

**The second species of *Purcellia* HANSEN et SØRENSEN, 1904  
(Arachnida: Opiliones: Pettalidae) from South Africa<sup>1</sup>**

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**ABSTRACT.** Two species of the family Pettalidae were described, among them *Purcellia leleupi* as new. Some more general remarks on the family Pettalidae were given.

**KEY WORDS:** Republic of South Africa, Opiliones, Pettalidae, new species.

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Through the courtesy of Dr Rudy JOCQUÉ I had an opportunity to study a rich material of harvestmen, collected in the countries of Southern Africa (Republic of South Africa, Zimbabwe and Zambia) by the staff members and accompanying persons of the Musée royal de l'Afrique Centrale in Tervuren (Belgium). The new material contains some very interesting species, among others two species of the family Pettalidae. One of them is new to science.

REMARKS ON SOUTH AFRICAN PETTALIDAE

The genus *Purcellia* HANSEN et SØRENSEN, 1904 was up-to-date monotypic, though all South African species described by LAWRENCE (1933, 1939, 1963) were placed here. In opinion of ROSAS COSTA (1950) they should, however, belong to a separate genus *Para-*

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*purcellia* ROSAS COSTA, 1950, differing from *Purcellia* by the following (not always very good defined) characters. 1. The location of ozophores – in all species the same: no difference in position, only in direction (upright or obliquely projecting beyond the body margin); 2. the shape of last segments: rounded or incised/bilobed – rather connected with sexual dimorphism, because even males of *P. illustrans* show a distinct incision, though not visible from the dorsal side; 3. the shape of the corona analis: the tergite IX is entire or divided with poorly visible suture. Additionally there is a crest on the basichelicerite but is it really enough as a genus separating character? JUBERTHIE (1970) and GIRIBET (2000, 2003, GIRIBET & BOYER 2002) maintain the two genera as separate. *Purcellia* is in common clade with *Speleosiro*, different from *Parapurcellia* (GIRIBET 2003, Fig. 52). Some inconsistency of their analysis lies in including species described from the former Transvaal by LAWRENCE (1963: *Purcellia peregrinator* and probably *P. transvaalica*) into the same clade as *Parapurcellia* – should they be transferred to *Parapurcellia*?

#### ***Purcellia illustrans* HANSEN et SØRENSEN, 1904**

##### **Material examined**

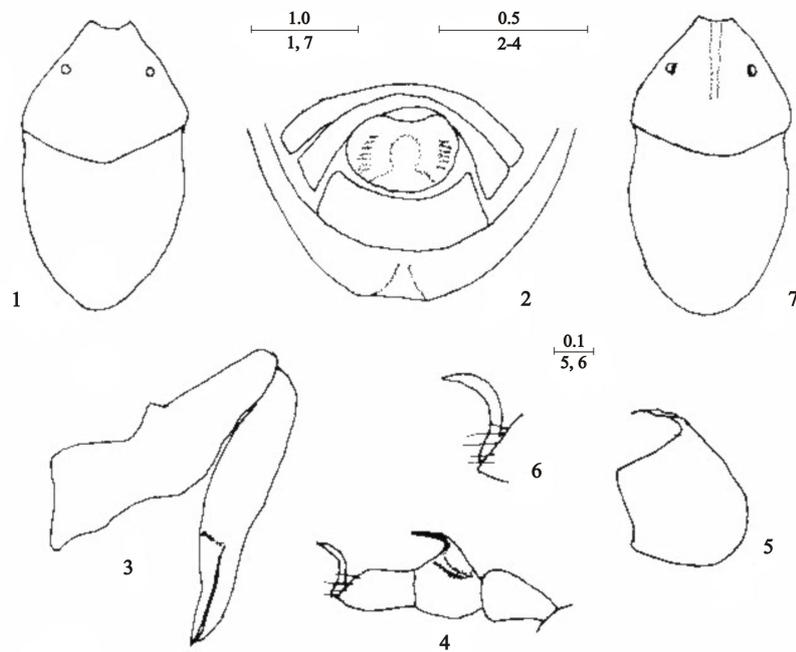
1 ♀ „Afrique du Sud, Prov. du Cap, versant Est de la Table Mountain, Kirstenbosch, dans humus, N. LELEUP ZA.39. XI-1966” (MRAC 130.014), 1 ♂, 1 ♀ (MRAC 130.030), 1 ♂, 1 ♀ (MRAC 130.049), 4 juv. (MRAC 130.010). 10 ♂, 14 ♀ „Afrique du Sud, Prov. du Cap, Table Mountain, Bats Cave, dans humus de *Podocarpus*, N. LELEUP ZA.43. XII.1966” (MRAC 130.021 – 7 ♂, 10 ♀, RCWS II/0022 – 3 ♂, 4 ♀).

##### **Description**

Body convex, coarsely granulated, dark brown. Two darker parallel lines reaching from the front margin to about  $\frac{2}{3}$  of carapace length. Chelicerae of the same colour as the body, palps and legs lighter – yellow-brown. Male (Fig. 1): body length 2.56–2.78 mm, carapace length 1.29 mm, carapace width 1.61 mm, abdomen width 1.56 mm. Female (Fig. 7): body length 3.00–3.28 mm, carapace length 1.29–1.33 mm, carapace width 1.72–1.78 mm, abdomen width 1.61–1.72 mm. Ozophores in the height of coxae III, about 3 diameters from the lateral margin, small, rounded, pointing upwards, on the top with several setae. Corona analis (Fig. 2) with a very broad, undivided tergite IX, thus anus shifted to the ventral side. Tergite VIII slightly concave (hardly visible from the dorsal side!). In females tergite VIII rounded. Basichelicerite (Fig. 3) dorsally with a short transversal crest. Tarsus IV (Fig. 4) about twice as long as the metatarsus, its distal article about 1.5 times longer than wide. Adenostyle (Fig. 5) sharply pointed, bent nearly parallel to leg axis, the first tarsal article with a distinct depression retrolaterally.

### Distribution

Known from numerous localities (HANSEN & SØRENSEN 1904, LAWRENCE 1931, KAURI 1961, STARĘGA 1992). It must be relatively common, particularly in litter, but only in the nearest vicinity of Cape Town. Two localities mentioned by LAWRENCE (1931): Houwhoek near Caledon and Knysna are in my opinion doubtful (Houwhoek refers most probably to *P. leleupi* and from Knysna there are specimens of an undescribed species in the Natal Museum).



**Figs 1-7.** *Purcellia illustrans* HANSEN et SØRENSEN; 1-6 male: 1 – body outline, 2 – corona analis, 3 – right chelicera, lateral view, 4 – metatarsus and tarsus IV, retrolateral view, 5 – first article of tarsus IV, retrolateral view, 6 – claw of tarsus IV, 7 – body outline of female.

*Purcellia leleupi* sp. n.

**Material examined**

1 ♂ (holotype) „Afrique du Sud, Prov. du Cap, Caledon distr., Sonder End Berg, Olifant rivier, N. LELEUP ZA.54. I-1966” (MRAC 130.009). [According to information from Dr. R. JOCQUÉ the coordinates of the locality are: S 33°50', E 19°07'].

**Etymology**

The species is named in honour of its discoverer, Dr. N. LELEUP.

**Description**

Male. Body length 2.78 mm, carapace 1.33 mm long, 1.39 mm wide, abdomen 1.61 mm wide. Body strongly convex (Fig. 8), its hind margin concave and bilobed. Colour uniformly dark brown, the darker stripes on the carapace converging, forming a V-shaped pattern pointing backwards. All appendages slightly lighter. Body covered with minute granules, much bigger on the coxae and the mouthparts. Ozophores pointing upright, the distance between them and the body margin two times as wide as their height. Distal half of the dorsal side of basichelicerite roughly granulated, the other parts of chelicerae smooth (Fig. 10). Tarsus IV about 1.5 times as long as metatarsus, with the apical article as long as the metatarsus (Fig. 11). Adenostyle sharply pointed, its point directed (bent) backwards (Fig. 12).

Penis, alas, lost during preparation.

**Affinities**

*P. leleupi* is similar to *P. illustrans* (body outline, granulation). It differs by the location of ozophores, the structure of corona analis (Fig. 9) and much thinner apical tarsal article (three times instead of about 1.5 longer than wide).

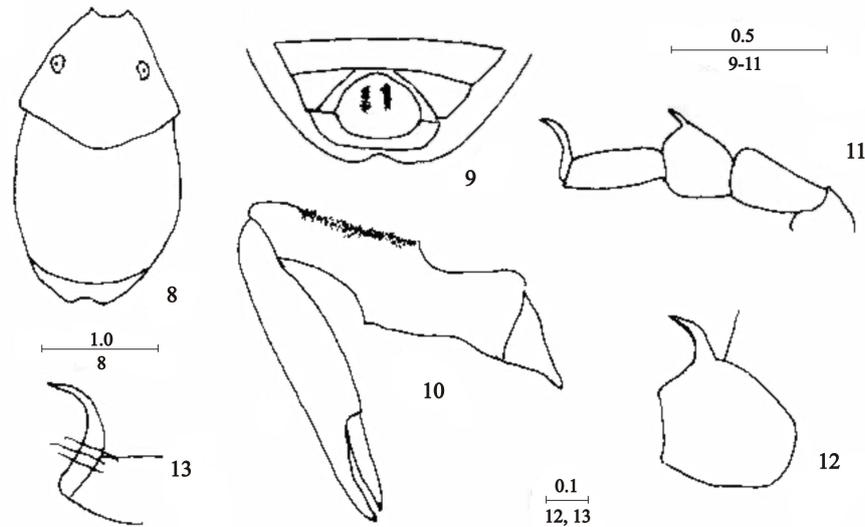
**Distribution**

LAWRENCE (1931) mentioned under localities of *P. illustrans* also Houwhoek (now Houhoek or Houhoek Pass about 25-30 km West from Caledon). Possibly this locality refers to *P. leleupi* and not *P. illustrans*.

**Acknowledgements**

My heartily thanks are due first of all to Dr R. JOCQUÉ, who enabled me to get access to the material, and to all collectors who gathered it.

The great majority of material is stored in the Museum in Tervuren (MRAC with number; labels written mostly in French), only a few so-called „desiderata” – in my personal reference collection (RCWS with number).



**Figs 8-13.** *Purcellia leleupi* sp. n. male (holotype), 8 – body outline, 9 – corona analis, 10 – right chelicera, mesal view, 11 – metatarsus and tarsus IV, retrolateral view, 12 – first article of tarsus IV, retrolateral view, 13 – claw of tarsus IV.

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