

***Pholcus bimbache* Dimitrov & Ribera, 2006**

Dimitrov, D., Ribera, C. 2006. Three new species of *Pholcus* (Araneae, Pholcidae) from the Canary Islands with notes on the genus *Pholcus* in the archipelago. J. Arachnol. 34: 126-134.

p. 127

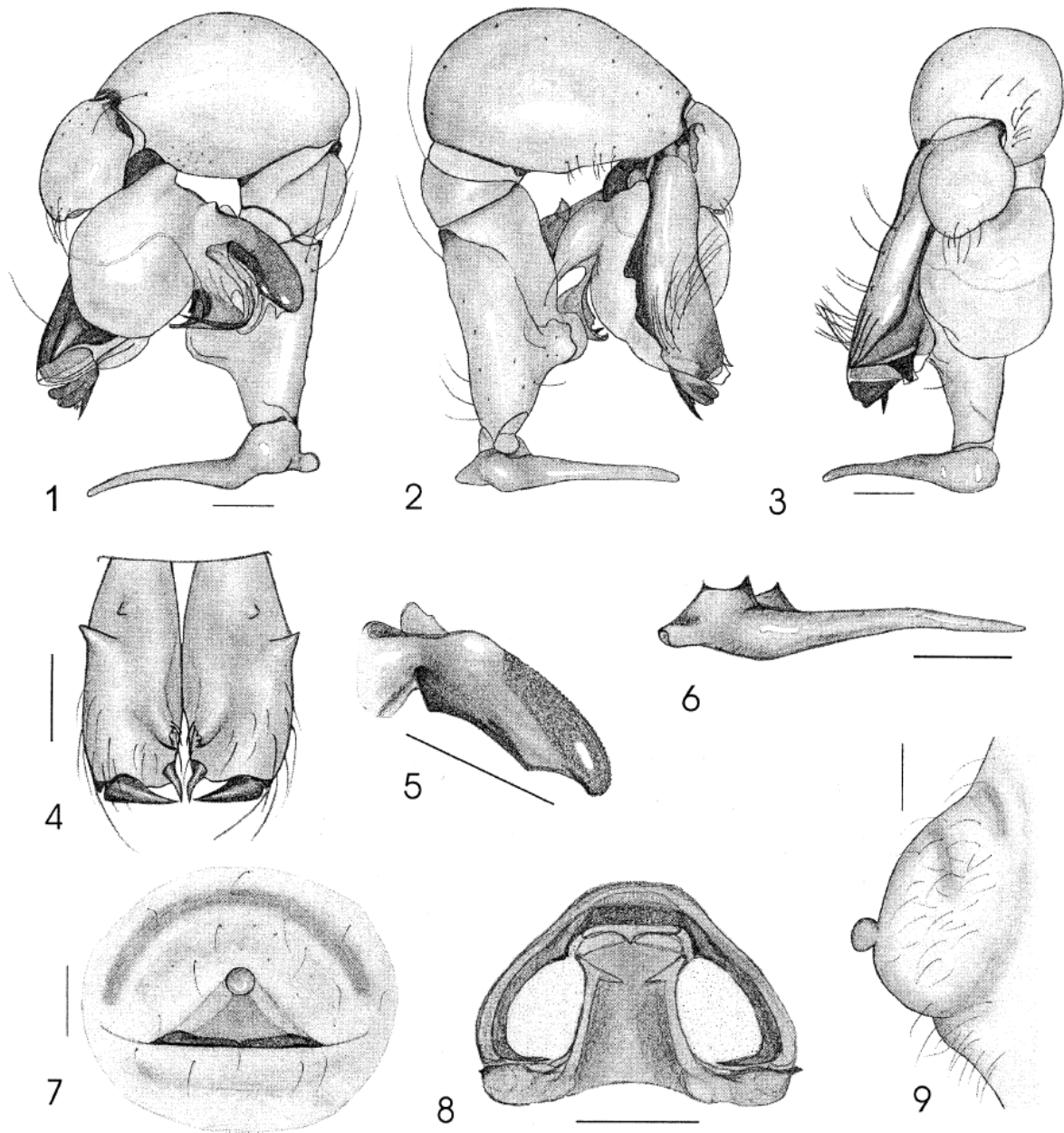
Pholcus bimbache new species

Figs. 1–9

Material examined.—Holotype male, Cueva del Juaclo de las Moleras, Frontera, El Hierro, Canary Islands, 27°43'N, 18°08'W, 7 November 1991, C. Ribera (CCRUB 3523–140). Paratypes: Canary Islands: 1 female, same locality and date as holotype, C. Ribera (CCRUB 3524–140) (drawings and description of the female are based on this specimen); 1 male, 2 females and 8 juveniles (CCRUB 3522, 3525 to 3527–140) same locality and date as holotype; 1 male and 1 juvenile, same locality, 4 February 2000, N. Mercader & E. Muñoz (CCRUB 4505–170).

Etymology.—The species is named after the original inhabitants of El Hierro island, the so-called “Bimbaches”.

Diagnosis.—*Pholcus bimbache* can be distinguished from similar Canarian species (*P. sveni* and *P. gomeræ*) by the less pronounced callosity of the procurus, the narrower base



Figures 1-9.—*Pholcus bimbache* new species: 1. Male palp, prolateral view; 2. Male palp, retrolateral view; 3. Male palp, frontal view; 4. Male chelicerae; 5. Uncus; 6. Trochanter of the male palp; 7. Epigynum, ventral view; 8. Vulva, dorsal view; 9. Epigynum, lateral view. Scale 0.2 mm.

of the uncus (Fig. 5), the longer claw-shaped apophysis of the appendix and the long, almost straight trochanteral apophysis (Fig. 6) of the male palp (Figs. 1-3); also, by the shape of the apophyses of the male chelicerae (Fig. 4). The diagnostic characters of the female are the shape of the epigynum and the large oval pore plates of the vulva (Figs. 7-9).

Description.—*Male (holotype)*: Prosoma yellowish with well marked cephalothoracic

junction and fovea. Ocular area elevated. Thorax with brown marking, wider than long, which starts at the fovea and extends to the posterior margin of the prosoma. It has three lighter zones dividing it into four darker radial lobes. Sternum brown-yellowish with borders slightly darker brown. Distance between AME equal to their diameter. Distance AME-ALE slightly more than two times the diameter of AME; AME-PME three times the diameter of AME. Anterior eye line frontal view slightly

recurved. Posterior eye line dorsal view recurved. Clypeus high with yellowish color. Chelicerae (Fig. 4) yellow-brownish; cheliceral apophyses brownish with cylindrical shape finishing with small darker outgrowths; upper margin of the proximolateral apophyses does not reach the lower margin of the frontal prominence. A few dark bristles are placed near the base of the cheliceral apophyses. Palps (Figs. 1–3) with yellow-brownish color, trochanter with long retrolateral apophysis (Fig. 6), femur large with ventral bulge, procurus with dark process of the apical apophysis. Opisthosoma elongated, almost cylindrical, whitish with small darker transversal zone in the genital area.

Female (paratype): All characters as in male except: less elevated ocular area, distance between AME slightly less than their diameter, distance AME-ALE slightly less than two times the diameter of the AME, AME-PME two and half times the diameter of the AME. Chelicerae without apophyses. Genital zone without pigmentation except the sclerotized zone of the epigynum. By transparency some parts of the vulva can be observed. Epigynum and vulva as in (Figs. 7–9).

Measurements.—*Male (holotype):* Prosoma 1.2 (1.2) wide, 1.3 (1.3) long; opisthosoma 1.1 (1.5) wide and 2.5 (3.0) long. Total body length 3.8 (4.3). Legs: I, femur 8.7(9.2), patella 0.5(0.5), tibia 8.1(9.5), metatarsus 13.2(14.3), tarsus 2.0(2.2), total 32.5(37.5); II 6.5(7.0), 0.5(0.5), 6.0(6.5), 9.0(8.5), 1.3(1.5), 23.3(24.0); III 5.0(5.0), 0.5(0.5), 4.0(4.2), 6.2(7.0), 1.0(1.0), 16.7(17.7); IV 6.3(7.0), 0.5(0.5), 5.8(6.2), 8.0(9.0), 1.2(1.1) 21.8(23.9). In brackets male paratype no. 3522–140. Palp: femur 0.60, patella 0.18, tibia 0.50, tarsus 0.20, total 1.48. Procurus 0.8.

Female: Prosoma 1.3 wide, 1.2 long; opisthosoma 1.5 wide, 3.5 long; total body length 4.7. Legs: I, femur 9.0, patella 0.7, tibia 8.2, metatarsus 14.0, tarsus 1.2, total 33.1; II 6.5, 0.7, 8.6, 9.2, 1.2, 23.6; III 5.0, 0.7, 4.5, 6.5, 1.0, 17.7; IV 7.0, 0.7, 5.0, 9.0, 1.2, 22.9. Palp femur 0.40, patella 0.14, tibia 0.19, tarsus 0.3, total 1.03.

Distribution.—This species is endemic to El Hierro, and is only known from the type locality.

Remarks.—*Pholcus bimbache* appears to be related to members of the so-called Tener-

ifensis group (Wunderlich 1987, 1991; Dimitrov & Ribera 2003) composed of ten species (seven in Tenerife and three in Gomera). Here we should note that the term “Tenerifensis group” is used as merely descriptive and does not imply any phylogenetic relationship. All these species are characterized by the claw-shaped apophysis of the appendix, and by the shape of both the uncus and the lamella of the procurus. *Pholcus sveni* Wunderlich 1987 is the most similar species. *Pholcus bimbache* can be distinguished from it by the longer and more curved claw-shaped apophysis, the shape of the procurus and the morphology of both the epigynum and the vulva. The presence of this species on El Hierro Island emphasizes the close faunistic relationships between Tenerife, La Gomera and El Hierro.

Dimitrov, D., Arnedo, M.A., Ribera, C. 2008. Colonization and diversification of the spider genus *Pholcus* Walckenaer, 1805 (Araneae, Pholcidae) in the Macaronesian archipelagos: Evidence for long-term occupancy yet rapid speciation. *Mol. Phyl. Evol.* 48: 596-614.

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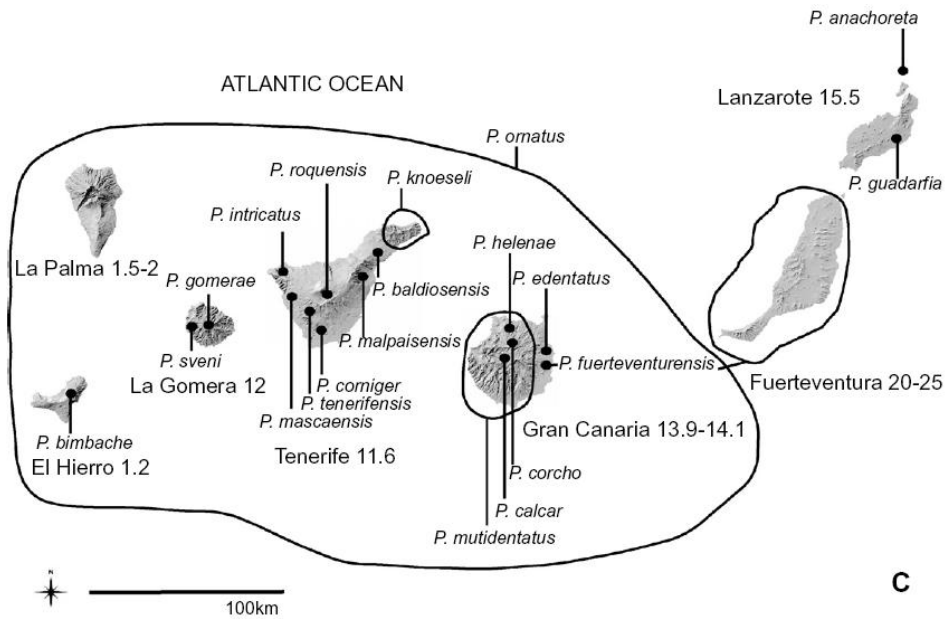


Fig. 1. (A) Map of the Macaronesian biogeographical region. (B) Known distribution of the Madeiran and north-west African *Pholcus* species. (C) Known distribution of the Canarian *Pholcus* species. Numbers following island names denote their estimated maximum age in Mya.

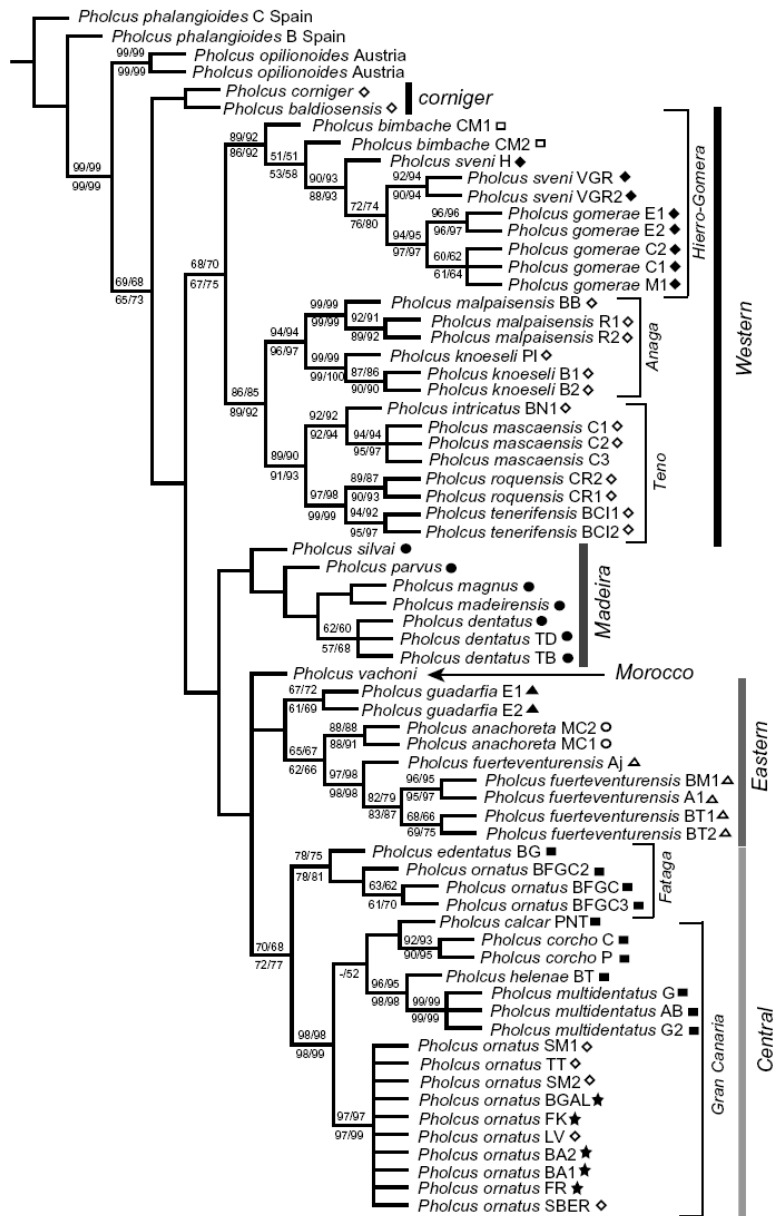


Fig. 5. Strict consensus of the 4 most parsimonious trees ($L = 2442$, $CI = 0.534$, $RI = 0.881$) found by MP analysis of the combined macaronesia data set. Support values higher than 50 are given as follows, bootstrap/Poisson bootstrap above branches and jackknife/symmetric resampling below branches. Geographic localities of the Macaronesian species are labeled as follows, Tenerife, rhomb; La Gomera, filled rhomb; El Hierro, square; Gran Canaria, filled square; Fuerteventura, triangle; Lanzarote, filled triangle; Montaña Clara, circle; Madeira, filled circle; La Palma, star.