Harpactirella leleupi Benoit, 1965 is a junior synonym of *Idiothele nigrofulva* (Pocock, 1898) (Araneae, Theraphosidae, Harpactirinae)

Richard C. Gallon

23a Roumania Crescent, Llandudno, North Wales, LL30 1UP

Summary

The "female" holotype of *Harpactirella leleupi* Benoit, 1965 was re-examined and found to be an immature male, and a junior synonym of *Idiothele nigrofulva* (Pocock, 1898), syn. nov.

Harpactirella leleupi Benoit, 1965 was described from a single, purportedly female, specimen collected by N. Leleup in south-eastern Zimbabwe (MRAC 116.016, Melsetter (=Chimanimani), 64 km N. of Chipinga, alt. 1700 m, July 1960).

In his description Benoit (1965) drew attention to the short distal segment of the posterior spinneret, subcircular sternum, wide clypeus, transverse fovea, rastellum of black setae and 20 labial cuspules of his holotype. He also mentioned that the dorsum of the abdomen is marked with a dark median line and chevrons.

In preparation for a revision of the genus *Harpactirella* Purcell, 1902, the holotype of *H. leleupi* was re-examined and a small, dense retrolateral cheliceral scopula was discovered (Fig. 1)—a feature apparently overlooked by Benoit. A retrolateral cheliceral scopula is synapomorphic for the Harpactirinae, with a reversal in *Harpactirella* (Raven, 1985; Gallon, 2003). The presence of a retrolateral cheliceral scopula in *H. leleupi* precludes its placement in *Harpactirella*, as defined by Purcell (1902).

On dissection, the holotype of *H. leleupi* was also found to be an immature male rather than a female. Immature male theraphosids are difficult to identify to species, since theraphosid taxonomy focuses on spermathecal, palpal bulb and tibial spur morphology. Fortunately the harpactirine genera are well defined and most can be keyed readily using somatic features (Gallon, 2002).

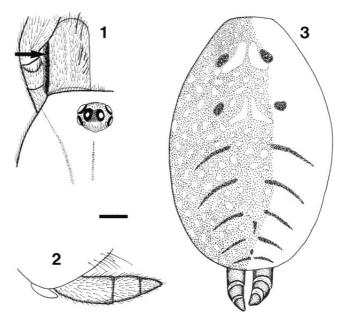
The absence of a prolateral cheliceral scopula rules out its placement in *Trichognathella* Gallon, 2004. Lack of prolateral stridulatory strikers on the maxilla precludes its placement in *Harpactira* Ausserer, 1871 (obvious, even in small immature *Harpactira*). The type of *H. leleupi* possesses distal prodorsal spines on metatarsi III and IV—a character which rules out *Eucratoscelus* Pocock, 1898. The foveae of immature *Ceratogyrus* Pocock, 1897 (protuberate and non-protuberate species) are distinctly procurved from an early instar. By the time they reach a size comparable with the holotype of *H. leleupi*, the protuberate *Ceratogyrus* also have distinct foveal protuberances. Since the fovea of *H. leleupi* is transverse, it cannot be included in *Ceratogyrus*.

The key feature of *Harpactirella leleupi* is its short sub-conical distal segment on the posterior spinneret (Fig. 2). This feature alone excludes placement in

Augacephalus Gallon, 2002, Ceratogyrus, Eucratoscelus, Harpactira, Pterinochilus Pocock, 1897 and Trichognathella. However, this character is autapomorphic for the monotypic genus Idiothele Hewitt, 1919. Idiothele also has reduced numbers of labial and maxillary cuspules, c. 30 and c. 40 respectively (Gallon, 2002). This is particularly apparent on the maxilla, since other harpactirine genera with scopulate chelicerae typically have 100+ cuspules in this position (De Wet & Dippenaar-Schoeman, 1991; Gallon, 2001, 2002). The type of H. leleupi has 21 labial cuspules and c. 40 maxillary cuspules and is thus consistent with *Idiothele*; the syntype male of *I. nigrofulva* (Pocock, 1898) possesses c. 30 and c. 40 cuspules respectively. All the type material of *I. nigrofulva* and its junior synonym, Pterinochilus crassispinus Purcell, 1902, has been examined (Gallon, 2002).

The holotype of *H. leleupi* was compared closely with a living, similar sized immature female *Idiothele nigrofulva*. This specimen was topotypic, having been collected from a silk-lined, trap-door burrow beneath a rock on wasteland near Barberton, South Africa (Digger's Retreat, Noordkaap, 25°40′63.9″S, 31°04′70.4″E, 5 August 2003, leg. Richard Gallon & Sjef van Overdijk).

The sub-circular sternum of *H. leleupi* (illustrated by Benoit, 1965) is identical in form to that of the immature female *I. nigrofulva* specimen, as are the anterior cheliceral bristles (rastellum?) noted by Benoit. Comparison of the dorsal abdominal markings showed these to be identical. In *I. nigrofulva* (females and immature males) the dorsal and lateral sides of the abdomen are uniformly adorned with reticulations, in addition to the dark markings of spots and bars (Figs. 3–5). Like the type of *H. leleupi*, not all specimens of *I. nigrofulva*



Figs. 1–3: Immature male of *Idiothele nigrofulva* (holotype of *Harpactirella leleupi*). **1** Anterior part of cephalothorax, showing ocular tubercle and left chelicera, dorsal view, arrow indicates retrolateral cheliceral scopula; **2** Spinnerets, prolateral view; **3** Abdomen, setae omitted, dorsal view. Scale line=1.0 mm (1, 3), 0.73 mm (2).

96 Harpactirella leleupi





Figs. 4–5: Topotypic subadult female *Idiothele nigrofulva*. **4** Showing dorsal abdominal pattern; **5** With trap-door constructed in captivity. Total body length 23.4 mm.

possess strong radial carapace markings (Gallon, 2002). The type locality of *H. leleupi* also falls within the known distribution range of *Idiothele nigrofulva* (Gallon, 2002).

For the reasons described above *Harpactirella leleupi* is considered a junior synonym of *Idiothele nigrofulva*. **New synonymy**.

Acknowledgements

Rudy Jocqué (MRAC=Musée Royal de l'Afrique Centrale, Tervuren, Belgium) is thanked for the loan of type material. Thomas Ezendam and Sjef van Overdijk are acknowledged for assistance in the field. Ansie Dippenaar-Schoeman (Plant Protection Research Institute, Pretoria, South Africa), Marianne Forsyth (Gauteng Nature Conservation, Johannesburg, South Africa) and Koos de Wet (Mpumalanga Parks Board, Lydenburg, South Africa) are thanked for help in securing collecting permits, and Rogério Bertani for his useful comments on the manuscript. Jason Dunlop is thanked for his review of the manuscript. This work was partly funded by a grant from the Ted Locket memorial fund of the British Arachnological Society.

References

- BENOIT, P. L. G. 1965: Etudes sur les Barychelidae du Centre Africain (Araneae Orthognatha) II. Leptopelmatinae nouveaux. *Revue Zool. Bot. afr.* **71**: 297–303.
- DE WET, J. I. & DIPPENAAR-SCHOEMAN, A. S. 1991: A revision of the genus *Ceratogyrus* Pocock (Araneae: Theraphosidae). *Koedoe* **34**(2): 39–68.
- GALLON, R. C. 2001: Revision of the *Ceratogyrus* spp. formerly included in *Coelogenium* (Araneae: Theraphosidae, Harpactirinae). *Mygalomorph* **2**(1): 1–20.
- GALLON, R. C. 2002: Revision of the African genera *Pterinochilus* and *Eucratoscelus* (Araneae, Theraphosidae, Harpactirinae) with description of two new genera. *Bull. Br. arachnol. Soc.* 12(5): 201–232.
- GALLON, R. C. 2003: A new African arboreal genus and species of theraphosid spider (Araneae, Theraphosidae, Stromatopelminae) which lacks spermathecae. *Bull. Br. arachnol. Soc.* **12**(9): 405–411.
- PURCELL, W. F. 1902: On the South African Theraphosidae, or "Baviaan" spiders, in the collection of the South African Museum. *Trans. S. Afr. phil. Soc.* **11**(4): 319–347.
- RAVEN, R. J. 1985: The spider infraorder Mygalomorphae (Araneae): cladistics and systematics. *Bull. Am. Mus. nat. Hist.* **182**: 1–180.

