Pholcus edentatus Campos & Wunderlich, 1995

Campos, C.G. & Wunderlich, J. 1995. The distribution of the species of the genus *Pholcus* Walckenaer on Gran Canaria - a first note, with the description of a new species. Beitr. Araneol. 4: 293-300.

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Pholcus edentatus **n.sp.** (Abb. 4-9)

Material: E-Gran Canaria, Bco. de Guayadeque, 500m, 1. artificial caves, 3♂ 4♀ C.G. CAMPOS leg. 4. IX. 1992, holotype ULT no. 02618 a) P, 1♂ 1♀ (paratypes) ULT no. 02618 P, 1♀ (paratype) ULT no. 02620 P, 1♀ (paratype) ULT no. 02621 P, 1♂ 1♀ (paratypes) SJW; 2. small artificial cave, 1♂ 1♀ (paratype) C.G. CAMPOS leg. 23. VI. 1992, ULT no. 02669 P; 3. small cave, 1♀ (paratype) C. G. CAMPOS leg. 13. V. 1992, ULT no. 02528 P.

Diagnosis: ♂: Outgrowth of the trochanter of the pedipalpus (fig. 4) bent and thick, procursus without tiny teeth, lamella of the procursus apically with numerous teeth, median part of the devided appendix large and longer then the retrolateral part, uncus broad (fig. 7). ♀: epigynum (fig. 8) with the small "knob" near the posterior margin, vulva (fig. 9) broadly sclerotized.

Description:
Measurements (in mm): length of the body 5-6.5, length of the prosoma ± 1.5, tibia I ♂ 11, ♀ 9.5, tibia IV ♂ 6.5, ♀ 6.2.

Colour of body and legs as in ornatus, comp. WUNDERLICH (1987: 82-83) and fuerteventurensis WUNDERLICH 1991.

Relationships: P. edentatus is strongly related to fuerteventurensis (Gran Canaria, Fuerteventura); both are the only known members of the Pholcus fuerteventurensis-group. This group is characterized by the bent dorso-apical sclerite of the procursus in the male (arrow in fig. 150 of WUNDERLICH (1991: 543)) and the position of the "knob" of the epigynum near the posterior margin. In fuerteventurensis the outgrowth of the trochanter of the ♂-pedipalpus is longer, straight and more slender, there are 2 tiny teeth at the dorsal margin of the procursus, the uncus is smaller, the median part of the devided appendix is smaller and more pointed, the distal structures of the procursus are different; in the female epigynum and vulva are different, in fuerteventurensis the vulva is not broadly sclerotized.

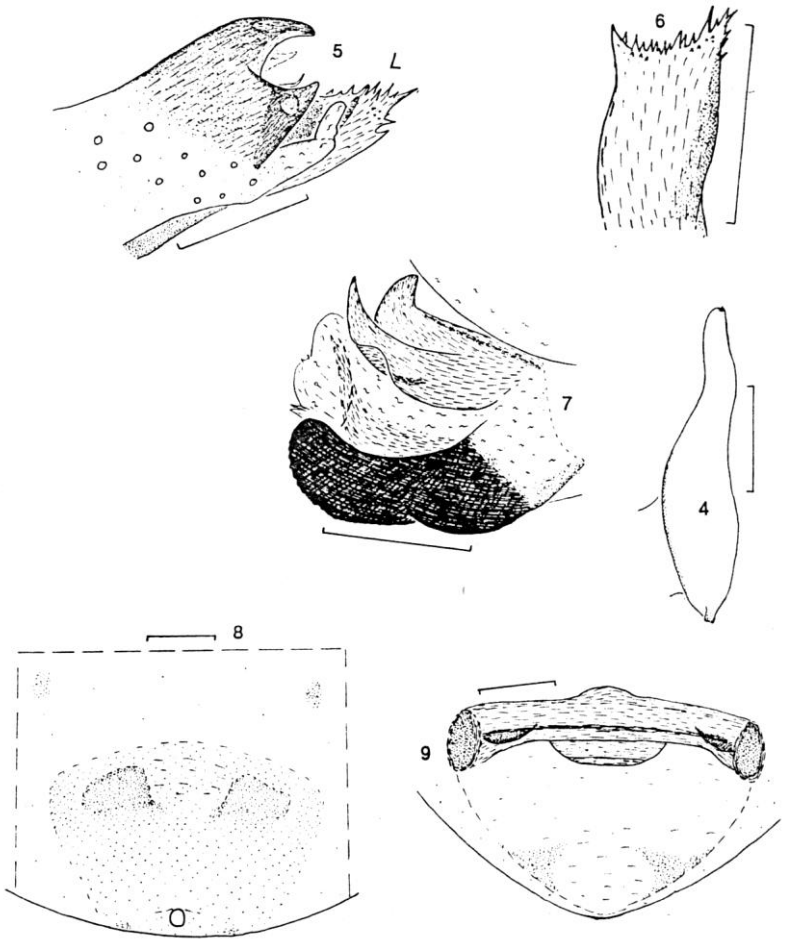

fig.4-9: Pholcus edentatus n.sp., 4) trochanter of the r. ♂-pedipalpus prolaterally; 5) distal part of the r. procursus retrolaterally (L = lamella); 6) lamella of the r. procursus ventrally; 7) uncus and appendix of the r. ♂-pedipalpus prolaterally; 8-9) ♀, epigynum ventrally and vulva dorsally;

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 EDENTATUS CAMPOS & WUNDERLICH, 1995
(FIGS 230–250)

Pholcus edentatus Campos & Wunderlich, 1995: 295, figs 4–9.

Material examined: 2 mm, 2 ff, from Barracno de Guayadeque, Gran Canaria, Canary Islands, Spain, 12.viii.2002, De Mas & Delgado (CCRUB 4614-173, 4594-172, 4593-172).

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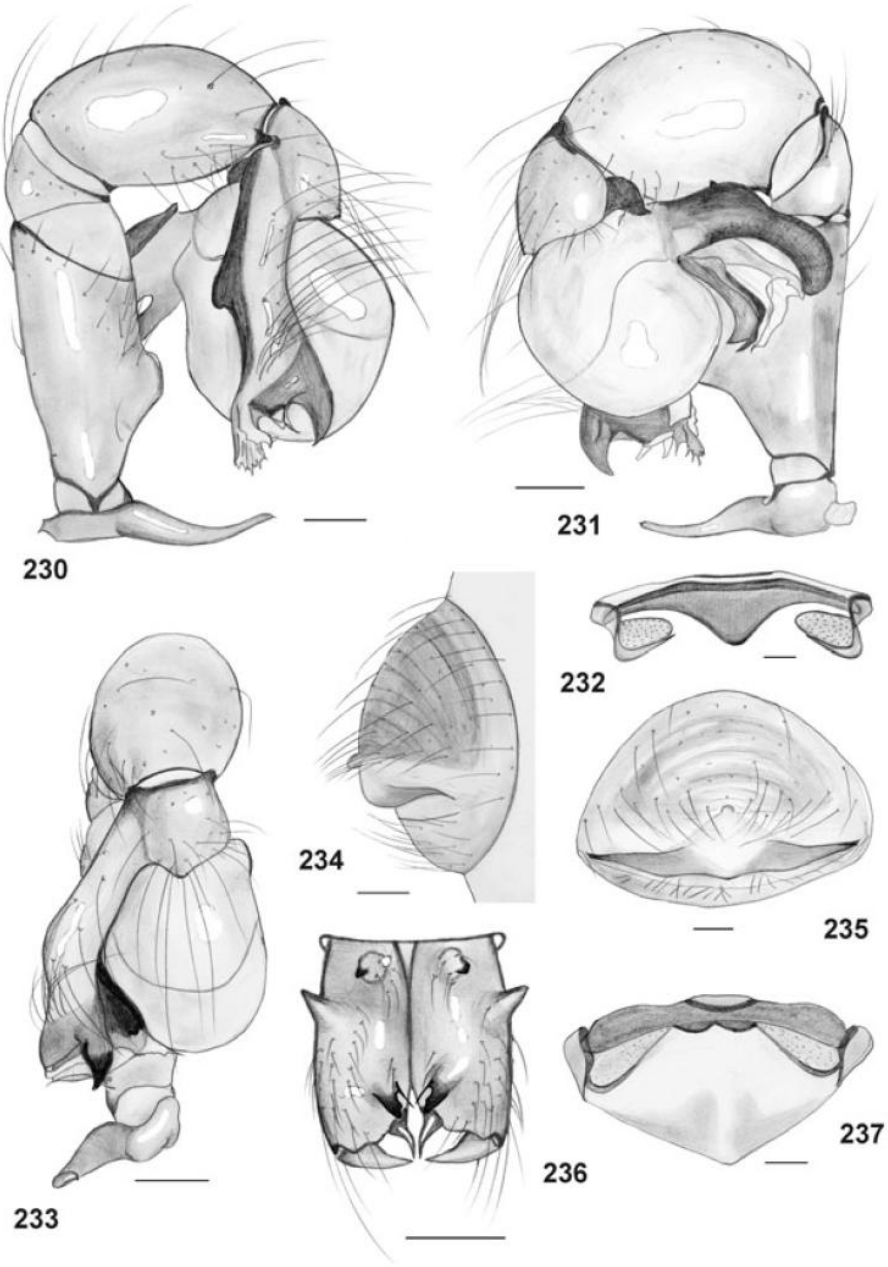
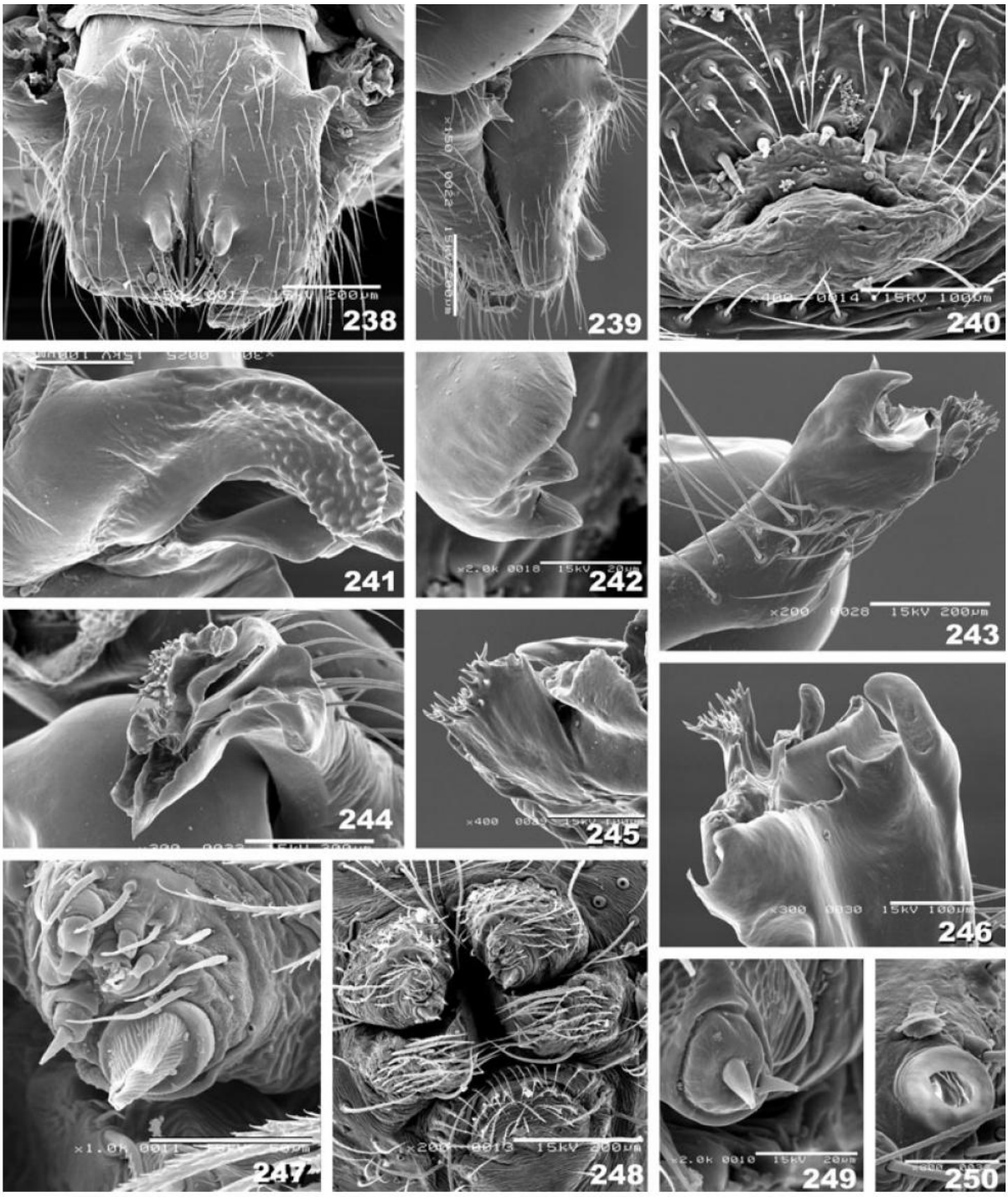
Diagnosis. *P. edentatus* can be distinguished from similar congeners by the following characteristics: the shape of the uncus, which has an inflection to its dorsal side (Fig. 231); the shape of the procursus' apical apophysis, which is lamellar with a wide base and irregular margins (Fig. 245); the procursus' large, heavily sclerotized dorsal apophysis (Figs 230, 243). The shape of the appendix of the bulb and the general morphology of the procursus are also very useful for identification purposes. The female is distinguished by a low triangular plate with a very wide base (Fig. 235) as well as by the morphology of the vulva (Fig. 237).

Description: Male: prosoma yellowish with brownish tones. Dorsally, a brownish colouring appears across the thorax. Ocular area elevated with brownish pigmentation around the eyes. Distance between AME and ALE equal to the diameter of ALE. Diameter of ALE half the diameter of ALE. Distance between AME strongly reduced. Frontal part of ocular elevation marked by darker pigmentation. Sternum



Figures 230–237. *Pholcus edentatus*: 230, male palp, prolateral; 231, male palp, retrolateral; 232, pore plates of the vulva, dorsal view; 233, male palp, frontal; 234, epigynum, lateral; 235, epigynum, ventral; 236, male chelicerae, frontal; 237, vulva, dorsal. Scale bars 0.2 mm.

yellow-brownish with darker margins. Chelicerae (Figs 236, 238, 239) slightly darker than the prosoma. The distal cheliceral apophyses dark brown, with bristles very close to their bases, and carrying two modified hairs (Fig. 242) as well as a small dorsal protuberance. The apex of the proximolateral apophyses does not extend to the base of frontal prominences. Frontal prominences with darker outgrowths. Palp as in Figures 230, 231, 233. Procursus (Figs 230, 233, 243, 244, 246) features large and heavily sclerotized dorsal apophysis. Apical apophysis of the procursus very wide, with one larger ventral part as well as



Figures 238–250. *Pholcus edentatus*: 238, male chelicerae, frontal; 239, male chelicerae, lateral; 240, male gonopore, ventral; 241, projections of the bulb, retrolateral; 242, distal apophysis of male chelicerae; 243, procursus, prolateral; 244, apex of procursus, frontal; 245, apical apophysis of the procursus, ventral; 246, procursus, retrolateral; 247, anterior lateral spinnerets; 248, spinnerets, ventral; 249, posterior lateral spinnerets; 250, male tarsal organ. Scale bars: 238, 239, 243, 244, 248, 200 μm; 240, 241, 245, 246, 100 μm; 247, 250, 50 μm; 242, 249, 20 μm.

numerous small apical outgrowths (Fig. 245), and one smaller dorsal outgrowth. Tarsal organ as in Figure 250. Opisthosoma yellow-brownish with cylindrical shape. Dorsally, eight darker spots appear distributed in two parallel longitudinal lines, their size decreasing towards the end of the opisthosoma. Ventrally, opisthosoma lighter with a darker transversal band over the genital area. Gonopore as in Figure 240. Spinnerets as in Figures 247–249.

Female: prosoma as in male except for the less pronounced elevation of the ocular area. Eyes closer together, with the distance between AME and ALE half the diameter of ALE. Sternum as in male. Chelicerae without apophyses. Colouring of opisthosoma as in the male. Epigynum and vulva as in Figures 232, 234, 235, 237.

Measurements: Male: Prosoma 1.5 long, 1.9 wide. Opisthosoma 4.9 long, 1.9 wide. Total body length 6.4. Leg I femur 12.5, patella 0.7, tibia 13.2, metatarsus 22.0, tarsus 2.3, total 50.7. Palp femur 0.7, patella 0.3, tibia 0.8, procursus 0.8. Female: Prosoma 1.4 long, 1.5 wide. Opisthosoma 4.8 long, 2.4 wide. Total body length 6.2. Leg I femur 11.2, patella 0.8, tibia 11.7, metatarsus 18.0, tarsus 2.4, total 44.2.

Distribution: This species is endemic to Gran Canaria where it is known to inhabit Barranco del Guayadeque (Fig. 276).

Natural history: *P. edentatus* lives in natural cavities in the lower parts of the Barranco de Guayadeque gorge. Although the walls of the gorge are very dry and with scarce xerophytic vegetation, the lower part is much more humid due to the development of limited agricultural activities and the accumulation of rain water.

Comments. All type material deposited in ULL is lost; however, the drawings provided in the original description by Campos & Wunderlich (1995) are sufficient to establish these specimens as conspecific with the lost types.

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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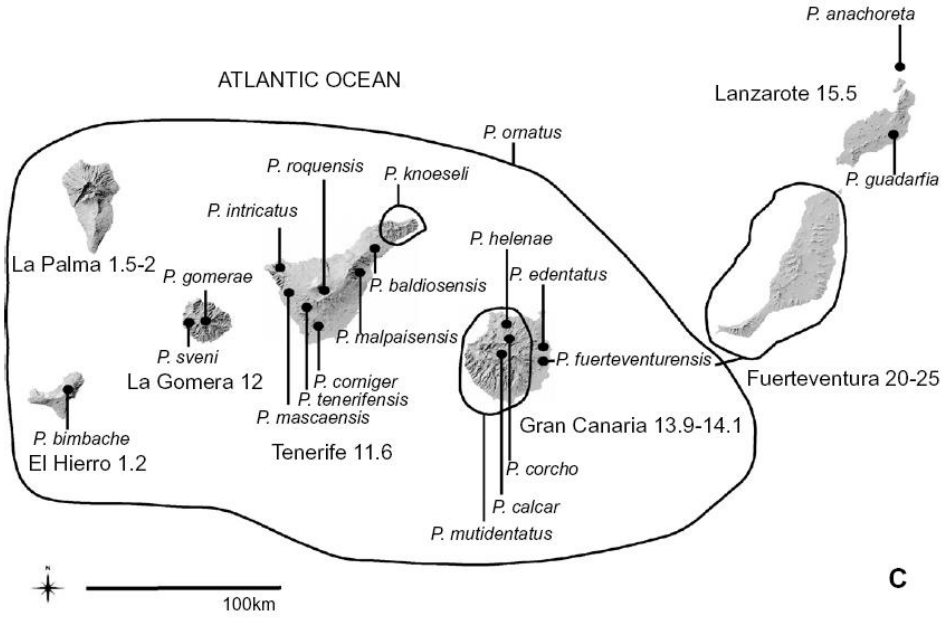

Fig. 1. (A) Map of the Macaronesian biogeographical region. (B) Known distribution of the Madeiran and north-west African *Pholcus* species. (C) Known distribution of the Canarian *Pholcus* species. Numbers following island names denote their estimated maximum age in Mya.

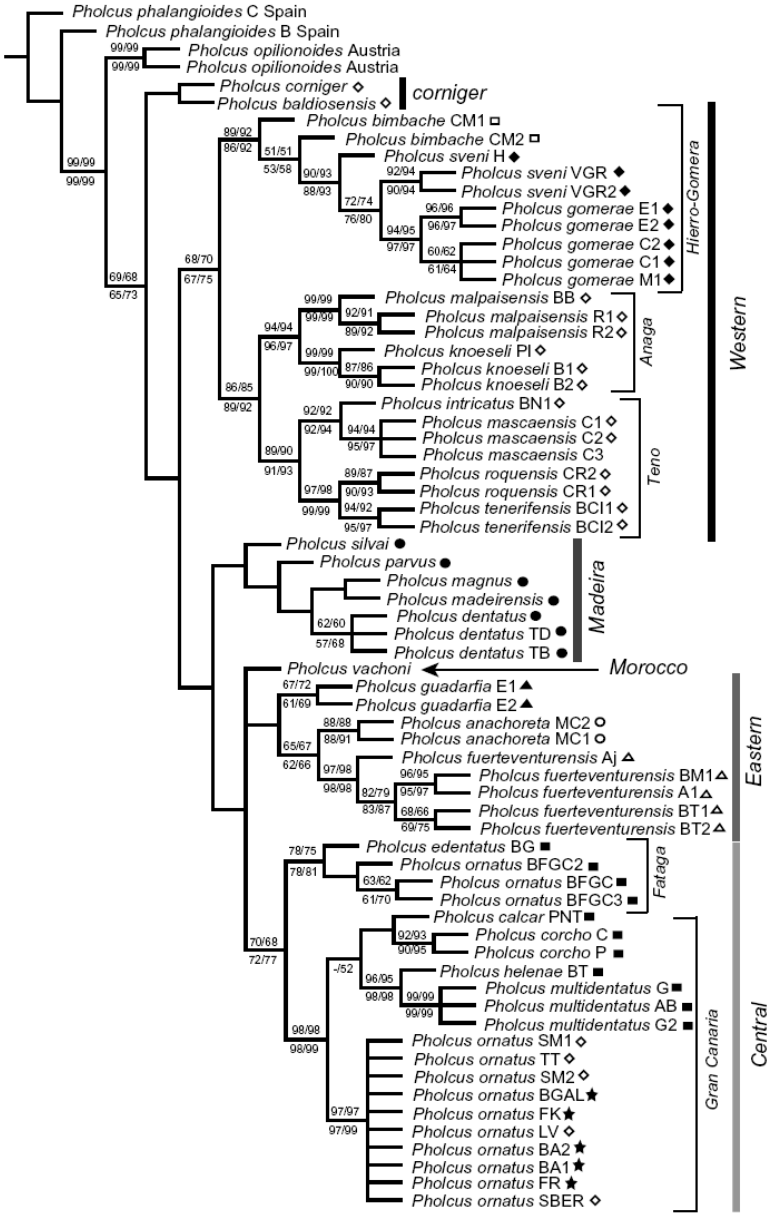

Fig. 5. Strict consensus of the 4 most parsimonious trees (L = 2442, CI = 0.534, RI = 0.881) found by MP analysis of the combined *macaronesia* data set. Support values higher than 50 are given as follows, bootstrap/Poisson bootstrap above branches and jackknife/symmetric resampling below branches. Geographic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