

New records of the crab spider *Hewittia gracilis* Lessert, 1928 from South Africa (Araneae: Thomisidae)

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ABSTRACT: The genus *Hewittia* Lessert, 1928 is newly recorded in South Africa, extending its current distribution range from Central Africa to South Africa. Prior to this study, only the female of the type species *Hewittia gracilis* was known. Photographs of the spider in life and some notes of its behaviour, distribution and conservation status are provided.

Key words: biodiversity; distribution; South African National Survey of Arachnida (SANSA)

INTRODUCTION

Hewittia Lessert, 1928 is a small monotypic genus, endemic to Africa, and known only from a female described from the Democratic Republic of the Congo (World Spider Catalog, 2022).

As part of the South African National Survey of Arachnida (SANSA), large areas in South Africa were surveyed and a series of specimens were sampled (Dippenaar-Schoeman *et al.*, 2015). Although *Hewittia gracilis* was already listed in the South African Spider Atlas (Dippenaar-Schoeman *et al.*, 2010: 1018), it was not yet formally reported from South Africa in the World Spider Catalog.

In this paper we report on *H. gracilis* from South Africa. Photographs of live specimens are provided as well as notes on its behaviour, distribution and conservation status.

METHOD

The specimens examined are deposited in the National Collection of Arachnida (NCA) at the Agricultural Research Council, Pretoria. As part of SANSA, requests were made for photographs for the SANSA Virtual Museum (Dippenaar-Schoeman *et al.*, 2012) and several images were received and are displayed here.

TAXONOMY

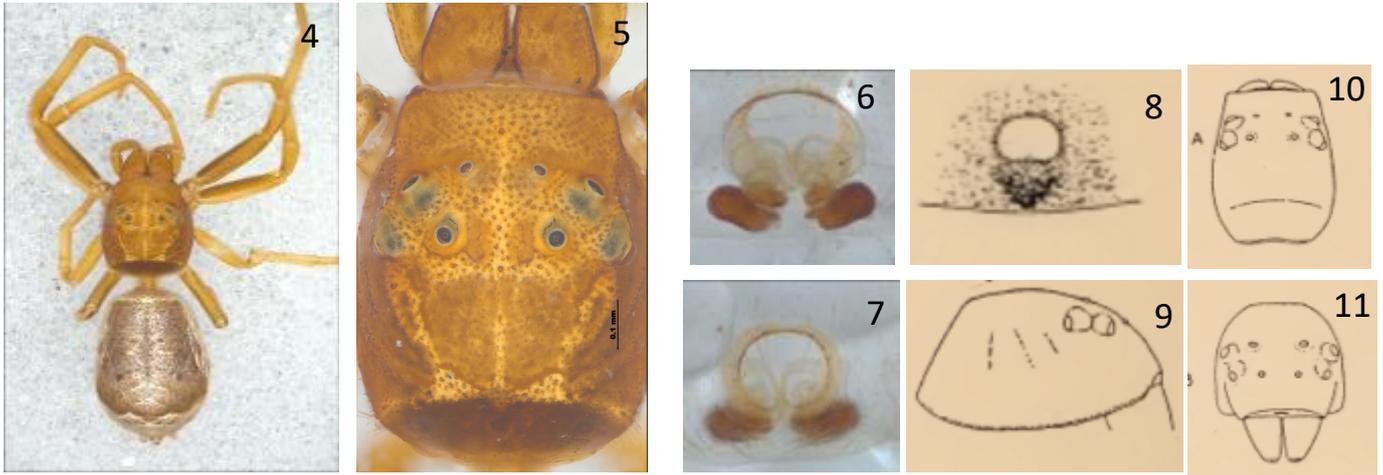
Hewittia gracilis Lessert, 1928

Hewittia gracilis Lessert, 1928: 307; Jézéquel, 1964: 111; Dippenaar-Schoeman *et al.*, 2010; 2014: 238.

Diagnostic characteristics: Total length: 3–4 mm. Female (Figs 1–2) carapace longer than wide, with scattered short setae and few longer setae present on truncated posterior edge of carapace, on the clypeal edge and between the lateral eyes, and behind posterior lateral eyes; cephalic region high, slightly convex, sloping anteriorly; thoracic region truncated posteriorly. Eyes (Figs 4–5) in two rows covering most of carapace width; both eye rows recurved; anterior eye row slightly wider than posterior eye row; lateral eyes on separate closely situated tubercles; anterior median eyes smallest, a third smaller than anterior lateral eyes; anterior median eyes closer to anterior lateral eyes than to each other, separated by four times their diameter; posterior median eyes a third smaller than posterior lateral eyes, separated by six times their diameter from each other; median ocular quadrangle slightly wider than long, narrower anteriorly than posteriorly.



Figures 1–3. *Hewittia gracilis*: 1. Female lateral view. 2. Female dorsolateral view. 3. Undescribed male lateral view. Photo credits: Rudi Steenkamp.



Figures 4–11. *Hewittia gracilis* female: 4. Alcohol material dorsal view. 5. Dorsal view carapace. 6. Epigyne ventral view. 7. Epigyne dorsal view. 8. Epigyne line drawing. 9. Carapace lateral view. 10. Carapace dorsal view. 11. Carapace anterior view. Photo credits: 4–7 Robin Lyle. 8–11 After Lessert (1928).

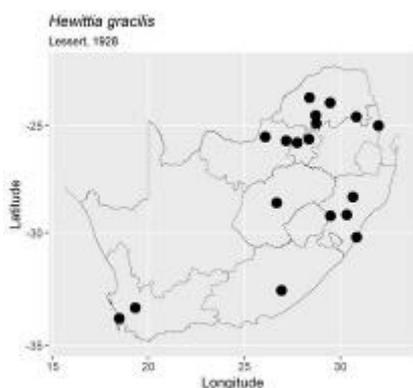
Abdomen oval, bluntly truncated anteriorly, a third longer than wide; colour of abdomen varies from grayish white with two posterior dark spots to almost total brown but always with the thin white line circling the dorsal area. Leg formula 1243. Epigyne with a circular opening (Figs 6–8). On photo of the undescribed male the carapace is reddish brown and abdomen grey with a pink tint and distinct white bands (Fig. 3)

GLOBAL DISTRIBUTION

Democratic Republic of the Congo (Lessert), Ivory Coast (Jezequel, 1964). New: Namibia (NCA), South Africa.

DISTRIBUTION IN SOUTH AFRICA

Eastern Cape: Hogsback (-32.59, 26.92). **Free State:** Amanzi Private Game Reserve (-28.62, 26.68); Free State National Botanical Gardens, Bloemfontein (-29.05, 26.21). **Gauteng:** Roodeplaat Dam Nature Reserve (-25.64, 28.36). **KwaZulu-Natal:** Giant's Castle Nature Reserve (-29.23, 29.48); Rietvlei (-29.18, 30.33); Isandlwane Nature Reserve (-28.359, 30.64). **Limpopo:** Mosdene Nature Reserve (-24.52, 28.7); Polokwane Nature Reserve (-23.9, 29.47); Tuinplaas (-24.9, 28.73). **Mpumalanga:** Blyde River Canyon Nature Reserve (-24.58, 30.82); Kruger National Park (Skukuza) (-25.00, 31.97). **Northern Cape:** Kuruman (-27.50, 23.30). **North West:** Kgawane Mountain Reserve (-25.72, 27.18); Skeerpoort (-25.81, 27.75); Zeerust (-25.53, 26.08). **Western Cape:** Table Mountain National Park (-33.82, 28.48); Kirstenbosch National Garden (-23.67, 28.38); 40 km NE of Ceres, Touwsriver road (-33.36, 19.31).



Hewittia gracilis known distribution in South Africa

CONSERVATION

The species is protected in eight reserves such as Roodeplaat Dam Nature Reserve (Dippenaar-Schoeman *et al.*, 1989) and Polokwane Nature Reserve (Dippenaar *et al.*, 2008) as well as two national parks (Kruger National Park and Table Mountain National Park). No conservation actions are recommended. More sampling needed to collect male.

BEHAVIOUR

They are free-living plant dwellers. They are mainly active during the day and their robust front legs enable them to attack prey much larger than themselves. Although widely distributed, they are not very commonly found. They were collected by beating shrubs and sweep netting grasses in South Africa from the Fynbos, Grassland (Haddad *et al.*, 2013) and Savanna Biomes (Foord *et al.*, 2011).

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