

First record of the crab spider *Diaea longisetosa* Roewer, 1961 from South Africa (Araneae: Thomisidae)

A.S. Dippenaar-Schoeman¹ & P. Webb²

¹ Department of Zoology, University of Venda, dippenaaransie@gmail.com. ² SANSA team member, Gauteng (deceased)

Abstract: The male of the crab spider *Diaea longisetosa* Roewer, 1961 was described from Senegal in Africa. It is for the first time recorded from South Africa and the general morphology of the male is discussed with photographs of live specimens provided. Notes on their behaviour, distribution in South Africa, and conservation status are provided.

Key words: biodiversity, geographic distribution, South African National Survey of Arachnida

INTRODUCTION

The genus *Diaea* Thorell, 1869 is presently known from 46 species and three species are listed from South Africa (World Spider Catalogue, 2023). As part of the South African National Survey of Arachnida (SANSA), large areas in South Africa were surveyed (Dippenaar-Schoeman *et al.*, 2015) and several *Diaea* species have been collected. One of these species has been identified as *Diaea longisetosa*, an African endemic described by Roewer (1961) from Senegal, with only the male known. In the present paper the male is redescribed and new distribution records for the species are added, as well as notes on their behaviour and conservation status.

METHODS

Material was obtained from the SANSA surveys and voucher specimens are deposited in the National Collection of Arachnida (NCA) at the Agricultural Research Council, Pretoria. Additional information was obtained from the SANSA Virtual Museum database (Dippenaar-Schoeman *et al.*, 2012).

TAXONOMY

Diaea longisetosa Roewer, 1961

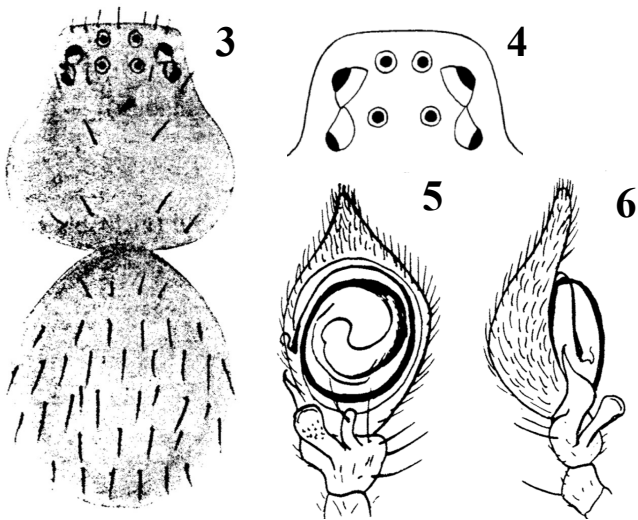
Diaea longisetosa Roewer, 1961: 76, f. 29a-g (Dm).

Diagnostic characteristics: Male (Figs 1–2): body size 4 mm. Carapace longer than wide, narrowed in eye region; integument pale green with darker green lateral and marginal bands; eye region with eyes covered by brown patch; eyes in two recurved rows on slight tubercles, lateral eyes larger than median eyes (Figs 4 & 8); carapace with dark, long setae scattered dorsally and on clypeal edge. Sternum heart shaped. Legs I and II much longer than III and IV; all legs pale green with scattered dark setae; legs I and II with darker markings on femora I where three setae have a dark brown base giving it a spotted appearance; dark bands present on legs I and II between trochanter and tibiae and distally on tibiae and metatarsi (Fig. 9). Abdomen oval with cream base and numerous dark setae (Figs 3 & 7); dorsally decorated with brown patterns that are edged with red marking. Male palp pale green with tarsus brown; retro-tibial apophysis long and pointed; median apophysis spade-like and ventral apophysis small (Figs 5–6). It resembles members of *Heriaeus*.

Female unknown but an immature specimen sampled from the same locality as the male at Lephahlale possibly belongs to the same species. The basic colour resembles that of the male but the dark brown patterns on the carapace and abdomen and bands on legs are absent. Body and legs pale green, abdomen with faint pattern (Fig. 10).



Figures 1–2. *Diaea longisetosa* male from Lephahlale, Limpopo. Photo credits: Peter Webb.



Figures 3–6. *Diaea longisetosa* male. 3. Habitus dorsal view. 4. Eye pattern. 5–6. Male palp. Credits: After Roewer (1961).

LIFE STYLE

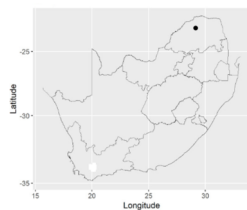
Diaea longisetosa is a free-living plant dweller. Specimens were sampled while sweeping grassland in the Savanna biome during a BioBlitz on the farm Zandrivier, approximately 10 km south of Lephalale (Ellisras) in the Waterberg Biosphere Reserve (Webb & Dippenaar-Schoeman, 2014).

GLOBAL DISTRIBUTION

Senegal. New: South Africa.

DISTRIBUTION IN SOUTH AFRICA

Limpopo: Farm Zandrivier 14 km south of Lephalale (23°48'29.43S, 27°46'26.41E).



CONSERVATION

An African endemic known from Senegal in the north and South Africa in the south. This species is possibly under-collected and suspected to occur in more localities. Due to its wide global range it is listed as Least Concern.

REFERENCES

DIPPENAAR-SCHOEMAN A.S., HADDAD C.R., FOORD S.H., LYLE R., LOTZ L.N. & MARAIS P. 2015. South African National Survey of Arachnida (SANSa): Review of current knowledge, constraints and future needs for documenting spider diversity (Arachnida: Araneae). *Transactions of the Royal Society of South Africa* 70: 245–277.

DIPPENAAR-SCHOEMAN A.S., LYLE R. & VAN DEN BERG A.M. 2012. Bioinformatics on the spiders of South Africa. *Serket* 13(1/2): 121–127.

ROEWER C.F. 1961. Opilioniden und Araneen, *In* Le Parc National de Niokolo-Koba, 2. *Mémoires de l'Institut Français d'Afrique Noire* 62: 33–81.



Figures 7–10. *Diaea longisetosa*. 7. Male habitus dorsal view. 8. Eye pattern. 9. Dorsal views showing the leg markings. 10. Immature specimen, possibly undescribed female of species. Photo credits: Peter Webb.

WEBB P. & DIPPENAAR-SCHOEMAN A.S. 2014. Bioblitz at the farm Zandrivier near Lephalale in the Limpopo Province. *SANSa Newsletter* 21: 4.

WORLD SPIDER CATALOG. 2023. World Spider Catalog. Version 24. Natural History Museum Bern, online at <http://wsc.nmbe.ch>, accessed on 13 March 2023. doi: 10.24436/2