

***Pholcus mascaensis* Wunderlich, 1987**

Wunderlich, J. 1987. Die Spinnen der Kanarischen Inseln und Madeiras. Triops Verlag. Pp. 1-435.

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Pholcus mascaensis n.sp. (Abb.118-127,702)

Material: Teneriffa, Barranco de Masca, etwas oberhalb der Mitte, am Eingang zu einem kleineren Seiten-Barranco, nahe einer Stau-

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mauer, unter großen Felsen über kleinem Bach; 1♂ 3♀ JW leg. in VIII; Holotypus (♂) und 3♀ (Paratypoiden) SMF.

Anmerkung: Die Pedipalpen des einzigen vorliegenden ♂ sind expandiert, daher konnten die Sklerite nicht in natürlicher Position abgebildet werden.

Diagnose: ♂-Pedipalpus (Abb.119-125): Sporn des Trochanter lang und schlank, Procursus mit 3 kurzen Börstchen nahe beisammen (Pfeil in Abb.122), Uncus breit, Appendix kaum größer als seine krallenförmige Apophyse, diese am Ende breit, wie quer abgeschnitten (Abb.120,125). Epigyne (Abb.126) außer am hinteren Rand wenig sklerotisiert, hinten deutlich konkav. "Knöpfchen" groß, Durchmesser quer 0.1mm. Verhältnis von Breite zu Länge 1.9.

Beschreibung:

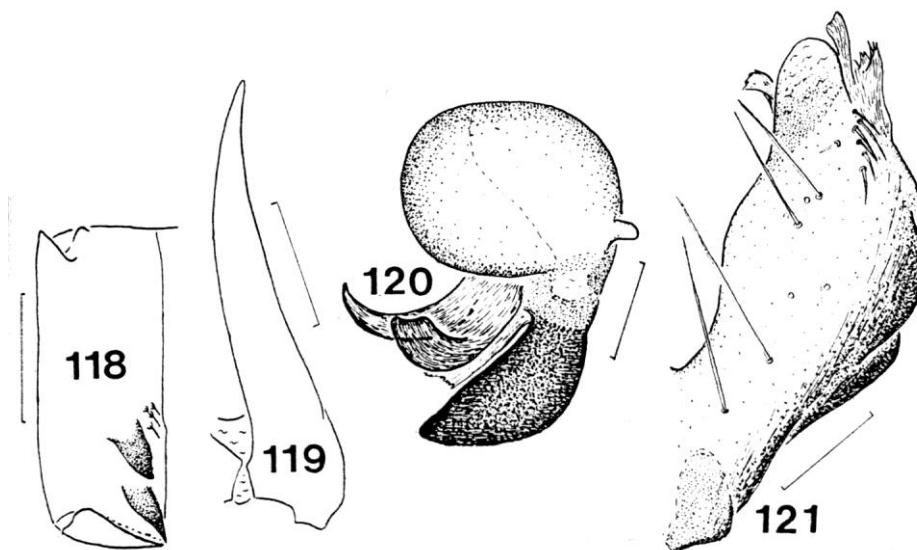
Maße (♂ ♀ in mm): Gesamt-Länge 5-6, Prosoma: Länge 1.5-1.6, Breite 1.6-1.7; Bein I (♂): Femur 10.4, Patella 0.7, Tibia 10.6, Metatarsus 17.9, Tarsus 2.4; Tibia II 7.6, Tibia III 5.0. Färbung: Prosoma mit dunkler, medial kaum aufgehellter Zeichnung (Abb.702). Opisthosoma mit 3 Paar dunklen Flecken, von denen die vorderen beiden verbunden sein können (variabel). Sternum grau, randlich oft etwas aufgehellt. Cheliceren (Abb.118): Position von basalem und lateralem Höcker direkt an der Basis.

♂-Pedipalpus und Epigyne: Siehe die Diagnose. Vulva: Abb.127.

Beziehungen: Die Art zeigt nach den distalen Strukturen des Procursus Beziehungen zu *P. tenerifensis* n.sp. von Teneriffa und zu weiteren verwandten Arten; nach dem Vorkommen von 3 Börstchen des Procursus und nach der Epigyne steht sie aber etwas isoliert.

Verbreitung: Teneriffa.

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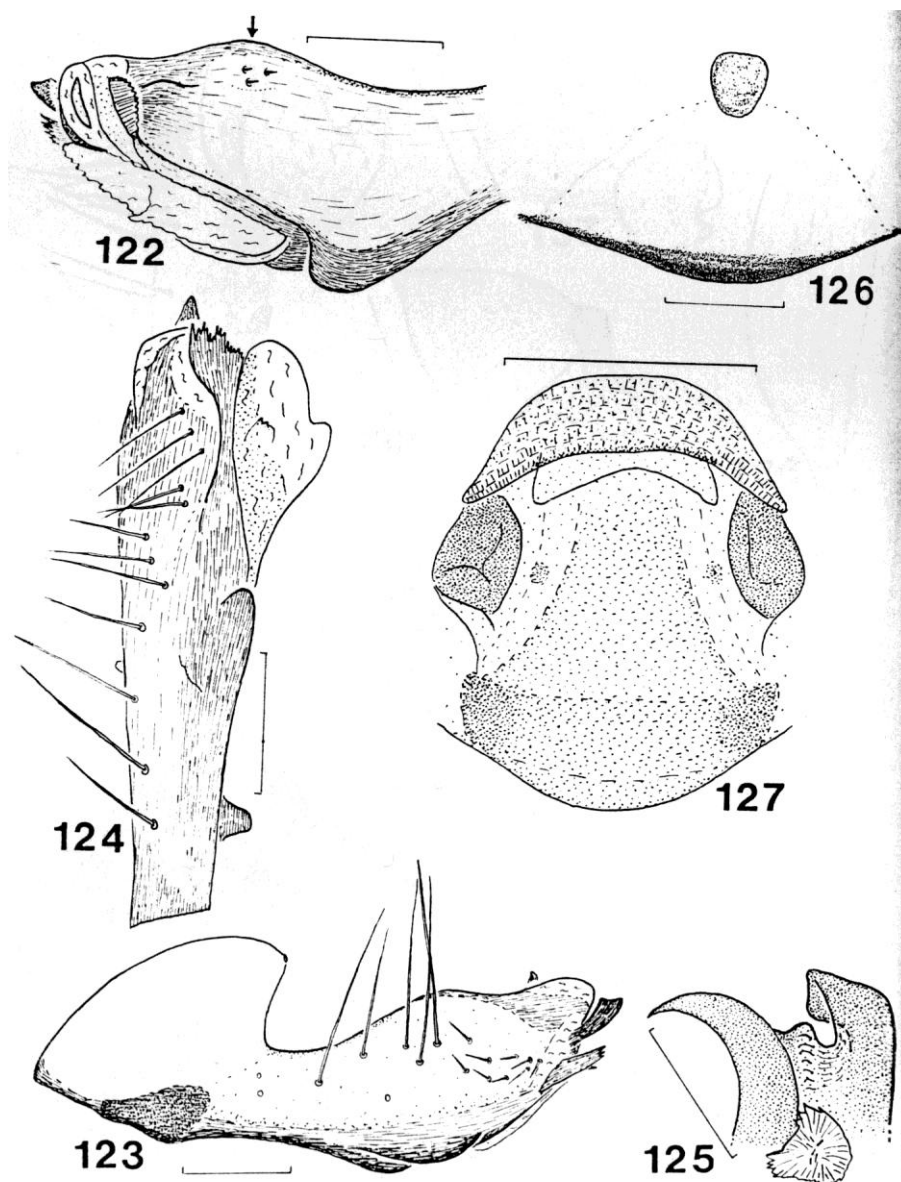


Fig. 118-127) *Pholcus mascaensis* n.sp.: 118) right δ -chelicera frontal; 119-125) right δ -pedipalpus: 119) trochanter retrolateral; 120) appendix, uncus, and embolus prolateral; 121-124) procursus dorsal, prolateral, retrolateral, and ventral; 125) appendix apical (transparent embolus-structure in natural position?); 126-127) φ , epigynum ventral and vulva dorsal. - M: Fig. 127) 0.5mm, the others 0.2mm.



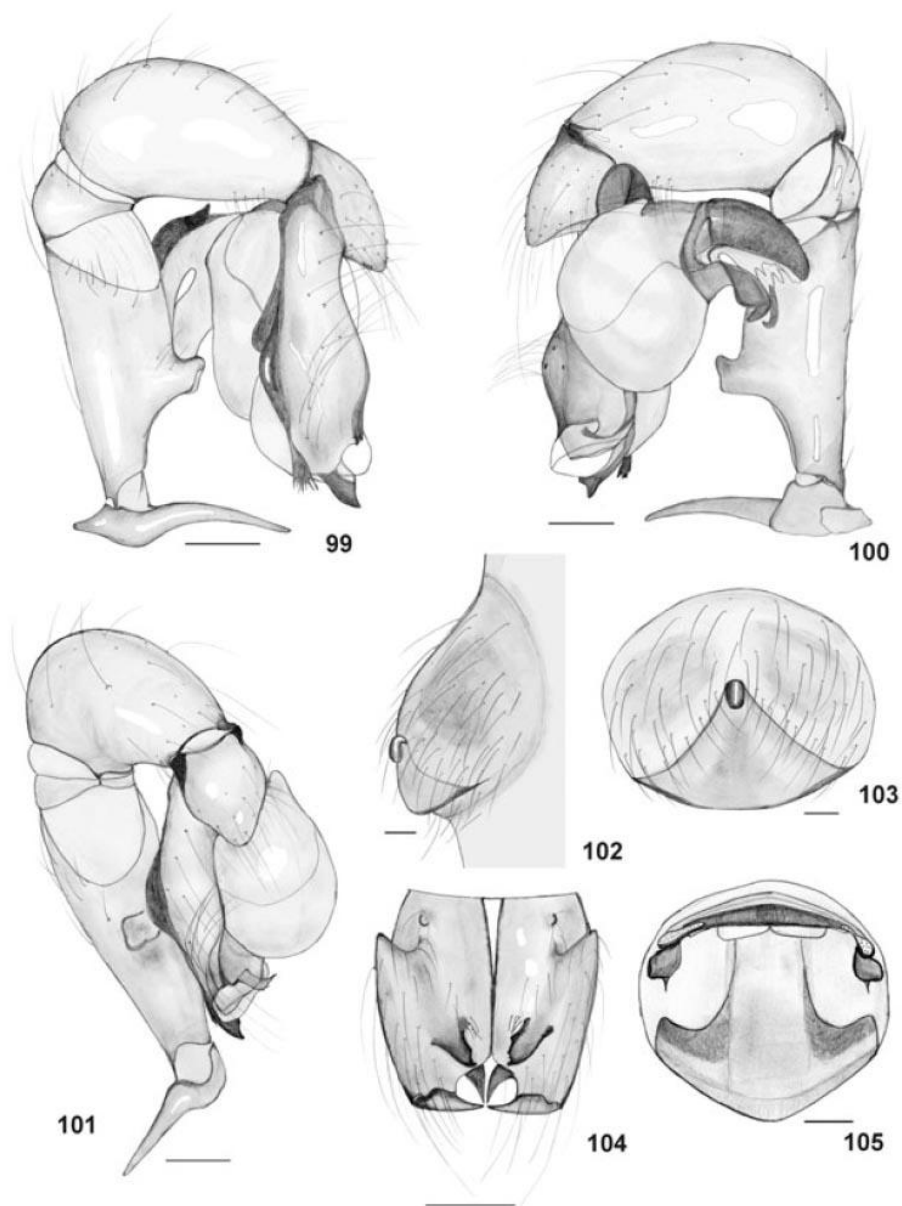
Fig. 702) Pholcus mascaensis n.sp., ♀.

Dimitrov, D., Ribera, C. 2007. The genus *Pholcus* (Araneae, Pholcidae) in the Canary Islands. Zool. J. Linn. Soc. 151: 59-114.

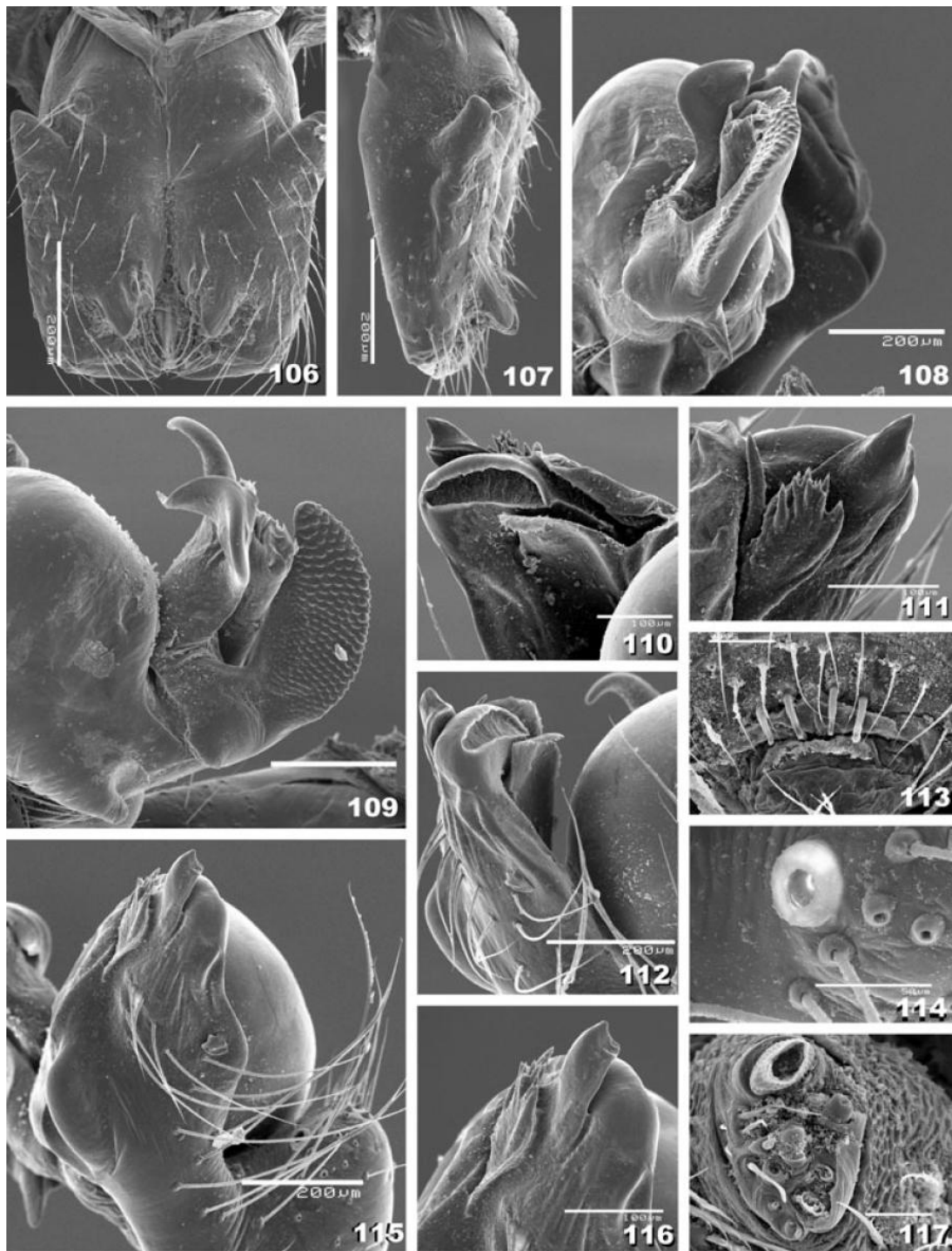
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PHOLCUS MASCAENSIS WUNDERLICH, 1987
(FIGS 99–117)

Pholcus mascaensis Wunderlich, 1987: 81, figs 118–127 and 702.



Figures 99–105. *Pholcus mascaensis*: 99, male palp, prolateral; 100, male palp, retrolateral; 101, male palp, frontal; 102, epigynum, lateral; 103, epigynum, ventral; 104, male chelicerae, frontal; 105, vulva, dorsal. Scale bars 0.2 mm.



Figures 106–117. *Pholcus mascaensis*: 106, male chelicerae, frontal; 107, male chelicerae, lateral; 108, projections of the bulb, ventral; 109, projections of the bulb, retrolateral; 110, apex of the procurus, retrolateral; 111, apical apophysis of the procurus, ventral; 112, procurus, dorsal; 113, male gonopore, ventral; 114, male tarsal organ; 115, male palp, prolateral; 116, terminal apophysis of the procurus, ventro-prolateral; 117, anterior lateral spinnerets. Scale bars: 106–109, 115, 200 μ m; 110, 111, 116, 100 μ m; 113, 114, 50 μ m; 117, 20 μ m.

Material examined: 1 m, holotype, from Barranco de La Masca, Tenerife, Canary Islands, Spain (SMF 35559); 1 f, 1 juv., from Cueva de Chio, Tenerife, 24.ii.2002, Dimitrov & De Mas (CCRUB 4682-173, 4596-172); 1 juv., Cueva de Chio, 24.ii.2002, Dimitrov (CCRUB 4683-173); 1 m, Cueva de Chio, 30.xi.1999, GIET (Grupo de Investigaciones Espeleológicas de Tenerife) (CCRUB 4595-172).

Diagnosis: *P. mascaensis* can be distinguished from its similar Canarian congeners, *P. intricatus* and *P. roquensis*, by the morphology of the apical apophysis of the procursus (Fig. 111), which has a lamina shape with irregular margins and a longer ventral outgrowth (*P. intricatus* is also lamina in shape but much narrower). The shape of the procursus is also different, while the uncus is thicker and more arched than in *P. roquensis*, and exhibits a more gradual curvature than in *P. intricatus* (Figs 100, 109). The position of the small teeth on the procursus is also different and a useful distinguishing trait. Distinctive characteristics of the female include the shape and colouring of the epigynum's plate, which in *P. mascaensis* is much clearer, with a tiny darker band appearing only near the genital opening (Figs 102, 103).

Description: Male: prosoma oval yellowish in colour. Dorsally, a brownish marking appears across the thorax, subdivided into four parts with irregular margins. In the central part of the thorax, the fovea crosses this marking. Eyes on elevated ocular area, surrounded by a darker pigmentation. AME very close together, the distance between them less than their diameter. Distance between AME and ALE equal to ALE's diameter. Diameter of AME half the diameter of ALE. Sternum brownish with darker margins. Chelicerae darker than the prosoma. Distal chelicerapophyses dark brown with a group of modified hairs near their bases (bristles), and two modified hairs at the apex. Upper margin of proximolateral apophysis extends to the base of the frontal prominence without passing over it. Chelicerae as in Figures 104, 106, 107. Palps as in Figures 99–101. Distally, procursus wide (Figs 110, 112, 115), with terminal apophysis and high conical elevation (Fig. 111). Apical apophysis (Figs 111, 116) of the procursus with a longer ventral outgrowth but a much shorter dorsal one. Between these outgrowths the apical apophysis features a cluster of short, sharpened endings (Fig. 111). Bulbal projections as in Figures 108, 109. Tarsal organ as in Figure 114. Opisthosoma yellowish, with four darker dorsal spots, the first rectangular in shape, the second resembling an inverted V, the remaining two rounded and placed on either side of the opisthosoma's central axis. Ventrally, the pigmentation clearer, with two longitudinal lines lacking hairs. Small darker marking appears

over the genital zone. Gonopore as in Figure 113. ALS as in Figure 117.

Female: prosoma as in male but lighter in colour. Ocular area less elevated, with shorter dorsal hairs than in the male. Chelicerae without apophyses. Shape and colour of opisthosoma as in male. Ventrally, epigynum elevated. Epigynum and vulva as in Figures 102, 103, 105.

Measurements: Male: Prosoma 1.0 long, 1.2 wide; opisthosoma 4.3 long, 1.5 wide. Total body length 5.3. Leg I, femur 9.0, patella 0.5, tibia 9.1, metatarsus 14.4, tarsus 35.4. Palp: femur 0.7, patella 0.2, tibia 0.7, procursus 0.8. Female: Prosoma 1.2 long, 1.3 wide; opisthosoma 4.9 long, 2.0 wide. Total body length 6.1. Leg I, femur 9.8, patella 0.6, tibia 10.7, metatarsus 16.1, tarsus 2.4, total 39.6.

Distribution: This species is known to inhabit Barranco de Masca and the Cueva de Chio cave on Tenerife Island (Fig. 276). These two sites are located in close proximity and it is possible that this species is also endemic to the southern part of the island. *P. mascaensis* is endemic to Tenerife Island.

Natural history: *P. mascaensis* was only collected from Cueva de Chio. The cave is situated close to the type locality in a pine forest with very poor understorey vegetation. This species does not present any troglomorphic features and all specimens were collected at the entrance of the cave. Interestingly *P. mascaensis* construct its webs under large rocks on the cave floor close to the ground and not on the ceiling.

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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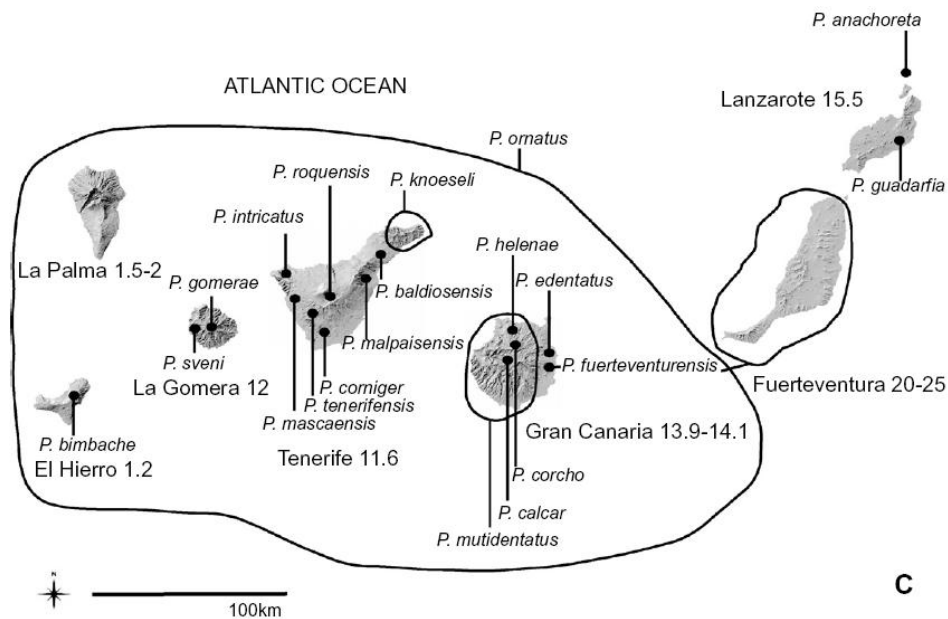


Fig. 1. (A) Map of the Macaronesian biogeographical region. (B) Known distribution of the Madeiran and north-west African *Pholcus* species. (C) Known distribution of the Canarian *Pholcus* species. Numbers following island names denote their estimated maximum age in Mya.

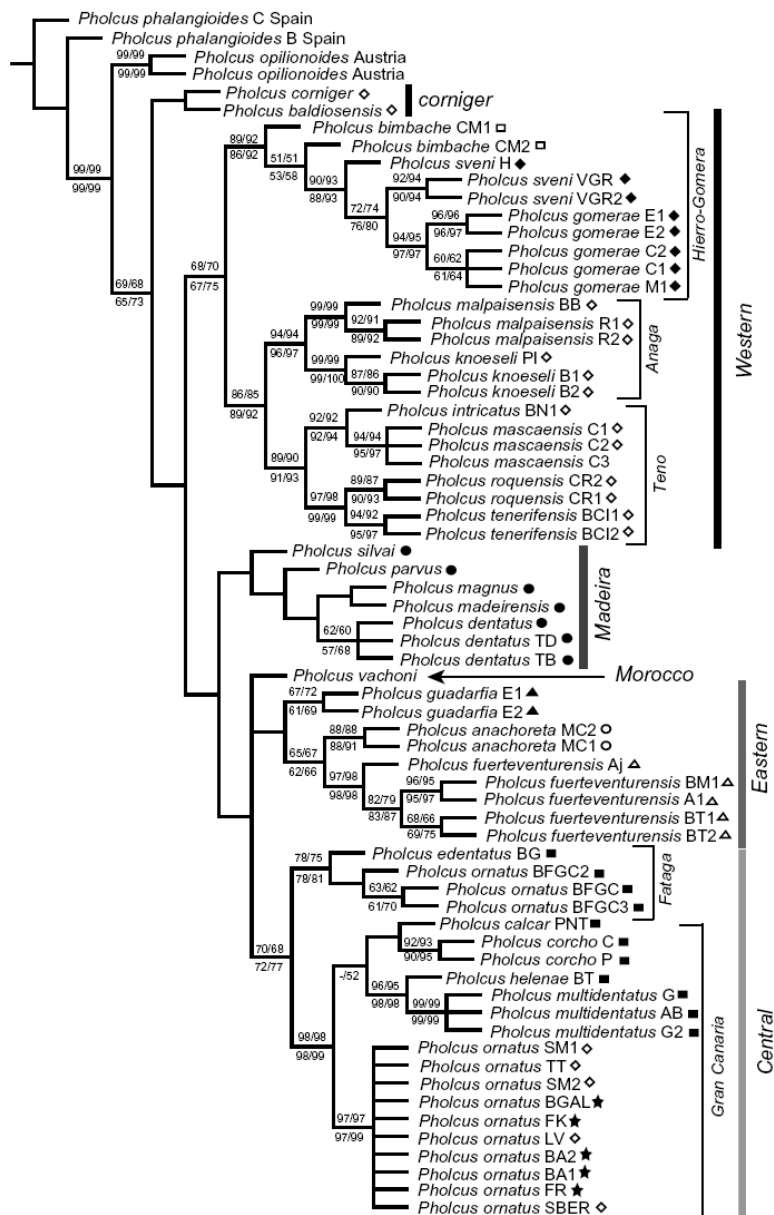


Fig. 5. Strict consensus of the 4 most parsimonious trees ($L = 2442$, $CI = 0.534$, $RI = 0.881$) found by MP analysis of the combined macaronesia data set. Support values higher than 50 are given as follows, bootstrap/Poisson bootstrap above branches and jackknife/symmetric resampling below branches. 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.