



## A new species of *Physocyclus* (Araneae: Pholcidae) from Mexico

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The genus *Physocyclus* (Pholcidae) is widely distributed in North and Central America, with the exception of the Antilles (Platnick 2013). *Physocyclus* species are found in various environments, including xeric shrub zones and tropical deciduous forests. The genus is also common in caves and rock shelters, including deep caves with complete darkness (Valdéz-Mondragón 2008). Hitherto, 31 species of *Physocyclus* have been described (Platnick 2013). In this paper a new species is described from Mexico.

The specimens were collected in Baja California Sur, in a coastal oasis adjacent to the Pacific coast (Fig. 1). Measurements are given in mm. Female genitalia were cleaned with 10% lactic acid for 1–2 min. Photographs were taken with a camera adapted to a stereomicroscope (MZ6, Leica Microsystems). *In vivo* photographs were made with a digital camera (Alpha NEX-5N, Sony).

The terminology is based on Valdez-Mondragón (2008). Abbreviations in the text and figures are: ALE (anterior lateral eyes), PLE (posterior lateral eyes), AME (anterior median eyes), PME (posterior median eyes), LA (lateral apophysis of chelicerae), SO (stridulatory organs), DA (dorsal apophysis of procurus), VN (ventral notch of procurus), E (embolus), EE (embolic sclerites), SO (spermatid operculum), VA (ventral apophyses of epigynum), PP (porous plates of the epigynum). The specimens have been deposited in the Colección Aracnológica del Centro de Investigaciones del Noroeste (CARCIB) and the California Academy of Sciences (CAS).

### Taxonomy

#### *Physocyclus palmaris* new species

Figures 3–13

**Type. Male (Holotype):** MEXICO: Baja California Sur, Municipality of La Paz, San Pedro Oasis, hand collected, 23°23'22.4"N, 110°12'30.2"W, 6 m. 4.III.2013, C. Palacios and M. L. Jiménez (CARCIB 013), deposited at CARCIB.

**Etymology.** The specific name is a noun in apposition and refers to the palm where the type was collected.

**Diagnosis.** *Physocyclus palmaris* appears to be closely related to *P. michoacanus* Valdez-Mondragón and *P. dugesi* Simon, but can be distinguished by the following features. Males are diagnosed by having the lateral apophysis of the chelicerae (LA) long, lightly curved and directed forward, with sclerotised cones in the basal half of the frontal lamina. The pedipalps have the embolic sclerites (EE) rounded and the embolus (E) is very wide and long and almost rounded in dorsal view and across the base of the femur, ending in a tip. Epigynum of females with ventral apophyses (VA) long, thin and directed forward.

**Description. Male (Holotype):** *Coloration.* Prosoma pale yellow, with long and black setae that were detached when the specimens were preserved in alcohol (Fig. 4). One longitudinal, asymmetric dark brown band on the carapace widens in an irregular form in the thoracic groove and tapers backward from this region. There is a black line from posterior row eyes to the thoracic groove. A dark brown band in the ocular region extends to the middle part of the clypeus. Clypeus with many setae and triangular dark spots at the distal edge. Carapace sides without marks. Ocular area slightly elevated with eight eyes surrounded by black rings; anterior row of eyes procurved and posterior row of eyes straight. Chelicerae: anterior face concave with sclerotized edges, frontal lamina with 64 cones with long setae mainly in the basal part and lateral sides of the lamina, with few cones extending to the distal part; lateral apophysis (LA) long and lightly curve in front view (Fig. 5), straight and thick with rounded tip in retrolateral view; stridulatory organs (SO)