



Species relationships in the Neotropical genus *Phareicranaus* Roewer 1913 (Opiliones: Cranaiidae): two new species and new data from Penial morphology

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Abstract

A reanalysis of the species relationships in the genus *Phareicranaus* Roewer, 1913, here considered the senior synonym of *Acanthocranaus* Roewer, 1913, *Santinezia* Roewer, 1923 and *Comboyus* Roewer, 1943, is carried out, using information unavailable in a previous analysis (of *Santinezia*). Subfamilies Cranainae and Prostyginae may be not monophyletic, since the generic relationships among cranainae are still obscure; it seems that *Phareicranaus* is closely related to *Ventrivomer* Roewer, 1913 and *Ventrisudis* Roewer, 1963, based on presence of a ventral apophysis on male coxa IV and cylindrical pedipalpal femur. The analysis performed with equal weighting generated 64 equally parsimonious trees (275 steps, $ci = .24$; $ri = .60$), and the strict consensus tree differs substantially from previous analyses. Based on results of the equally weighted cladistic analysis, *Phareicranaus* is supported by the following unambiguous synapomorphies: penis base of the glans ringed; pedipalpal femur with a stout dorsoapical spine; strong ventral tubercles on pedipalpal femur and; area II invading area I (the two halves do not touch each other). Two **new species** are described, *Phareicranaus divisor* (type-locality: Brazil, Acre, Parque Nacional da Serra do Divisor) and *P. patauateua* (type-locality: Brazil, Pará, Ourém, Patauateua, fazenda Gavião). Male genitalia are described for the following cranaiids: *Chiriboga albituber* Roewer, 1959; *Metacranaus tricalcaris* Roewer, 1913; *Phareicranaus calcariger* (Roewer, 1913), **comb. n.**; *P. albimedialis* (Goodnight & Goodnight, 1943); *P. festae* Roewer, 1925; *P. parallelus* Roewer, 1925; *P. angelicus* (Roewer, 1963) **comb. n.**; and *P. ortizi* (Roewer, 1952) and *Ventrisudis mira* Roewer, 1963. The following **new combinations** are proposed: from *Acanthocranaus*, *Phareicranaus calcariger* (Roewer, 1913); from *Santinezia*, *Phareicranaus albilineatus* (Roewer, 1932); *P. angelicus* (Roewer, 1963); *P. arthrocentricus* (Mello-Leitão, 1943), *P. biordi* (González-Sponga, 1991); *P. calcarfemoralis* (Roewer, 1917); *P. calcaritibialis* (Roewer, 1915); *P. capayitaensis* (González-Sponga, 2003); *P. contrerasi* (González-Sponga, 2003); *P. circumlineatus* (González-Sponga, 1989); *P. curvipes* (Roewer, 1916); *P. duranti* (González-Sponga, 1989); *P. fronteriza* (González-Sponga, 2003); *P. furva* (Pinto-da-Rocha & Kury, 2003); *P. giganteus* (Roewer, 1913); *P. glaber* (González-Sponga, 2003); *P. gracilis* (Pinto-da-Rocha & Kury, 2003); *P. guaricoensis* (González-Sponga, 2003); *P. heliae* (Avram, 1983); *P. hermosa* (Pinto-da-Rocha & Kury, 2003); *P. lamitius* (González-Sponga, 2003); *P. leonensis* (González-Sponga, 2003); *P. lucifer* (Pinto-da-Rocha & Kury, 2003); *P. manauara* (Pinto-da-Rocha, 1994); *P. noctiscansor* (Townsend & Milne 2010); *P. onorei* (Pinto-da-Rocha & Kury, 2003); *P. ortizi* (Roewer, 1952); *P. parvus* (González-Sponga, 2003); *P. sanarensis* (González-Sponga, 2003); *P. simonbolivari* (Avram, 1987); *P. singularis* (H. Soares, 1970); *P. soledadensis* (González-Sponga, 2003); *P. spinulatus* (Goodnight & Goodnight, 1943); and *P. subparamera* (González-Sponga, 2003). *Santinezia sanarensis humocaroenis* González-Sponga, 2003, transferred to *Phareicranaus*, is elevated to species level, proposing the **new combination** and **new status**: *Phareicranaus humocaroenis* (González-Sponga, 2003). Three **new names** are proposed: *Phareicranaus roeweri* to replace *Nieblia festae* Roewer, 1925, preoccupied by *Phareicranaus festae* Roewer, 1925; *Phareicranaus goodnightorum* to replace *Santinezia magna* Goodnight & Goodnight 1942, preoccupied by *Phareicranaus magnus* (Roewer, 1932); and *Phareicranaus kuryi* to replace *Comboyus albilineatus* Roewer, 1943, preoccupied by *Santinezia albilineata* Roewer, 1932, which is presently a junior synonym of *Inezia curvipes* Roewer, 1916 (now *Phareicranaus curvipes*). *Phareicranaus cingulatus* Roewer, 1932 and *Santinezia serratotibialis* Roewer, 1932 are **newly synonymized** with *Goniosoma calcariferum* Simon, 1879 (the type species of *Phareicranaus*). Additionally, *Phareicranaus giganteus* Roewer, 1932 is **newly synonymized** with *Holocranus longipes* Roewer 1913, and the monotypic genus *Meridia* Roewer 1913 (type species *M. palpalis* Roewer 1913) is transferred from Manaosbiidae to Cranaiidae, Cranainae.

Key words: Amazon, Andes, Harvestmen, *Comboyus*, *Santinezia*, *Phareicranaus*