On Taczanowski's pholcids, with three new synonymies in Pholcidae (Araneae)

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Summary

Three new synonymies are proposed, relating to species described by Taczanowski: *Pholcus tigrinus* Taczanowski, 1874 is a junior synonym of *Smeringopus pallidus* (Blackwall, 1858); *Mesabolivar rubristernus* (Caporiacco, 1947) is a junior synonym of *Mesabolivar cyaneus* (Taczanowski, 1874); *Physocyclus orientalis* Zhu & Song, in Song, Zhu & Chen, 1999 is a junior synonym of *Physocyclus globosus* (Taczanowski, 1874).

Introduction

During the preparation of the generic revision of New World pholcids (Huber, 2000), one of us (BAH) tried in vain to borrow the types of two species described by Taczanowski: *Pholcus tigrinus* Taczanowski, 1874 and *Pholcus cyaneus* Taczanowski, 1874, both from French Guiana. When the material was finally received it was too late to incorporate the data into the revision. Therefore, the results are briefly presented here: *Pholcus tigrinus* Taczanowski, 1874 is proposed as a junior synonym of *Smeringopus pallidus* (Blackwall, 1858); *Mesabolivar rubristernus* (Caporiacco, 1947) is proposed as a junior synonym of *Mesabolivar cyaneus* (Taczanowski, 1874). The types of Taczanowski's species are deposited in the Museum and Institute of Zoology of the Polish Academy of Sciences, Warsaw, Poland.

Additionally, we recently had the chance to compare the type material of *Physocyclus orientalis* Zhu & Song, 1999 with material of yet another species described by Taczanowski in 1874, the well-studied synanthropic species *Physocyclus globosus* (Taczanowski, 1874). The earlier suspicion that the two names might be synonyms (Huber, 2000) proved correct, and the two names are here formally synonymised.

Pholcus tigrinus Taczanowski, 1874

Pholcus tigrinus Taczanowski, 1874: 104, pl. 2 fig. 7 (♂♀).
Priscula tigrina: Simon, 1893: 478; Roewer, 1942: 347; Bonnet, 1958: 3769.

When Taczanowski described this species (and *Pholcus cyaneus* and *P. globosus*) there were only five genera included in the Pholcidae: *Pholcus*, *Spermophora*, *Artema*, *Rachus* (later synonymised with *Spermophora*) and *Rhomphaea* (later transferred to Theridiidae). Among these, *Pholcus* was certainly the best choice. Simon (1893: 478, footnote) obviously did not see the type material, and speculated that *P. tigrinus* could "probablement" be a *Priscula*. Although Simon did not actually transfer the species, it was treated as a *Priscula* by Petrunkevitch (1911), Roewer (1942), Mello-Leitão (1946) and Bonnet (1958). It therefore ended up in *Physocyclus* when Brignoli (1981) synonymised *Priscula* with *Physocyclus*. However, Brignoli (1981: 96) emphasised that he considered the position of *Pholcus tigrinus* as "wholly uncertain". To avoid unnecessary confusion, we cite the species here under the original name.

One of us (BAH) received three vials with putative syntypes of this species, with the following labels and contents:

1. "*Pholcus tigrinus* Taczan., St Laurent d. Maroni—Guyane fr., leg. K. Yelski, detm. W. T. Taczanowski, 5", = 2♀ of *Smeringopus pallidus* (Blackwall, 1858).
2. "*Pholcus tigrinus* Taczan., Uassa—Guyane française, leg. K. Yelski, detm. W. T. Taczanowski, 5a", = 3♀, 6 juveniles of *Smeringopus pallidus* (Blackwall, 1858).
3. "*Pholcus tigrinus* Taczan., Cayenne—Guyane franç., leg. K. Yelski, detm. W. T. Taczanowski, 3", = 1♀ *Mesabolivar* sp. [near *aurantiacus* (Mello-Leitão, 1930)].

Two types of evidence strongly suggest that only the first two vials contain the material to which Taczanowski (1874) was referring in his description: he cited only material from Uassa and Saint Laurent de Maroni, and his description of the pattern on the opisthosoma clearly refers to *Smeringopus pallidus* and not to *Mesabolivar* sp. (". . . une belle figure, composée de 4–6 paires de taches obliques, . . . imitant une feuille pennée; . . ."). Therefore, only the first two vials contain syntypes. Since all material in these vials is conspecific, there is no need to select a lectotype. In sum, *Pholcus tigrinus* Taczanowski, 1874 is here synonymised with *Smeringopus pallidus* (Blackwall, 1858), **new synonymy**.

Mesabolivar cyaneus (Taczanowski, 1874)

Pholcus cyaneus Taczanowski, 1874: 103, pl. 2 fig. 6 (♂♀); Roewer, 1942: 342; Bonnet, 1958: 3609.
Blechroscelis cyaneus: Mello-Leitão, 1940: 175.

This species was also originally described as a *Pholcus*, and was later transferred to *Blechroscelis* Simon by Mello-Leitão (1940). When *Blechroscelis* was synonymised with *Priscula* (Huber, 2000), most *Blechroscelis* species were transferred to *Mesabolivar* González-Sponga, 1998, including the present species.

One of us (BAH) received a vial containing twelve putative syntypes of this species, with the following label: "*Pholcus cyaneus* Taczan., Uassa—Guyane française, leg. K. Yelski, detm. W. T. Taczanowski, 4". Three species were included:

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1. *Mesabolivar cyaneus* (Taczanowski, 1874), 2♂, one of them selected as lectotype for the reasons detailed below.
2. *Mesabolivar cambridgei* (Mello-Leitão, 1947), 2♂ 5♀, 2 juveniles.
3. *Mesabolivar aurantiacus* (Mello-Leitão, 1930), 1♀.

Fortunately, Taczanowski (1874: fig. 6) illustrated the male palp of this species, and from that drawing it is evident that he was referring to the two males listed as *M. cyaneus* above and not to those listed as *M. cambridgei*: the procursus of *M. cyaneus* is long and S-shaped, that of *M. cambridgei* short and straight (compare figs. 796 and 895 in Huber, 2000). Therefore, one of the former males is selected as the lectotype.

It has been suspected previously (Huber, 2000) that *Mesabolivar rubristernus* (Caporiacco, 1947) might be a junior synonym of *M. cyaneus*. Examination of the material listed above leaves no doubt that the material treated as *M. rubristernus* by Huber (2000) is in fact conspecific with the lectotype of *M. cyaneus*. The only problem here is that the type material of *M. rubristernus* is apparently lost (it could not be found in the Museo Zoologico de "la Specola", Firenze). However, for reasons detailed previously (Huber, 2000) it seems very probable that the material treated there as *M. rubristernus* is in fact conspecific with Caporiacco's type material. Therefore, *Mesabolivar rubristernus* (Caporiacco, 1947) is here synonymised with *Mesabolivar cyaneus* (Taczanowski, 1874), **new synonymy**.

Physocyclus orientalis Zhu & Song, in Song, Zhu & Chen, 1999

Physocyclus orientalis Zhu & Song, in Song, Zhu & Chen, 1999: 63, fig. 26A–H (♂♀).

This species was characterised as "closely related to *Physocyclus globosus*" (Zhu & Song, in Song *et al*., 1999), based on comparison with figures in Brignoli (1981). However, direct comparison of the female holotype and a male paratype with specimens of *P. globosus* (Taczanowski, 1874) from various continents clearly shows that the two names are synonyms. The suggested differences (shape of the "spermathecae", i.e. the pore plates, and of the "embolus", i.e. the "embolar division" *sensu* Huber, 2000) result mainly or entirely from slightly varying angles of view.

It has been emphasised recently (Huber, 2000) that, contrary to previous views, the genus *Physocyclus* is geographically restricted to the United States and Central America. The only known exception is the synanthropic *P. globosus*, which has been recorded from South America, the Antilles, Africa, Japan, and various Pacific Islands. We have not checked the specimens on which these records are based, but a look at the collection of the American Museum of Natural History (New York) corroborates the long-held view that this is a pantropical species. The collection houses specimens from North, Central and South America, Africa, Australia, and various Pacific Islands. Some vials contain material from countries where this species has apparently not been recorded in the literature: Peru, Trinidad, Honduras, Guatemala, USA (Florida), Bahamas, Nigeria, Congo, Fiji and Loyalty Islands, Philippines, and New Hebrides. In sum, *P. orientalis* Zhu & Song is a junior synonym of the only species of *Physocyclus* that occurs outside the New World, *P. globosus* (Taczanowski, 1874), **new synonymy**.

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