovi* Lazarov, 2005, but it differs from this species by the noticeably shorter and less curved embolic portion of the bulb and by the shape of the male embolic keel. It differs from two other congeners with unknown males as follows: from *B. incerta* Ausserer, 1871 by the strongly recurved fovea (that is almost straight in the former species) as well as by the presence of a distinct cheliceral rastellum, and from *B. specularix* Kulczyński, 1897 by fewer cheliceral teeth (7, as in the most members of the genus, vs. 8–9) and by the larger number of teeth on the paired tarsal claws (5–7 vs. 3–4).

MALE (holotype). Total body length ca. 9.00. Carapace: length 4.90, width 3.93. Color in alcohol: carapace, palps and legs dorsally brown-rufous; eye tubercle brown; chelicerae reddish-brown; sternum, labium, maxillae, palps and legs ventrally light brown; abdomen dorsally light brown with a darker brown dorsal pattern represented by five pairs of inclined chevron-like fasciae, ventral abdominal surface and spinnerets pale yellowish brown. Carapace covered with moderately dense short and fine semi-appressed discolored hairs. Ratio of AME, ALE, PLE, PME: 7, 11, 9, 7. Interspaces: AME–AME 5, ALE–AME 4, ALE–PLE 3, PLE–PME 3, PME–PME 14. Chelicerae with 7+7 promarginal teeth and 10+9 denticles, weak rastellum consists of 25–30 stout setae. Labium: length 0.33, width 0.95; cuspules absent. Maxillae: 24+19 cuspules, serrula absent. Sternum: length 2.57, width 1.97. Sternal sigillae small rounded submarginal. Palp: Fm d1.1.1, pd1, Pt 0; Tb d1.1.1, p1.1, v1.1.1.



Figs 1–8. *Brachythele bentzieni* sp.n., male: 1 — carapace dorsally; 2 — serrate cheliceral fang retrolaterally; 3 — eye tubercle dorsally; 4 — sternum, labium and maxillae ventrally; 5 — right tibia and metatarsus I retrolaterally; 6 — right tibia I ventrally; 7 — left palpal tibia, cymbium and bulb ventrally; 8 — same structures retrolaterally. Scale bars for Figs 1, 2 and 4 — 1.0 mm, and for Figs 3, 5–8 — 0.5 mm. Orig.

Рис. 1–8. *Brachythele bentzieni* sp.n., самец: 1 — карапакс сверху; 2 — пильчатый коготок хелицеры ретролатерально; 3 — глазной бугорок сверху; 4 — стернум, лабиум и максиллы снизу; 5 — правые голень и предлапка I ретролатерально; 6 — правая голень I снизу; 7 — левые голень пальпы, цимбиум и бульбус снизу; 8 — те же структуры ретролатерально. Масштаб: 1, 2 и 4 — 1,0 мм; 3, 5–8 — 0,5 мм. Ориг.

Leg I: Fm d1.1.1.1, pd1.1; rd1.1. Pt p1.1; Tb p1.1, r1, v1.2.1+2M; Mt p1.1, v1.2.2. Leg II: Fm d1.1.1.1.2; pd1.1, r1.1.1; Pt p1.1; Tb p1.1, v2.2.3; Mt p1.1.1; v1.2.2. Leg III: Fm d1.1.1.1.2, pd1.1.1, rd1.1.1; Pt p1.1.1, r1.1; Tb d1, p1.1, r1.1.1, v2.2.2; Mt d1.1.1, p1.1.1, r1.1.1, v2.2.3. Leg IV: Fm d1.1.1.1, pd1.1.1, pr1.1.1; Pt 0; Tb d1, r1.1.1.1, v2.2.2; Mt d2.2.2, p1.1.1.2.1, r1.1.1, v2.2.2. Leg tarsi and cymbium spinose. Leg measurements as shown in Table. Scopula: distal on metatarsi I–II, entire on tarsi I–II, vestigial on tarsi III, absent on tarsi IV. Paired claws: outer margin with 5–6 teeth, 7 teeth on inner margin. Trichobothria: 2 rows of 9–11 on tibiae, 14–15 on metatarsi, 13–14 on tarsi, 9 on cymbium. PMS: length 0.37, diameter 0.27. PLS: maximal diameter 0.45; length of basal, medial and apical segments 0.60, 0.47, 0.50; total length 1.57; apical segment triangle. Leg measurements:

Femur	2.14	3.80	3.50	3.16	3.78
Patella	1.02	2.10	1.91	1.56	2.04
Tibia	1.55	2.46	2.15	1.98	2.39
Metatarsus		2.78	2.44	2.91	1.84
Tarsus	0.82	2.20	1.78	3.94	2.00
Total	5.53	13.35	11.78	11.45	14.15

FEMALE. Unknown.

DISTRIBUTION. Known presently only from Eastern Greece: Volos.

ETYMOLOGY. Named after Mr. Michael Bentzien, an American MS-student, who first examined the specimen and referred it to a undescribed species.

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References

- Drensky P. 1937. Faunata na paiatzite (Araneae) w Beulgaria. Podrazred Mygalomorphae: semeystwa Ctenizidae i Atypidae // Izv. tzar. prirod. Inst. Sofia. Vol.10. P.259–280.
- Koch C.L. 1838. Die Arachniden. Nürnberg, Bd.5. S.1–104.
- Lazarov S. 2005. A new species from Bulgaria, *Brachythele langourovi* sp. n. (Araneae, Nemesiidae) // Rev. Suisse Zool. Vol.112. No.1. P.189–193.
- Platnick N.I. 2007. The world spider catalog, version 8.0. American Museum of Natural History, online at <http://research.amnh.org/entomology/spiders/catalog/index.html>
- Poleneč A. 1978. Zusammensetzung und Besonderheiten der Epigaischen Spinnenfauna des Seslerio-Ostrietum am Berge Slavnik (1028 m) (Nord-Istrien, Jugoslavien) // Symp. Zool. Soc. London. No.42. P.367–377.
- Raven R.J. 1985. The spider infraorder Mygalomorphae (Araneae): cladistics and systematics // Bull. Amer. Mus. Nat. Hist. Vol.182. No.1. P.1–180.