Pholcus multidentatus Wunderlich, 1987

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

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Pholcus multidentatus n.sp. (Abb.150-156)

Material: Gran Canaria, Zentrum und Süden: 1. Bei Fataga, an einer Tränke unter überhängenden Felsen, 2♂ 2♀ JW leg. in VII; Holotypus (♂) und 1♂ 2♀ (Paratypoide) SMF; 2. Zentrum, am Cruz de Tejeda, in einer Halbhöhle, 1♂ 1♀ (Paratypoide) JW leg. in VII; SMF; 3. Barranco de Mogan, wenige km S Mogan, in einer Halbhöhle, 1♂ 1♀ W leg. in VII; SMF; 4. San Agostin (Süd-Küste), 50m vom Meer, unter großen Steinen 2♂ 1♀ 2 juv. (Paratypoide) JW leg. in VII; SMF.

Diagnose: ♂ -Pedipalpus (Abb.150-155): Sporn des Trochanter kurz, gerade und distal kaum dünner. Uncus distal mäßig dick und deutlich sichelförmig gebogen. Appendix mit langer, schlanker Apophyse, diese etwas kürzer bis etwas länger als der Appendix. Procursus mit 2 nach hinten weisenden Börstchen auf einem großen, stumpfen Auswuchs, das distale etwas bis deutlich kürzer als das basale; beide sind nur mäßig weit voneinander getrennt. Lamella breit, distal mit zahlreichen Zähnchen in variabler Position.- Epigyne wie bei P. ornatus (Abb.139-140).

Beschreibung:
Maße (♂ ♀ in mm): Gesamt-Länge 5-6.5, Prosoma: Länge und Breite 1.35-1.45; Bein I (♂): Femur 10.5, Patella 0.55, Tibia 11, Metatarsus 18, Tarsus 2.5; Tibia II 7.7, Tibia III 4.6, Tibia IV 6.4.
Färbung wie bei P. ornatus.
♂ -Cheliceren wie bei P. corcho n.sp., etwas variabel.
♂ -Pedipalpus und Epigyne: Siehe die Diagnose. Vulva: Abb.156.

Beziehungen: Sie bestehen am ehesten zu P. ornatus Bösenberg 1895 und P. corcho n.sp.; bei P. multidentatus ist aber der Uncus sichelförmig gebogen.

Verbreitung: Gran Canaria.

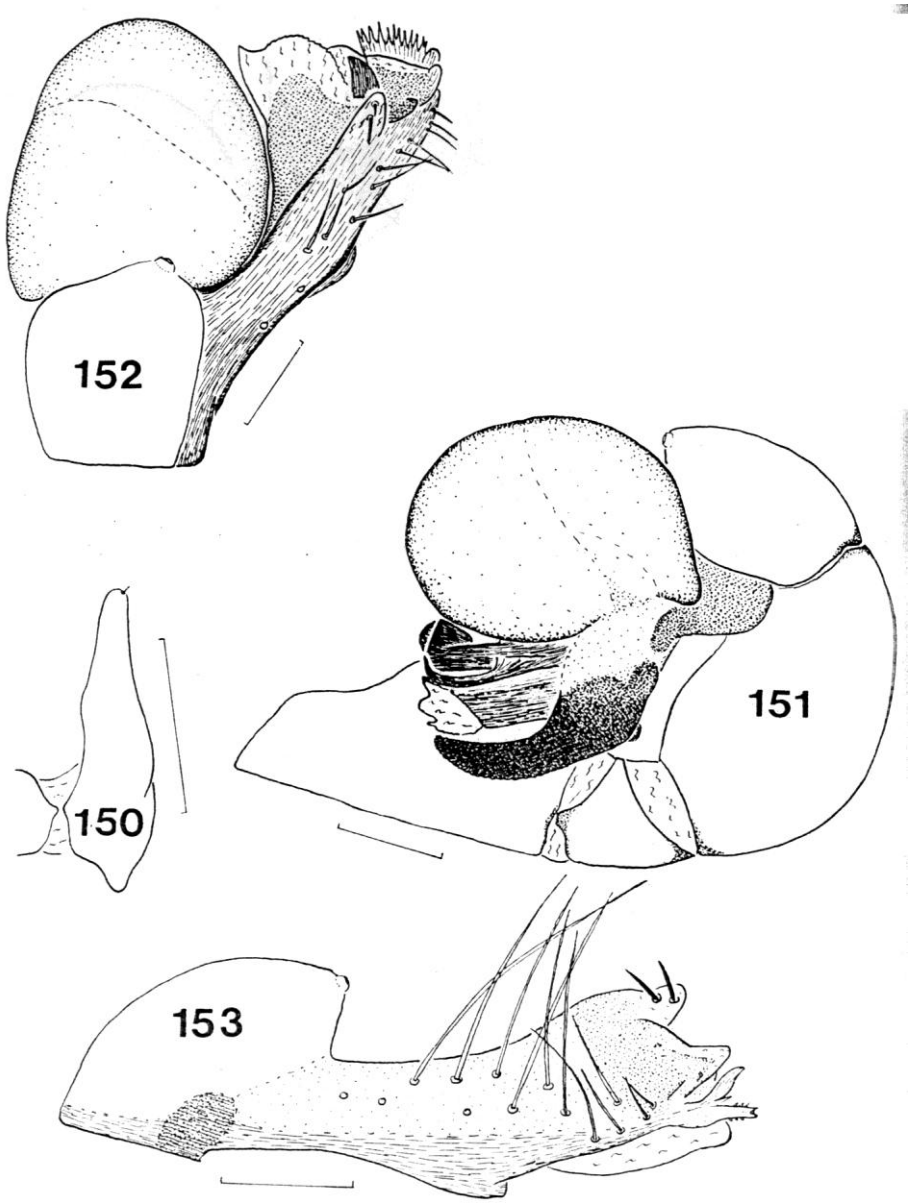

Fig.150-156) Pholcus multidentatus n.sp.: 150-155) right ♂ - pedipalpus: 150) trochanter retrolateral; 151-152) pedipalpus prolateral and dorsal: 153-154) procursus retrolateral and ventral: 155) appendix apical: 156) ♀ , vulva dorsal. - M: Fig.156) 0.5mm, the others 0.2mm.

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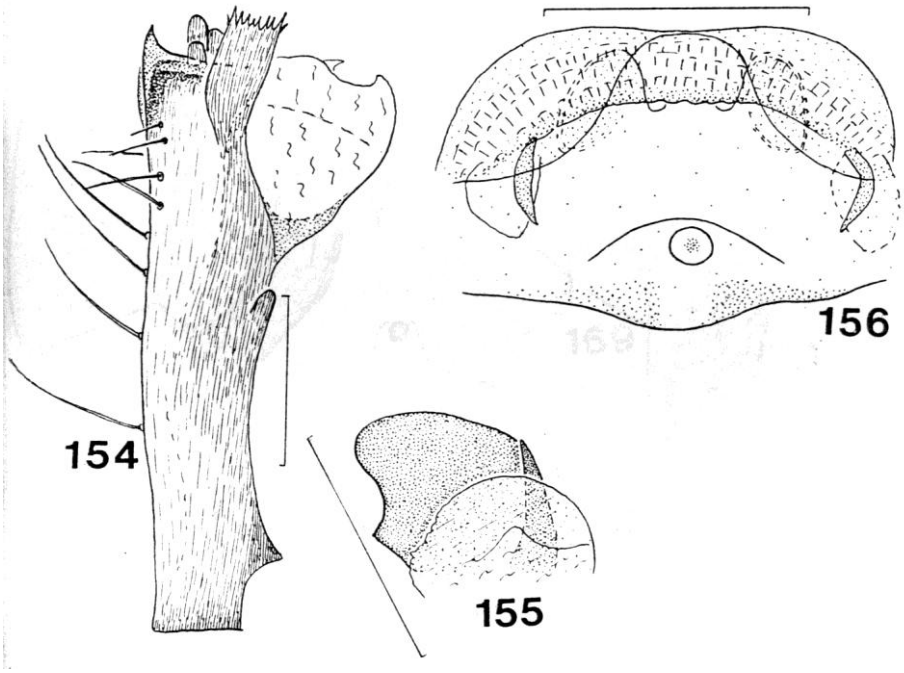

Wunderlich, J. 1992. Die Spinnen-Fauna der Makaronesischen Inseln. Taxonomie, Ökologie, Biogeographie und Evolution. Beitr. Araneol. 1: 1-619.

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87. Pholcus multidentatus WUNDERLICH 1987

Material; siehe auch WUNDERLICH (1987:84): Gran Canaria, 1. Zentrum, 1400m, cuevas Caiadas, kleine Höhle, 5♂ 4♀ JW leg. in V, SJW; 2. Bco. de Guayadeque (SE), etwa 1000m, in kleiner Höhle, 2♂ 2♀ ljuv. JW leg. in V, SJW; 3. Bco de Tirajana, 300m, in kleiner Höhle, 2♀ JW leg. in VI, SJW.

Anmerkung: Die Position der Börstchen (Abb.167-168) variiert deutlich.

Verbreitung: Gran Canaria (Zentrum und Süden).

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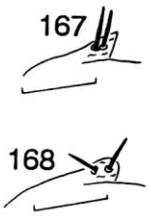


167-168: Pholcus multidentatus WUNDERLICH 1987, ♂, intrapopular variability of the tiny spines of the r. procursus retrolateral.

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

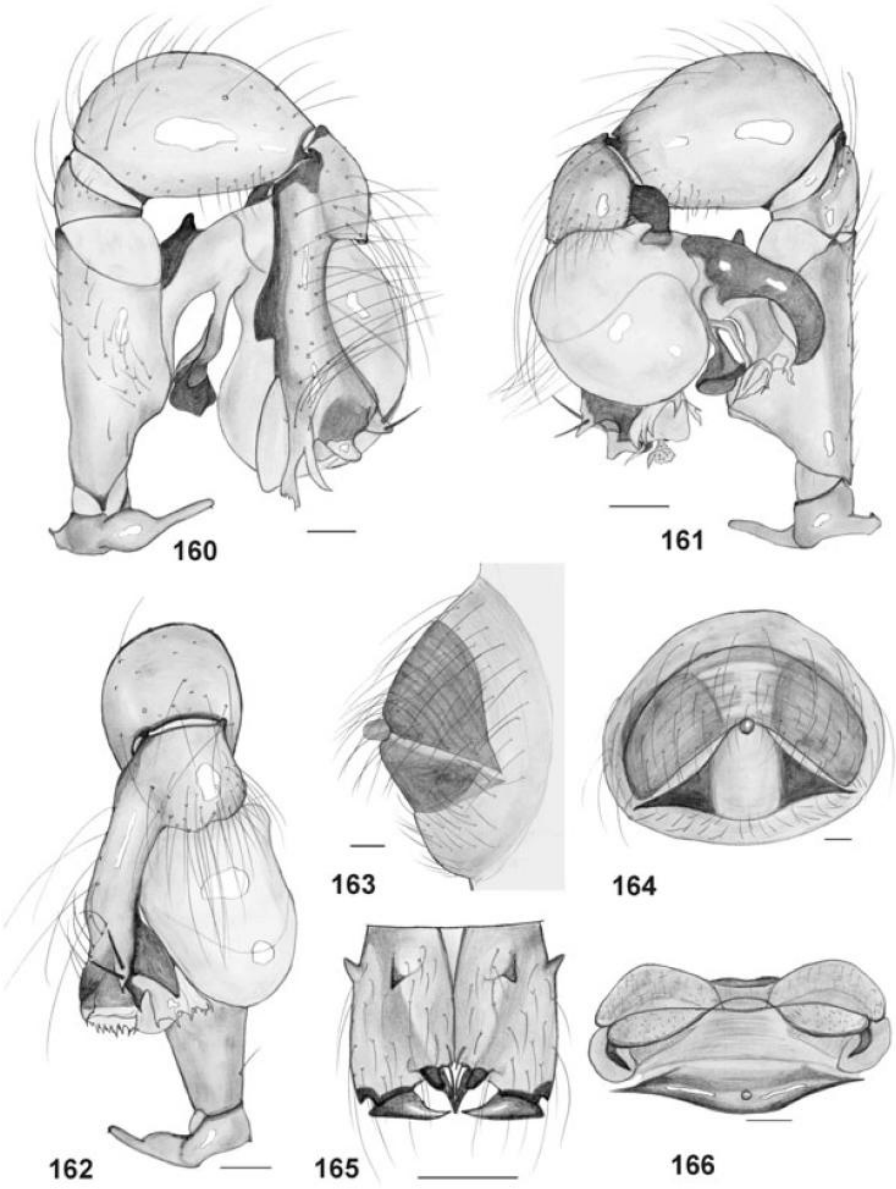
PHOLCUS MULTIDENTATUS WUNDERLICH, 1987 (FIGS 160–176)

Pholcus multudentatus Wunderlich, 1987: 84, figs 150–156; Wunderlich, 1992: 321, figs 167, 168.

Material examined: 1 m, holotype, from Barranco de Fataga, Gran Canaria, Canary Islands, Spain, Wunderlich (SMF 35541); 1 m, 2 ff, paratypes, same data as for holotype (SMF 35542); 2 mm, 3 ff, 1 juv., Gia, Gran Canaria, 5 May 2004, Dimitrov & Txasko (4649-173, 4650-173); 4 mm, 4 ff, Tamadaba, Gran Canaria (CCRUB 4612-173, 4551-171, 4550-171); 1 m, from Cuevas Caidas, Gran Canaria 9.viii.2002, De Mas & Delgado (CCRUB 4613-173); 3 mm, from El Juncal, Gran Canaria, 11.viii.2002, De Mas & Delgado (CCRUB 4552-171); 2 mm, from Pinar de Pajonales, Gran Canaria, 11.viii.2002, De Mas & Delgado (CCRUB 4553-171); 1 m, 1 f, from Punto de Granja, Gran Canaria, 5.viii.2002, De Mas & Delgado (CCRUB 4656-173).

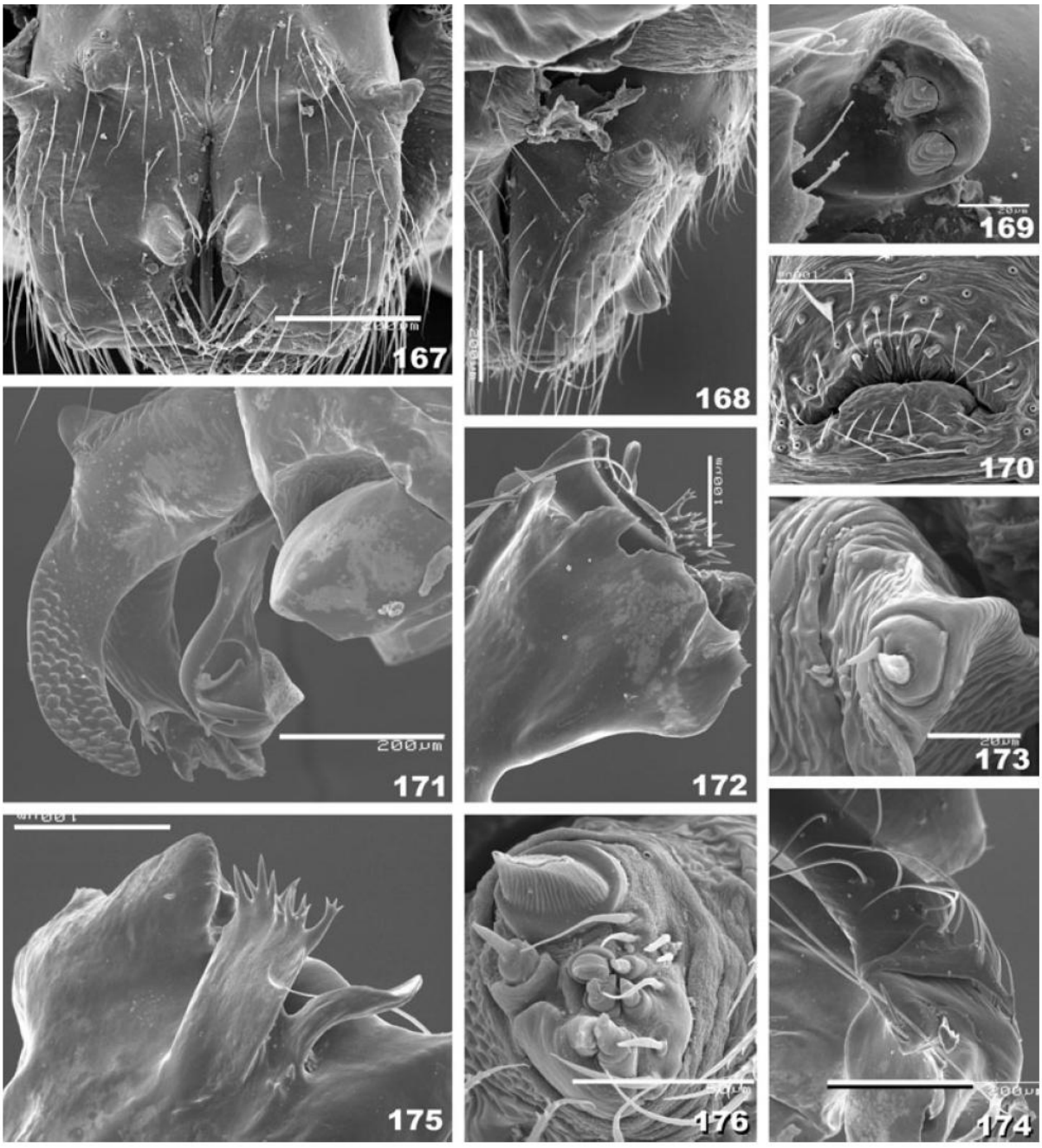
Diagnosis: *P. multidentatus* differs from similar congeners (*P. helenae* and *P. calcar*) in the procursus' bifurcated, membranous apical apophyses, which feature small outgrowths (Fig. 175), and the shape of the uncus, which is arched without a clear inflection point (Figs 161, 171). The shape of the appendix of the bulb as well as the general morphology of the procursus is also different. The females are distinguished by the shape of the triangular plate of the epigynum (Fig. 164) and the morphology of the vulva (Fig. 166).

Description: Male: prosoma yellowish. Dorsally, two brownish markings are visible over the thorax, each marking subdivided into two parts with irregular margins. Fovea yellowish, centrally between the two markings. Eyes over an elevated ocular area. ALE, PLE and PME grouped into two lateral triads. Distance between AME smaller than their diameter. Diameter of ALE two-fold greater than that of AME, distance between them slightly larger than ALE diameter. All eyes surrounded by dark pigmented area. Sternum brownish-yellow with darker margins. Chelicerae (Figs 165, 167, 168) with yellow–brownish



Figures 160–166. *Pholcus multidentatus*: 160, male palp, prolateral; 161, male palp, retrolateral; 162, male palp, frontal; 163, epigynum, lateral; 164, epigynum, ventral; 165, male chelicerae, frontal; 166, vulva, dorsal. Scale bars 0.2 mm.

colour and with darker distal cheliceral apophyses situated very close to the cheliceral tooth. Distal apophyses with two modified hairs and very short conical outgrowth (Fig. 169). Proximolateral apophyses with very narrow base and upper margin extending over the base of the frontal prominences. Frontal prominences with dark-coloured outgrowths. Palp as in Figures 160–162. In this species the procursus features two dorsal spines (Figs 172, 174). Apical apophysis of the procursus bifurcated with one shorter dorsal part and a longer ventral part (Fig. 175). Lamellar ventral area with numerous short and sharpened outgrowths. Legs yellowish, darker than prosoma. Opisthosoma cylindrical yellowish in colour. Dorsally, eight brownish spots grouped in two longitudinal lines are visible. Ventrally, a small darker marking over the genital zone is visible. Gonopore as in Figure 170. Spinnerets ultrastructure as in Figures 173, 176;



Figures 167–176. *Pholcus multidentatus*: 167, male chelicerae, frontal; 168, male chelicerae, lateral; 169, distal apophysis of male chelicerae; 170, male gonopore, ventral; 171, projections of the bulb, retrolateral; 172, procursus, retrolateral; 173, posterior median spinnerets; 174, dorsal apophysis of the procursus, dorsal; 175, apical apophysis of the procursus, ventral; 176, anterior lateral spinnerets. Scale bars: 167, 168, 171, 174, 200 μm; 170, 172, 175, 100 μm; 169, 173, 20 μm; 176, 50 μm.

darker margins visible when observed in alcohol-preserved specimens.

Female: prosoma as in male but with fewer hairs. Ocular area less elevated and eyes closer together. Distance between AME and ALE half the diameter of ALE. Chelicerae without apophyses. Shape and colour of opisthosoma as in male. Epigynum elevated with darker pigmentation. Triangular plate heavily sclero-

tized and dark brown in colour. Epigynum as in Figures 163, 164. Vulva as in Figure 166.

Measurements: Male: Prosoma 1.2 long, 1.5 wide; opisthosoma 4.1 long, 1.5 wide. Total body length 5.3. Leg I, femur 11.0, patella 0.7, tibia 12.7, metatarsus 21.1, tarsus 2.2, total 47.7. Palp: femur 0.8, patella 0.3, tibia 0.8, procursus 0.9. Female: Prosoma 1.5 long, 1.9 wide; opisthosoma 4.4 long, 2.4 wide. Total body length 5.9. Leg I, femur 11.7, patella 0.7, tibia 11.9, metatarsus 18.9, tarsus 1.5, total 44.7.

Distribution: This species is endemic to Gran Canaria where it is known to inhabit many different localities, including Barranco de Fataga, Barranco de Tirajana, Barranco de Tocadamon, Barranco de El Risco, Ayaguares and Santa Lucia (Fig. 276).

Natural history: This species lives in natural cavities, very common on walls of the heavily eroded Gran Canarian ravines. It can be found in a wide range of altitudes starting from 300 m up to over 1000 m. In the low limit of its distribution *P. multidentatus* was collected in humid locations, often near palm trees or small gardens which were artificially watered. The specimens found at high altitude live in pine forest close to small temporal ponds of water.

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.

p. 597

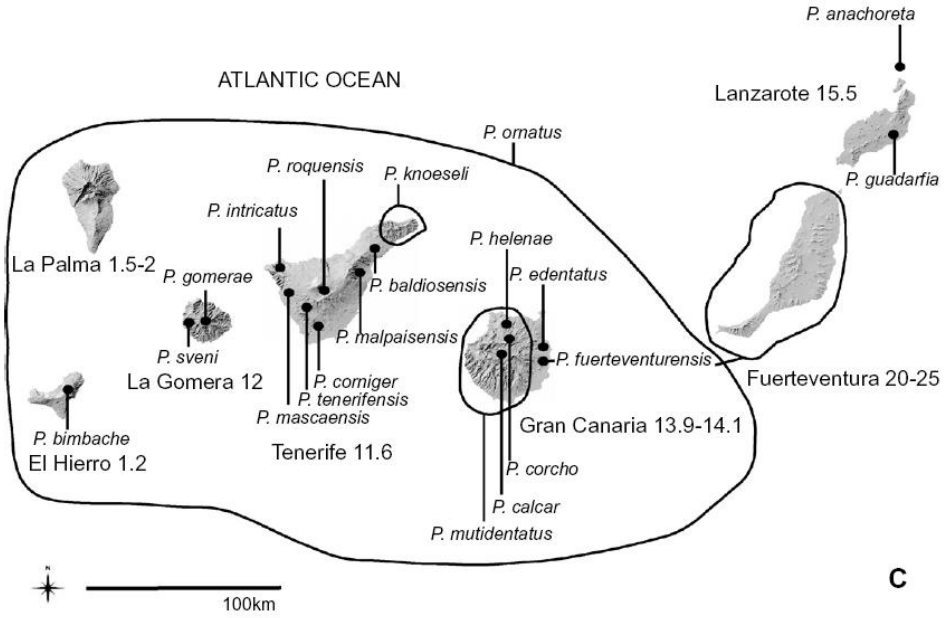


Fig. 1. (A) Map of the Macaronesian biogeographical region. (B) Known distribution of the Madeiran and north-west African *Pholcus* species. (C) Known distribution of the Canarian *Pholcus* species. Numbers following island names denote their estimated maximum age in Mya.

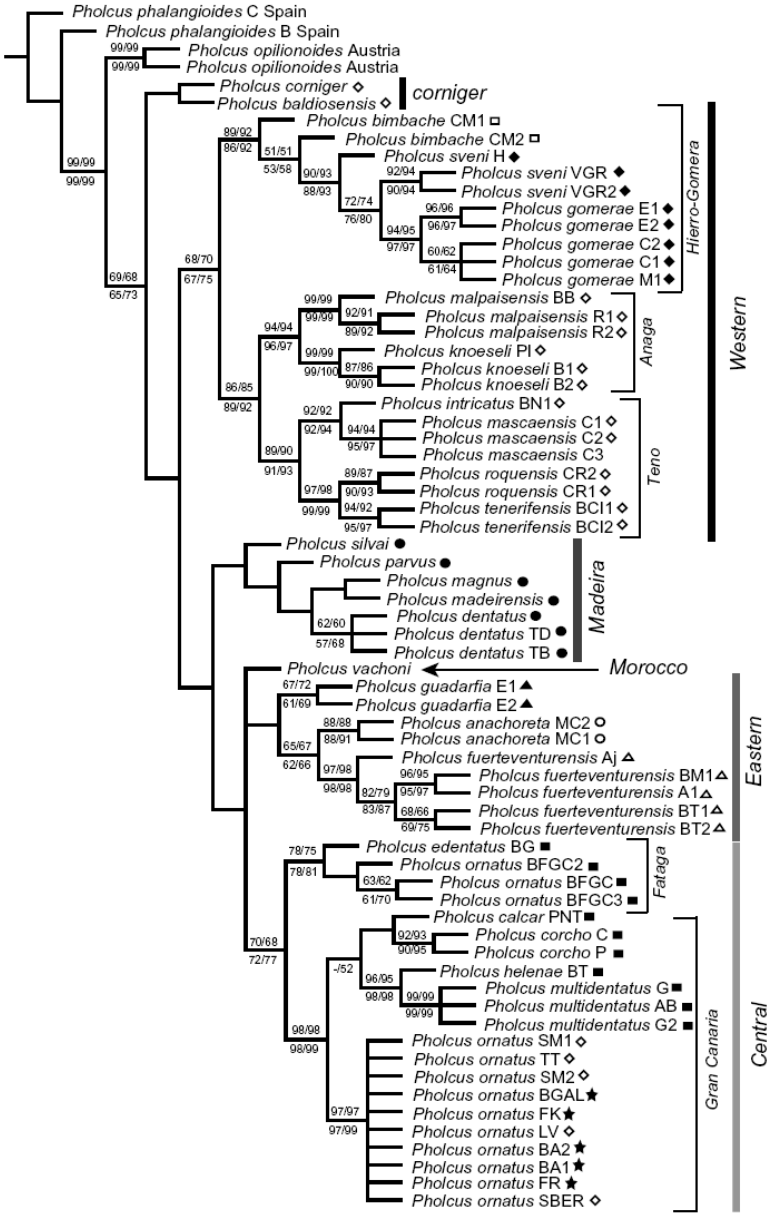


Fig. 5. Strict consensus of the 4 most parsimonious trees (L = 2442, CI = 0.534, RI = 0.881) found by MP analysis of the combined *macaronesia* data set. Support values higher than 50 are given as follows, bootstrap/Poisson bootstrap above branches and jackknife/symmetric resampling below branches. Geographic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