



THE  
PALPIMANIDAE  
OF  
SOUTH AFRICA

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*South African National Survey of Arachnida Photo Identification Guide Palpimanidae 2020 version 1: 1-25*

# THE PALPIMANIDAE OF SOUTH AFRICA

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## ABSTRACT

The Palpimanidae is represented by 19 genera of which several are recorded from Africa. In South Africa the family is represented by two genera and 15 species. The African genera have not been revised. Presently 10 of the species are South African endemics and five are known from Southern Africa. Seven of the species are listed at Data Deficient due to lack of both sexes. There are 882 Palpimanidae records in the National Collection of Arachnida with *Diaphorocellus* (135 records) and *Palpimanus* with 747 records, but 73% of the accessions have not been identified to species level. The true status of the palpimanids will only be known after revisions.

## ACKNOWLEDGEMENTS

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\*Not listed in World Spider Catalog for South Africa



*Palpimanus* sp. anterior view Photo Peter Webb



*Palpimanus* sp. anterior view Photo Peter Webb

## FAMILY PALPIMANIDAE Thorell, 1870

The Palpimanidae is represented by 19 genera of which several are recorded from Africa. In South Africa the family is represented by 2 genera and 15 species (World Spider Catalog 2020).

**COMMON NAMES:** Palp-Footed Spiders

**MORPHOLOGY:** Body size: TL 3-13 mm. Carapace often dark to bright red or bright orange; suboval in outline with cephalic region evenly rounded sloping gently towards thoracic region; fovea usually distinct; epidermis hard and granular; eyes: 8 in 2 rows that varies in position between genera with lateral eyes either close together or widely separated and posterior median eyes small or large and irregularly-shaped (*Diaphorocellus*). Abdomen fawn, grey to purplish, with two oval spots in *Diaphorocellus*; abdomen ovate with epigastric region heavily sclerotized forming a ring-like scutum which extends dorsally to encircle pedicel while the rest of abdomen is covered with a light cover of short hair. Legs: anterior pair of legs enlarged and much stronger than other three pairs with femur I greatly expanded dorsally and with thick scopula present distally on prolateral surface of tibiae, metatarsi and tarsi (Dippenaar-Schoeman 2014).

**LIFE STYLE:** Ground dwellers, found during the day in small irregular sac-like retreats made under stones. In Southern Africa palpimanids occupy a wide habitat range from very dry arid regions in Namibia to dense forest areas in South Africa. However they seem to be more common in the drier regions and are even found in the desert. They are slow moving spiders that walk with their strong front legs kept up in the air. The tibiae, metatarsi and tarsi bear thick prolateral scopulae composed of spade-shaped setae that may be receptors of some kind. Some species have well-developed stridulatory organs. The chelicerae are provided on the lateral surface with a smooth hairless strip, which is covered with extremely minute transverse striae, when seen under high magnification. The reciprocating organ of stridulation is composed of three round papillae each bearing a black setiform seta situated basally on the inner surface of the femur. The sounds are audible from a short distance and apparently serve two purposes: functioning both as a potential defence mechanism and as an important cue for mating recognition used by males and females (Dippenaar-Schoeman & Jocqué 1997).

**TAXONOMY:** Some South African species have been discussed by Zonstein et al. (2016) and Zonstein & Marusik (2019).



*Diaphorocellus* sp. Photo Les Oates



*Palpimanus* sp. Photo Peter Webb





## GENUS *DIAPHOROCELLUS* Simon, 1893

*Diaphorocellus* Simon, 1893 is a small genus of palpimanid spiders with six species known from the Afrotropical region (World Spider Catalog 2020).

**COMMON NAME:** Two-Spotted Palpimanid spiders

**TYPE SPECIES:** *Diaphorocellus biplagiatus* Simon, 1893

**MORPHOLOGY.** Body size TL 4-9 mm, male slightly smaller than the female. *Diaphorocellus* differs from other genera and species of Palpimanidae by the presence of light dorsal spots on the dark grey abdomen, by the large posterior median eyes that are irregularly shaped and very close to each other and genitalia. Carapace longer than wide; often dark to bright red or bright orange; suboval in outline with cephalic region evenly rounded sloping gently towards thoracic region; fovea usually distinct; eyes: 8 in 2 rows; lateral eyes close together; posterior median eyes white and irregularly-shaped. Abdomen grey to purplish usually with two white oval spots; abdomen ovate with epigastric region heavily sclerotized forming a ring-like scutum which extends dorsally to encircle pedicel while the rest of abdomen is covered with a light cover of short hair. Legs: anterior pair of legs enlarged and much stronger than other three pairs with femur I greatly expanded dorsally and with thick scopula present distally on prolateral surface of tibiae, metatarsi and tarsi.

**LIFE STYLE:** Free running Ground dwellers. Frequently collected in pitfall traps

**TAXONOMIC NOTES:** Zonstein et al. (2016) studied numerous specimens from South Africa and adjacent countries. Although these specimens from have the same abdominal pattern and size, they determined that the genitalia of specimens from the Western Cape clearly differ from specimens from Botswana and the eastern provinces of South Africa. Unfortunately they did not discuss these differences. They considered only specimens from the Western and Northern Cape Province belonging to *D. biplagiatus*, and those from other areas to be *D. helveolus*. Simon (1910) in his description of *D. helveolus* clearly states it to be a small species, with eyes positioned close to anterior edge and very distinct in having a white abdomen. Characters not found in specimens from the Free State, Limpopo and Mpumalanga.



*Diaphorocellus* sp. Photo Les Oates



*Diaphorocellus* sp. Photo John Wilkinson

## *Diaphorocellus biplagiatus* Simon, 1893

**COMMON NAME:** Two-Spotted Palpimanid spider

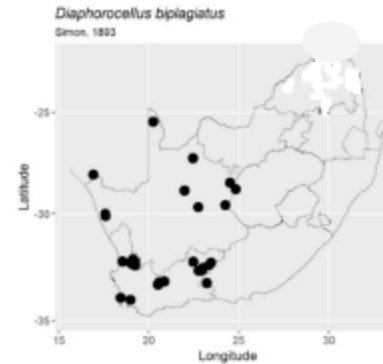
**NATIONAL STATUS:** LC

**NATIONAL RATIONALE:** A southern African endemic described in 1893 with type locality only “Africa australis”. In South Africa, the species is known from two provinces. Due to its wide geographical range, it is therefore listed as being of Least Concern.

**LIFESTYLE:** The species is a free-running ground dweller frequently sampled from pitfall traps. Sampled from Fynbos, Grassland, Desert, Nama Karoo, Savanna (Foord et al. 2011, Haddad et al. 2013) and Succulent Karoo biomes. It has also been sampled from pistachio orchards.

**GLOBAL DISTRIBUTION:** Botswana, Namibia and South Africa.

**DISTRIBUTION IN SOUTH AFRICA:** **Northern Cape:** Benfontein Nature Reserve (-28.82, 24.82); Groblershoop (various locations: Farm Blackridge, E of Langberge; Farm Koedoesnek, E of Langberge) (-28.88, 21.98); Kalahari Gemsbok National Park, Twee Rivieren (-29.48, 25.24); Kamaggas (-29.75, 17.4); Kimberley (-28.73, 24.76); Prieska (various locations: Farm Goodhope, 30 km SW; Green Valley Nuts Estate) (-29.68; 22.74); Richtersveld Transfrontier National Park, Helfskloof, Noumieskloof (-28.25, 17.17); Hopetown (Farm Suffolk) (-29.58, 24.24); Steinkopf (-29.25, 17.73); Namaqua National Park (-30.0109, 17.5797); Soebatsfontein (-30.11, 17.59); Tswalu Kalahari Reserve (-27.30, 22.45). **Western Cape:** Beaufort West: Farm 151b (-32.32, 23.44), Farm 394 (-32.96, 23.67), Farm Bokvlei (-32.73, 23.59), Farm Eerste Water (-32.69, 22.96), Farm Katdoornkuil (-33.19, 23.26), Farm Kantkraal (-33.28, 23.22), Farm Vaalkuil (-33.28, 23.22); Karoo National Park (various locations: Lammejies leegte; Mid Plateau) (-32.28, 22.46); Table Mountain National Park, Devil’s Peak (-33.9549, 18.4395); Cederberg Wilderness Area 7.1, 1152 m a.s.l. (-32.46, 19.24); Cederberg Wilderness Area 8.3, 1357 m a.s.l. (-32.43, 19.21); Cederberg Wilderness Area, Sneeuokop (-34.05, 18.98); Cederberg Wilderness Area Sneeuokop 12.3 1680 m a.s.l. (-32.35, 19.17); Cederberg, Sederhoutkloof 1100–1200 m a.s.l. (-32.17, 19.1); Cederberg Wilderness Area Niewoudt’s Pass, CIB 4.3, 551 m a.s.l. (-32.35, 19.01); Cederberg Wilderness Area Sawadee CIB 3.1, 359 m a.s.l. (-32.34, 18.99); Cederberg Wilderness Area Sawadee CIB 3.3, 344 m a.s.l. (-32.34, 18.99); Cederberg Wilderness Area Sawadee CIB 3.4, 332 m a.s.l. (-32.34, 18.99); Cederberg Wilderness Area Wupperthal, CIB 17.3, 515 m a.s.l. (-32.28, 19.22); Cederberg Wilderness Area, CIB5.1, 643 m a.s.l. (-32.3958, 19.0873);

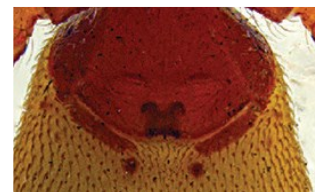


*Diaphorocellus biplagiatus* female Photo Peter Webb



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After Zonstein et al. (2016).



Epigyne Photo ASD



*Diaphorocellus biplagiatus* male and female Photo ASD



## *Diaphorocellus biplagiatus* (continued)

Cederberg Wilderness Area, CIB5.2, 677 m a.s.l. (-32.3968, 19.0870); Cederberg, Aan Het Berg, CIB2.2, 257 m a.s.l. (-32.2754, 18.5307); Cederberg, Aan Het Berg, CIB2.3, 258 m a.s.l. (-32.2771, 18.5299); Cederberg, Wupperthal, CIB17.2, 531 m a.s.l. (-32.2802, 19.2198); Laingsburg (-33.20, 20.85); Matjiesfontein (-33.24, 20.58); Witteberg Nature Reserve (-33.3443, 20.5051)

**CONSERVATION MEASURES:** There are no significant threats to the species.

**TAXONOMIC NOTES:** Redescribed by Zonstein et al. (2016). Known from both sexes, illustrated.

**UNPLACED SPECIMENS** see Zonstein et al. (2016)

**DISTRIBUTION IN SOUTH AFRICA:** **Free State:** Bloemfontein (Farm Deelhoek) (-29.11, 26.22). **Limpopo:** Blouberg Nature Reserve (-22.99, 29.04); Dendron (Farm Amsterdam) (-23.37, 29.32); Kruger National Park 5 km. N of Letaba Camp (-22.93, 31.02); Lajuma mountain Retreat (-23.03, 29.45); Polokwane Nature Reserve (-23.9, 29.47); Springbok Flats: Tuinplaas (-24.9, 28.73); Waterpoort (-22.54, 29.37); Lephalale/Ellisras (-23.67, 27.71); Limpopo Valley (farm Stoke) (-22.4847, 29.8802); Mussina (-22.33, 30.03); Ndengeza (-23.3165, 30.4114); Nwanedi Nature Reserve (-22.59, 30.36); Soutpansberg, Farm Stoke (-22.483, 29.883); Vhembe Biosphere Bristow Farm (-23.1776, 29.7716); Waterpoort (-22.54, 29.37). **Mpumalanga:** Kruger National Park (Letaba Rest Camp) (-23.851, 31.577); Kruger National Park (Shingwedzi) (-23.12, 31.43).



*Diaphorocellus biplagiatus* Photo Peter Webb



*Diaphorocellus biplagiatus* Photo Peter Webb

**Diaphorocellus spp.**



KNP Photo ASD



Tshipise Photo John Wilkinson



Medikwe Photo Len de Beer



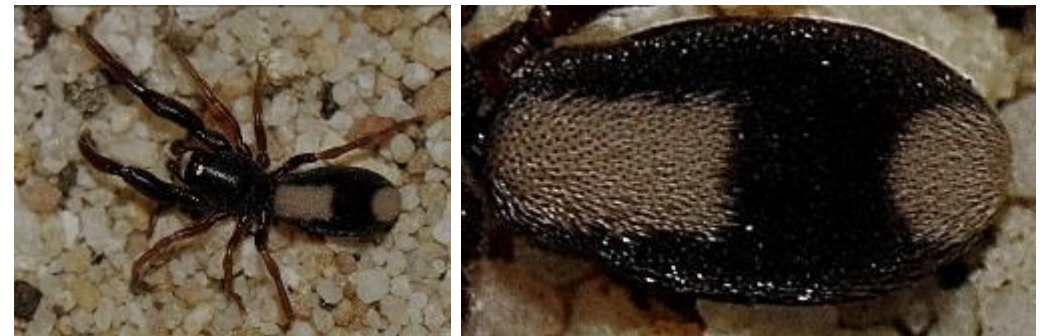
Lephahlale Photo Peter Webb



Dombeya Photo Peter Webb



Soutpansberg Photo Stefan Foord



Elandsberg Photo Esther vd Westhuizen



## GENUS *PALPIMANUS* Dufour, 1820

To date, 21 species of *Palpimanus* are known to occur in Africa south of the Sahara and none have been revised. Fourteen species have been recorded from South Africa.

**COMMON NAME:** Armed Palp-Footed Spiders

**TYPE SPECIES:** *Palpimanus gibbulus* Dufour, 1820

**MORPHOLOGY:** Body size TL 6-13 mm. Carapace sub-oval in outline anteriorly truncated; cephalic region evenly rounded, sloping gently towards thoracic region; fovea distinct, covered with a hard, coriaceous granular epidermis; eyes eight in two rows; posterior row straight or recurved; posterior median eyes usually closer to each other than laterals; anterior median eyes the largest of all the eyes. Abdomen ovate; cuticle often coriaceous with epigastric region heavily sclerotised, forming a ring-shaped scutum extending dorsally to encircle the pedicel. Legs: anterior pair of legs enlarged; femur I greatly expanded dorsally; leg I much stronger than the other three pairs; atellae elongated; metatarsi and tarsi reduced in size; with thick scopula with spatulate setae distally on prolateral surface of the tibia, metatarsi and tarsi; tarsal claws dissimilar in size; anterior tarsi with extremely small claws, larger on the posterior legs.

**LIFE STYLE:** They are free-living ground dwellers found in sac retreats under stones. The female deposits a round white egg sac in a nest constructed of stones, plant material and silk threads.

**TAXONOMIC NOTES:** No revisions but four African species of *Palpimanus* Dufour, 1820 were re-examined and redescribed by Zonstein & Marusik (2019).



*Palpimanus paroculus* female with egg sac from Tswalu Game Reserve Photo Peter Webb

## *Palpimanus armatus* Pocock, 1898

**COMMON NAME:** Armed Palp-Footed Spider

**NATIONAL STATUS:** LC

**NATIONAL RATIONALE:** A South African endemic described by Pocock(1898) from Durban. The species is known from three provinces (EOO=117 306 km<sup>2</sup>; AOO= 32 km<sup>2</sup>; 17-1734 m a.s.l.). Due to the wide geographical range, it is therefore listed as Least Concern.

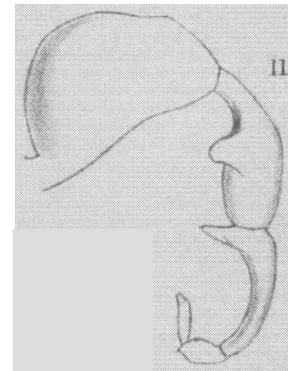
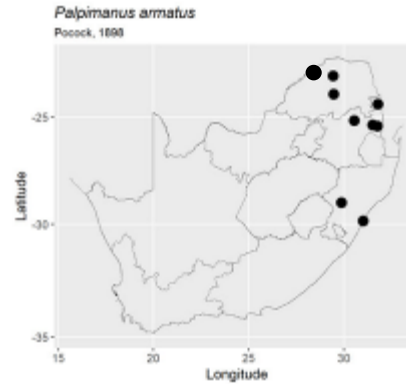
**LIFESTYLE:** The species is a free-running ground dweller sampled from pitfall traps. They were sampled from the Indian Ocean Coastal Belt, Grassland and Savanna biomes (Foord et al. 2011; Haddad et al. 2013).

**GLOBAL DISTRIBUTION:** South Africa.

**DISTRIBUTION IN SOUTH AFRICA:** *KwaZulu-Natal:* Durban (-29.85, 31.01); Estcourt (-29.00, 29.87). *Limpopo:* Polokwane Nature Reserve (-23.9, 29.47); Turfloop Nature Reserve (-23.0386, 29.4768); Lephalale/Ellisras (-23.67, 27.71). *Mpumalanga:* Kruger National Park (Lwakahle) (-25.43, 31.75); Kruger National Park (Napi) (-25.37, 31.51); Kruger National Park (Satara) (-24.38, 31.78); Sterkspruit Nature Reserve (-25.17, 30.54).

**CONSERVATION MEASURES:** Species protected areas in the Kruger National Park (Dippenaar-Schoeman 2020d), Sterkspruit Nature Reserve and Polokwane Nature Reserve (Dippenaar et al. 2008).

**TAXONOMIC NOTES:** Not revised. Known from both sexes. Female with carapace, anterior legs, palpi, sternum and mouth-part, and epigastric area mahogany-brown; remaining legs yellowish red, these parts rather scantily covered with greyish-yellow hairs; abdomen more thickly covered with hairs of the same tint, brownish yellow beneath. Male differing from female principally in the structure of the anterior legs, the femur of which is higher; the patella is armed externally with a stout conical process, and the tibia is arched and is furnished with a thinner backwardly directed process close to the base (Size 11-13 mm). Leg I illustrated showing process on patella of male (Pocock 1898).



Leg I of male after Pocock (1898)



*Palpimanus armatus* female from Lephalale Photo Peter Webb



## *Palpimanus aureus* Lawrence, 1927

**COMMON NAME:** Namibian Palp-Footed Spider

**NATIONAL STATUS:** DDT

**NATIONAL RATIONALE:** A southern African endemic described by Lawrence (1927) from Namibia from a juvenile specimen. In South Africa, it is recorded from several localities in Limpopo (EOO=874 km<sup>2</sup>; AOO=16 km<sup>2</sup>; 531-1245 m a.s.l.). Identification is still problematic, additional collecting is needed to sample adults, it is therefore listed as Data Deficient for taxonomic reasons.

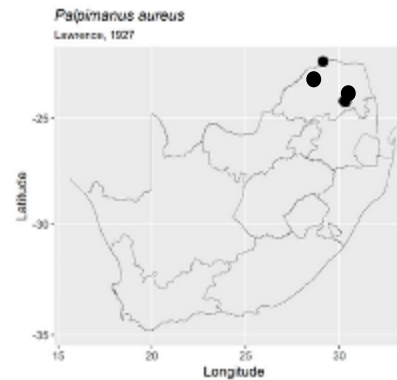
**LIFESTYLE:** The species is a free-living ground dweller sampled from the Savanna Biome (Foord et al. 2011).

**GLOBAL DISTRIBUTION:** Namibia and South Africa.

**DISTRIBUTION IN SOUTH AFRICA: Limpopo:** Limpopo Valley Nature Reserve (-22.22, 29.13); Lekgalameetse Nature Reserve, Farm Balloon (-24.2, 30.34); Lekgalameetse Nature Reserve, Farm Malta (-24.17, 30.25); Lekgalameetse, Nature Reserve, Farm The Downs (-24.14, 30.31); Lephalale/Ellisras (-23.67, 27.71).

**CONSERVATION MEASURES:** Threats to the species are not suspected to be significant and protected in Lekgalameetse Nature Reserve (Foord et al. 2016) and Limpopo Valley Nature Reserve.

**TAXONOMIC NOTES:** Not revised. Known only from an immature male. The species can be recognized by the red carapace, sternum, and mouth-parts, orange anterior pair of legs and the remaining legs yellow; abdomen dull golden, thickly covered with fine black hairs. The posterior median eyes are oblong, white, resembling those of *Diaphorocellus*, less than a short diameter apart. Front legs with tibia shorter than the patella and provided with club-shaped scopular setae on metatarsi and tarsi (Lawrence 1927).



*Palpimanus aureus* from Lephalale Photo Peter Webb

Eye pattern showing the posterior median eyes

## *Palpimanus capensis* Simon, 1893

**COMMON NAME:** Cape Palp-Footed Spider

**NATIONAL STATUS:** LC

**NATIONAL RATIONALE:** A South African endemic described by Simon (1893) from Port Elizabeth. The species is recorded from three provinces (EOO=227 627 km<sup>2</sup>; AOO=44 km<sup>2</sup>; 7-1513 m a.s.l.). Due to its wide range, it is therefore listed as Least Concern.

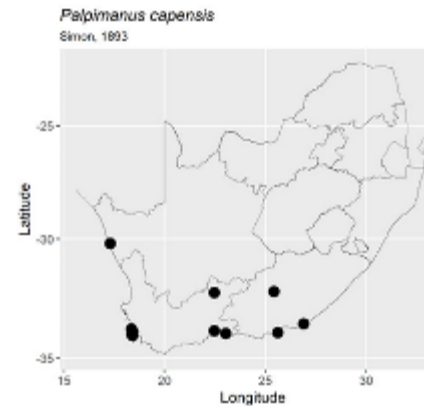
**LIFESTYLE:** The species is a free-living ground dweller. Sampled from the Fynbos, Forest, Grassland and Thicket biomes (Haddad et al. 2013).

**GLOBAL DISTRIBUTION:** South Africa.

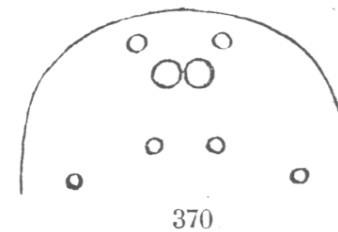
**DISTRIBUTION IN SOUTH AFRICA:** **Eastern Cape:** Port Alfred (-33.58, 26.89); Mountain Zebra National Park (-32.24, 25.43); Port Elizabeth (-33.95, 25.61); Afgunst (-33.88, 22.468). **North-ern Cape:** Koiingnaas (-30.19, 17.29). **Western Cape:** Cape Town (-33.91, 18.42); Karoo National Park (-32.28, 22.46); Orange Kloof (-34.00, 18.24); Table Mountain National Park (-33.82, 18.48); Table Mountain National Park, Tokai S (-34.07, 18.4); Knysna Forest (-33.978, 23.029); Robben Island (-33.8, 18.35).

**CONSERVATION MEASURES:** There are no significant threats to the species. It is protected in the Mountain Zebra National Park (Dippenaar-Schoeman 2005), Karoo National Park (Dippenaar-Schoeman et al. 1999) and Table Mountain National Park (Dippenaar-Schoeman 2020c).

**TAXONOMIC NOTES:** Not revised. Known from both sexes.



*Palpimanus capensis* Photo Norman Larsen



Eyes after Simon (1893)



*Palpimanus capensis* from Robben Island Photo ASD



## *Palpimanus crudeni* Lessert, 1936

**COMMON NAME:** Eastern Cape Palp-Footed Spider

**NATIONAL STATUS:** DDT

**NATIONAL RATIONALE:** A South African endemic described by Lessert (1936) from Mozambique. In South Africa it is recorded from two provinces, (EOO=12 284 km<sup>2</sup>; AOO=12 km<sup>2</sup>; 52–588 m a.s.l.). The placement of the species is problematic as the female is still unknown; it is therefore listed as Data Deficient for taxonomic reasons.

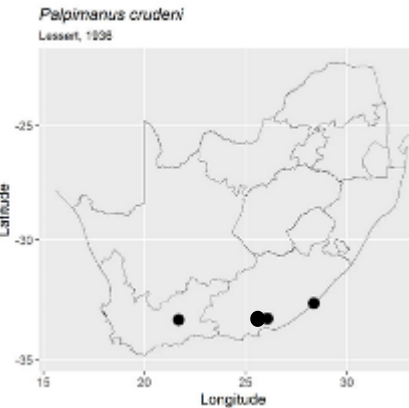
**LIFESTYLE:** The species is a free-running ground dweller. Sampled from the Fynbos, Indian Ocean Coastal Belt and Nama Karoo biomes.

**GLOBAL DISTRIBUTION:** Mozambique, South Africa.

**DISTRIBUTION IN SOUTH AFRICA:** *Eastern Cape:* Alicedale (-33.31, 26.08); Kei River Mouth (-32.68, 28.37); Addo Elephant National Park (-33.32 25.72). *Western Cape:* Swartberg Nature Reserve, Gamkaskloof (-33.36, 21.69).

**CONSERVATION MEASURES:** Threats to the species are unknown. Protected in the Swartberg Nature Reserve (Dippenaar-Schoeman et al. 2005) and Addo Elephant National Park (Dippenaar-Schoeman et al. 2020).

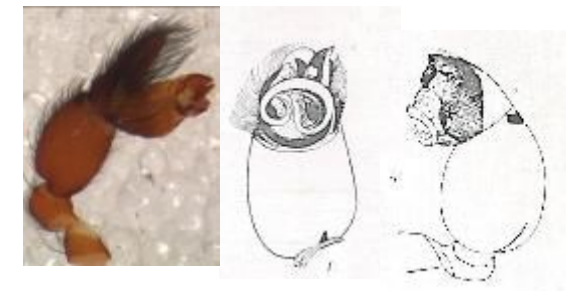
**TAXONOMIC NOTES:** Not revised. Known only from the male, palp illustrated.



*Palpimanus crudeni* from Swartberg NR  
Photo H. Berglyster



*Palpimanus crudeni* from Addo NP Photo ASD



After Lessert (1936)

## *Palpimanus giltayi* Lessert, 1936

**COMMON NAME:** Mozambique Palp-Footed Spider

**NATIONAL STATUS:** LC

**NATIONAL RATIONALE:** A southern African endemic described by Lessert (1936) from Mozambique. In South Africa, the species is known only from KwaZulu-Natal (EOO=4 km<sup>2</sup>; AOO=4 km<sup>2</sup>; 635m a.s.l.). More sampling is needed, to collect the female and determine the species' range but due to the wide southern African range listed as Least Concern.

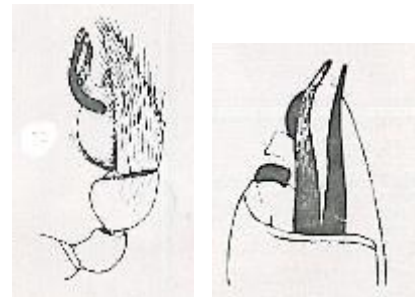
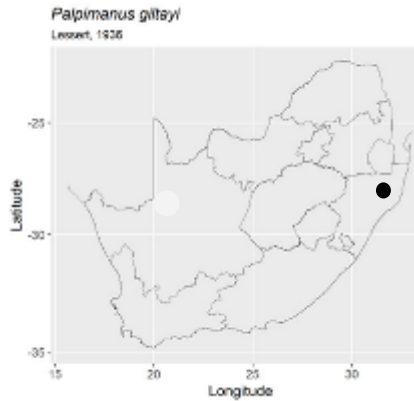
**LIFESTYLE:** The species is a free-running ground dweller. Little is known about their behaviour. Sampled from the Succulent Karoo biome.

**GLOBAL DISTRIBUTION:** Mozambique and South Africa.

**DISTRIBUTION IN SOUTH AFRICA:** *KwaZulu-Natal:* Ndumo Game Reserve (-26.544, 32.155).

**CONSERVATION MEASURES:** Threats to the species are unknown. Protected in the Ndumo Game Reserve but more sampling is needed to collect the female.

**TAXONOMIC NOTES:** Not revised. Known only from the male (size 9-10 mm). Carapace, sternum and the front legs dark; rest of legs paler. Abdomen is dull red, covered with grey hair layer (Lessert 1936).



After Lessert (1936)



*Palpimanus giltayi* female from Ndumo Game Reserve  
Photo Charles Haddad



## *Palpimanus globulifer* Simon, 1893

**COMMON NAME:** Grahamstown Palp-Footed Spider

**NATIONAL STATUS:** DDT

**NATIONAL RATIONALE:** An Eastern Cape endemic described by Simon (1893) from Grahamstown. The species is known from a few localities and is suspected to occur in more localities (EOO<500 km<sup>2</sup>; AOO=8 km<sup>2</sup>; 7-552 m a.s.l.). The status of the species remains obscure. Some more sampling is needed to collect the female and to determine the species range. Therefore, listed as Data Deficient for taxonomic reasons.

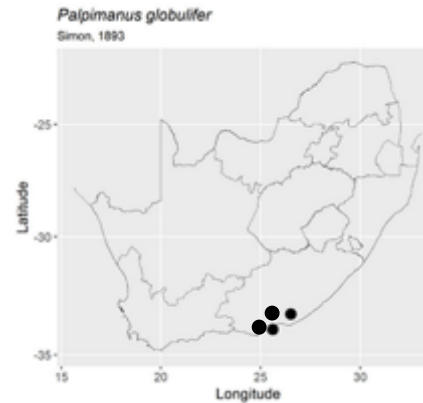
**LIFESTYLE:** The species is a free-running ground dweller. Sampled from the Fynbos and Thicket biomes

**GLOBAL DISTRIBUTION:** South Africa.

**DISTRIBUTION IN SOUTH AFRICA: Eastern Cape:** Port Elizabeth (-33.95, 25.61); Grahamstown/Makhanda (-33.3, 26.52); Jeffrey's Bay (-34.06, 24.91); Addo Elephant National Park (-33.32, 25.72).

**CONSERVATION MEASURES:** The status of the species remains obscure. Some more sampling is needed to collect the female and to determine the species range. Protected in the Addo Elephant National Park (Dippenaar-Schoeman et al. 2020).

**TAXONOMIC NOTES:** Not revised. Known only from the male, not illustrated. Size male 9-10 mm. Carapace narrow with band of white hair, sternum and front legs are dark red; rest of legs reddish brown. Abdomen is dull golden, covered with grey hair layer. TL 6 mm.



*Palpimanus globulifer* from Jeffreys Bay Photo Linda Wiese

## *Palpimanus leppanae* Pocock, 1902

**COMMON NAME:** Jansenville Palp-Footed Spider

**NATIONAL STATUS:** DDT

**NATIONAL RATIONALE:** A South African endemic described by Pocock (1902), and known only from the type locality Jansenville (EOO<100 km<sup>2</sup>; AOO=4 km<sup>2</sup>; 444 m a.s.l.). The status of the species remains obscure. Some more sampling is needed to collect the male and to determine the species range. Therefore it is listed as Data Deficient for taxonomic reasons.

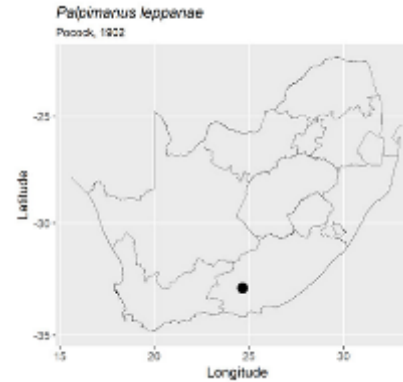
**LIFESTYLE:** The species is a free-living ground dweller. Sampled from the Thicket Biome.

**GLOBAL DISTRIBUTION:** South Africa.

**DISTRIBUTION IN SOUTH AFRICA:** *Eastern Cape*: Jansenville (-32.93, 24.67).

**CONSERVATION MEASURES:** The status of the species remains obscure. Some more sampling is needed.

**TAXONOMIC NOTES:** Not revised. Known only from the female, not illustrated. The species can be recognized by the arrangement of the eyes. The posterior eye row is straight and lies far back, the posterior medians are about five or six diameters apart, the distance between them median quadrangle very narrowed in front, very long, considerably more than twice as long as its posterior width and more than four times its anterior width. Eyes of anterior row close-set, procurved, lower edge of medians only a little higher than upper edge of laterals, which are much smaller; clypeus low, only about equal to the height of the quadrangle formed by the eyes of the anterior line, the laterals of which are about twice their diameter above it (Pocock 1902).





## *Palpimanus namaquensis* Simon, 1910

**COMMON NAME:** Northern Cape Palp-Footed Spider

**NATIONAL STATUS:** LC

**NATIONAL RATIONALE:** A southern African endemic described by Simon (1910) from Kamaggas in the Northern Cape. The species is also recorded from Namibia. In South Africa, it is known from several localities in the Northern Cape, (EOO=118 877 km<sup>2</sup>; AOO=24 km<sup>2</sup>; 231-1187 m a.s.l.). Due to its wide geographical range, it is listed as Least Concern.

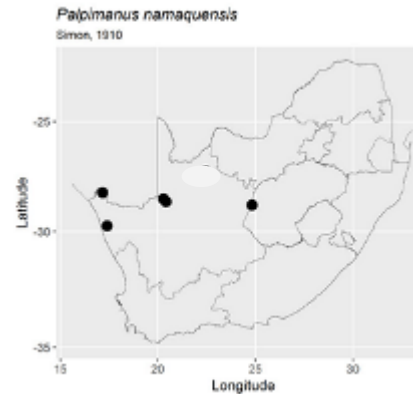
**GLOBAL DISTRIBUTION:** Namibia and South Africa.

**LIFESTYLE:** The species is a free-living ground dweller. The type specimen was found in rocky areas. Sampled from the Succulent Karoo and Desert biomes.

**DISTRIBUTION IN SOUTH AFRICA: *Northern Cape:*** Riemvasmaak (-28.53, 20.29); Kamaggas (-29.75, 17.4); Augrabies National Park (-28.66, 20.42); Richtersveld Transfrontier National Park (-28.25, 17.17); Benfontein Game Reserve (-28.82,24.82).

**CONSERVATION MEASURES:** There are no significant threats to the species. Protected in Augrabies National Park (Dippenaar-Schoeman 2020a), Benfontein Game Reserve and Richtersveld Transfrontier National Park (Dippenaar-Schoeman 2020b).

**TAXONOMIC NOTES:** Species redescribed by Zonstein & Marusik (2019).



*Palpimanus namaquensis* after Zonstein & Marusik (2019)

## *Palpimanus paroculus* Simon, 1910

**COMMON NAME:** Kamaggas Palp-Footed Spider

**NATIONAL STATUS:** DDT

**NATIONAL RATIONALE:** A Northern Cape endemic described by Simon (1910) from the type locality Kamaggas (EOO<1000 km<sup>2</sup>; AOO=4 km<sup>2</sup>; 231 m a.s.l.). The status of the species remains obscure. Some more sampling is needed to collect the male and to determine the species range. Therefore, listed as Data Deficient for taxonomic reasons.

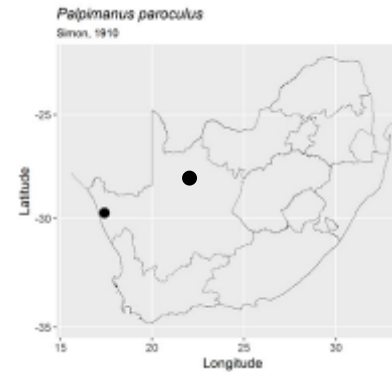
**GLOBAL DISTRIBUTION:** South Africa.

**DISTRIBUTION IN SOUTH AFRICA:** *Northern Cape:* Kamaggas (-29.75, 17.4); Tswalu Game Reserve (-27.3, 22.44).

**LIFESTYLE:** The species is a free-living ground dweller. Sampled from the Savanna and Succulent Karoo biomes. At Tswalu Game Reserve a female with an egg sac was photographed. The round white egg sac was deposited in a silk nest made of stones and plant material.

**CONSERVATION MEASURES:** Threats to the species are unknown.

**TAXONOMIC NOTES:** The type female was redescribed by Zonstein & Marusik (2019).



After Zonstein & Marusik (2019)



*Palpimanus paroculus* female from Tswalu Game Reserve Photo Peter Webb



## *Palpimanus potteri* Lawrence, 1937

**COMMON NAME:** Potter's Palp-Footed Spider

**NATIONAL STATUS:** LC

**NATIONAL RATIONALE:** A South African endemic described by Lawrence (1937) from Hluhluwe. The species is known from two provinces (EOO=63 850 km<sup>2</sup>; AOO=48 km<sup>2</sup>; 31-1119 m a.s.l.). Although only known from one sex, this species has a wide distribution and is therefore listed as Least Concern.

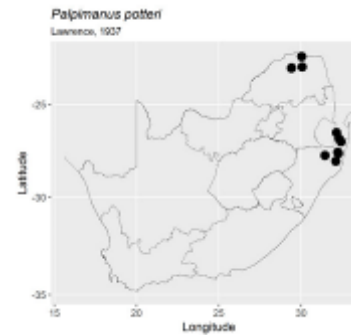
**LIFESTYLE:** The species is a free-living ground dweller, some specimens have been found in rocky areas. Sampled from the Savanna Biome.

**GLOBAL DISTRIBUTION:** South Africa.

**DISTRIBUTION IN SOUTH AFRICA:** **KwaZulu-Natal:** Hluhluwe Nature Reserve (-28.09, 32.1); iSimangaliso Wetland park: Mkuze Game Reserve (-27.63, 32.25); iSimangaliso Wetland park: uMkhuze Game Reserve (A) (-27.609, 32.227); iSimangaliso Wetland park: uMkhuze Game Reserve (E) (-27.6099, 32.2319); iSimangaliso Wetland park: uMkhuze Game Reserve (F) (-27.657, 32.268); Ndumo Game Reserve (-26.5444, 32.1546); Ndumo Game Reserve: South shore of Shokwe Pan (-26.88, 32.31); Ngome State Forest (-27.78, 31.45); Tembe Elephant Park (-27.034, 32.425); Wyndford Farm (-28.4, 29.4). **Limpopo:** Mussina (-22.33, 30.03); Vhembe Biosphere Gondenani (-22.913, 30.064); Vhembe Biosphere: Goro Game Ranch GORO 2 (-22.964, 29.421); Vhembe Biosphere: Goro Game Ranch GORO 4 (-22.977, 29.414).

**CONSERVATION MEASURES:** There are no significant threats to the species. Protected in the Hluhluwe Nature Reserve, Mkuze Game, Ndumo Game Reserve and Tembe Elephant Park.

**TAXONOMIC NOTES:** Not revised. Known only from female. Carapace red, abdomen orange-brown, legs II-IV yellow; leg I, sternum, and mouth-parts a little lighter red than carapace. Carapace covered with fine granules, fairly thickly clothed, especially in the region of the eyes, with grey hairs (blackish in their proximal halves); sternum with evenly distributed coarse round granules much larger than those of the carapace; total length 7-8 mm (Lawrence 1937).



After Lawrence (1937)



*Palpimanus potteri* female and male from Wyndford Photo Peter Webb

## *Palpimanus pseudarmatus* Lawrence, 1952

**COMMON NAME:** Pietermaritzburg Palp-Footed Spider

**NATIONAL STATUS:** LC

**NATIONAL RATIONALE:** A South African endemic described by Lawrence (1952) from Pietermaritzburg. The species is recorded from two provinces (EOO=66 039 km<sup>2</sup>; AOO=16 km<sup>2</sup>; 405-1523 m a.s.l.). Due to its wide range, it is listed as Least Concern.

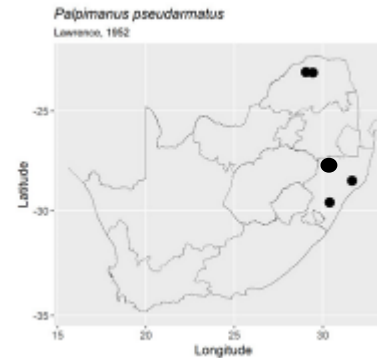
**LIFESTYLE:** The species is a free-living ground dweller. Sampled from the Savanna Biome (Foord et al. 2011).

**GLOBAL DISTRIBUTION:** South Africa.

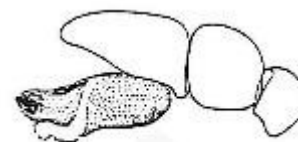
**DISTRIBUTION IN SOUTH AFRICA:** *KwaZulu-Natal:* Pietermaritzburg (-29.6, 30.38); Ophathe Game Reserve (-28.52, 31.66); Newcastle, Moorfield Farm (1870 m a.s.l.) (-27.87586, 29.70825). *Limpopo:* Blouberg Nature Reserve (-22.99, 29.04); Western Soutpansberg (-23.022, 29.434).

**CONSERVATION MEASURES:** There are no significant threats to the species. It is protected in two protected areas, Ophathe Game Reserve (Haddad & Dippenaar-Schoeman 2015), Blouberg Nature Reserve (Foord et al. 2019) and Western Soutpansberg (Muelelwa et al. 2011).

**TAXONOMIC NOTES:** Not revised. Known from both sexes, palp and front leg illustrated. The species is recognized by carapace, mandibles, sternum, mouthparts and epigastric area dark red; leg I red, II-IV; reddish-orange; abdomen yellow brown. Posterior row seen from above straight to very slightly procurved; medians white, a little smaller than the laterals and a little nearer to each other than to them In male patella and tibia armed with tubercle absent in female. Size 10-11 mm (Lawrence 1952).



*Palpimanus pseudarmatus* from Blouberg NR Photo ASD



After Lawrence (1952)



## *Palpimanus subarmatus* Lawrence, 1947

**COMMON NAME:** Ndumo Palp-Footed Spider

**NATIONAL STATUS:** DDT

**NATIONAL RATIONALE:** A KwaZulu-Natal endemic described by Lawrence (1947) from type locality given only as Natal. The species was sampled from two provinces (EEO=4 km<sup>2</sup>; AOO=4 km<sup>2</sup>; 140 m a.s.l.). Too little is known about the location, habitat and threats of this taxon for an assessment to be made. Placement of the female is also problematic; it is therefore listed as Data Deficient for taxonomic reasons.

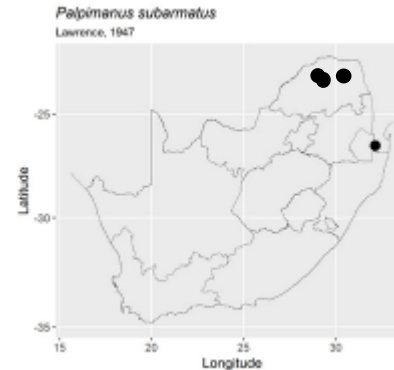
**LIFESTYLE:** The species is a free-living ground dweller, collected from pitfall traps from the Savanna Biome (Foord et al. 2011).

**GLOBAL DISTRIBUTION:** South Africa.

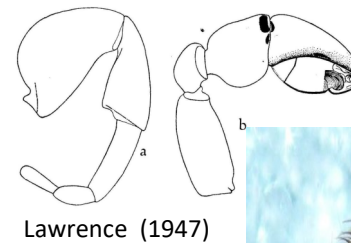
**DISTRIBUTION IN SOUTH AFRICA:** *KwaZulu-Natal:* Ndumo Game Reserve (-26.87, 32.24). *Limpopo:* Syferkuil (-23.04, 29.46); Goro Game Ranch (-22.939, 29.428); Western Soutpansberg (-22.967, 29.40).

**CONSERVATION MEASURES:** There are no known threats to the species.

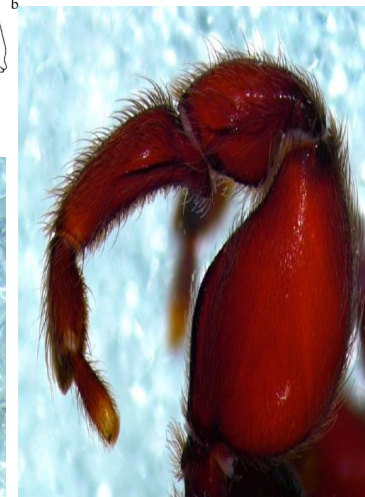
**TAXONOMIC NOTES:** Not revised. Known only from the male, leg 1 and palp illustrated. Colour carapace deep reddish, leg I reddish, remaining legs and palpi orange. Carapace with cephalic part strongly raised, its upper surface horizontal, descending almost vertically posteriorly to the thoracic striae. Posterior eye row straight to slightly recurved, laterals a little larger than the medians which are 3-4 times their own diameter apart and 1 1/2 times as far from the laterals as from each other; median quadrangle much longer than wide and a little narrower in front than behind. Patella 1 along its upper surface considerably longer than tibia, considerably enlarged and triangular, its lower surface on the inner side with a sharp blackish keel ending distally in a blunt triangular point. Size 8.7 mm (Lawrence 1947).



*Palpimanus subarmatus* from Western Soutpansberg Photo ASD



Lawrence (1947)



*Palpimanus subarmatus* Photo Charles Haddad

## *Palpimanus transvaalicus* Simon, 1893

**COMMON NAME:** Transvaal Palp-Footed Spider

**NATIONAL STATUS:** LC

**NATIONAL RATIONALE:** A South African endemic described by Simon (1893) with type locality only given as Transvaal. The species is widespread and known from seven provinces (EOO=415 350 km<sup>2</sup>; AOO=12 km<sup>2</sup>; 83-1951 m a.s.l.). Although the species is presently known only from one sex it has a wide geographical range and is listed as Least Concern.

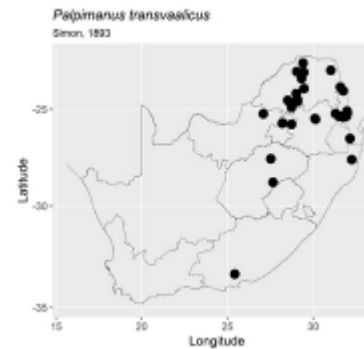
**LIFESTYLE:** The species is a free running ground dweller, active at night. During the day it is frequently found in small irregular saclike retreats made under stones. This species has been recorded from the Grassland, Savanna and Thicket biomes as well as crops such as citrus and cotton (Foord et al. 2011; Haddad et al. 2013)

**GLOBAL DISTRIBUTION:** South Africa.

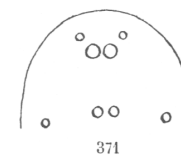
**DISTRIBUTION IN SOUTH AFRICA:** **Eastern Cape:** Kirkwood (-33.39, 25.43). **Free State:** Mpetsane Conservation Estate (-28.8, 27.65). **Gauteng:** Bronkhorstspuit (Farm Onverwacht) (25.8, 28.74); Pretoria National Botanical Garden (-25.74, 28.19); Pretoria/Tshwane: Nooitgedacht (25.74, 28.19), Rietondale Research Station (-25.73, 28.23); Suikerbosrand Nature Reserve (-27.59, 27.53). **KwaZulu-Natal:** uMkuze Game Reserve (-27.63, 32.25); Ndumo Game Reserve: S W shore of Banzi Pan (-26.87, 32.24). **Limpopo:** Blouberg Nature Reserve (-22.99, 29.04); Dendron (Farm Amsterdam) (-23.37, 29.32); Kruger National Park (Letaba Camp)(-23.83, 31.58); Kruger National Park (Olifants Camp) (-24.02,31.75); Kruger National Park (Shingwedzi Camp) (-22.93, 31.02); Kruger Park Lodge (-25.23, 31); Lhuvhondo Nature Reserve (-23.03, 29.45); Nylsvley Nature Reserve (-24.65, 28.67); Polokwane Nature Reserve (-23.9, 29.47); Potgietersrus/Mokopane (-24.17, 29); Waterpoort (Rochdale Farm) (22.54, 29.41); Springbok Flats Roedtan (-24.6; 29.08); Tuinplaas (-24.565, 28.46); Bekendevlei (24.50, 29.09), Lodge (-24.53, 28.51), Wildskamp (-24.9, 28.73); Polokwane Nature Reserve (-23.9, 29.47); Potgietersrus/Mokopane Sovenga Hill, University of Limpopo (-24.17, 29). **Mpumalanga:** Kruger National Park (Lwakahle) (-25.43, 31.75); Kruger National Park (Makhuthwanini) (-25.38, 31.6); Kruger National Park (Napi) (-25.37, 31.51); Kruger National Park (Satara) (25.38, 32.13); Kruger National Park (Skukuza) (-25, 31.97); Kruger National Park 06 (-25.24, 32.08); Steenkampsberg (Groblers Farm) (-25.5, 30.1); Verloren Vallei Nature Reserve (-25.53, 30.13). **North West:** Pilaanesberg Nature Reserve (-25.25, 27.08).

**CONSERVATION MEASURES:** There are no significant threats to the species. Protected in >10 protected areas.

**TAXONOMIC NOTES:** Not revised. Known only from the male, female collected but need to be described.



Male palp ASD



After Simon (1893)



*Palpimanus transvaalicus* from different localities  
Photo Peter Webb



## *Palpimanus tuberculatus* Lawrence, 1952

**COMMON NAME:** Estcourt Palp-Footed Spider

**NATIONAL STATUS:** DDT

**NATIONAL RATIONALE:** A KwaZulu-Natal endemic described by Lawrence (1952) and known only from the type locality Estcourt (EOO<100 km<sup>2</sup>; AOO=4 km<sup>2</sup>; 1573 m a.s.l.). The status of the species remains obscure. Some more sampling is needed to collect the female and to determine the species range. Therefore it is listed as Data Deficient for taxonomic reasons.

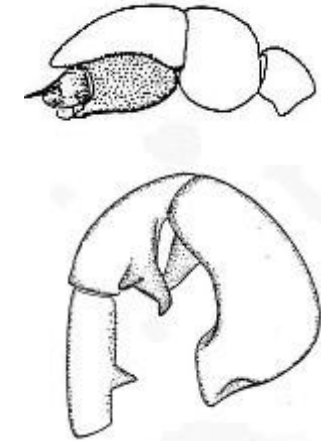
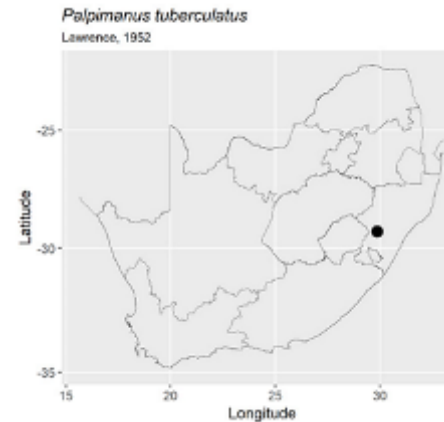
**LIFESTYLE:** The species is a free-living ground dweller. Sampled from the Savanna Biome.

**GLOBAL DISTRIBUTION:** South Africa.

**DISTRIBUTION IN SOUTH AFRICA:** *KwaZulu-Natal*: Estcourt (-29, 29.87).

**CONSERVATION MEASURES:** Threats to the species are unknown.

**TAXONOMIC NOTES:** Not revised. Known only from male, leg 1 and palp illustrated.



After Lawrence (1952)

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