



THE
BEMMERIDAE
OF
SOUTH AFRICA

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THE BEMMERIDAE OF SOUTH AFRICA

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ABSTRACT

The Bemmeridae has not yet been revised. Of the five *Homostola* species known from South Africa only *Homostola zebrina* Purcell, 1902 is known from both sexes the rest is only known from the females. The five species are all South African endemics except *H. zebrina* that is also known from Eswatini (Swaziland). Three species are listed as Least Concern is *Homostola pardalina* (Hewitt, 1913), *Homostola vulpecula* Simon, 1892 and *Homostola zebrina*.

Of the 28 *Spiroctenus* species known from South Africa only nine are known from both sexes with two species descriptions based on juveniles. The status of all 28 species remains obscure and some more sampling is needed to collect both sexes and to determine the species' range as nineteen of the species are known only from the type locality. They are listed as Data Deficient.

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Note *Spiroctenus spinipalpis* Hewitt 1919 wrongly listed in World Spider Catalog from South Africa, it was described from Ruby Creek, Eswatini (Swaziland).

FAMILY BEMMERIDAE

The family Bemmeridae is known from four genera and 47 species. Two of the genera *Homostola* and *Spiroctenus* represented by 33 species are known from South Africa (World Spider Catalog 2020).

TYPE GENUS: *Spiroctenus* Simon, 1892

COMMON NAME: Litter Spiders

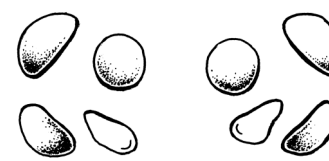
MORPHOLOGY: Body size 13-25 mm. Carapace lightly hirsute; cephalic region strongly arched; fovea broad, transverse, procurved; clypeus absent; eye group rectangular, about twice as wide as long; eye tubercle distinct, raised; chelicerae broad with two rows of strong teeth; rastellum consisting of several short blunt spines on low mound on inner distal surface, some transversely directed spines between fangs; labium wider than long, with few cuspules; sternum posteriorly broad; posterior sigilla large, oval, central, but not confluent. Abdomen oval; dorsum with pattern in some species posterior lateral spinnerets short with domed apical segment. Leg tarsi of females short, broad; all legs similar in width; scopulae of females entire on tarsi I and II, distal on metatarsi I and II, elsewhere absent.

LIFESTYLE: They are ground dwellers that construct underground burrows with or without a trapdoor (Dippenaar-Schoeman 2002).

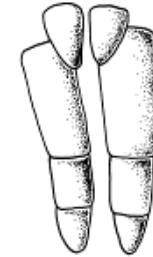
TAXONOMY: The genus *Homostola* (5 spp.) was transferred from Cyrtacheniidae and the genus *Spiroctenus* (28 spp.) from Nemesiidae (Opatova et al. 2020).



Rastellum consisting of several short blunt spines



Eye group about twice as wide as long



Apical segment of posterior Spinnerets short and dome-shaped



Homostola sp. female Photo Les Oates

GENUS *HOMOSTOLA* Simon, 1892

The *Homostola* described by Simon (1892) is only known from African. The genus was transferred from the Ctenizidae to Cyrtaucheniidae by Raven (1985) and then to the Bemmeridae by Opatova et al. (2020). Five species of *Homostola* are known from the Afrotropical Region and South Africa (World Spider Catalog 2020).

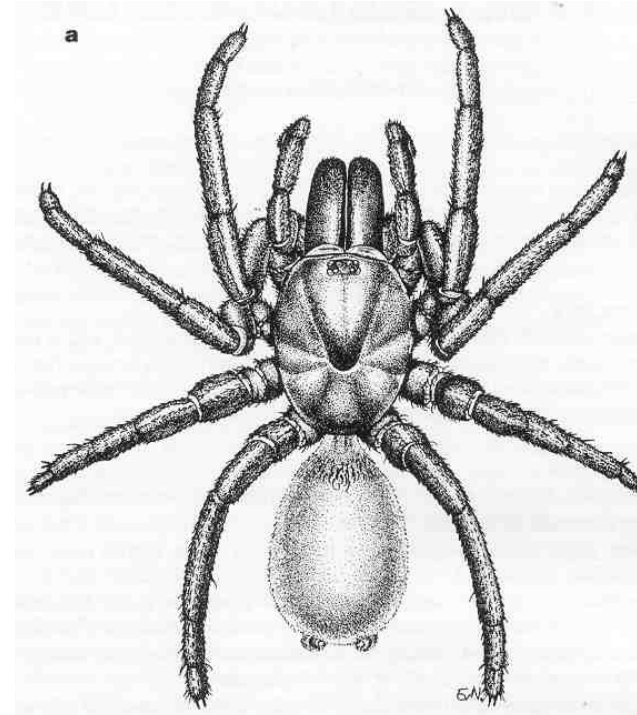
COMMON NAMES: African Litter Trap-Door Spiders

TYPE SPECIES: *Homostola vulpecula* Simon, 1892

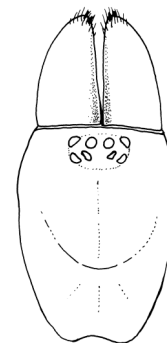
MORPHOLOGY: Body size TL 13-23 mm. Female: colour vary from dark brown to pale yellow; carapace frequently with darker median areas. Carapace lightly hirsute to glabrous; cephalic region usually strongly arched; fovea broad, transverse to procurved; clypeus narrow to absent; eye group rectangular, twice as wide as long, on distinct eye tubercle; rastellum usually several short, blunt spines. Sternum with six sigilla variable in shape. Abdomen sometimes with bands or spots. Legs strong; same colour as carapace; legs III and IV longer and stronger than I and II; several males have been collected but only the male of *Homostola zebrina* Purcell, 1902 has been described (Hewitt 1915).

LIFE STYLE: Little published records exist on their behaviour. They were found in the leaf litter and the males were easily collected in pitfall traps. The females live in fairly shallow burrows (16-20 cm deep) made under the leaf litter and covered with a loose fitting lid. Van Dam & Roberts (1917) found burrows of *Homostola zebrina* made mainly under rocks and stones. This sheltered habitats seem to increase the survival rate in areas with heavy rains. They also found burrows where the female and her offspring shelter together. These burrows usually have only one entrance while in the majority of burrows without young there were two very distinct entrances. The latter burrows resemble a T-shape with the entrances above the ends of the cross-piece. Males have also been collected from burrows. In some specimens the trapdoor lids were covered with bits of straw (Van Dam & Roberts, 1917). The males are more active and are easily collected in pit traps. In build up areas they frequently drown in swimming pools. During a survey of ground fauna from five habitat types that included open and closed humus rich forest areas in the Ngome State Forest *H. zebrina* was more abundant in the grassy areas and pine plantations with penetrating forest than in the forest areas (Van der Merwe, 1996; Dippenaar-Schoeman 2002).

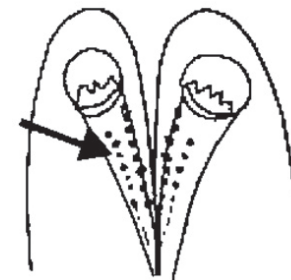
TAXONOMY: The African species has not yet been revised. *Homostola* is a senior synonym of *Stictogaster* and *Paromostola* (World Spider Catalog 2020). Four of the species known only from the females. The males have been collected but are not yet described.



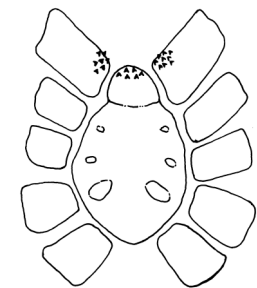
Female *Homostola* sp. after Dippenaar-Schoeman & Jocqué (1997)



Fovea broad, transverse and procurved



Chelicerae with two rows of strong teeth



Posterior sigilla large and oval

***Homostola abernethyi* (Purcell, 1903)**

COMMON NAME: Abernethy's Wafer-Lid Trapdoor Spider

CONSERVATION STATUS: DDT

NATIONAL RATIONALE: An Eastern Cape endemic described by Purcell (1903) as *Paromostola abernethyi* from Kentani. It is presently known from two localities (EOO<500 km²; AOO=8 km²; 1-424 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.

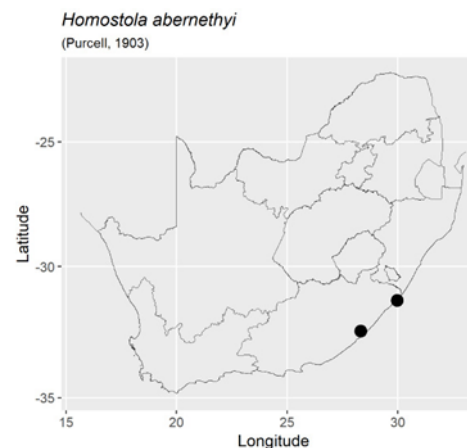
LIFE STYLE: Ground dwellers that are more commonly found in forest areas in leave litter. Sampled from the Indian Ocean Coastal Belt, Savanna (Foord et al. 2011) and Thicket biomes.

GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH Africa: **Eastern Cape:** Kentani (-32.5, 28.32); Mkhambathi Nature Reserve (-31.32, 29.97).

CONSERVATION MEASURES: No known threats. Protected in the Mkhambathi Nature Reserve (Dippenaar-Schoeman et al. 2011). More sampling needed to collect the male and to determine the species' range. .

TAXONOMIC NOTES Not revised only the female known. Colour pale yellowish, the thoracic portion and the lateral borders and median band of the cephalic portion lightly darkened with a brownish tinge. Ocular area more than twice as wide as long. Legs pale yellowish; tarsi I and 11 scopulate to base. Labium with 9 teeth in 3 rows. Total length 13.1 mm (Purcell 1903).



Homostola pardalina (Hewitt, 1913)

COMMON NAME: Barberton Wafer-Lid Trapdoor Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: A South African endemic described by Hewitt (1913) as *Paromostola pardalina* from Barberton in Mpumalanga. It is known from three provinces (EOO= 74 155 km²; AOO=20 km²; 807-1544 m a.s.l.). Although the species is presently known only from one sex it has a fairly wide geographical range and can be listed as Least Concern.

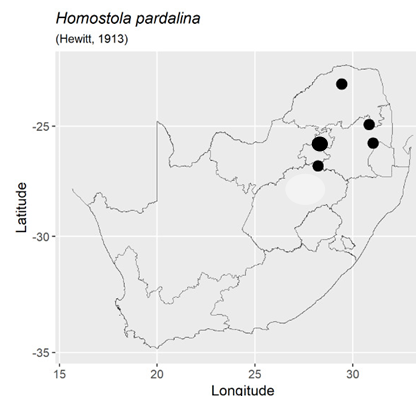
LIFE STYLE: Free living ground dwellers more commonly found in leaf litter. It has been sampled from pitfall traps in the Grassland and Savanna biomes (Foord et al. 2011; Haddad et al. 2013).

GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: **Gauteng:** Suikerbosrand Nature Reserve (-27.59, 27.53); Stryfontein (-26.83, 28.22). **Limpopo:** Lhuvhondo Nature Reserve (-23.038, 29.442). **Mpumalanga:** Barberton (-25.79, 31.04); Graskop 30 km N (-24.93,30.84).

CONSERVATION MEASURES: No known threats. Protected in the Suikerbosrand Nature Reserve and Luvhondo Nature Reserve (Foord et al. 2008). Males have been collected but are not yet described.

TAXONOMIC NOTES: Not revised, only the female is known. Carapace and appendages chestnut brown above, the patellae of first two pairs of legs paler; abdomen pale over an anterior median area, elsewhere dark with numerous pale spots at the sides and posteriorly; lower surfaces pale. Labium > 50 cuspules Posterior sternal sigilla oval and elongated, only slightly less than their own diameter distant from the sternal margin and slightly more than two diameters apart. Fovea deep, wide and procurved. Total length 13 mm (Hewitt 1913).



Homostola pardalina female from Luvhondo NR
Photo ASD

Homostola reticulata (Purcell, 1902)

COMMON NAME: Swellendam Wafer-Lid Trapdoor Spider

CONSERVATION STATUS: DDT

NATIONAL RATIONALE: A Western Cape endemic described by Purcell (1902) as *Stictogaster reticulatus* from Swellendam. It is known from a few localities in the province (EOO=2 811 km²; AOO= 16 km²; 15-266m a.s.l.). The status of the species remains obscure. Some more sampling is needed to collect the male and to determine the full species' range. Therefore listed as Data Deficient for taxonomic reasons.

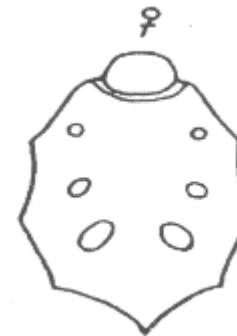
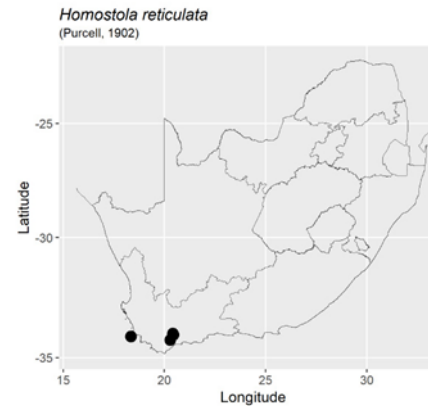
LIFE STYLE: A free living ground dweller sampled in leaf litter from the Fynbos Biome.

GLOBAL DISTRIBUTION: South Africa.

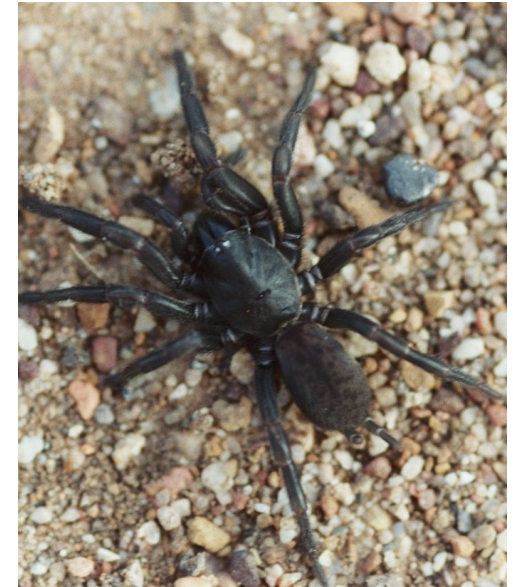
DISTRIBUTION IN SOUTH AFRICA: *Western Cape:* De Hoop Nature Reserve, Koppie Alleen (-34.28593, 20.28593); Swellendam Bonnievale Farm (-34.02, 20.42); Bontebok National Park (-34.07, 20.45); Kogelberg Nature Reserve (-34.140, 18.340).

CONSERVATION MEASURES: No known threats. The species is protected in the De Hoop Nature Reserve (Haddad & Dippenaar-Schoeman 2009), Bontebok National Park (Dippenaar-Schoeman 2020a) and Kogelberg Nature Reserve. Some more sampling is needed to collect the male and to determine the full species' range.

TAXONOMIC NOTES: Not revised only the female is known. Colour in alcohol: carapace greenish yellow (the cephalic portion and the region round the fovea brownish yellow in one specimen), faintly darkened with a brownish tinge, the cephalic portion with brown lateral borders and with or without an infuscate median line; legs greenish yellow, the upper surface of the patellae and tibiae and often also the greater portion of the distal segments pale ochraceous; abdomen the upper surface thickly covered with an irregular network of purplish black, in which an irregular median stripe may be made out, the under surface with some scattered black marks on its posterior half. Labium with about 25 teeth in 4-5 rows. Total length 20 mm (Purcell (1902).



Sternum after Tucker (1917)



Homostola reticulata from De Hoop NR Photo Charles Haddad

Homostola vulpecula Simon, 1892

COMMON NAME: Grassland Wafer-Lid Trapdoor Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: A South African endemic described by Simon (1892) with type locality only given as Zululand. It is known from four provinces, including seven protected areas (EOO=159 029 km²; AOO=80 km²; 29-1758 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.

LIFE STYLE: The species are more commonly found in leaf litter and sampled with pitfall traps. Sampled from the Grassland, Indian Ocean Coastal Belt and Savanna biomes (Foord et al. 2011; Haddad et al. 2013).

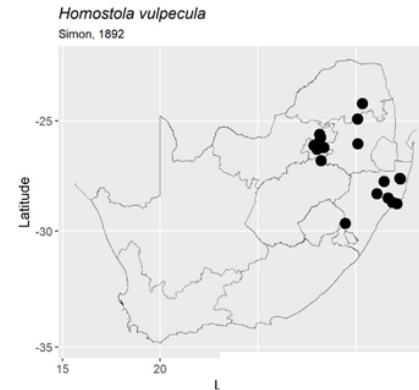
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: **Gauteng:** Brakpan (-26.23, 28.37); Brakfontein (-25.738, 28.177); Groenkloof Nature Reserve (-25.78, 28.2), Onderstepoort (-25.74, 28.19), Rosslyn (-25.62, 28.09); Honingklip, Roodepoort (-26.14, 27.86); Pretoria/Tshwane (-25.7, 28.19); Sandton (-26.06, 28.07); Stryfontein (-26.83, 28.22); Kliprivierberg Nature Reserve (-26.27, 28.08). **KwaZulu-Natal:** Empangeni (-28.72, 31.88); Ngome State Forest (-27.78, 31.45); Ophathe Game Reserve (-28.52, 31.66); Richards Bay (15 km N) (-28.78, 32.1); iSimangaliso Wetland park, Mkuze Game Reserve (-27.63, 32.25); Sani Pass 1500m alt. (-29.66, 29.46).

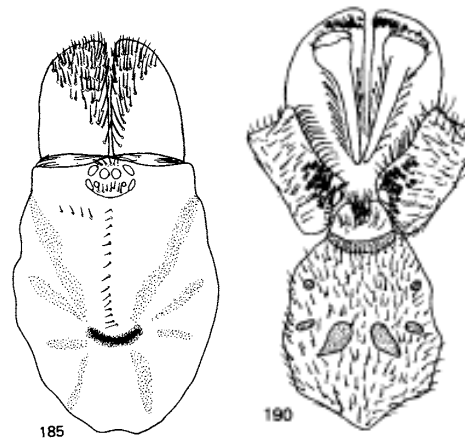
Limpopo Lekgalameetse Nature Reserve, Farm Balloon (-24.2, 30.34). **Mpumalanga:** Carolina (-26.06, 30.11); Two Rivers (24.91, 30.09).

CONSERVATION MEASURES: No known threats. Protected in the Groenkloof Nature Reserve, Onderstepoort Nature Reserve, Kliprivierberg Nature Reserve, Mkuze Game Reserve, Ngome State Forest, Lekgalameetse Nature Reserve (Foord et al. 2016) and Ophathe Game Reserve (Haddad & Dippenaar-Schoeman 2015). No conservation actions are recommended.

TAXONOMIC NOTES: Not revised, only the female is known. Carapace dark brown to olive brown; darker around edge and in eye region; chelicerae dark with dark setae around the edge; abdomen purplish with irregular chevrons; labium with between 13-15 cusps; numerous dark setae on abdomen, ventrum pale; legs olive brown with dark seta; mating spur of male a long spur on the side and more ventrally two pointed spurs (Raven 1985).



Homostola vulpecula from Groenkloof NR Photo ASD



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Carapace and sternum after Raven (1985)



Homostola vulpecula from Pretoria Photo Les Oates

Homostola zebrina Purcell, 1902

COMMON NAME: Zebra Homostola Wafer-Lid Trapdoor Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: A southern African endemic described by Purcell (1902) from Pietermaritzburg in South Africa. It is also known from Eswatini. In South Africa known from four provinces (EOO= 163 953 km²; AOO=88 km²; 14-1 876 m a.s.l.). There are no significant threats to the species. Due to its wide geographical range, the species is listed as being of Least Concern.

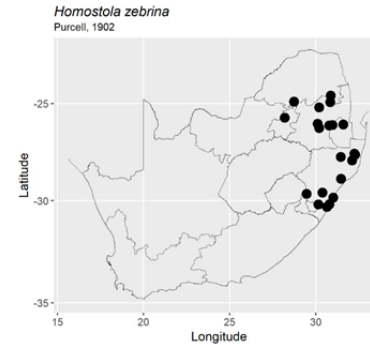
LIFE STYLE: The species is free-living ground dweller more abundant in grassy areas but also recorded from pine plantations under rocks and stones (Van Der Merwe et al. 1996). Sampled from the Grassland, Indian Ocean Coastal Belt and Savanna biomes (Foord et al. 2011, Haddad et al. 2013). The burrows without young had two entrances and those with young only one

GLOBAL DISTRIBUTION: Eswatini (Swaziland) and South Africa.

DISTRIBUTION IN SOUTH AFRICA: **Gauteng:** Pretoria/ Tshwane Bon Accord (-25.74, 28.19). **KwaZulu-Natal:** Durban Umbilo (-29.85, 31.01); Durban (-29.85, 31.01); Eshowe (-28.89, 31.47); Lower Umkomaas River(-30.18, 30.8); Makowe (-27.96, 32.11); Ngome State Forest (-27.78, 31.45); Pietermaritzburg Manderston (-29.6, 30.380; Sani Pass 1500m alt. (-29.66, 29.46); Sani Pass 900m altitude (-27.67, 32.28); uMkhuze Game Reserve (E) (-27.61, 32.24); uMkhuze Game Reserve (F) (-27.66, 32.27); uMkhuze Game Reserve (I) (-27.66, 32.27); Umzinto Dumisa (-30.31, 30.65). **Limpopo:** Tuinplaas, Springbokvlakte (Bekendevei) (-24.9, 28.73). **Mpumalanga:** Carolina (-26.06, 30.11); Chrissiesmeer Lake Chrissie (-26.28, 30.19); Graskop 30 km N (-24.93, 30.84); Lochiel (-26.15, 30.78); Oshoek (-25.2, 30.2); Steynsdorp (-26.12, 30.97); Mariepskop (-24.58, 30.87).

CONSERVATION MEASURES: No known threats. Protected in the Ngome State Forest (Van der Merwe et al. 1996) and uMkhuze Game Reserve.

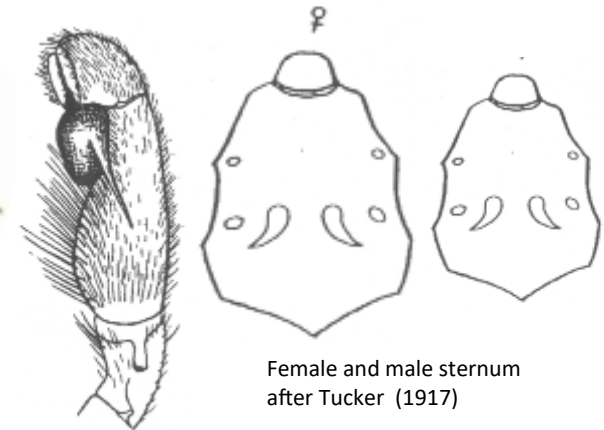
TAXONOMIC NOTES: Species not revised, both sexes known. Female carapace yellow or testaceous yellow with the sides pale yellow; cephalic region broad and faintly infusate with narrow dark median stripe; chelicerae reddish brown; labium 5-6 and 2-4 teeth; tarsi and metatarsi I and II thickly scopulate. In male tibia I is swollen and carries very stout twisted adjacent distal spines each raised on a tubercle Total length 23 mm (Hewitt 1915).



Homostola zebrina male from Groenkloof NR Photo ASD



Mating spur and palp Photo ASD



Female and male sternum after Tucker (1917)

Male palp after Hewitt (1916)

GENUS *SPIROCTENUS* Simon, 1889

The genus *Spiroctenus* described by Simon (1889) is known from 30 species of which 28 have been recorded from South Africa. The genus was transferred from Ctenizidae to Nemesiidae by Raven (1985) and then transferred to Bemmeridae by Opatova et al., (2020).

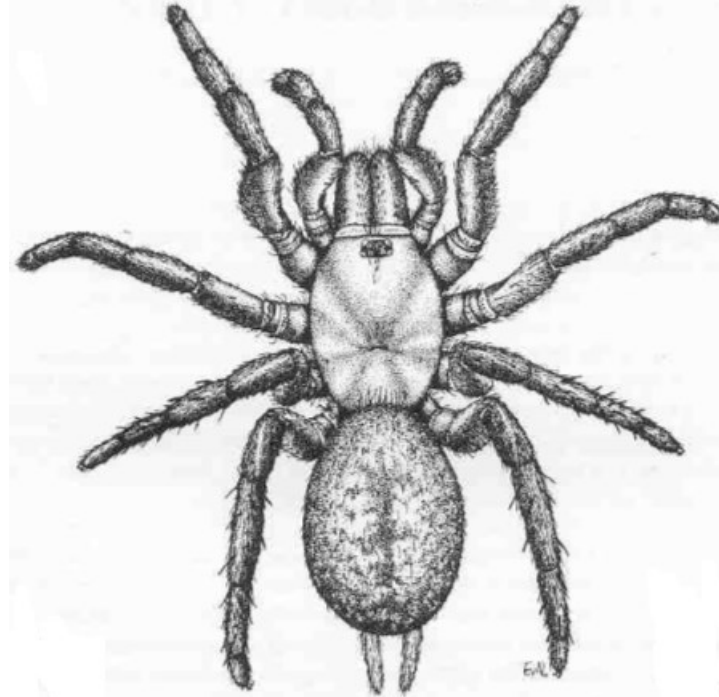
TYPE SPECIES: *Spiroctenus personatus* Simon, 1889

COMMON NAME: Spiroctenus Trapdoor Spider

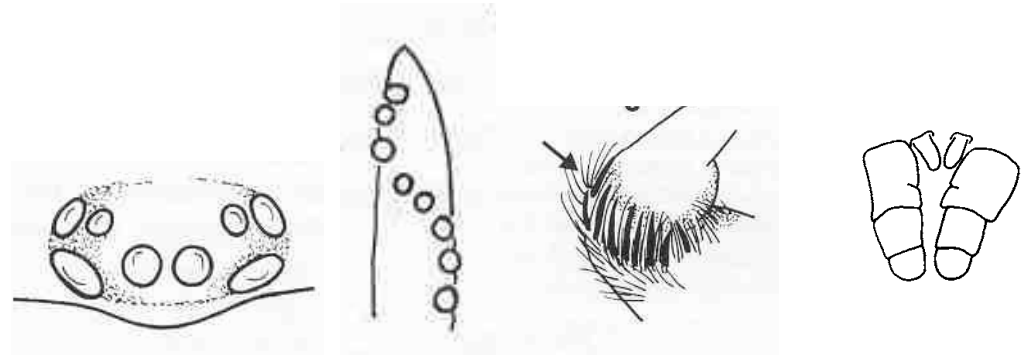
MORPHOLOGY: Body size TL 15-23 mm. Carapace with fovea short, more or less straight; eye tubercle low; rastellum close set stout setae on low mound; labium and endites with numerous cuspules; endites rectangular without heel. Sternum with posterior sternal sigilla oval, not marginal. Abdomen sometimes with bands or spots; apical segment of posterior lateral spinnerets domed. Legs with a very small unpaired third claw on tarsi I-IV; males with one S-shaped row of teeth on paired claws, females with two rows with third claw very small; scopulae thin to absent on tarsi II of females; in males, thin but entire on tarsi I and II, very thin and divided on tarsi III and IV; distal or absent on metatarsi I and II; metatarsal preening combs present on legs III and IV.

LIFE STYLE: Juveniles and females of *Spiroctenus* construct a variety of burrow shapes, varying from a plain burrow to burrows with side chambers. Males of different species are frequently found under stones or in shallow burrows (Purcell 1903; Tucker 1917). The entrances of the burrows are either closed with a trapdoor or decorated with a turret. Published information on burrow structure of some *Spiroctenus* species is summarized in Dippenaar-Schoeman (2002, Table 6 p. 99).

TAXONOMY: The genus has not yet been revised. According to Zonstein (2016) considerable work is needed on this group to ascertain whether any of the taxa placed in the synonymy of *Spiroctenus* represent members of *Pionothele*.



Female *Spiroctenus* sp. after Dippenaar-Schoeman (2006).



Eye tubercle low

Males with S-shaped row of teeth on paired claws

Rastellum close set stout setae on low mound

Posterior lateral spinnerets domed

Spiroctenus armatus Hewitt, 1913

COMMON NAME: Port Alfred Spiroctenus Trapdoor Spider

CONSERVATION STATUS: DDT

NATIONAL RATIONALE: An Eastern Cape endemic described by Hewitt (1913) from the west bank of the Kowie River, 4.5 km from Port Alfred (EEO=4 km²; AOO=4 km²; 59 m a.s.l.). Known only from the type locality. The status of the species remains obscure and some more sampling is needed to collect the female and to determine the species' range. Therefore listed as Data Deficient for taxonomic reasons.

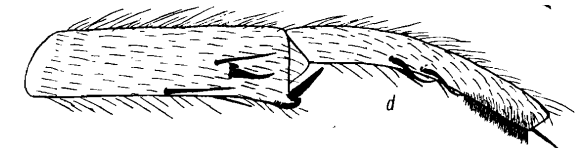
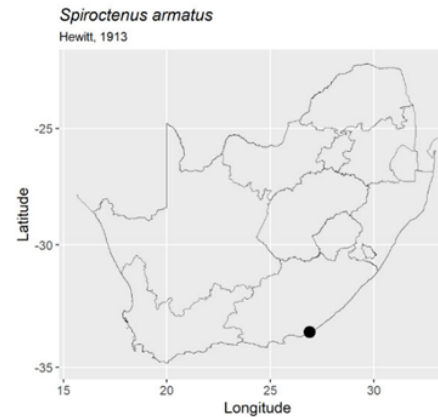
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Eastern Cape:* West bank of Kowie River, 4.5 km from Port Alfred (-33.58, 26.89).

LIFESTYLE: Male sampled from a trap-door burrow on the west bank of the Kowie River (Hewitt 1913). It fall within the Thicket Biome.

CONSERVATION MEASURES: Threats to this species are unknown but the status of the species remains obscure and some more sampling is needed to collect the female and to determine the species' range.

TAXONOMIC NOTES: Species not revised only the male is known. Carapace dark reddish brown, becoming almost black in front and on the chelicerae, pedipalps and legs reddish brown, the basal joints darker, especially the trochanters; abdomen pale yellowish above with an irregular black pattern; lower surfaces paler than the upper. Metatarsus I curved near the base, the underside distinctly concave, the inner surface with two large curved spines, outer surface inferiorly with two straight spines, the apex inferiorly with a pair of spines (Hewitt 1913).



Mating spur on front leg after Hewitt (1919)

Spiroctenus broomi Tucker, 1917

COMMON NAME: Broom's Spiroctenus Trapdoor Spider

NATIONAL STATUS: DDT

NATIONAL RATIONALE: A Western Cape endemic described by Tucker (1917) from Stellenbosch. Known only from the type locality (EOO=4 km²; AOO=4 km²; 103 m a.s.l.). The status of the species remains obscure. Some more sampling is needed to collect the male and to determine its range. Therefore, it is listed as Data Deficient for taxonomic reasons.

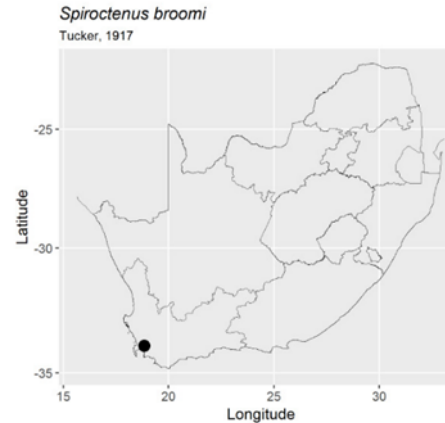
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Western Cape:* Stellenbosch (-33.93, 18.85).

LIFESTYLE: Female sampled from a sloping burrow with a looping passage connecting a lower portion with an upper passage, with a low turret around the entrance (Tucker 1917). Sampled from the Fynbos Biome.

CONSERVATION MEASURES: Threats to this species are unknown but some more sampling is needed to collect the male and to determine its range.

TAXONOMIC NOTES: Not revised, only the female known. Very dark; carapace dark infuscated brown; upper abdomen dull purplish black with faint testaceous flecks; under abdomen slightly paler; genital plate and lung operculae pale brown. Sternum and coxae a lighter, redder brown than the carapace; legs dark, especially the anterior ones, the posterior ones being slightly lighter. Labium with 4–5, maxillae with *ca* 40 cuspules. Total length 25 mm (Tucker 1917).



Spiroctenus cambierae (Purcell, 1902)

COMMON NAME: Cambier's Spiroctenus Trapdoor Spider

NATIONAL STATUS: DD

NATIONAL RATIONALE: A Western Cape endemic described by Purcell (1902) as *Hermachistes cambierae* from the type locality, Houwhoek (EOO=4 km²; AOO=4 km²; 237 m a.s.l.). Some more sampling is needed to determine the species' range. Therefore, it is listed as Data Deficient.

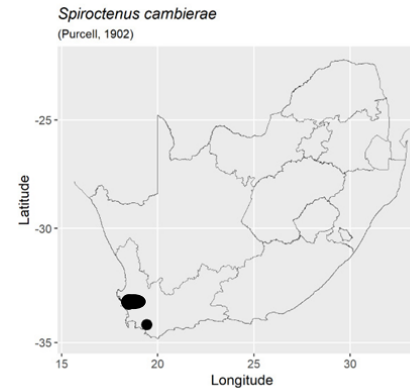
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: Western Cape: Caledon Houwhoek (-34.24, 19.43); Pniel (-33.9, 18.98); Klapmuts(-33.82, 18.88).

LIFESTYLE: Ground burrow-dweller, but nothing is known about their behavior. Sampled from the Fynbos Biome.

CONSERVATION MEASURES: Threats to this species are unknown. Some more sampling is needed to determine the species' range.

TAXONOMIC NOTES: Species not revised, both sexes known. Carapace and legs dull brown, tinged with olive. Abdomen dark, almost black, both with a narrow band of confluent dull testaceous spots clown the centre of the ventral surface; lung operculae, genital plate, and spinners about the same colour as the sternum, slightly lighter than the carapace. Total length 17 mm (Tucker 1917).



Spiroctenus coeruleus Lawrence, 1952

COMMON NAME: Pietermaritzburg Spiroctenus Trapdoor Spider

NATIONAL STATUS: DDT

NATIONAL RATIONALE: A KwaZulu-Natal endemic described by Lawrence (1952) (EOO2 163 km²; AOO=24 km²; 647 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.

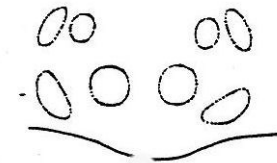
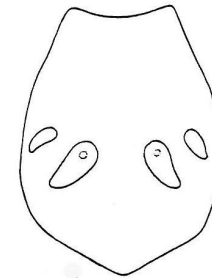
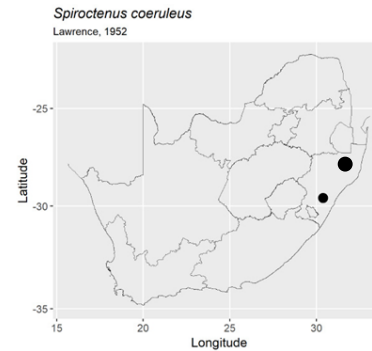
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: KwaZulu-Natal: Pietermaritzburg (-29.60, 30.38); Ndumo Game Reserve (-26.5444, 32.1546).

LIFESTYLE: Ground burrow-dweller but nothing is known about their behaviour. Sampled from the Savanna Biome (Foord et al. 2011).

CONSERVATION MEASURES: Threats to this species are unknown. Some more sampling is needed to collect the female and to determine its range.

TAXONOMIC NOTES: Not revised. Known only from the male. Cephalothorax and appendages slate blue owing to a fine coating of some powdery substance, abdomen above pale brown, with small symmetrical darker markings, below yellow-brown. Total length 15 mm (Lawrence 1952).



Sternum and eye pattern after Lawrence (1952)



Spiroctenus coeruleus male from Ndumo Game Reserve Photo Charles Haddad

Spiroctenus collinus (Pocock, 1900)

COMMON NAME: Table Mountain Spiroctenus Trapdoor Spider

NATIONAL STATUS: DD

NATIONAL RATIONALE: A Western Cape endemic described by Pocock (1900) as *Hermachstes collinus* from Table Mountain. The species is only known from the Cape Peninsula (EOO=2 163 km²; AOO=24 km²; 7-160 m a.s.l.). Some more sampling is needed to determine its range. Therefore, it is listed as Data Deficient.

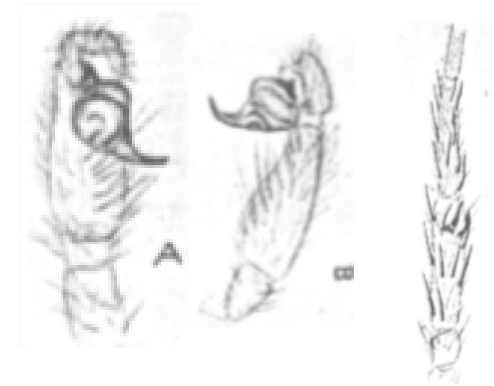
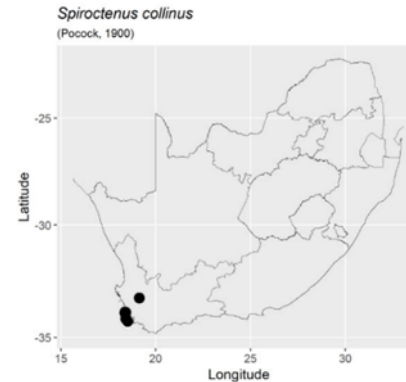
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: Western Cape: Camps Bay (-33.95, 18.37); Kalk Bay (-34.19, 18.42); Table Mountain National Park (-33.91, 18.42); Table Mountain National Park Signal Hill (-33.90, 18.38); Table Mountain National Park Silvermine Nature Reserve (-34.30, 18.52); Tulbagh (-33.28, 19.14).

LIFESTYLE: Burrow-dweller that makes a simple burrow with a turret around the entrance (Tucker 1917). Sampled from the Fynbos Biome.

CONSERVATION MEASURES: Historic collections from lowland sites are likely to have been lost to urban development but protected in the Table Mountain National Park (Dippenaar-Schoeman 2020b). Some more sampling is needed.

TAXONOMIC NOTES: Not revised but both sexes known. Carapace ochraceous, with deep olive infuscations in the cephalic region and posterior carapace, and to a less extent in lateral radiations from the fovea. Legs pale ochraceous below, darkened with a brownish tinge above on femora, and browner from patellae onwards. Pedipalps lighter and tinged olivaceous; abdomen darkened with a brownish tinge above, with testaceous markings posteriorly, bringing out central and oblique dark lines. Abdomen with its sides and under surface pale testaceous with a distinct green tinge. Total length female 18 mm, male 12 mm (Pocock 1900; Tucker 1917).



Male palp and mating spur after Tucker (1917)

Spiroctenus curvipes Hewitt, 1919

COMMON NAME: Utrecht Spiroctenus Trapdoor Spider

NATIONAL STATUS: DD

NATIONAL RATIONALE: A KwaZulu-Natal endemic described by Hewitt (1919) from type Klipspruit, Utrecht (EOO=4 km²; AOO=4 km²; 1214 m a.s.l.). Some more sampling is needed to determine the species' range. Therefore, listed as Data Deficient.

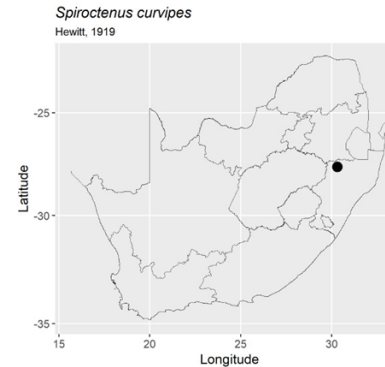
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *KwaZulu-Natal:* Utrecht, Klipspruit (-27.66, 30.31).

LIFESTYLE: Ground burrow-dweller but nothing is known about its behaviour. Sampled from the Savanna Biome (Foord et al. 2011).

CONSERVATION MEASURES: Threats to this species are unknown but some more sampling is needed to determine the species' range.

TAXONOMIC NOTES: Not revised. Known from both sexes. Male with anterior portion and sides of carapace pale with a reddish tinge, hinder portion dark. Legs dark, almost black, except the coxae of the first two pairs which are reddish yellow. Inferiorly, the sternum and all the coxae are reddish yellow. Abdomen dark above with somewhat indistinct darker cross stripes broken in the middle; inferiorly pale. Total length 11 mm. Female with the carapace and legs pale olivaceous but on the mesial area of the cephalic region there are black hairs sparsely scattered although the cephalic portion is paler than the rest of the carapace: abdomen with dark oblique cross stripes on each side superiorly except in front where it is uniformly infuscated, but ventrally and laterally it is pale. Total length 21 mm (Hewitt 1919).



Sternum and curved front leg after Hewitt (1919)

Spiroctenus exilis Lawrence, 1938

COMMON NAME: Port Edward Spiroctenus Trapdoor Spider

NATIONAL STATUS: DDT

NATIONAL RATIONALE: A KwaZulu-Natal endemic described Lawrence (1938) from Port Edward (EOO=4 km²; AOO=4 km²; 63 m a.s.l.). It is only known from the type locality. 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.

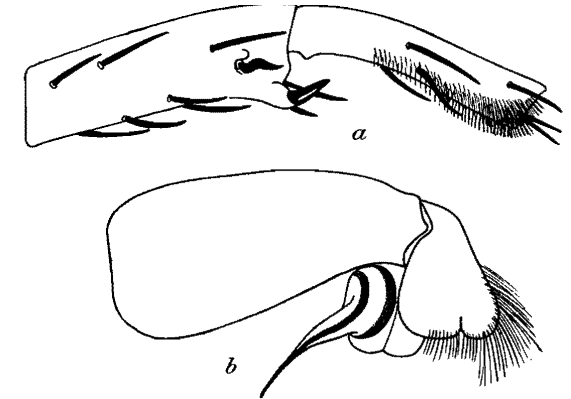
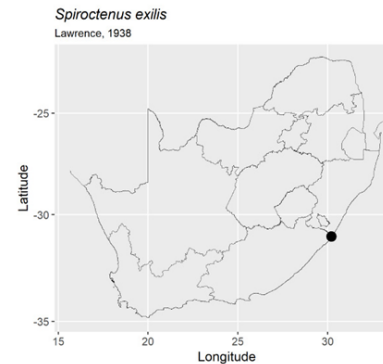
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *KwaZulu-Natal*: Port Edward (-31.04, 30.21).

LIFESTYLE: Ground burrow-dwellers, but nothing more is known about their behaviour. Sampled from the Indian Ocean Coastal Belt Biome.

CONSERVATION MEASURES: Threats to this species are unknown but some more sampling is needed to collect the female and to determine the species' range.

TAXONOMIC NOTES: Not revised. Known only from the male. Carapace orange, legs yellow; abdomen blackish brown, mottled with light spots. Total length 12 mm (Lawrence 1938).



Mating spur and palp of male after Lawrence (1938)

Spiroctenus flavopunctatus (Purcell, 1903)

COMMON NAME: Hogsback Spiroctenus Trapdoor Spider

NATIONAL STATUS: DDT

NATIONAL RATIONALE: An Eastern Cape endemic described by Purcell (1903) as *Herma-chastes flavopunctatus* from the type locality, Hogsback (EOO=4 km²; AOO=4 km²; 1307 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.

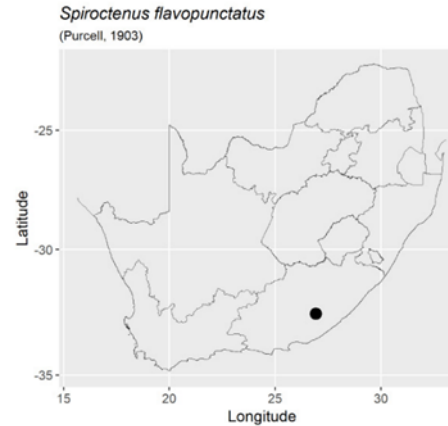
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: Eastern Cape: Amatola Mountains Hogsback (-32.59, 26.92).

LIFESTYLE: The type was found in a rotten tree trunk (Purcell 1903) in the Forest Biome.

CONSERVATION MEASURES: Threats to this species are unknown but some more sampling is needed to collect the male and to determine the species' range.

TAXONOMIC NOTES: Not revised. Known only from the female. Colour olivaceous, with yellow streaks; chelicerae nearly black; legs olivaceous, but the patella and the naked strips on the tibiae and metatarsi yellowish; abdomen deep purplish black, with numerous, conspicuous, roundish, pale yellow spots above and at the sides, but without trace of the tree-pattern. Female with 28-32 cuspules on labium and 38-52 cuspules on maxillae; paired tarsal claws with 2-4 teeth on inner margin and with 2-3 teeth on outer margin. Total length 17 mm (Purcell 1903).



Spiroctenus fossorius (Pocock, 1900)

COMMON NAME: Port Elizabeth Spiroctenus Trapdoor Spider

NATIONAL STATUS: DDT

NATIONAL RATIONALE: An Eastern Cape endemic described by Pocock (1900) as *Bessia fossoria* from the type locality, Port Elizabeth (EEO=4 km²; AOO=4 km²; 7 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.

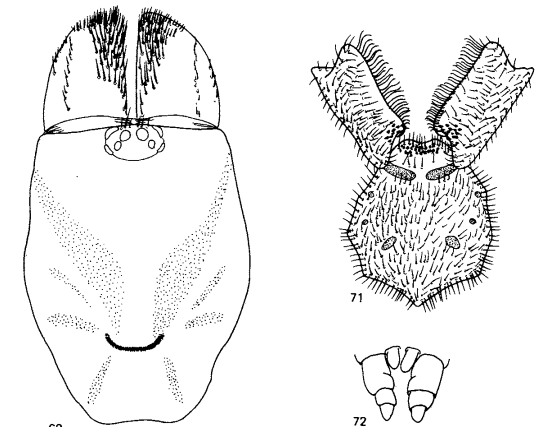
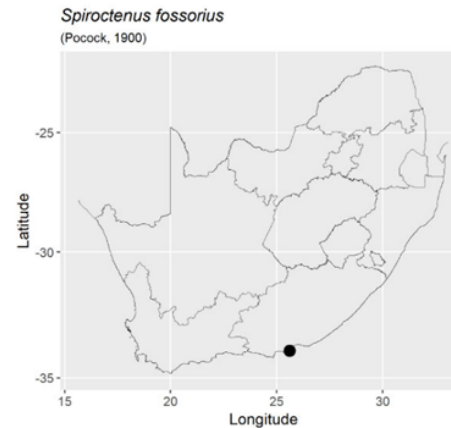
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Eastern Cape:* Port Elizabeth (-33.95, 25.61).

LIFESTYLE: Ground burrow-dweller, but nothing more is known about their behaviour. Sampled from the Thicket Biome.

CONSERVATION MEASURES: Threats to this species are unknown but some more sampling is needed to collect the male and to determine the species' range.

TAXONOMIC NOTES: Not revised. Known only from the female. Labium and maxillae with approximately 20 cuspules each; paired tarsal claws with 3–4 teeth on inner and outer margins; posterior sternal sigilla sub central, Carapace and legs pale reddish. Total length 12 mm (Pocock 1900; Raven 1985).



Carapace, sternum and spinnerets of *Spiroctenus fossorius* after Raven (1985)

Spiroctenus fuliginosus (Pocock, 1902)

COMMON NAME: Brakkloof Spiroctenus Trapdoor Spider

NATIONAL STATUS: DDT

NATIONAL RATIONALE: An Eastern Cape endemic described by Pocock (1902) as *Herma-chastes fuliginosus* from the type locality, Brakkloof (EEO=4 km²; AOO=4 km²; 280 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.

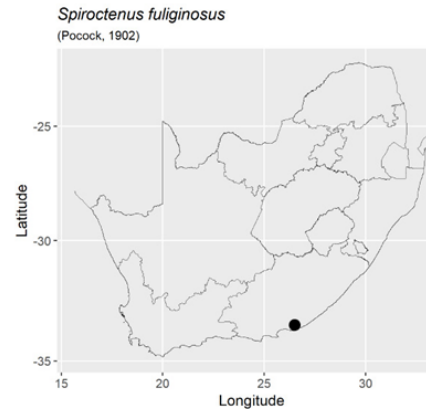
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Eastern Cape:* Brakkloof (-33.53, 26.50).

LIFESTYLE: Ground burrow dweller but nothing more is known about their behaviour. Sampled from the Thicket Biome.

CONSERVATION MEASURES: Threats to this species are unknown but some more sampling is needed to collect the female and to determine the species' range.

TAXONOMIC NOTES: Not revised, known only from the female. Body and legs very dark, uniformly blackish grey. Total length 20 mm (Pocock 1902).



Spiroctenus gooldi (Purcell, 1903)

COMMON NAME: Goold's Spiroctenus Trapdoor Spider

NATIONAL STATUS: DDT

NATIONAL RATIONALE: A Western Cape endemic described by Purcell (1903) as *Hermachastes gooldi* from Stompneus, St Helena Bay and St James (EOO=16 km²; AOO=16 km²; 109-634 m a.s.l.). All of the specimens were sampled prior to 1903. The status of the species remains obscure. Some more sampling is needed to collect the female and to determine the species' current range. Therefore, it is listed as Data Deficient for taxonomic reasons.

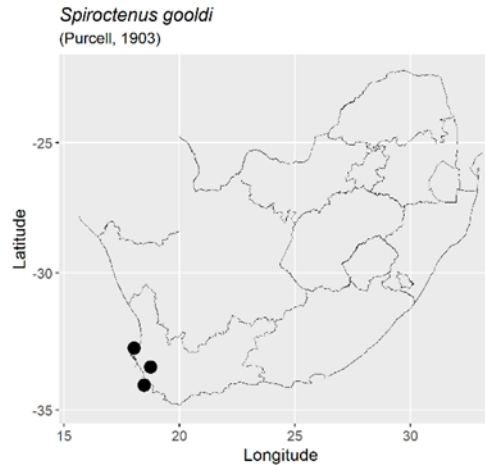
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Western Cape*: Malmesbury (-33.46, 18.74); Stompneus St Helena Bay (-32.77, 18.03); St James false Bay (-34.11, 18.46).

LIFESTYLE: Ground burrow-dweller, but nothing more is known about their behaviour. Sampled in the Fynbos Biome.

CONSERVATION MEASURES: Threats to this species are unknown but some more sampling is needed to collect the female and to determine the species' current range.

TAXONOMIC NOTES: Not revised, known only from the male. Abdomen with transverse strippers meeting or nearly meeting in median line. Total length 10-11 mm (Purcell 1903).



Spiroctenus inermis (Purcell, 1902)

COMMON NAME: Clanwilliam Spiroctenus Trapdoor Spider

NATIONAL STATUS: DDT

NATIONAL RATIONALE: A South African endemic described by Purcell (1902) as *Hermachastes inermis* from Clanwilliam in the Western Cape. It has also been sampled from the Northern Cape (EOO=2 854 km²; AOO=12 km²; 78-995 m a.s.l.). The status of the species remains obscure and 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.

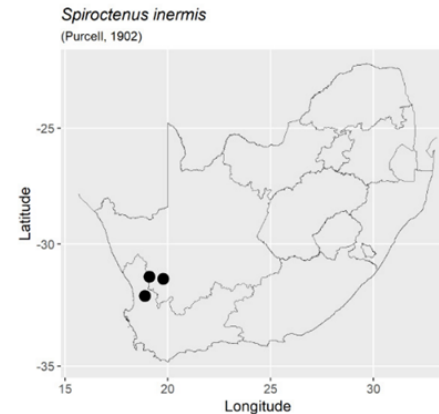
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: **Northern Cape:** Nieuwoudtville (-31.37, 19.11); Oorlogskloof Nature Reserve (-31.46, 19.77). **Western Cape:** Clanwilliam Pakhuisberg (-32.16, 18.89).

LIFESTYLE: Ground burrow-dweller but nothing more is known about their behaviour. Sampled from the Fynbos and Succulent Karoo biomes.

CONSERVATION MEASURES: Threats to this species are unknown and some more sampling is needed to collect the female and to determine the species' range.

TAXONOMIC NOTES: Not revised. Known only from the male. Carapace pale ochraceous; cephalic portion darkened with a brownish tinge, with a longitudinal ochraceous stripe extending from each side of the ocular area; chelicerae pale ochraceous, with infuscate lines; legs pale ochraceous, femora weakly darkened with a brownish tinge lines above; sternum and under side of coxae pale yellowish; abdomen pale yellowish, the upper surface and generally also the posterior part of the sides strongly blackened, with numerous pale yellowish dots and spots, but without well-defined, obliquely transverse, dark stripes. Total length 12-14 mm (Purcell (1902)).



Spiroctenus latus Purcell, 1904

COMMON NAME: Wellington Spiroctenus Trapdoor Spider

NATIONAL STATUS: DDT

NATIONAL RATIONALE: A Western Cape endemic described by Purcell (1904) and known only from the type locality, Wellington (EOO= 4 km²; AOO= 4 km²; 170 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.

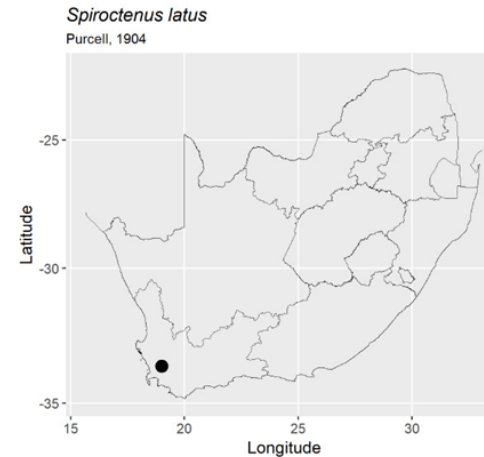
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Western Cape*: Wellington (-33.65, 19.01).

LIFESTYLE: Ground burrow-dweller, but nothing more is known about their behaviour. Sampled from the Fynbos Biome.

CONSERVATION MEASURES: Threats to this species are unknown. Some more sampling is needed to collect the female and to determine the species' range.

TAXONOMIC NOTES: Not revised. Known only from the male. Carapace reddish brown, margins blackened; legs darkened with a brownish tinge; abdomen pale yellow dorsal side and laterally with thick black reticulation. Total length 15 mm (Purcell 1904).



Spiroctenus lightfooti (Purcell, 1902)

COMMON NAME: Lightfoot's Spiroctenus Trapdoor Spider

NATIONAL STATUS: DD

NATIONAL RATIONALE: A South African endemic described by Purcell (1902) as *Hermachastes lightfooti* from the Table Mountain National Park. The species is known from two provinces (EOO=15 628 km²; AOO=12 km²; 7-925 m a.s.l.). The status of the species remains obscure. Some more sampling is needed to determine the species' range. Therefore, it is listed as Data Deficient.

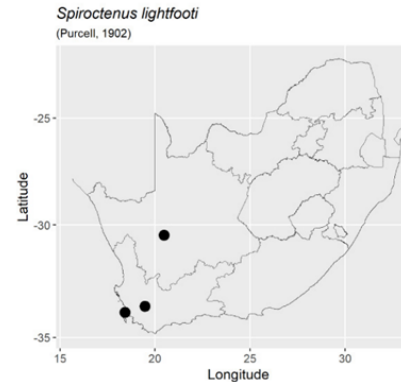
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: **Northern Cape:** Brandvlei (-30.46, 20.48). **Western Cape:** Table Mountain National Park Signal Hill (-33.91, 18.42); Worcester (-33.64, 19.47).

LIFESTYLE: Ground burrow-dwellers that make simple burrows with a turret around the entrance. The type male was collected from under stones (Purcell 1902). Sampled from the Fynbos and Nama Karoo biomes.

CONSERVATION MEASURES: Threats to this species are unknown. It is protected in the Table Mountain National Park (Dippenaar-Schoeman 2020b). Some more sampling is needed to determine the species' range.

TAXONOMIC NOTES: Not revised. Known from both sexes. Carapace pale ochraceous, the cephalic portion often faintly darkened with a brownish tinge, more darkly so along the median line and towards the lateral borders; chelicerae, pedipalps, and legs pale ochraceous; sternum and under side of the coxae of legs pale yellowish; under surface of abdomen and the greater part of the lateral surface (also in the posterior part) pale yellowish, with a large spot above and a small one in front of each of the posterior spinners; the upper surface of the abdomen with an irregular black pattern, showing numerous small and some large, pale yellowish spots (the latter sometimes arranged in a double series). Total length male 9-12 mm and female 14 mm (Purcell (1902)).



Spiroctenus lignicola Lawrence, 1937

COMMON NAME: Hluhluwe Spiroctenus Trapdoor Spider

NATIONAL STATUS: DDT

NATIONAL RATIONALE: A KwaZulu-Natal endemic described by Lawrence (1937) and only known from the type locality, Hluhluwe Nature Reserve (EOO=4 km²; AOO=4 km²; 119 m a.s.l.). The status of the species remains obscure and 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.

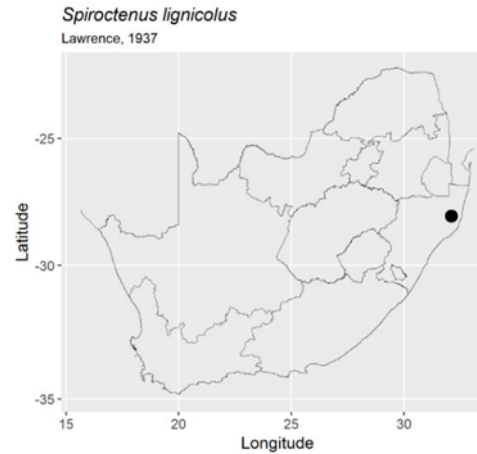
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *KwaZulu-Natal*: Hluhluwe Nature Reserve (-28.09, 32.10).

LIFESTYLE: Ground burrow-dweller, but nothing more known about their behaviour. Sampled from the Savanna Biome (Foord et al. 2011).

CONSERVATION MEASURES: Threats to this species are unknown. Some more sampling is needed to collect the male and to determine the species' range.

TAXONOMIC NOTES: Not revised. Known only from the female. Light reddish-brown, abdomen yellow with a brown tree-like pattern marking. Cheliceral furrow with 12 promarginal teeth and 7–8 denticles; labium with 16, maxillae with about 50 cuspules; paired tarsal claws IV with 4–5 teeth on inner margin and with 0–1 teeth on outer margin. Total length 19.2 mm (including chelicerae) (Lawrence 1937).



Spiroctenus londinensis Hewitt, 1919

COMMON NAME: East London Spiroctenus Trapdoor Spider

NATIONAL STATUS: DD

NATIONAL RATIONALE: An Eastern Cape endemic described by Hewitt (1919) and only known from the type locality, East London (EOO=4 km²; AOO=4 km²; 56 m a.s.l.). Some more sampling is needed to determine the species' range. Therefore, listed as Data Deficient.

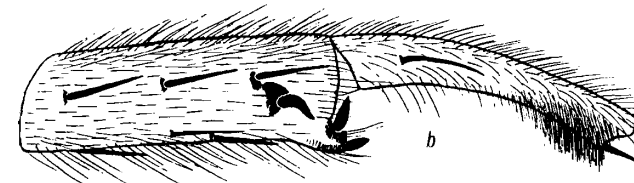
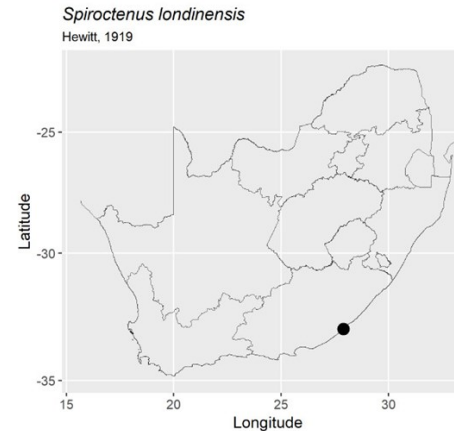
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Eastern Cape:* East London (-33.01, 27.90)

LIFESTYLE: Ground burrow-dwellers. They build burrows passing downwards for a distance of 18-20 cm, with the lower portion free of silk. The lids of the burrows with hinge down in the middle of the lid, forming two distinct halves (Cruden 1916; Hewitt 1919). Sampled from the Thicket Biome.

CONSERVATION MEASURES: Threats to this species are unknown. Some more sampling is needed to determine the species' range.

TAXONOMIC NOTES: Not revised. Known from both sexes. Male with carapace dark brown, chelicerae and femora of legs and palps blackish brown; the remaining segments of the legs and palps are reddish brown except the tarsi and metatarsi which are a little darker, those of the first two pairs of legs being about the same tint as the carapace. Upper surface of abdomen dull yellowish with infuscations which are somewhat indefinitely shown, being obscured by the black bristly hairs which cover the surface: in the posterior half there is however distinct indication of thin dark cross stripes. Sternum and lower surfaces of appendages pale reddish brown: abdomen pale inferiorly. Total length 22 mm. Female with the palps and legs pale brown, becoming dark on the distal segments: the carapace is castaneous, the chelicerae blackish brown. The abdomen is infuscated superiorly, and has numerous small indistinct pale spots: ventrally pale. Total length 27 mm (Hewitt 1919).



Leg 1 of male after Hewitt (1919)

Spiroctenus marleyi Hewitt, 1919

COMMON NAME: Marley's Spiroctenus Trapdoor Spider

NATIONAL STATUS: DD

NATIONAL RATIONALE: A KwaZulu-Natal endemic described by Hewitt (1919) and known only from the type locality, Eshowe (EOO=4 km²; AOO=4 km²; 527 m a.s.l.). Some more sampling is needed to determine the species' range. Therefore, it is listed as Data Deficient.

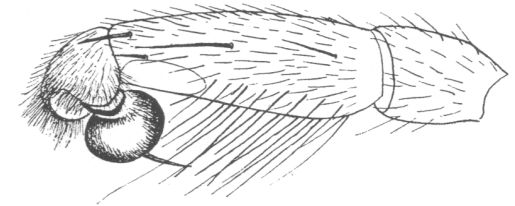
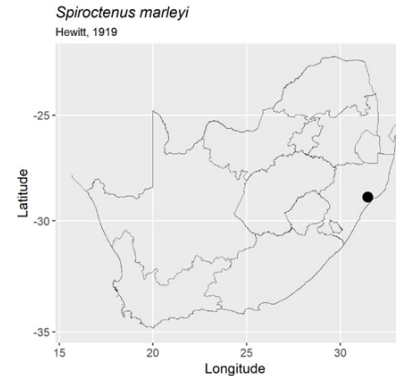
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *KwaZulu-Natal*: Eshowe (-28.89, 31.47).

LIFESTYLE: Ground burrow-dweller, but nothing more is known about their behaviour. Sampled from the Indian Ocean Coastal Belt Biome and Savanna Biome (Foord et al. 2011).

CONSERVATION MEASURES: Threats to this species are unknown and some more sampling is needed to determine the species' range.

TAXONOMIC NOTES: Not revised. Known from both sexes. Male with appendages dull brown, carapace dark chestnut brown, abdomen infuscated superiorly. Total length 10.5 mm. Female carapace and appendages brown: abdomen infuscated superiorly, with numerous unarranged pale spots which break up the original dark tree pattern. Total length 15 mm (Hewitt 1919).



Male palp after Hewitt (1919)

Spiroctenus minor (Hewitt, 1913)

COMMON NAME: Alicedale Spiroctenus Trapdoor Spider

NATIONAL STATUS: DD

NATIONAL RATIONALE: An Eastern Cape endemic described by Hewitt (1913) as *Bessia minor* and known only from the type locality, Alicedale (EOO=4 km²; AOO=4 km²; 283 m a.s.l.). Some more sampling is needed to determine the species' range. Therefore, it is listed as Data Deficient.

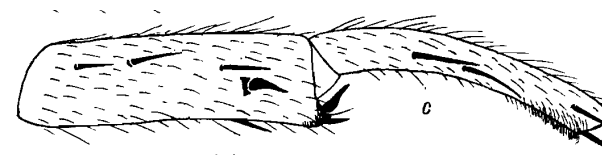
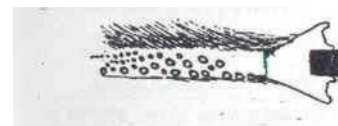
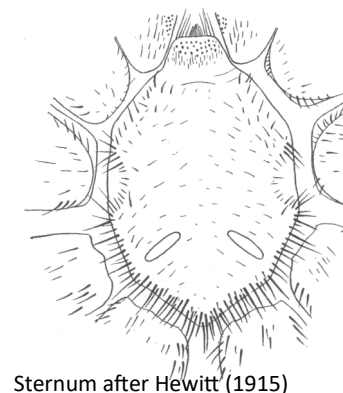
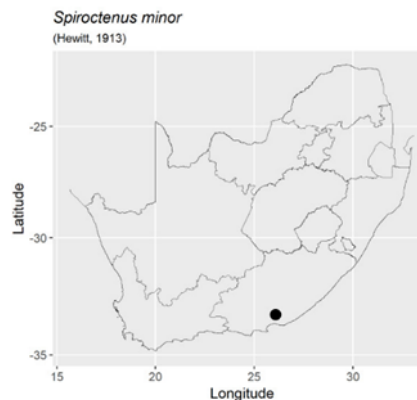
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Eastern Cape*: Alicedale (-33.31, 26.08).

LIFESTYLE: Ground burrow-dwellers with burrow sloping downwards for a distance of 18-20 cm with the lower portion free of silk (Cruden 1916; Hewitt 1919). Sampled from the Thicket Biome.

CONSERVATION MEASURES: Threats to this species are unknown. Some more sampling is needed to determine the species' range.

TAXONOMIC NOTES: Not revised. Known from both sexes. Female carapace and appendages pale chestnut olive above, the patellae of the first two pairs of legs paler and with a reddish brown tinge; abdomen dorsally is pale with an extensive but indefinite variegated blackish pattern. Lower surfaces pale brown, the chelicerae, coxae of pedipalps, and labium with a reddish tinge. Total length of female 22.5 mm (Hewitt 1913) and male 15.2 mm (Hewitt 1915).



Spiroctenus pallidipes Purcell, 1904

COMMON NAME: Touws River Spiroctenus Trapdoor Spider

NATIONAL STATUS: DDT

NATIONAL RATIONALE: A Western Cape endemic described by Purcell (1904) and known only from the type locality, Worcester, at the Touws River Station (EOO=4 km²; AOO=4 km²; 242 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.

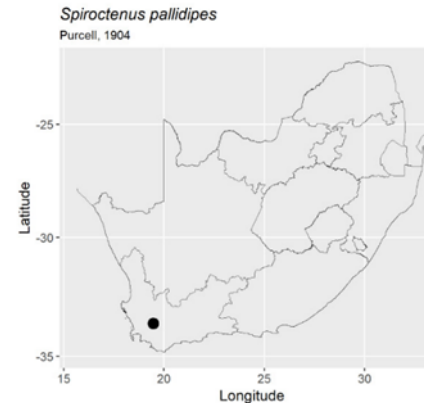
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Western Cape:* Worcester Touws River Station (-33.64, 19.47).

LIFESTYLE: Ground burrow-dwellers constructing a vertical burrow. The burrow is enlarged at a depth of 18-23 cm into a chamber, with an additional small chamber in the upper wall used as a retreat when there is danger. It is without a lid or turret (Purcell (1904). Sampled from the Fynbos Biome.

CONSERVATION MEASURES: Threats to this species are unknown. Some more sampling is needed to collect the female and to determine the species' range.

TAXONOMIC NOTES: Not revised. Known from both sexes. Pale yellowish; carapace with chelicerae reddish yellow rest faintly induscat; abdomen with well define pattern composed of series of transverse dark or purplish stripes united by a median longitudinal stripe; legs very pale yellowish. Total length 12.5 mm (Purcell 1904).



***Spiroctenus pardalina* (Simon, 1903)**

COMMON NAME: Spiroctenus Trapdoor Spider

NATIONAL STATUS: DDT

NATIONAL RATIONALE: This species was described by Simon (1903) as *Bemmeris pardalina* from a juvenile specimen and no exact type locality was provided. The status of the species remains obscure. Some more sampling is needed to collect adults and to determine the species' range. Therefore, listed as Data Deficient for taxonomic reasons.

GLOBAL DISTRIBUTION: South Africa (no exact locality).

DISTRIBUTION IN SOUTH AFRICA: Unknown.

LIFESTYLE: Ground burrow-dweller, but nothing is known about their behaviour or ecology.

CONSERVATION MEASURES: Threats to this species are unknown. Some more sampling is needed to collect adults and to determine the species' range.

TAXONOMIC NOTES: Not revised. Known only from juveniles, not illustrated. Carapace almost glabrous, eye group twice as wide as long, labium with four cuspules (Simon 1903).

Spiroctenus pectiniger (Simon, 1903)

COMMON NAME: Matjiesfontein Spiroctenus Trapdoor Spider

NATIONAL STATUS: DDT

NATIONAL RATIONALE: A Western Cape endemic described by Simon (1903) as *Ctenonemus pectiniger* from Matjiesfontein (EOO=4 km²; AOO=4 km²; 912 m a.s.l.). This species described from a juvenile specimen and the status of the species therefore remains obscure. Some more sampling is needed to collect adults and to determine the species' range. Therefore, it is listed as Data Deficient for taxonomic reasons.

GLOBAL DISTRIBUTION: South Africa.

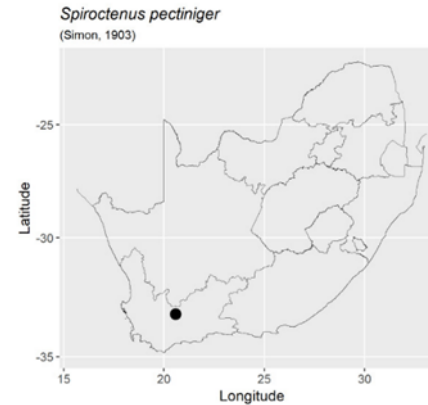
DISTRIBUTION IN SOUTH AFRICA: *Western Cape:* Matjiesfontein (-33.24, 20.58).

LIFESTYLE: Burrow leading into a larger chamber, out of which two side burrows branch. Entrance with silk lining slightly spread out on the soil surface made flush with the surface or forming a very short turret, covered with bits of plant material (Purcell 1904). Sampled from the Fynbos Biome.

CONSERVATION MEASURES: Threats to this species are unknown. Some more sampling is needed to collect adults and to determine the species' range.

TAXONOMIC NOTES: Not revised. Known only from juveniles, not illustrated. Carapace almost glabrous, anterior median and lateral eyes subequal in size; labium with 4–5 cuspules (Simon 1903).

See Purcell 1904 123



Spiroctenus pilosus Tucker, 1917

COMMON NAME: Smithfield Spiroctenus Wishbone Trapdoor Spider

NATIONAL STATUS: DDT

NATIONAL RATIONALE: A Free State endemic described by Tucker (1917) from Smithfield (EOO=4 km²; AOO=8 km²; 1405-1500 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.

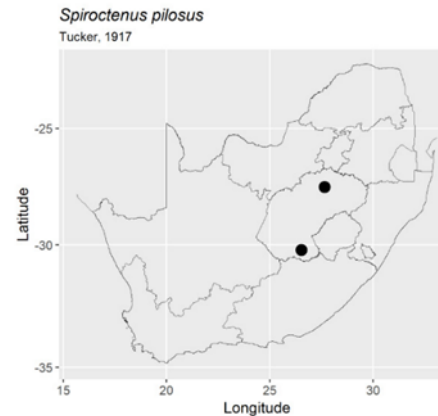
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: Free State: Edenville Farm Lusthof (-27.55, 27.66); Smithfield (-30.21, 26.53).

LIFESTYLE: Ground burrow-dweller, but nothing more is known about their behaviour. Sampled from the Grassland Biome.

CONSERVATION MEASURES: Threats to this species are unknown. Some more sampling is needed to collect the male and to determine the species' range.

TAXONOMIC NOTES: Not revised. Known only from the female, not illustrated. Carapace medium brown; cephalic portion infuscated, especially along median and lateral lines; slight infuscate radiations from fovea ; abdomen of specimen rather crushed; sternum and coxae of legs ochraceous brown, slightly redder anteriorly; labium dark; chelicerae red-brown below, darker above; femora of legs ochraceous, tinged olivaceous above, and from patella onwards ochraceous brown, becoming slightly redder distally. Cheliceral furrow with nine promarginal teeth and 9–10 denticles; labium with few spine-like hairs, maxillae with ca 30 cuspules. Total length 20 mm (Tucker 1907).



Spiroctenus pilosus female Photo ASD

Spiroctenus punctatus Hewitt, 1916

COMMON NAME: Zululand Spiroctenus Trapdoor Spider

NATIONAL STATUS: DDT

NATIONAL RATIONALE: A KwaZulu-Natal endemic described by Hewitt (1916), with the type locality only given as Zululand. The species was recollected in the Ngome State Forest (EOO= 4 km²; AOO= 4 km²; 1044 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.

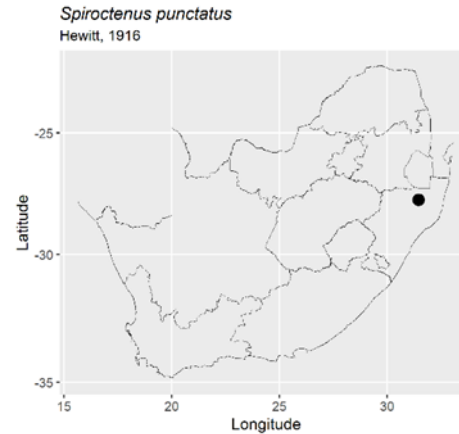
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *KwaZulu-Natal:* Ngome State Forest (-27.78,31.45).

LIFESTYLE: Ground burrow-dweller, but little more known about their behaviour. The specimens from Ngome State Forest were collected in pitfall traps (Van der Merwe et al. 1996) from the Savanna Biome (Foord et al. 2011).

CONSERVATION MEASURES: Threats to this species are unknown. Some more sampling is needed to collect the male and to determine the species' range.

TAXONOMIC NOTES: Not revised. Known only from the female. Carapace, chelicerae and femora of palps and legs dark olive-brown, patellae and more distal segments of palps and legs paler. Abdomen dark above with numerous small pale spots of irregular size. Cheliceral furrow with 11–12 promarginal teeth and six denticles; labium with 31 cusps. Total length 16 mm (Hewitt 1916).



Spiroctenus purcelli Tucker, 1917

COMMON NAME: Purcell's Spiroctenus Trapdoor Spider

NATIONAL STATUS: DDT

NATIONAL RATIONALE: A Western Cape endemic described Tucker (1917) and known only from the type locality, Simonstown (EOO=4 km²; AOO=4 km²; 125 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.

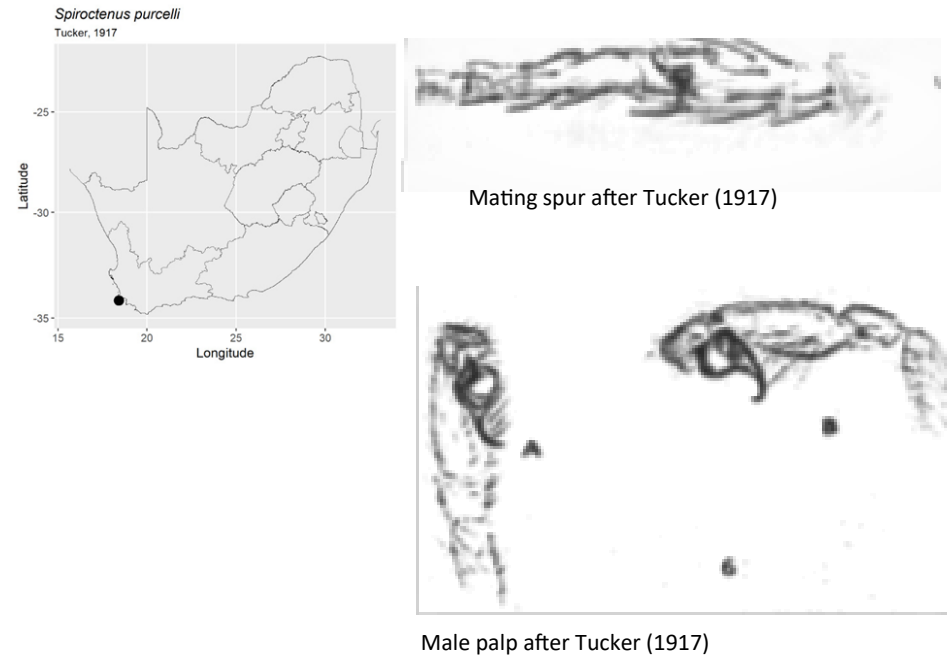
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Western Cape:* Simonstown (-34.19, 18.42)

LIFESTYLE: Ground burrow-dweller, but nothing more is known about their behaviour. Sampled from the Fynbos Biome.

CONSERVATION MEASURES: Threats to this species are unknown. Some more sampling is needed to collect the female and to determine the species' range.

TAXONOMIC NOTES: Not revised. Known only from the male. Carapace and upper surface of femora dark infused with brown; cephalic portion slightly darker, with a line down centre to fovea; under surface of femora lighter and tinged with olive; legs slightly browner and darker distally; palps lighter distally and tinged with olive; entire under surface ochraceous; upper surface of abdomen strongly infuscated, especially anteriorly; posteriorly, infuscation takes the form of a central dark line and 3 to 4 distinct oblique dark lines branching from it; sides of abdomen clear ochraceous; small dark spot on under abdomen below each posterior spinner. Total length 19.5 mm (Tucker 1917).



Spiroctenus sagittarius (Purcell, 1902)

COMMON NAME: Brandvlei Spiroctenus Trapdoor Spider

NATIONAL STATUS: DD

NATIONAL RATIONALE: A Western Cape endemic described by Purcell (1902) as *Herma-chastes sagittarius* from Brandvlei, Worcester (EOO=4 km²; AOO=4 km²; 242 m a.s.l.). Known only from the type locality. Some more sampling is needed to determine the species' range. Therefore, it is listed as Data Deficient.

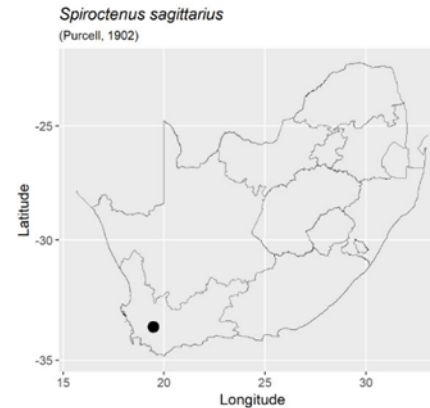
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Western Cape:* Worcester Brandvlei (-33.64, 19.47).

LIFESTYLE: Ground burrow-dweller, but nothing more is known about their behaviour. Sampled from the Fynbos Biome.

CONSERVATION MEASURES: Threats to this species are unknown. Some more sampling is needed to determine the species' range.

TAXONOMIC NOTES: Not revised. Known from both sexes. Male pale ochraceous; the cephalic portion of the carapace with a median and two lateral, well-marked, fusco-olivaceous bands; the under side of the sternum, coxae, and especially of the posterior femora very pale, almost white; the abdomen coloured as in *H. lightfooti*, except that the black of the upper surface forms a series of well-marked, obliquely transverse stripes, separated by broader parallel bands of pale yellow and united along the median line. Female colour as in male, but the carapace faintly infuscated, excepting on the pale ochraceous band on each side of the dark median stripe of the cephalic portion; chelicerae also for the most part weakly infuscated; under side pale ochraceous; femora of the legs often faintly greenish. Total length male 10.5 and female 19.5 mm (Purcell 1902).



Spiroctenus schreineri (Purcell, 1903)

COMMON NAME: Schreiner's Spiroctenus Trapdoor Spider

NATIONAL STATUS: DDT

NATIONAL RATIONALE: A South African endemic described by Purcell (1903) as *Herma-chastes schreineri* from farms near Hanover in the Northern Cape. It is known from two provinces and protected in the Karoo National Park (EOO=1 153 km²; AOO=16 km²; 1212-1402 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.

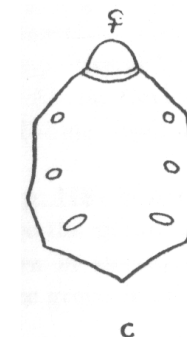
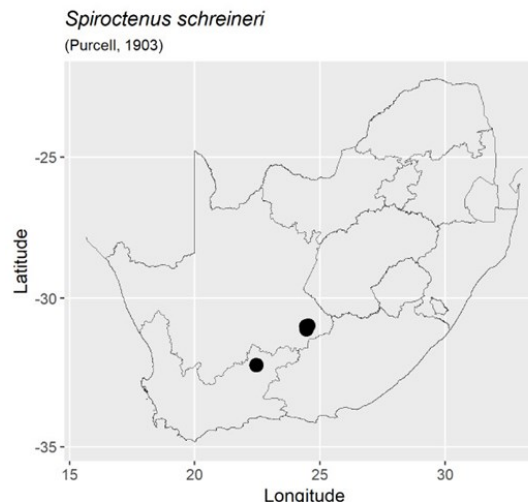
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: **Northern Cape:** Hanover (-30.94, 24.53); Poortjiesfontein (-30.97, 24.45); Vlagkop (-31.07, 24.46). **Western Cape:** Karoo National Park (-32.28, 22.46)

LIFESTYLE: Ground-dwellers that live in burrows that are about 10-15 cm deep. The burrow is straight, or sometimes the hole has a forked entrance and a blind side chamber, but this is apparently exceptional. The turret is decorated with sticks and grass seeds bound together by webbing and projecting for a short distance above the level of the surrounding ground. The top edge of the turret is irregular. The hole is open at the top, although occasionally a fine film of web stretched across the top of the turret (Purcell 1903). Sampled from the Nama Karoo Biome.

CONSERVATION MEASURES: Threats to this species are unknown. Some more sampling is needed to collect the male and to determine the species' range.

TAXONOMIC NOTES: Not revised. Known only from the female. Female carapace pale yellowish or greenish yellow, weakly infuscated in places, particularly along the lateral margins of the cephalic area; femora of legs pale greenish yellow, the remaining distal segments yellow, the patellae and tibiae often bright yellow; abdomen pale yellowish, the upper surface brownish black in anterior half, the posterior part strongly marked with the usual tree-pattern, the posterior bars not reaching the ventral surface in front of the spinners; ventral surface of body pale yellowish, the abdomen generally with a brownish black spot in front of each lateral spinneret. Total length 23 mm (Purcell 1903).



Spiroctenus tricalcaratus (Purcell, 1903)

COMMON NAME: Stompneus Spiroctenus Trapdoor Spider

NATIONAL STATUS: DDT

NATIONAL RATIONALE: A Western Cape endemic described by Purcell (1903) as *Herma-chastes tricalcaratus* from Stompneus at St. Helena Bay. Sampled from several localities, but all collections were made in the early 1900's (EOO=6 256km²; AOO=16 km²; 109-206 m a.s.l.). The current status of the species remains obscure and 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.

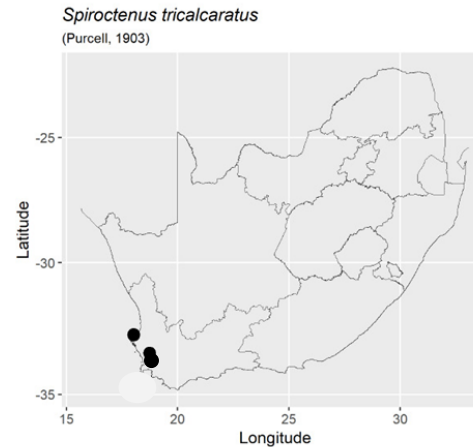
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Western Cape:* Malmesbury (-33.46, 18.74); Soldaten Post (-32.78, 18.03); St. Helena Bay Stompneus (-32.77, 18.030; Steenberg's Cove (-34.80,18.37)

LIFESTYLE: Ground burrow-dweller, but nothing more is known about their behaviour. Sampled from the Fynbos Biome.

CONSERVATION MEASURES: Threats to this species are unknown but some more sampling is needed to collect the female and to determine the species' range.

TAXONOMIC NOTES: Not revised. Known only from the male. Colour pale ochraceous; carapace with faint greenish or fuscous patches radiating inwards from the margins, the cephalic portion yellowish, with a dark stripe along middle and one at each lateral margin; abdomen with the median black or blackish brown stripe abbreviated posteriorly and widened anteriorly into a large patch and flanked on each side by a row of short, obliquely transverse, similarly coloured stripes, which do not unite with the median stripe; under surface of abdomen with a dark spot a little in front of the larger spinners; the sides with a larger spot just above these spinners but otherwise without spots or stripes; distal part of first leg reddish. Total length 11- 14 mm (Purcell 1903).



Spiroctenus validus (Purcell, 1902)

COMMON NAME: Breederiver Spiroctenus Trapdoor Spider

NATIONAL STATUS: DD

NATIONAL RATIONALE: A Western Cape endemic described by Purcell (1902) as *Hermachastes validus* from Ashton, Bonnie Vale farm near Bushman's Drift on the Breede River (EOO=40 km²; AOO=12 km²; 108-167 m a.s.l.). The species is under-sampled and some more collecting is needed to determine the species' range. Therefore, it is listed as Data Deficient.

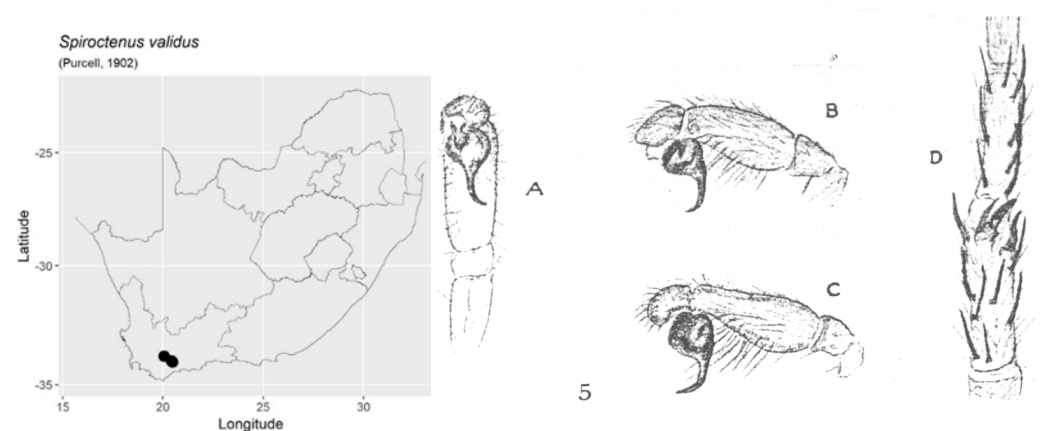
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: Western Cape: Ashton Bonnie Vale farm near Bushman's Drift on Breede River (-33.83, 20.06); Swellendam (-34.02, 20.42); Bontebok National Park (-34.0708, 20.4756).

LIFESTYLE: Ground burrow-dwellers making a burrow with a turret of grass around the entrance (Tucker 1917). Sampled in the Fynbos Biome.

CONSERVATION MEASURES: Threats to this species are unknown. Protected in the Bontebok National Park (Dippenaar-Schoeman 2020a) but more collecting is needed to determine the species' range.

TAXONOMIC NOTES: Not revised. Known from both sexes. Inner side of tibia 1 with a pair of distal tubercles each bearing 1-2 stout spurs; tibia 1 also strongly incrassated at the apex, very thick; all tarsi thickly and broadly scopulate. Colour olivaceous; carapace infusate, legs more yellowish and femora not so dark; tibiae and metatarsi yellow brown; infusate spots above spinners on ventral surface are large. Total length male 16 mm female 25.5 mm (Purcell 1902).



Male palp and leg 1 after Purcell (1902)

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