

South African National Survey of Arachnida Photo Identification Guide Araneidae Part 2 E-Nemo 2022 version 2: 1-61

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GENUS ERIOVIXIA Archer, 1951

The genus *Eriovixia* described by Archer (1951) is known from 22 species but only three species are reported from Africa (World Spider Catalog 2022) of which one has recently been recorded from South Africa (Dippenaar-Schoeman 2014; Dippenaar-Schoeman et al. 2021) and Swaziland for the first time.

COMMON NAMES: Eriovixia Araneid Spiders

TYPE SPECIES: Eriovixia rhinura (Pocock, 1900)

MORPHOLOGY: They are small spiders with a total length of 3-6 mm. The carapace as wide as long; cephalic region raised bearing dense setae; eyes on tubercles is more distinct in males. The abdomen is almost round, save for the pronounced easily visible tail like extension. It varies from small humps to pointed extensions, usually brownish grey to dark brown; hairy. Ventrally abdomen with yellow spots. In males the abdomen is decorated with setae and white spots. Legs are short and grouped together around the carapace. In males legs with long spines (Dippenaar-Schoeman 2014; Dippenaar-Schoeman et al. 2021).

LIFE STYLE: They make orb-webs between vegetation. The bridge line usually very long.

TAXONOMY: African species not yet revised.





Eriovixia excelsa female from Dinokeng Photo P. Webb





Eriovixia excelsa male from Bergpan Photos P. Webb

Eriovixia excelsa (Simon, 1889)

COMMON NAME: Hump back Araneid Spider / Tailed Araneid Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: A species described by Simon (1889) as *Glyptogona excelsa*. The species has a wide global distribution. It has recently been recorded from South Africa and Swaziland for the first time. In South Africa recorded from four provinces. (EOO= 53 505 km²; AOO= 36 km²; 148-1444 m a.s.l.). Due to its wide geographical range, it is listed Least Concern.

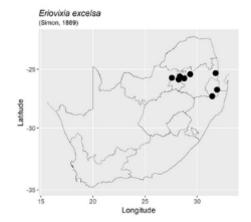
LIFE STYLE: They make orb-webs between vegetation usually with a very long bridge line. The species was sampled from the Grassland and Savanna biomes. Heron (2016) observed a mimetic relationship between the beetle *Cassida calvaria* and *Eriovixia excelsa* in the Palmiet Nature Reserve at Westville near Durban in October 2010. They were of similar size, colouring and body patterns (Dippenaar-Schoeman 2014; Dippenaar-Schoeman et al. 2021; Heron 2016).

GLOBAL DISTRIBUTION: India, Pakistan, China, Taiwan, Philippines, Indonesia, and Africa: Swaziland and South Africa.

DISTRIBUTION SOUTH AFRICA: *Gauteng:* Roodeplaatdam Nature Reserve (-25.64, 28.36); Roodeplaat Research Station (-25.66, 28.35); Irene Veld (field opposite Gem Village) (-25.89, 28.23); Ezemvelo Nature Reserve (-25.80, 28.77). *Mpumalanga*: Nelspruit (-25.34, 31.77); Loskopdam, Farm Ranch 2D (-25.43, 29.33). *North West:* Mooi Nooi (-25.75, 27.57). *KwaZulu-Natal:* Ndumo Game Reserve (-27.33, 31.45).

CONSERVATION MEASURES: Protected in the following areas: Roodeplaatdam Nature Reserve, Ezemvelo Nature Reserve and Ndumo Game Reserve. No conservation actions are recommended.

TAXONOMIC NOTES: Species known from both sexes.





Eriovixia excelsa male in web Photo P. Webb



After Archer (1951)



Eriovixia excelsa female Klein Kariba Photo P. Webb



Eriovixia excelsa female Ezemvelo Photo P. Webb

GENUS GASTERACANTHA Sundevall, 1833

The genus *Gasteracantha* Sundevall, 1833 is represented by 101 species and subspecies (World Spider Catalog 2020). Four species are known from South Africa.

COMMON NAMES: Kite spiders

TYPE SPECIES: Gasteracantha cancriformis (Linnaeus, 1758)

MORPHOLOGY: Kite spiders are brightly coloured with striking patterns. The carapace is usually as broad as it is long. The spiders have hard, shell-like flattened bodies. The abdomen is wider than long. Dorsally the spiders are decorated with modified spines that differ in length and shape between the species. Also dorsally the abdomen has a number of small elongate sigilla, usually dark-coloured. The male's abdomen is without spines. The venter of the abdomen has a bulge. Variation in colour and shape occur between the species. The immature spiders differ from the adults in colour (Dippenaar-Schoeman 2014).

LIFE STYLE: The web of gasteracanthines is a complete orb, made either vertically or on an inclined plane, with an open hub, many radii and viscid spirals. A distinct feature is the occurrence of series of flocculent tufts of silk attached either to the radii or to the bridge and foundation lines. The tufts consist of a mass of thin threads. The spider hangs in the middle of the web in the open hub. The web is made between trees and shrubs, occasionally high up between branches in tall trees. Although several papers have been published on their taxonomy and distribution, very little is known about the natural history of the Afrotropical species (Dippenaar-Schoeman & Jocqué 1997) The orb-webs are usually made high in trees or tall shrubs above the observer's eye level. The bridge line is frequently longer than the orb part. It gives the impression that the spider is floating in space. The spiders are active during the day and do not remove their webs (Dippenaar-Schoeman & Van den Berg 2010; Dippenaar-Schoeman & Haddad 2013).

TAXONOMY: No recent revisions.



Gasteracantha milvoides female Photo J. van Zyl



Gasteracantha versicolor female Photo K. Geldenhuys



Gasteracantha versicolor female in web Photo A. Jones

Gasteracantha falcicornis Butler, 1873

COMMON NAME: Long Wing Kite Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: An African endemic described by Butler (1873). The species is recorded from five African countries. In South Africa the species is known from two provinces (EOO=43523 km²; AOO=40 km²; 4-750 m a.s.l.). Due to its wide geographical range the species is listed as Least Concern.

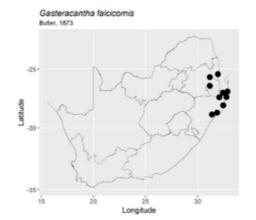
LIFE STYLE: Orb-web dweller. The webs are usually made high in trees or tall shrubs above the observer's eye level. The bridge line is frequently longer than the orb part. It gives the impression that the spider is floating in space. The web is sometimes decorated with tufts of silk. The spiders are active during the day and do not remove their webs. Sampled from two biomes (Foord et al. 2011).

GLOBAL DISTRIBUTION: Malawi, Tanzania, Zambia, Swaziland and South Africa.

DISTRIBUTION SOUTH AFRICA: *KwaZulu-Natal*: Empangeni (-28.72, 31.88); iSimangaliso Wetland Park: Fanie's Island (-28.1, 32.45), Kosi Bay Nature Reserve (-26.93, 32.87), Sodwana Bay National Park (-27.4, 32.76), Lake Sibaya (-27.35, 32.7); Jozini (-27.42, 32.07); Ngoye Forest (-28.88,31.38); Tembe Elephant Park (-26.94, 32.47). *Mpumalanga*: Avoca (-25.68, 31.17); Komatipoort (-25.43, 31.94).

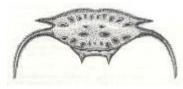
CONSERVATION MEASURES: Protected in the following areas: Kosi Bay Nature Reserve, Ngoye Forest and Tembe Elephant Park. No conservation actions are recommended.

TAXONOMIC NOTES: Last revised by Emerit (1974). Known from the female.





Gasteracantha falcicornis female in web Photo K. Braun



Habitus after Emerit (1974)



Gasteracantha falcicornis female from Sodwana Bay Photo A. Leroy



Gasteracantha falcicornis female from Swaziland Photo K. Braun

Gasteracantha milvoides Butler, 1873

COMMON NAME: Medium Wing Kite Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: An African endemic described by Butler (1873) from South Africa (no exact locality). Known from six African countries. In South Africa the species is known from four provinces (EOO= 325 208 km²; AOO= 108 km²; 5-1341 m a.s.l.). Due to its wide geographical range, it is listed as Least Concern.

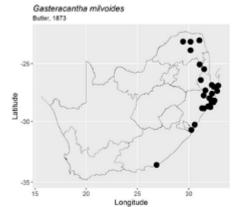
LIFE STYLE: Orb-web dweller. A species commonly found in the warmer tropical regions. The orb-webs are usually made in trees or tall shrubs, from waist height to above the observer's eye level. The bridge line is frequently longer than the orb part. It gives the impression that the spider is floating in space. The web is sometimes decorated with tufts of silk. The spiders are active during the day and do not remove their webs. Sampled from the Forest, Indian Coastal Belt, Grassland (Haddad et al. 2013), Savanna and Thicket biomes (Foord et al. 2011).

GLOBAL DISTRIBUTION: Central African Republic, Kenya, Namibia, Zimbabwe, Swaziland and South Africa.

DISTRIBUTION SOUTH AFRICA. *Eastern Cape*: Fish River (-33.6, 26.85). *KwaZulu-Natal*: Dukuduku Forest Station (-28.37, 32.23); Empangeni (-28.72, 31.88); Enseleni Nature Reserve (-28.68, 32.05); Entumeni Nature Reserve (-28.88, 31.29); Eshowe (-28.89, 31.47); Hluhluwe Nature Reserve (-28.09, 32.1); iSimangaliso Wetland Parks: Cape Vidal (-28.16, 32.56), Kosi Bay Nature Reserve (-26.93, 32.87), Mkuzi Game Reserve (-27.63, 32.25), Sodwana Bay National Park (-27.4, 32.76), St. Lucia (-28.36, 32.41); Ndumo Game Reserve (-26.87, 32.24); Ngome State Forest (-27.78, 31.45); Nyala Game Reserve (-28.72, 31.88); Oribi Gorge Nature Reserve (-30.71, 30.26); Pongola (Farm Vergeval) (-27.35, 31.61); Richards Bay (15 km N) (-28.78, 32.1); Tembe Elephant Park (-26.94, 32.47); Valley Bush (-28, 32); Vernon Crookes Nature Reserve (-30.27, 30.57). *Limpopo:* Kruger National Park (-22.93, 31.02); Lhuvhondo Nature Reserve (-23.03, 29.45); Ratombo Forest (-23.06, 30.17); Lekgalameetse Nature Reserve (-23.82, 30.16); *Mpumalanga*: Malelane (-25.49, 31.5); Burgers Hall (-25.08, 31.06).

CONSERVATION MEASURES: Protected in >18 protected areas such as Ndumo Game Reserve (Haddad et al. 2006); Kruger National Park (Dippenaar-Schoeman & Leroy 2003) and Lekgalameetse Nature Reserve (Foord et al. 2016). No conservation actions are recommended.

TAXONOMIC NOTES: Last revised by Emerit (1974). Known from both sexes.

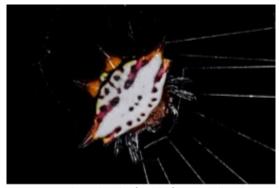




Gasteracantha milvoides female from Nelspruit Photo A. Louw



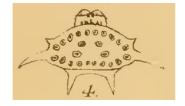
Gasteracantha milvoides female Photo P. Webb



Gasteracantha milvoides female from Sandkraal Photo J. van Zyl



Gasteracantha milvoides female from Opathe NR Photo E. Klimsa



After Emerit (1974).

Gasteracantha sanguinolenta C. L. Koch, 1844

COMMON NAME: Short-Wing Kite Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: An African endemic described by C. L. Koch (1844) from South Africa with type locality only Cap der guten Hoffnung. The species is known from several countries throughout Africa. In South Africa it is known from eight of the nine provinces including nine protected areas (EOO=759 576 km²; AOO=116 km²; 6-1 556m a.s.l.). Due to its wide global distribution, it is listed as being of Least Concern.

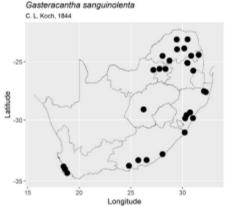
LIFE STYLE: Orb-web dweller. A species commonly found in the warmer tropical regions.. The orb-web are usually made high in trees or tall shrubs above the observer's eye level. The bridge line is frequently longer than the orb part. It gives the impression that the spider is floating in space. The web is sometimes decorated with tufts of silk. The spiders are active during the day and do not remove their webs (Dippenaar-Schoeman 2014). Sampled from all the floral biomes except from the Nama and Succulent Karoo biomes (Haddad et al. 2013; Foord et al. 2011).

GLOBAL DISTRIBUTION: Known throughout Africa, São Tomé, Yemen, Seychelles, Socotra, Swaziland and South Africa.

DISTRIBUTION SOUTH AFRICA: *Eastern Cape*: Addo Elephant National Park (-33.32, 25.72): Baviaanskloof Nature Reserve (-33.76, 24.81); Cintsa (-32.83, 28.06); Grahamstown (Kowa) (-33.3, 26.52). Free State: Bloemfontein (-29.11, 26.22). Gauteng: Roodeplaatdam Nature Reserve (-25.64, 28.36). KwaZulu-Natal: Durban (-29.85, 31.01); Glen Bush, Richmond (-29.86, 30.26); Noodsberg (-29.37, 30.73); Pietermaritzburg (-29.6, 30.38); Port Edward (-31.04, 30.21); Ubombo (-27.56, 32.08). *Limpopo*: Alma (-24.49, 28.07); Kampersrus (-24.48, 30.83); Lhuvhondo Nature Reserve (-23.03, 29.45); Polokwane Nature Reserve (-23.9, 29.47); Springbok Flats (Tuinplaas) (-24.9, 28.73); Roodewal Forest (-23.02, 30.03); Lekgalameetse Nature Reserve (-23.82, 30.16); Kruger National Park (-22.93, 31.02). *Mpumalanga*: Barberton (-25.79, 31.04); Goedehoop Forest (-25.02, 30.39); Wagon Drift (-25.11, 30.49). North West: Brits (-25.62, 27.77). Western Cape: Bergvliet (-34.03, 18.63); Hangklip, Pringle Bay (-34.34, 18.83); Table Mountain National Park (-33.82, 18.48).

CONSERVATION MEASURES: Protected in >10 protected areas such as Lhuvhondo Nature Reserve (Foord et al. 2002); Kruger National Park (Dippenaar-Schoeman & Leroy 2003); Polokwane Nature Reserve (Dippenaar et al. 2008) and Lekgalameetse Nature Reserve (Foord et al. 2016). No conservation actions are recommended.

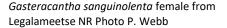
TAXONOMIC NOTES: Last revised by Emerit (1974). Known from both sexes.





Gasteracantha sanguinolenta female from Mooinooi Photo P. Webb







Gasteracantha sanguinolenta female from Montagu Photo W. Jubber



After Koch (1844)

Gasteracantha versicolor (Walckenaer, 1842)

COMMON NAME: Common Kite Spider

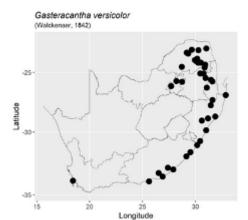
CONSERVATION STATUS: LC

NATIONAL RATIONALE: An African endemic described by Walckenaer (1842) as *Plectana versicolor*. Known from several countries throughout Africa. In South Africa the species is known from six provinces (EOO=790 063 km²; AOO=156 km²; 7-1710 m a.s.l.). Due to its wide geographical distribution, it is listed as Least Concern.

LIFE STYLE: Orb-web dweller. A species commonly found in the warmer tropical regions. They usually make their orb-webs high between trees or tall shrubs above the observer's eye level. The bridge line is frequently longer than the orb part. It gives the impression that the spider is floating in space. The web is sometimes decorated with tufts of silk. The spiders are active during the day and do not remove their webs. Sampled from the Fynbos, Forest, Grassland and Savanna biomes (Haddad et al. 2013; Foord et al. 2011). The species was also sampled from citrus orchards (Dippenaar-Schoeman et al. 2013).

GLOBAL DISTRIBUTION: Widespread throughout Africa.

DISTRIBUTION SOUTH AFRICA: Eastern Cape: East London (-33.01, 27.9); Coffee Bay (-31.97, 29.14); Grahamstown Dassie Krantz (-33.3, 26.52); King William's Town Pirie Forest (-32.88, 27.39); Port Alfred (-33.58, 26.89); Port Elizabeth (-33.95, 25.61); Port St. Johns (-31.63, 29.53). Gauteng: Bronkhorstspruit Tiegerpoort (-25.8, 28.74); Pretoria/ Tshwane Wonderboom-South (-25.74, 28.19); Randfontein (-26.17, 27.7). KwaZulu-Natal: Durban (-29.85, 31.01); iSimangaliso Wetland Park: Kosi Bay Nature Reserve (-26.93, 32.87); Port Shepstone (-30.74, 30.44); Umtamvuna Nature Reserve (-31.06, 30.17); Greytown (-29.05 30.6); Ngome State Forest (-27.78,31.45); Nyala Game Reserve (-28.72, 31.88); Pongola, Farm Vergeval, district Ngotsche (-27.35, 31.61); Sungulwane Game Reserve (-28.87, 31.18); Hluhluwe Nature Reserve (-28.09, 32.10). Limpopo: Kruger National Park (-22.93, 31.02); Dendron, Farm Amsterdam (-23.37, 29.32); Haenertsburg (-23.94, 29.95); Hoedspruit Hippo Pools (-24.34, 30.93); Lekgalameetse Nature Reserve, Farm Malta (-24.17, 30.25); Levubu (-23.08, 30.28); Makgokolo Game Reserve (-24.17, 30.52); Mara Mara (-23.04, 29.66); Mosdene Nature Reserve Naboomspruit (-24.52, 28.7); New Agatha Forest (-24.03, 30.08); Swadini Nature Reserve Swadini, Blyde River Resort (-24.34, 30.93); Tzaneen (-23.82, 30.16); Westphalia (-23.3, 29.18); Wolkberg Nature Reserve Haenertsburg (-23.94, 29.95).





Gasteracantha versicolor female Photo K. Geldenhuys



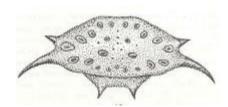
Gasteracantha versicolor female ventral View Photo P. Webb



Gasteracantha versicolor female from Dullstroom Photo P. Webb



Gasteracantha versicolor female from Kampferust Photo P. Webb



After Emerit (1974)

Gasteracantha versicolor (continued)

Mpumalanga: Mariepskop (-24.58, 30.87); Nelspruit (-25.47, 30.96); Bergvliet Forest Station (-25.1, 30.78); Burgers Hall (-25.76, 31.6); Buffelspruit, Farm Amo (-25.63, 31.47); Lydenburg. (-25.09, 30.46). *Western Cape:* Table Mountain National Park: Newlands Forest (-33.91, 18.42).

CONSERVATION MEASURES: Protected in >10 protected areas such as Kruger National Park (Dippenaar-Schoeman & Leroy 2003); Lekgalameetse Nature Reserve (Foord et al. 2016) and Table Mountain National Park. No conservation actions are recommended.

TAXONOMIC NOTES: Known from both sexes (Emerit 1974).



Gasteracantha versicolor female from Hluhluwe Nature Reserve Photo E. Klimsa



Gasteracantha versicolor female Photo L. Oates

GENUS GASTROXYA Benoit, 1962

An African endemic genus described by Benoit (1962) and known from four species (World Spider Catalog 2020). Only *Gastroxya benoiti* is known from South Africa

COMMON NAMES: Spotted Kite Spiders

TYPE SPECIES: Gastroxya schoutedeni Benoit, 1962

MORPHOLOGY: Carapace wider than long covered by white setae; fovea longitudinal; eyes in two rows; lateral eyes closely spaced near lateral edge; cheliceral furrow with two rows of teeth; sternum with curved tip. Dorsum of abdomen with a double row of 18 marginal sigilla; four sigilla form a trapezoid medially with double row on posterior border; ventrally without protuberances. Epigyne a longitudinal crest flanked by two deep round indentations. Femur of male palp with strong tooth at base.

LIFE STYLE: Nothing is known about their behaviour.

TAXONOMY: Genus not revised.



Gastroxya benoiti Photo N. Bay

Gastroxya benoiti Emerit, 1973

COMMON NAME: Benoit's Spotted Kite Spider

CONSERVATION STATUS: DDT

NATIONAL RATIONALE: A South African endemic species described in 1973 as *Gastroxya benoiti* from Port St Johns. The species has a restricted distribution and is present only known from two specimens sampled in the Eastern Cape and KwaZulu-Natal. The species is rare and under collected. Some more sampling is needed to collect the male and to determine the species' range. Therefore listed as Data Deficient for Taxonomic reasons.

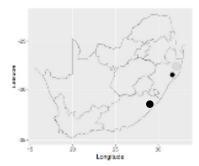
LIFE STYLE: Not known.

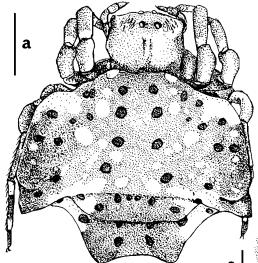
GLOBAL DISTRIBUTION: South Africa.

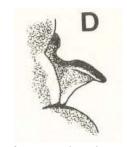
DISTRIBUTION SOUTH AFRICA: *KwaZulu-Natal*: Durban (-29.85, 31.01). *Eastern Cape:* Port St. Johns, Mouth of the Umgazi (-31.63, 29.53).

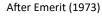
CONSERVATION MEASURES: Some more sampling is needed to collect the male and to determine the species' range.

TAXONOMIC NOTES: Not revised.











Gastroxya benoiti Photo N. Bay

GENUS GEA C. L. Koch, 1843

The genus *Gea* C.L. Koch, 1843 is known from 12 species with four species recorded from Africa (World Spider Catalog 2020).

COMMON NAMES: Gea Orb-Web Spiders

TYPE SPECIES: Gea spinipes C.L. Koch, 1843

MORPHOLOGY: Size: TL female 4-6 mm, male 3-4.5 mm. *Gea* differs from *Argiope* in having the anterior eyes evenly spaced. It differs from most araneid genera by having the posterior eye row strongly procurved and a low thoracic region of the carapace. *Gea* specimens are smaller than *Argiope* and have larger posterior median eyes. In the females the eyes of the posterior eye row are almost equally spaced, whereas in *Argiope*, the median eyes are closer to each other than to the laterals. Abdomen shield shaped with lobes on sides; color of the abdomen is variable; there may be transverse lines or a dark folium. Another character that separates *Gea* from other genera is the modified first tibia of the male that is curved and armed with macro-setae.

LIFE STYLE: According to Simon (1895), they do not make a stabilimentum but it has been observed in webs of some webs.

TAXONOMY: African species not revised.



Gea infuscata female Photo J. Boyce



Front leg after Levi

Gea infuscata Tullgren, 1910

COMMON NAME: Gea Orb-Web Spiders

CONSERVATION STATUS: LC

NATIONAL RATIONALE: An African endemic described by Tullgren (1910) from Tanzania. The species is known from five African countries. However it is possibly under collected and is suspected to occur in more countries in-between. In South Africa, it is known from five provinces (EOO= 641 980km²; AOO=72km²; 1-1323 m a.s.l.). Due to its wide geographical distribution, it is listed as Least Concern.

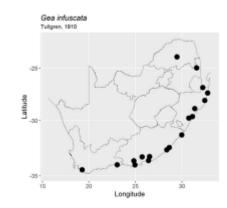
LIFE STYLE: The spider makes an orb-web with a round zigzag stabilimentum, giving it a doily appearance. Sampled from the Fynbos, Forest and Savanna biomes. (Foord et al. 2011).

GLOBAL DISTRIBUTION: Tanzania, Angola, Botswana, Sudan and South Africa.

DISTRIBUTION SOUTH AFRICA: Eastern Cape: Jeffrey's Bay (-34.04, 24.94); Kei River Mouth (-32.68, 28.37); Keurkloof (Baviaanskloof) (Farm Ferndale) (-33.68, 24.83); Mazeppa Bay (-32.47, 28.64); Addo Elephant National Park (-33.32, 25.72); Alexandria (-33.65,26.4); Grahamstown (-33.3, 26.52); Mkhambathi Nature Reserve (-31.32,29.97) KwaZulu-Natal: Ndumo Game Reserve (-26.87, 32.24) iSimangaliso Wetland park, Sodwana Bay (-27.4,32.76); iSimangaliso Wetland park, Fanie's Island (-28.1, 32.45); La Mercy (-29.63, 31.13); Ndumo Game Reserve Pongola River (-26.87,32.24); Ngoye Forest (-28.88, 31.38); Alverstone near Hillcrest (-29.77, 30.73); Tembe Elephant Park (-27.0337, 32.4245). Limpopo: Polokwane Nature Reserve (-23.9, 29.47); Tshipise, Farm Alicedale (-22.62, 30.14). *Mpumalanga:* Sabi River Banks (-24.98, 31.58). *Western Cape:* Fisherhaven, Hermanus (-34.47, 19.27); Knysna (-34.03,23.03).

CONSERVATION MEASURES: Protected in the following reserves such as Addo Elephant National Park (Dippenaar-Schoeman et al. 2020); Mkhambathi Nature Reserve (Dippenaar -Schoeman et al. 2011); Ndumo Game Reserve (Haddad et al. 2006); Tembe Elephant Park (Haddad et al. 2009) and Polokwane Nature Reserve (Dippenaar et al. 2008). No conservation actions are recommended.

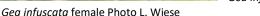
TAXONOMIC NOTES: Not revised. Known from both sexes.











Gea infuscata female Photo J. Wilkinson







Eoigyne Photo C. Haddad

UNDETERMINED SPECIES

GENUS *GEA* species

Gea transversovittata Tullgren, 1910 to be confirmed











Maybe new Gea from Lekgalameetse NR P. Webb











Maybe new Gea from Tembe Elephant Park D. MacFyden

Ndumo L. de Beer

Maybe new Ndumu GR

Hoedspruit

GENUS HYPSACANTHA Dahl, 1914

A monotypic African genus described by Dahl (1914). It was removed from the synonymy of *Gasteracantha* Sundevall, 1833 by Emerit (1973). (World Spider Catalog 2022).

COMMON NAMES: Hypsacantha Kite Spiders

TYPE SPECIES: Hypsacantha crucimaculata (Dahl, 1914)

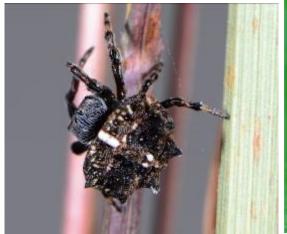
MORPHOLOGY: Size: TL female 6-7 mm, male 3-5 mm. Carapace broad; dark brown clothed with strong white setae; median eyes on small tubercles; lateral eyes near the border of the carapace. Abdomen is hard and leathery; anterior edge is slightly rounded with two small tubercles; six sigilla present at the base of spine II; abdomen slightly slopes to the rear, with two pairs of small tubercles, the medial pair pointing upwards. Legs are short and the same colour as the carapace.

LIFE STYLE: Nothing is known about their behaviour.

TAXONOMY: Last discussed by Emerit (1973). Known from both sexes.



Hypsacantha crucimaculata from Lekgalameetse NR Photo P. Webb



Hypsacantha crucimaculata from Lekgalameetse NR Photo P. Webb



Hypsacantha crucimaculata from Bontebok NP Photo E. Klimsa

Hypsacantha crucimaculata (Dahl, 1914)

COMMON NAME: Hypsacantha Kite Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: An African endemic described by Dahl (1914) as *Gasterantha crucimaculata* from Tanzania. The species is known from six African countries, but it is possibly under collected and is suspected to occur in more countries in between. In South Africa, the species is known from six provinces (EOO=433 711km²; AOO=40km²; 54 -1513 m a.s.l.). Due to its wide geographical range, the species is listed as Least Concern.

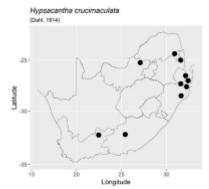
GLOBAL DISTRIBUTION: Central African Republic, Democratic Republic of the Congo, Mozambique, Tanzania Zimbabwe and South Africa.

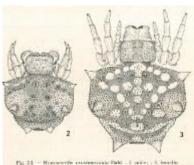
DISTRIBUTION SOUTH AFRICA: *Eastern Cape*: Mountain Zebra National Park (-32.24, 25.43). *KwaZulu-Natal*: iSimangaliso Wetland park, Mkuze Game Reserve (-27.63, 32.25); Ophathe Game Reserve (-28.52, 31.66); Ndumo Game Reserve (-26.544,32.155); Tembe Elephant Park (-27.0337, 32.4245); Pongola, Farm Vergeval, district Ngotsche (-27.35, 31.61). *Limpopo*: Makalali Nature Reserve (-24.34, 30.93); Lekgalameetse Nature Reserve, Farm Malta (-24.17, 30.25). *Mpumalanga*: Kruger National Park (Skukuza) (-24.99, 31.59). *North West*: Pilanesberg Nature Reserve (-25.25, 27.08). *Western Cape*: Karoo National Park Stalshoek (-32.28, 22.46); Bontebok National Park (-34.07, 20.45).

LIFE STYLE: They make an orb-web but nothing more is known about their behaviour. Sampled from the Nama Karoo and Savanna biomes (Foord et al. 2011).

CONSERVATION MEASURES. There are no known threats to the species. Sampled from the following protected areas such as Ophathe Game Reserve (Haddad & Dippenaar-Schoeman 2015); Makalali Nature Reserve (Whitmore et al. 2002); Karoo National Park (Dippenaar-Schoeman et al. 1999) and Kruger National Park (Dippenaar-Schoeman & Leroy 2003).

TAXONOMIC NOTES: Revised by Emerit (1973). Known from both sexes.





Hypsacantha crucimaculata female after Emerit (1973)



Hypsacantha crucimaculata male Photo P. Webb





Hypsacantha crucimaculata from Lekgalameetse NR Photo P. Webb

GENUS HYPSOSINGA Ausserer, 1871

The genus *Hypsosinga* was described by Ausserer (1871) and it is known from 18 species and three subspecies. Several species have a world-wide distribution of which two presently are known from Africa (World Spider Catalog 2020).

COMMON NAMES: Hypsosinga False Pyjama Spiders

TYPE SPECIES: Hypsosinga sanguinea (C. L. Koch, 1844)

MORPHOLOGY: The genera *Singa* and *Hypsosinga* comprise small spiders identifiable by a shiny body decorated with spots or lines. *Hypsosinga* has the carapace smooth and rather wide in front, wider than the eye area; there is no thoracic depression, or sometimes only a small longitudinal black mark in the male; integument shiny; eye area usually black; posterior median eyes usually their own diameter apart. *Hypsosinga* differs from *Singa* in having the posterior median eyes the largest; ocular quadrangle is wider behind than in front, or rectangular. *Abdomen* in *Hypsosinga* unlike that of *Singa* tends to be oval, widest in the middle, with either two dorsal longitudinal bands or four dark spots. The epigynum differs from those of both *Singa* and *Araneus* in lacking a scape (Dippenaar-Schoeman 2014).

LIFE STYLE: They live on low plants where their small orb-webs frequently go unnoticed. *Hypsosinga* make a complete orb-web usually with a retreat. They are frequently sampled in sweep nets in grassland.

TAXONOMY: African species not revised.



Hypsosinga lithyphantoides female Photo P. Webb



Hypsosinga pygmaea female Photo P. Webb



Hypsosinga holzapfelae female Photo P. Webb



Hypsosinga sp. female Photo P. Webb

Hypsosinga holzapfelae (Lessert, 1936)

COMMON NAME: Spotted Araneus Hairy Field Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: An African endemic described from Mozambique by Lessert (1936). It has since been sampled from three African countries. This species is possibly under collected and is suspected to occur in the countries in-between. In South Africa, the species is known from five provinces (EOO=195 565 km²; AOO=60 km²; 78-1556 m a.s.l.). Due to its wide geographical range the species is listed as Least Concern.

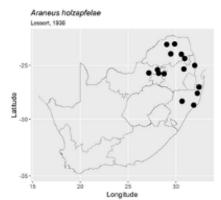
LIFE STYLE: Orb-web spiders making their webs in vegetation. Sampled from the Savanna (Foord et al. 2011) and Thicket biomes. The species was also sampled from macadamia (Dippenaar-Schoeman et al. 2001), avocado orchards (Dippenaar-Schoeman et al. 2005) and tomatoes (Dippenaar-Schoeman et al. 2013).

GLOBAL DISTRIBUTION: Mozambique, Kenya and South Africa.

DISTRIBUTION SOUTH AFRICA: *Gauteng:* Ezemvelo Nature Reserve (-25.8, 28.77); Faerie Glen Nature Reserve (-25.74, 28.19); Tswaing Crater Nature Reserve (-25.42, 28.08). *KwaZulu-Natal:* Empangeni (-28.72, 31.88); Isandlwane Nature Reserve (-28.359, 30.64); uMkhuze Game Reserve (-27.6217, 32.2454); Tembe Elephant Park (-27.034, 32.425). *Limpopo*: Blouberg Nature Reserve (-22.99, 29.04); Gravelotte (-23.95, 30.57); Little Leigh (Western Soutpansberg) (-22.95, 29.87); Makalali Nature Reserve (-24.34, 30.93); Polokwane Nature Reserve (-23.9, 29.47). *Mpumalanga*: Brondal (-25.35, 30.84); Kruger National Park (-25.01, 31.97). *North West*: Rustenburg Nature Reserve (-25.72, 27.18).

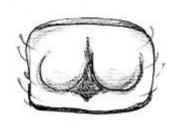
CONSERVATION MEASURES: Sampled from 11 protected areas such as Tembe Elephant park (Haddad et al. 2009), Blouberg (Muelelwa et al. 2010; Foord et al. 2019), Makelali Nature Reserve (Whitmore et al. 2001) and Kruger National Park (Dippenaar-Schoeman 2020). No conservation actions are recommended.

TAXONOMIC NOTES: Not revised. Known from both sexes (Dippenaar-Schoeman et al. 2020).





H. holzapfelae male Photo P. Webb



Epigyne after Dippenaar-Schoeman et al. 2020







Hypsosinga holzapfelae female Photos P. Webb

Hypsosinga lithyphantoides Caporiacco, 1947

COMMON NAME: False Pyjama Spider

CONSERVATION STATUS: LC

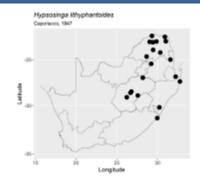
NATIONAL RATIONALE: An African endemic described by Caporiacco (1947) from Uganda. It has been recorded from three African countries. From South Africa it has been collected from five provinces (EOO=370 440 km²; AOO=80 km²; 1-1593 m a.s.l.). Because of wide geographical range, the species is listed as Least Concern .

LIFE STYLE: *Hypsosinga* make a complete orb-web sometimes with a retreat. Sampled mainly by sweep-netting grasses and herbs from the Grassland, Indian Ocean Coastal Belt and Savanna biomes (Foord et al. 2011; Haddad et al. 2013). Also sampled from citrus orchards and potato fields (Dippenaar-Schoeman et al. 2013).

GLOBAL DISTRIBUTION: Kenya, Uganda and South Africa.

DISTRIBUTION IN SOUTH AFRICA: Eastern Cape: Mkhambathi Nature Reserve (-31.32, 29.97). Free State: Amanzi Private Game Reserve (-28.62, 26.68); Bloemfontein Free State National Botanical Garden (-29.11, 26.22); Clocolan, Mpetsane Conservation Estate (-28.92, 27.58); Erfenis Dam Nature Reserve (-28.5, 26.8); Oranjeville (-26.99, 28.2). Kwa-Zulu-Natal: iSimangaliso Wetland park, Sodwana Bay National Park (-27.4, 32.76); Ndumo Game Reserve (-26.87, 32.24); Sani Pass (-30.19, 30.24). Limpopo: Blouberg Nature Reserve (-22.99, 29.04); Kruger National Park.(-22.93, 31.02); Lhuvhondo Nature Reserve (-23.038,29.442); Lekgalameetse, Farm Balloon (-24.2, 30.34); Little Leigh (Western Soutpansberg) (-22.9485, 29.8696); Nylsvley Nature Reserve (-24.65, 28.67); Pafuri (Waller's Camp) (-22.424, 30.910); Polokwane Nature Reserve (-23.9, 29.47); Venetia, Limpopo Valley Reserve (-22.3204, 29.3235). Mpumalanga: Kruger National Park (Skukuza) (-24.99, 31.59).

CONSERVATION MEASURES: No conservation actions are recommended. Protected in >15 protected areas such as: Mkhambathi Nature Reserve (Dippenaar-Schoeman et al. 2011); Amanzi Private Game Reserve (Haddad & Butler 2018); Erfenis Dam Nature Reserve (Haddad et al. 2015); Ndumo Game Reserve (Haddad et al. 2006); Blouberg Nature Reserve (Foord et al. 2019).







Hypsosinga lithyphantoides female Photo P. Webb





Hypsosinga lithyphantoides female and male Photo P. Webb



Hypsosinga lithyphantoides female and male ASD

TAXONOMIC NOTES: Known from both sexes.

Hypsosinga pygmaea (Sundevall, 1831)

COMMON NAME: Spotted False Pajama Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: A species described by Sundevall (1831) as *Theridion pygmaeum*. It is widespread and known from Africa, North America, Europe and Asia. It has recently been identified in South Africa, where it known from four provinces (EOO=65 500 km²; AOO=24 km²; 47-1471 m a.s.l.). Due to wide global range it is listed as Least Concern.

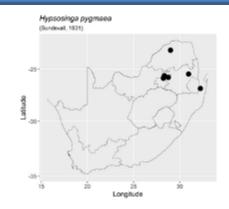
LIFE STYLE: *Hypsosinga* make a complete orb-web probably sometimes with a retreat. Sampled mainly by sweep-netting grasses and herbs in from the Grassland and Savanna biomes (Foord et al. 2011; Haddad et al. 2013).

GLOBAL DISTRIBUTION: North America, Europe, Turkey, Israel, Caucasus, Russia to Central Asia, China, Korea, Japan and South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Mpumalanga:* Loskop Dam Nature Reserve (-25.46, 29.23); Nelspruit (-25.47, 30.96). *Gauteng:* Irene (-25.87, 28.22); Ezemvelo Nature Reserve (-25.80, 28.77); Roodeplaatdam Nature Reserve (-25.64, 28.36). *KwaZulu-Natal:* Ndumo Game Reserve (-26.87, 32.24).

CONSERVATION MEASURES: Protected in the following reserves: Loskop Dam Nature Reserve; Ezemvelo Nature Reserve; Roodeplaatdam Nature Reserve; Ndumo Game Reserve; Blouberg Nature Reserve. No conservation actions are recommended.

TAXONOMIC NOTES: Known from both sexes.





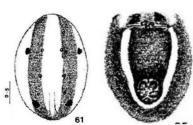
Hyposinga pygmaea female Photo E. Klimsa

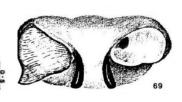


Hypsosinga pygmaea female from Kloof Photo P. Webb



Hypsosinga pygmaea female Tswaing Crater Nature Reserve Photo P. Webb





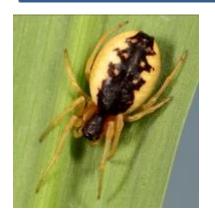


Abdomen and epigyne After Levy (1984)

Epigyne Photo ASD

UNDETERMINED SPECIES

Hypsosinga species



From Irene Veldt Photo P. Webb



From Delmas Photo P. Webb



From Wakefield Photo P. Webb



From Lephahlale female and male Photo P. Webb



From Irene Veldt Photo P. Webb



From Irene Veldt Photo P. Webb



From Ezemvelo NR Photo P. Webb



From Alverstone Photo P. Webb

GENUS IDEOCAIRA Simon, 1903

Ideocaira is endemic to South African and was described by Simon(1903). It is known from two species (World Spider Catalog 2020).

COMMON NAMES: Triangle. Orb-Web Spiders

TYPE SPECIES: Ideocaira transversa Simon, 1903

MORPHOLOGY: TL female and male 8-10 mm. The genus is recognised by the triangular shape of the abdomen. When resting the legs are pulled close to the body. Their colour varies from yellow orange to brown. Carapace pear-shaped; eye area narrowed, more so in males; median eyes grouped together with posterior median eyes larger than anterior median eyes; lateral eyes are positioned more to the back and close together; fovea longitudinal. Abdomen triangular and anteriorly truncated. Legs: front legs are strong with strong setae on the tibiae (Dippenaar-Schoeman 2014).

LIFE STYLE: They make orb-webs at night but little more is known about their behaviour. Specimens were sampled with sweep nets during the day.

TAXONOMY: Not revised.



Ideocaira sp. female from Kloof Photo P. Webb

Ideocaira transversa Simon, 1903

COMMON NAME: Triangle Orb-Web Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: A South African endemic described by Simon(1903) with the type locality only given as Natal. The species is recorded from four provinces including eight protected areas (EOO=553 077 km²; AOO=48 km²; 16-1732 m a.s.l.). Due to its wide geographical range, the species is therefore listed as Least Concern.

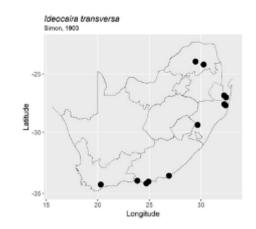
LIFE STYLE: An orb-web spider recorded from the Fynbos, Savanna and Thicket biomes.

GLOBAL DISTRIBUTION: South Africa

DISTRIBUTION IN SOUTH AFRICA: Eastern Cape: Jeffrey's Bay (-34.06, 24.91); Mkambathi Nature Reserve (-31.27, 30.02); Port Alfred (-33.58, 26.89); Tsitsikamma National Park (Storms River Mouth) (-33.98, 23.83); Thyspunt, 12 km WNW, Cape St Francis (-34.2056, 24.7083); Addo Elephant National Park (-33.32, 25.72). KwaZulu-Natal: Phinda Game Reserve (-27.72, 32.38); Kamberg Nature Reserve(-29.39, 29.67); Ndumo Game Reserve (-26.87, 32.24); Tembe Elephant Park (-27.0337, 32.4245); uMkhuze Game Reserve (-27.6217, 32.2454). Limpopo: Polokwane Nature Reserve (-23.9, 29.47); Lekgalameetse Nature Reserve, Farm Malta (-24.17, 30.25). Western Cape: De Hoop Nature Reserve (-34.45, 20.44).

CONSERVATION MEASURES: Protected in the following reserves: Addo Elephant National Park (Dippenaar-Schoeman et al. 2020); Ndumo Game Reserve; Phinda Game Reserve; Tembe Elephant Park; uMkhuze Game Reserve; Lekgalameetse Nature Reserve; Polokwane Nature Reserve; De Hoop Nature Reserve, Koppie Alleen. No conservation actions are recommended.

TAXONOMIC NOTES: Known only from the female with no illustrations.





Ideocaira transversa undescribed male from Kloof Photo Peter Webb





Ideocaira transversa female from Kloof Photo Peter Webb

Ideocaira triquetra Simon, 1903

COMMON NAME: Yellow Triangle Orb-Web Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: An Eastern Cape endemic described by Simon (1903) from Port Elizabeth. The species has been recorded from several localities throughout the province (EOO=64 670 km²; AOO= 48 km²; 1-1 364 m a.s.l.). Due to its wide geographical range, the species is listed as Least Concern.

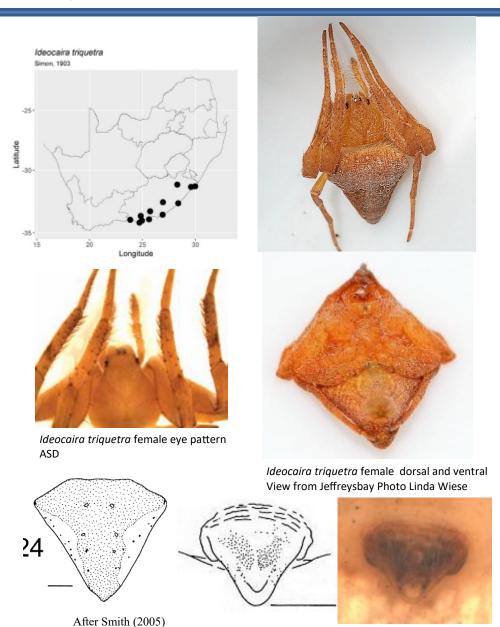
LIFE STYLE: An orb-web spider recorded from the Fynbos, Savanna and Thicket Biome.

GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Eastern Cape*: Mzimhlava River Mouth (-31.37, 29.58); Port Elizabeth (-33.95, 25.61); Addo Elephant National Park (-33.32, 25.72); Cape St Francis. -34.2056, 24.7083); Hogsback (-32.59, 26.92); Jeffreys Bay (-34.04, 24.94); Kei River Mouth (-32.68, 28.37); Keurkloof, farm Ferndale Baviaanskloof (-33.68, 24.83); Mkhambathi Nature Reserve (-31.32, 29.97); Port Alfred (-33.58, 26.89); Prentjiesberg (-31.18, 28.28); Storms River Mouth (-33.98, 23.83).

CONSERVATION MEASURES: No conservation actions are recommended.

TAXONOMIC NOTES: Known from both sexes.



UNDETERMINED SPECIES

Ideocaira spp.





Ideocaira sp. female from Kloof Photo P. Webb



Ideocaira sp. female from Wakefield Photo P. Webb









Ideocaira sp. ? Photo N. Larsen

GENUS ISOXYA Simon, 1885

Isoxya is an Afrotropical genus described by Simon (1885) and it is represented by 16 species of which six species are recorded from South Africa (World Spider Catalog 2020). The genus was removed from the synonymy of *Gasteracantha* Sundevall, 1833 by Benoit (1962).

COMMON NAMES: Isoxya Box Kite Spiders

TYPE SPECIES: Isoxya cicatricosa (C.L. Koch, 1844)

MORPHOLOGY: These spiders have a carapace that is usually as wide as it is long. Their abdomen is brightly decorated with yellow, red or black and white patterns. The dorsal part is hardened to form a rigid scutum bearing large spots and depressions, often prolonged laterally and posteriorly in spine like extensions. The spinnerets are surrounded by a sclerotised ring. Legs are relatively short. The eight eyes are in two rows (4:4). Males are much smaller than females and differ in colour and shape (Benoit & Emerit 1975; Emerit 1973).

LIFE STYLE: During the day they can be found in large orb-webs usually made high between trees. The web is usually decorated with small silk tufts. The egg sacs are covered with silk and they attached it to vegetation (Dippenaar-Schoeman 2014).

TAXONOMY: No recent revision of African species.



Isoxya cicatricosa female from Alverstone Photo Peter Webb



Isoxya mossamedensis female from Irene Photo Peter Webb



Isoxya mucronata female Photo Peter



Isoxya sp. female Photo Peter Webb



Female with egg sac Photo Les Oates



Isoxya sp. female in web Photo Peter

Isoxya cicatricosa (C. L. Koch, 1844)

COMMON NAME: Black and White Box Kite Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: An African endemic described by C.L. Koch (1844) as Gasteracantha cicatricosa from Ethiopia. Recorded from several countries throughout Africa. In South Africa the species is known from six provinces (EOO=780 233 km²; AOO=160 km²; 5-2799 m a.s.l.). Due to its wide geographical range, the species is listed as Least Concern.

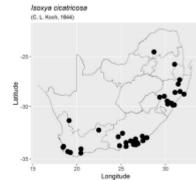
LIFE STYLE: An orb-web spider. During the day the species can be found in large orb-webs typically made high up between trees. The web is usually decorated with silk tufts. Sampled from the Forest, Fynbos, Grassland, Indian Ocean Coastal Belt, Nama Karoo, Savanna, Succulent Karoo and Thicket biomes (Foord et al. 2011; Haddad et al. 2013).

GLOBAL DISTRIBUTION: Wide spread throughout Africa.

DISTRIBUTION IN SOUTH AFRICA: Eastern Cape: Alexandria (-33.65, 26.4); Alicedale (-33.31, 26.08); Bathurst (-33.5, 26.84); Baviaanskloof Nature Reserve (-33.76, 24.81); Dunbrody (-33.47, 25.55); Fort Brown Kudu Reserve (-33.13, 26.62); Grahamstown (-33.3, 26.52); Hamburg (-33.29, 27.46); Jansenville (-32.93, 24.67); Kasouga (-33.63, 2643); Kenton-on-Sea (-33.68, 26.67); King William's Town (-32.88, 27.39); Kowie (-33.45, 26.7); Pearston (-32.59, 25.15); East London (-33.01, 27.9); Port Alfred (-33.58, 26.89); Redhouse (-33.82, 25.55). KwaZulu-Natal: Botha's Hill (-29.7, 30.72); Champagne Castle Hotel (-29.06, 29.41); Champagne Castle (-29.08, 29.35); Durban (-29.85, 31.01); Estcourt (-29.00, 29.87); Mariannhill (-29.86, 30.83); Pietermaritzburg (-29.60, 30.38); Ngome State Forest (-27.78, 31.45); Nkandla Forest (-28.61, 31.09); Ophathe Game Reserve (-28.52, 31.66); Pongola, (Farm Vergeval) (-27.35, 31.61); Richards Bay (-28.78, 32.1); Umgeni Valley Nature Reserve (-29.47, 30.2). Limpopo: Naboomspruit (-24.52, 28.7). Mpumalanga: Barberton (-25.79, 31.04). Northern Cape: Nieuwoudtville (-31.37, 19.11). Western Cape: Cape Town (-33.91, 18.42); De Hoop Nature Reserve (-34.45, 20.44); Hermanus (-34.4, 19.25); Karoo National Park (-32.28, 22.46); Kogelberg Biosphere Reserve Kogelberg Valley. (-34.32, 18.96); Table Mountain National Park (-33.82, 18.48); Cape Town (-33.91, 18.42).

CONSERVATION MEASURES: No conservation actions are recommended. Sampled in >15 protected areas such as: Ophathe Game Reserve (Haddad & Dippenaar-Schoeman 2015); De Hoop Nature Reserve (Haddad & Dippenaar-Schoeman 2009); Karoo National Park (Dippenaar-Schoeman et al. 1999) and Table Mountain National Park.

TAXONOMIC NOTES: Last revised by Emerit (1973).







Isoxya cicatricosa female Photo L. Oates



I. cicatricosa female Photo P. Webb



Female Photo R. Steenkamp



Isoxya cicatricosa female from Alverstone Photo P. Webb



Male?



Photo R.Steenkamp

after Benoit (1962)

Isoxya mossamedensis Benoit, 1962

COMMON NAME: Angola Isoxya Box Kite Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: A Southern African endemic described by Benoit (1962) from Angola. The species is rare and has been sampled in South Africa from three provinces (EOO=98 762 km²; AOO=12 km²; 400-1692 m a.s.l.). Due to its wide geographical range, the species is listed as Least Concern.

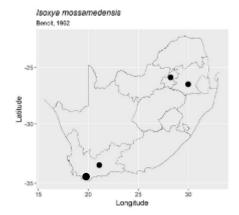
LIFE STYLE: The species makes orb-webs between vegetation. Spiders are found in the web during the day. Sampled from the Grassland and Nama Karoo biomes.

GLOBAL DISTRIBUTION: Angola and South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Mpumala*nga: Ermelo (-26.51, 29.98); *Gauten*g: Irene Veld (field opposite Gem Village) (-25.89, 28.23). *Western Cape:* Cape Aardvark Nature Reserve (-33.4941, 21.0880); Fernkloof Nature Reserve (-34.86, 19.34).

CONSERVATION MEASURES: No conservation actions are recommended. Protected in the Aardvark Nature Reserve.

TAXONOMIC NOTES: Male identification is still problematic.





Isoxya mossamedensis female from Aardvark Photo P. Webb



Habitus after Benoit (1962)





Isoxya mossamedensis female dorsal and ventral view from Irene Photo P. Webb

Isoxya mucronata Walckenaer, 1841

COMMON NAME: Mucronata Box Kite Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: An African endemic described by Walckenaer (1841) from the Democratic Republic of the Congo.. In South African the species is known from two provinces (EOO=8 088 km²; AOO=20 km²; 416-1507 m a.s.l.). The species may however be under collected and is suspected to occur in more countries in-between. Due to its wide geographical range, the species is listed as Least Concern.

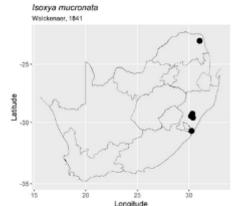
LIFE STYLE: The species makes orb-webs between vegetation. The web is usually decorated with silk tufts. Sampled from the Forest, Grassland and Savanna biomes (Foord et al. 2011; Haddad et al. 2013).

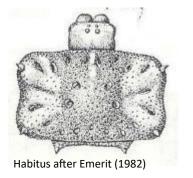
GLOBAL DISTRIBUTION: The Democratic Republic of the Congo and South Africa

DISTRIBUTION IN SOUTH AFRICA: *KwaZulu-Natal:* Howick (-29.47, 30.2); Oribi Gorge Nature Reserve (-30.71, 30.26); Pietermaritzburg (-29.6, 30.38); Umgeni River (-29.26, 30.32); St. Lucia (-27.58, 32.67). *Limpopo:* Kruger National Park (Letaba) (-22.93, 31.02).

CONSERVATION MEASURES: No conservation actions are recommended. Sampled form the following protected areas: Oribi Gorge Nature Reserve and Kruger National Park.

TAXONOMIC NOTES: Last revised by Emerit (1982). Known from both sexes.









Isoxya mucronata female from St Lucia Photo P. Webb

Isoxya stuhlmanni Bosenberg & Lenz, 1895

COMMON NAME: Spotted Isoxya Box Kite Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: An African endemic described by Bösenberg and Lenz (1895) from the Democratic Republic of the Congo. The species is known from several African countries. In South Africa, the species is recorded from five provinces (EOO=377 941 km²; AOO=88 km²; 13-1902 m a.s.l.). Due to its wide geographical range, the species is listed as being of Least Concern.

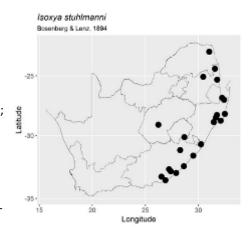
LIFE STYLE: An orb-web spider. During the day, the species can be found in large orb-webs typically made high between trees. They were sampled in high numbers in coastal forests at Richard's Bay. The webs were constructed 1-2 m above-ground between plants, with individual webs often abutting (Dippenaar-Schoeman & Wassenaar 2006). Sampled from the Forest, Grassland, Indian Ocean Coastal Belt, Savanna and Thicket biomes (Foord et al. 2011; Haddad et al. 2013).

GLOBAL DISTRIBUTION: Rwanda, Tanzania, Democratic Republic of the Congo, Mozambique, Swaziland and South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Eastern Cape*: East London (-33.01, 27.9); Grahamstown (-33.3, 26.52); Mazeppa Bay (-32.47, 28.64); Qachas Nek (-30.12, 28.68); Port St. Johns, Nxo forest (-31.63, 29.53); King William's Town (-32.88, 27.39); Pirie Forest (-32.72, 27.24); Port Alfred (-33.58, 26.89); Prentjiesberg (-31.18, 28.28). *Free State*: Bloemfontein (-29.11, 26.22). *KwaZulu-Natal*: Eshowe (-28.89, 31.47); Dlinza Forest near Eshowe (-28.89, 31.45); Oribi Gorge Nature Reserve (-30.71, 30.26); Ndumo Game Reserve (-26.87, 32.24); Ophathe Game Reserve (-28.52, 31.66); Richards Bay (15 km N) (-28.78, 32.1); Tembe Elephant Park (-26.94, 32.47); Umfolozi Nature Reserve (-28.3, 31.76); iSimangaliso Wetland Park, Cape Vidal. (-28.22, 32.5); Richards Bay (-28.78, 32.1). *Limpopo*: Kruger National Park, Seekoeigat (-22.93, 31.02). *Mpumalanga*: Lydenburg (-25.09, 30.46); Nelspruit (-25.47, 30.96).

CONSERVATION MEASURES: Protected in eight protected areas. No conservation actions are recommended.

TAXONOMIC NOTES: Last revised by Emerit (1973). Known only from the female but identification of male is still problematic.





Isoxya stuhlmanni female Photo P. Webb



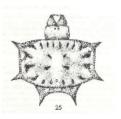




I. stuhlmanni female from Kloof Photo P. Webb



Male Photo P.Webb



Habitus after Lessert 1933

Isoxya tabulata (Thorell, 1859)

COMMON NAME: Yellow Isoxya Box Kite Spider

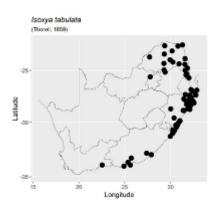
CONSERVATION STATUS: LC

NATIONAL RATIONALE: An African endemic described by Thorell (1859) from the Democratic Republic of the Congo (DRC), and known from nine African countries. In South Africa, the species is recorded from six provinces including 13 protected areas (EOO=681 893km²; AOO=268km²; 1-1399m a.s.l.). Due to its wide geographical range, the species is listed as being of Least Concern.

LIFE STYLE: An orb-web spider. During the day, the species can be found in large orb-webs usually made high between trees. The web is usually decorated with silk tufts. Sampled from the Forest, Grassland, Indian Ocean Coastal Belt, Savanna and Thicket biomes (Foord et al. 2011; Haddad et al. 2013). The species was also sampled from citrus orchards and tomato fields (Dippenaar-Schoeman et al. 2013).

GLOBAL DISTRIBUTION: Angola, the Democratic Republic of the Congo, Malawi, Swaziland, Tanzania, Zimbabwe, Mozambique and South Africa.

DISTRIBUTION IN SOUTH AFRICA: Eastern Cape: Addo Elephant National Park Woody Cape. (-33.32, 25.72); East London (-33.01, 27.9); King William's Town (-32.88,27.39); Port Elizabeth (-33.95, 25.61); Groendal (-33.7094, 25.3508); Mkhambathi Nature Reserve (-31.32, 29.97). KwaZulu-Natal: Bluff (-29.88, 31.02); Dukuduku Forest Station (-28.37, 32.23); Durban (-29.85, 31.01); Empangeni (-28.72, 31.88); Eshowe (-28.89, 31.47); Glenmore (-31, 30.25); Hluhluwe (-28.02, 32.28); Hluhluwe Nature Reserve (-28.09, 32.1); Ifafa Beach (-30.45, 30.64); iSimangaliso Wetland Park: Cape Vidal (-28.16, 32.56), Kosi Bay Nature Reserve (-26.93, 32.87), Lake Sibaya (-27.35, 32.7), Lake St. Lucia (-28, 32.48), Mkuzi Game Reserve (-27.63, 32.25), Sodwana Bay National Park (-27.4, 32.76); Jozini (-27.42, 32.07); Lewombo Mission Station (-28, 32); Makowe (-27.96, 32.11); Margate (-30.85, 30.36); Ndumo Game Reserve (-26.87, 32.24); Ngoje Forest (-28.88, 31.38); Ngome State Forest (-27.78, 31.45); Nongoma (-27.93, 31.65); Oribi Gorge Nature Reserve (-30.71, 30.26); Pietermaritzburg (-29.6, 30.38); Pongola (Farm Vergeval) (-27.35, 31.61); Port Edward (-31.04, 30.21); Port Shepstone (-30.74, 30.44); Richards Bay (-28.78, 32.1); Scottburgh (-30.28, 30.75); Tembe Elephant Park (-26.94, 32.47); Umbonambi (-28.72, 30.02); Ubombo (-27.56, 32.08); Umfolozi Nature Reserve (-28.3, 31.76); Umkomaas (-30.2, 30.8); Uvongo (-30.82, 30.39); Valley Bush (-28, 32); Vernon Crookes Nature Reserve (-30.27, 30.57); Winkelspruit (-30.08, 30.83). Limpopo: Dendron (Farm Amsterdam) (-23.37, 29.32); Ellisras/Lephalale (-23.67, 27.71); Hae-







Isoxya tabulate female Photo K. Braun



Isoxya tabulata female Photo I. Riddell



Isoxya tabulate female Photo Peter Webb



After Lawrence 1937

Isoxya tabulata (continued)

Mpumalanga: Hectorspruit (-25.43, 31.68); Komatipoort (-25.43, 31.94); Komatipoort (Farm Sommerreg, 17 km SE) (-25.53, 31.82); Kruger National Park (Skukuza) (-25, 31.97); Loskop Research Station (-25.17, 29.4); Marble Hall (-24.96, 29.29); Marloth Nature Reserve (-25.35, 31.78). *North-West:* Buffelspoort Research Station (-25.62, 27.77). *West-ern Cape*: Saasveld Forest Station (-33.95, 22.53).

CONSERVATION MEASURES: Protected in > 20 protected areas such as Ndumo Game Reserve (Haddad et al. 2006); Tembe Elephant Park (Haddad et al. 2009); Kruger National Park (Dippenaar-Schoeman & Leroy 2003) and Addo Elephant National Park (Dippenaar-Schoeman et al. 2020). No conservation actions are recommended.

TAXONOMIC NOTES: Last revised by Emerit (1973). Known from both sexes. This species resemble *Isoxya stuhl* manni closely.



Isoxya tabulata female from Kloof Photo P. Webb



Isoxya tabulate female Photo Hannes Mitchell

Isoxya yatesi Emerit, 1973

COMMON NAME: Yates' Box Kite Spider

CONSERVATION STATUS: DDT

NATIONAL RATIONALE: A South African endemic described by Emerit (1973) from Pinetown. The species is known from two provinces (EOO=107 238 km²; AOO=16 km²; 353-1407 m a.s.l.). The species is rare and under collected. Some more sampling is needed to collect the male and to determine the species' range. Therefore, listed as Data Deficient for Taxonomic reasons.

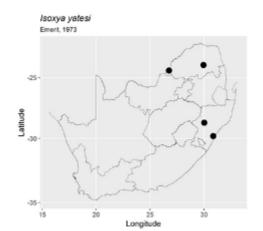
LIFE STYLE: An orb-web spider. During the day the species can be found in large orb-webs usually made high between trees. The species is known from the Savanna, Grassland and Bushveld biomes (Foord et al 2011; Haddad et al. 2013).

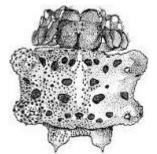
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *KwaZulu-Natal*: Umbonambi (-28.73, 30.02); Pinetown (-29.81, 30.85). *Limpopo*: Haenertsburg Wolkberg Nature Reserve (-23.94, 29.95); Atherstone Nature Reserve (-24.416, 26.750).

CONSERVATION MEASURES: Some more sampling is needed to collect the male and to determine the species' range. Protected in the following reserves: Atherstone Nature Reserve and Wolkberg Nature Reserve.

TAXONOMIC NOTES: Known only from the female. Not revised.





Isoxya yatesi after Emerit (1973)



Isoxya yatesi female dorsal view ASD



Isoxya yatesi female ventral view ASD



Isoxya yatesi female lateral view ASD

NEW OR ONLY VARIATIONS??

Isoxya species







Female from Swaziland Photo P. Webb



Female from St Lucia Photo P. Webb



Female from Eastern Cape Photo L. Wiese



From Westville Durban



GENUS KILIMA Grasshoff, 1970

Kilima is endemic to African and was described by Grasshoff (1970). It is represented by three species of which one is known from South Africa (World Spider Catalog 2020).

COMMON NAMES: Kilima Grass Orb-Web Spiders

TYPE SPECIES: Kilima decens (Blackwall, 1866)

MORPHOLOGY: Size: TL female and male 7-9 mm. Carapace is elongate with dark median longitudinal band. Abdomen with a narrow orange band bordered by a thin band that varies from white to brown followed by a broader dark brown band with scalloped edge. Legs are similar to carapace in colour. The genus resembles the grassland species *Neoscona moreli* but in this genus the abdominal longitudinal bands are in almost a straight line.

LIFE STYLE: *Kilima decens* is commonly found on grasses, where they blend in with their elongated, straw-coloured bodies. Their webs are made during the night and removed early in the morning. They rest during the day on nearby vegetation, usually grass. They prey on a wide variety of flying and jumping insects (Dippenaar-Schoeman 2014).

TAXONOMY: Genus not yet revised.

FURTHER READING: Grasshoff (1970).



Kilima decens female Photo P. Webb



Kilima decens female from Mpetsane Photo A. Jones



Kilima decens female from Bloemfontein Photo J. van Zyl

Kilima decens (Blackwall, 1866)

COMMON NAME: Kilima Grass Orb-Web Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: An African endemic described by Blackwall (1866) as Epeira decens from Tanzania. The species is widespread throughout Africa. It was sampled from Lesotho and South Africa and is known from all the provinces (EOO=779 604 km²; AOO=188 km²; 1-1986 m a.s.l.). Due to its wide geographical range, the species is listed as Least Concern.

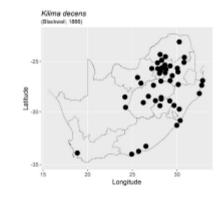
LIFE STYLE: The species usually makes large orb-webs in grass at night. Sampled from the Fynbos, Indian Ocean Coastal Belt, Grassland and Savanna biomes (Foord et al. 2011; Haddad et al. 2013). It was also sampled from potato and pumpkin fields (Dippenaar-Schoeman et al. 2013).

GLOBAL DISTRIBUTION: Widespread throughout Africa.

DISTRIBUTION IN SOUTH AFRICA: Eastern Cape: Grahamstown (-33.3, 26.52); Jeffrey's Bay (-34.06, 24.91); Mkambathi Nature Reserve (-31.02, 30.23). Free State: Bloemfontein (-29.11, 26.22); Mpetsane Conservation Estate (-28.92, 27.58); Fouriesburg (-28.61, 28.23); Oranjeville (-26.99, 28.2); Vredefort (-27, 27.37). *Gauteng*: Ezemvelo Nature Reserve (-25.8, 28.77); Johannesburg (-26.2, 28.04); Norscott Nature Reserve (-26.2, 28.04); Pretoria/Tshwane (-25.74, 28.19); Pretoria/Tshwane (Irene, Smuts House) (-25.89, 28.23); Rietvleidam Nature Reserve (-25.85, 28.16); Roodeplaat Research Station (-25.66, 28.35). KwaZulu-Natal: Kamberg Nature Reserve (-29.39, 29.67); iSimangaliso Wetland Park (Kosi Bay Nature Reserve) (-26.93, 32.87); Margate (-30.85, 30.36). Limpopo: Mosdene Nature Reserve (-24.52, 28.7); Vaalwater (-24.29, 28.11); Warmbaths/ Bela-Bela (-24.88, 28.29); Kruger National Park (-22.93, 31.02). Mpumalanga: Belfast (-25.69, 30.04); Blyde River Canyon Nature Reserve (-24.58, 30.82); Delmas (-26.14, 28.68); Loskop Dam Nature Reserve (-25.46, 29.23); Sabie (-25.1, 30.78); Standerton (-26.94, 29.23). North-West: Barberspan (-26.62, 25.58); Borakalalo Game Reserve (-25.14, 27.82); Hartbeespoortdam (-25.73, 27.85). Northern Cape: Suffolk farm nr Hopetown (-29.58, 24.24). Western Cape: Stellenbosch (-33.93, 18.85).

CONSERVATION MEASURES: Protected in >15 reserves such as Mkambathi Nature Reserve (Dippenaar-Schoeman et al. 2011; Kruger National Park Dippenaar-Schoeman & Leroy 2003). No conservation actions are recommended.

TAXONOMIC NOTES: Revised by Grasshoff (1970). Known from both sexes.





Kilima decens female Photo K. Geldenhuys



Kilima decens female Photo P. Webb



Kilima decens female from Mpetsane Photo A. Jones



Epigyne after Grasshoff (1970) Epigyne Photo ASD

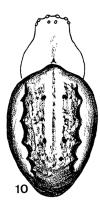


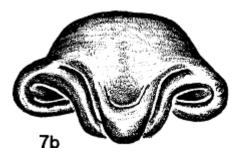
Kilima decens female Photo J. van Zyl

Kilima griseovariegata (Tullgren, 1910)

TO BE CONFIRMED

DISTRIBUTION: Central, East Africa, Yemen, Zimbabwe Mozambique









Irene Photo Peter Webb

GENUS LARINIA Simon, 1874

Larinia is a genus described by Simon (1874) and it is represented by 58 species that have a worldwide distribution. Eleven species are known from Africa and three are so far recorded from South Africa (World Spider Catalog 2020).

COMMON NAMES: Grass Orb-Web Spiders

TYPE SPECIES: Larinia lineata (Lucas, 1846)

MORPHOLOGY: Medium-sized araneids with a narrow, elongated body. Carapace longer than it is wide; with a short, grooved longitudinal fovea; anterior median eyes largest; median ocular quadrangle appreciably wider in front than behind; chelicerae with 3-4 promarginal and retromarginal teeth. Abdomen distinctly longer than wide. Epigynum of female bears a slender scape with rigid attachment at base; scape frequently breaks off. Legs I longest, legs III shortest; They can be confused with Kilima decens but here the median lines with slight curves (Dippenaar-Schoeman 2014; Dippenaar-Schoeman & Haddad 2014.

LIFE STYLE: This is a typical grassland species, resembling grass in shape and colour. They constructs loosely woven webs in grass. They are not easily seen and usually sampled with a sweep net. When at rest they stretch their body and legs along a blade of grass.

TAXONOMY: Last report on African *Larinia* by Grasshoff (1970, 1971).





Larinia sp. female Photo A. Jones



Larinia sp. female in web Photo A. Jones



Larinia sp. male in web Photo A. Jones

Larinia bifida Tullgren, 1910

COMMON NAME: Larinia Grass Orb-Web Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: An African endemic described by Tullgren (1910) from Tanzania. The species has been recorded from seven African countries. In South Africa, it is known from five provinces (EOO=361 049 km²; AOO=36 km²; 3-1730 m a.s.l.). Due to its wide geographical range, the species is listed Least Concern.

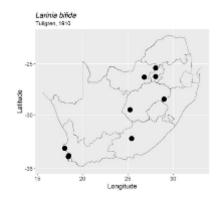
LIFE STYLE: An orb-web spider, which constructs orb-webs in grass at night. This is a typical grassland species, resembling grass in shape and colour. They are not easily seen and are usually sampled with a sweep net. When at rest they stretch their body and legs along a blade of grass. Sampled from the Grassland and Fynbos biomes.

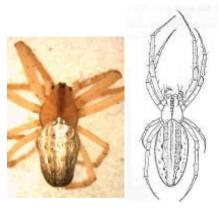
GLOBAL DISTRIBUTION: Botswana, Central African Republic, Democratic Republic of the Congo, Malawi, Tanzania, Seychelles and South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Eastern Cape*: Mountain Zebra National Park (-32.24, 25.43). *Free State*: Kalkfontein Dam Nature Reserve (-29.51, 25.25); Sterkfontein Dam Nature Reserve (-28.48,29.01); Mpetsane Conservation Estate (-28.92, 27.58). *Gauteng*: Kliprivierberg Nature Reserve (-26.27,28.08); Tswaing Crater Nature Reserve (-25.42, 28.08). *North West*: Ventersdorp.-26.32 26.82). *Western Cape*: Jacobsbaai, Saldanha Bay (-33.15, 18.03); Cape Town (-33.91, 18.42); Table Mountain National Park (-33.82, 18.48).

CONSERVATION MEASURES: No conservation actions are recommended. Sampled from six protected areas such as Mountain Zebra National Park (Dippenaar- Schoeman 2006) and Table Mountain National Park.

TAXONOMIC NOTES: Revised by Grasshoff (1970). Known only from the female.





After Grasshoff (1970)





Larinia bifida females in web from Mpetsane Photo A Jones





Larinia bifida males in web from Mpetsane Photo Allen Jones





After Grasshoff (1970)

Larinia chloris (Audouin, 1826)

COMMON NAME: Larinia Grass Orb-Web Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: A species described by Audouin (1826) as *Epeira chloris* with a wide distribution in Africa and western Asia. In South Africa, the species is known from five provinces (EOO=559 467 km²; AOO=32 km²; 4-1909 m a.s.l.). Due to its wide geographical range, the species is listed as Least Concern.

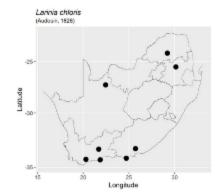
GLOBAL DISTRIBUTION: North and East Africa, Turkey, Mozambique, India, Bangladesh and South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Eastern Cape:* Thyspunt (-34.192, 24.712); Addo Elephant National Park (-33.32, 25.72). *Limpopo:* Potgietersrus/Mokopane (-24.17, 29.00). *Mpumalanga:* Verloren Vallei Nature Reserve (-25.53, 30.13). *Western Cape*: Borrelfontein, 8 km W of Gouritz Mouth (-34.33, 21.85); De Hoop Nature Reserve (-34.45, 20.44); Swartberg Nature Reserve (Gamkaskloof) (-33.36, 21.69). *Northern Cape:* Tswalu Kalahari Reserve (-27.3, 22.44).

LIFE STYLE: An orb-web spider that constructs their webs in the grass. Known from the Thicket, Fynbos, Savanna and Grassland biomes (Foord et al. 2011).

CONSERVATION MEASURES: No conservation actions are recommended. There are no known threats to the species. Protected in five reserves such as Swartberg Nature Reserve (Gamkaskloof) (Dippenaar-Schoeman et al. 2005) and Tswalu Kalahari Reserve (Dippenaar-Schoeman et al. 2018).

TAXONOMIC NOTES: Revised by Grasshoff (1970). Known from both sexes.







After Grasshoff (1970).



Larinia bifida after ASD



Larinia bifida female Photo P. Webb



Larinia bifida female Photo M. Rheeder



Larinia bifida female Photo E. Klimsa

Larinia natalensis (Grasshoff, 1971)

COMMON NAME: Natal Larinia Grass Orb-Web Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: A South African endemic described described by Grasshoff (1971) as *Drexelia natalensis*, with type locality only given as Natal. This species is known from six provinces (EOO=448 867 km²; AOO=48 km²; 55-1842 m a.s.l.). Due to its geographical range, the species is listed as Least Concern.

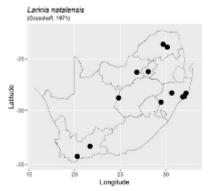
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Gauteng:* Klipriviersberg Nature Reserve (-26.27, 28.08). *KwaZulu-Natal:* Empangeni (-28.72, 31.88); Enseleni Nature Reserve (-28.68, 32.05); Giant's Castle Nature Reserve (-29.23, 29.48); Isandlwane Nature Reserve (-28.338, 30.667); Dukuduku Forest Station (-28.37, 32.23). *Limpopo*: Legalameetse Nature Reserve (-23.82, 30.16); Polokwane Nature Reserve (-23.537, 29.7145). *North West:* Ventersdorp (-26.32, 26.82). *Northern Cape*: Benfontein Game Reserve (-28.82, 24.82). *Western Cape*: Swartberg Nature Reserve (Gamkaskloof) (-33.36, 21.69); De Hoop Nature Reserve (-34.45, 20.44).

LIFE STYLE: An orb-web spider that constructs their webs in grass. Known from the Fynbos, Indian Ocean Coastal Belt, Grassland and Savanna biomes (Foord et al. 2011). The species was also sampled from cotton fields (Dippenaar-Schoeman et al. 2013).

CONSERVATION MEASURES: There are no known threats to the species. Protected in ten reserves such as De Hoop Nature Reserve (Haddad & Dippenaar-Schoeman 2009); Polokwane Nature Reserve (Dippenaar et al. 2008); Swartberg Nature Reserve (Dippenaar-Schoeman et al. 2005) and Legalameetse Nature Reserve (Foord et al. 2016).

TAXONOMIC NOTES: Known only from female.





Epigynum after Grasshoff (1970)



Larinia natalensis female Photo ASD

UNDETERMINED SPECIES

GENUS LARINIOIDES Caporiacco, 1934

Genus described by Caporiacco (1934) represented by seven species Most of species with very wide distribution throughout Europe, North Africa to Central Asia, Russia and introduced in North America (World Spider Catalog 2020).

COMMON NAMES: Larinioides Orb-web Spiders

TYPE SPECIES: Larinioides suspicax (O. Pickard-Cambridge, 1876)

MORPHOLOGY: These orb-weaving spiders have large, bulbous, oval-shaped abdomens, which are dorsoventrally flattened. The abdomen ranges include black, grey, red and olive, and the carapace features a lighter coloured, arrow shaped pattern that points towards the cephalothorax. Their legs have a striped pattern matching the carapace with strong setae. The two pairs of forward legs are very long (typically equal to the entire body length) while their rear legs are shorter. Males tend to be smaller and paler in colour than females.

LIFE STYLE: Orb-web vertical in grass vegetation and less than 1 m above ground. Retreat always present.

TAXONOMY: Several species have been sampled that are still unnamed. More material, especially of males, is needed for identification purposes and to describe if it is a new species.



Mpetsane Photo A. Jones



Jeffreysbay Photo L. Wiese



Sabie Photo P. Webb



Umhlanga Photo P. Webb



Legalameetse NR Photo P. Webb



Irene Photo P. Webb

GENUS LIPOCREA Thorell, 1878

Lipocrea is a genus described by Thorell (1878) and it is represented by four species with only one species recorded from Africa (World Spider Catalog 2020).

COMMON NAMES: Long Tailed Grass Orb-Web Spiders

TYPE SPECIES: *Lipocrea fusiformis* (Thorell, 1877)

MORPHOLOGY: Size: TL female and male 7-8 mm. These spiders have straw-coloured bodies and legs. Carapace is elongate pear-shaped but narrower in the eye region; fovea elongate, with a narrow longitudinal band dorsally. Abdomen straw-coloured frequently with paired black spots; oval, elongate with a narrow tip anteriorly and a slight hump above the spinnerets. Their legs are very long and decorated with spots and setae; same colour as body; bear setae with dark spots at their bases (Grasshoff 1970).

LIFE STYLE: They make orb-webs in grass at night and remove them early in the morning.

TAXONOMY: Only one species from Africa described by Grasshoff (1970).





Lipocrea longissimima female from Irene Photo P. Webb

Lipocrea longissima (Simon, 1881)

COMMON NAME: Lipocrea Grass Orb-Web Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: An African endemic described by Simon (1881) as *Larinia longissima*. The species is widely distributed throughout Africa. In South Africa it is known from seven provinces (EOO=550 584 km²; AOO=84 km²; 3-1706 m a.s.l.). There are no significant thread to the species and due to its wide geographical range, the species is listed as Least Concern.

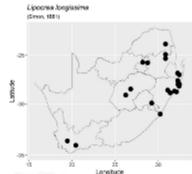
GLOBAL DISTRIBUTION: Lesotho, Botswana and South Africa.

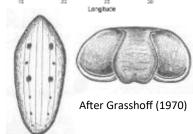
DISTRIBUTION IN SOUTH AFRICA: Free State: Bloemfontein (-29.11, 26.22); Erfenis Dam Nature Reserve (-28.5, 26.8). Eastern Cape: Mkambathi Nature Reserve (-31.02, 30.23). Gauteng: Ezemvelo Nature Reserve (-25.8, 28.77); Faerie Glenn Nature Reserve (-25.7, 28.19). KwaZulu-Natal: Empangeni (-28.72, 31.88); Hluhluwe Game Reserve (-28.02, 32.28); iSimangaliso Wetland Park (Mkuzi Game Reserve) (-27.63, 32.25); iSimangaliso Wetland Park, Hells Gate (-28.011,32.443); Ndumo Game Reserve (-26.87, 32.24); Ngoje Forest (-28.88, 31.38); Nkandla Forest (-28.61, 31.09); Richards Bay (-28.78, 32.1); Tembe Elephant Park (-26.94, 32.47); Charters Creek Champ (-28.199, 32.414). Limpopo: Makalali Nature Reserve (-24.34, 30.93); Lekgalameetse Nature Reserve (-23.82, 30.84). Mpumalanga: Brondal (-25.35, 30.84); Graskop (-24.93, 30.84). Western Cape: Worcester (-33.64,19.47); Bontebok National Park (-34.07, 20.45).

LIFE STYLE: The species makes orb-webs in grass and is known from Fynbos, Forest, Indian Ocean Coastal Belt, Grassland and Savanna biomes (Foord et al. 2011; Haddad et al. 2013). The species has also been sampled from avocado (Dippenaar-Schoeman et al. 2005) and pecan orchards, as well as tomato fields (Dippenaar-Schoeman et al. 2013).

CONSERVATION MEASURES: There are no known threats to the species. Sampled from >10 protected areas such as Mkambati Nature Reserve (Dippenaar-Schoeman et al 2011); Erfenis Dam Nature Reserve (Fourie et al. 2013) and Ndumo Game Reserve (Haddad et al. 2006)

TAXONOMIC NOTES: Revised by Grasshoff (1970). Known from both sexes.







Lipocrea longissimima female ASD



Lipocrea longissimima male ASD





Lipocrea longissimima female from Irene Photo P. webb

GENUS MAHEMBEA Grasshoff, 1970

Mahembea described by Grasshoff (1970) is a monotypic and endemic to Africa (World Spider Catalog 2020).

COMMON NAMES: Mahembea Grass Orb-Web Spiders

TYPE SPECIES: Mahembea hewitti (Lessert, 1930)

MORPHOLOGY: Size: TL female and male 7-8 mm. Carapace elongate; straw coloured to yellow orange; with a median longitudinal band. Abdomen elongate extend past spinnerets; with thin paired longitudinal bands. Legs same colour as body; bear setae with dark spots at their bases (Grasshoff 1970).

LIFE STYLE: They make orb-webs in grass at night and remove them early in the morning.

TAXONOMY: Known from both sexes.



Mahembea hewitti female Photo P. Webb



Mahembea hewitti female in web Photo W. Schmidt

Mahembea hewitti (Lessert, 1930)

COMMON NAME: Hewitt's Grass Orb-Web Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: An African endemic described from the Democratic Republic of the Congo by Lessert (1930), as *Larinia hewittii*. The species is under collected and is suspected to occur in more countries. In South Africa, the species is known from five provinces (EOO=183 704 km²; AOO=36 km²; 29-1556 m a.s.l.). Due to its wide geographical range, the species is listed as Least Concern.

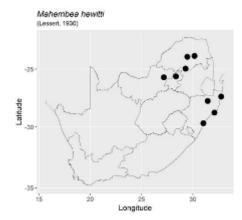
GLOBAL DISTRIBUTION: Democratic Republic of the Congo to South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Gauteng*: Roodeplaatdam Nature Reserve (-25.64, 28.36). *KwaZulu-Natal*: Mount Edgecombe (-29.68, 31.03); Ngome State Forest (-27.78, 31.45); Richards Bay (-28.78, 32.1); iSimangaliso Wetland park, Sodwana Bay National Park (-27.4, 32.76). *Limpopo*: Polokwane Nature Reserve (-23.9, 29.47); Lekgalameetse Nature Reserve (-23.82, 30.16). *Mpumalanga*: Marble Hall (-24.96, 29.29). *North West*: Kgaswane Mountain Reserve (-25.72, 27.18).

LIFE STYLE: The species makes orb-webs in grass. It is known from the Forest Indian Ocean Coastal Belt and Savanna biomes (Foord et al. 2011). The species was also sampled from sugar cane fields (Dippenaar-Schoeman et al. 2013).

CONSERVATION MEASURES: There are no known threats to the species. Protected in >6 protected areas. Polokwane Nature Reserve (Dippenaar et al. 2008); Lekgalameetse Nature Reserve (Foord et al. 2016) and Roodeplaat Dam Nature Reserve (Dippenaar-Schoeman et al. 1989).

TAXONOMIC NOTES: Revised by Grasshoff (1970). Known from both sexes.





Mahembea hewitti female Photo ASD

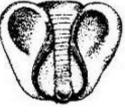


Mahembea hewitti female from Loskopdam Photo P. Webb



Mahembea hewitti female Photo E. Klimsa





After Grasshoff (1970)

GENUS MEGARANEUS Lawrence, 1968

A monotypic African endemic genus described by Lawrence (1968) (World Spider Catalog 2020).

COMMON NAMES: Large Spiky Orb-Web Spiders

TYPE SPECIES: *Megaraneus gabonensis* (Lucas, 1858)

MORPHOLOGY: These large araneids (30-21 mm) bear superficial resemblance to bark spiders. In the holotype the carapace is blackish brown, sometimes reddish; covered by minute round wart-like tubercles; sternum is blackish; ventral surface is covered with golden hair. The abdomen has three pairs of blunt lateral sub-angular tubercles and there are two pairs of large round sigillae and about 50 smaller pit like impressions; variable pattern of yellow markings on a black background. Legs are black with front legs banded; leg I shorter than IV. Sexual dimorphism occurs in size. Male resembles female in basic abdominal shape but is very small.

LIFE STYLE: An orb-web spider species.

TAXONOMY: Known from both sexes. This genus resembles members of the genus *Acanthepeira* Marx, 1883 that is presently only known from North and South America. Several species have been sampled that could be members of *Megaraneus* or else *Acanthepeira* which is newly recorded from Africa



Megaraneus gabonensis from Mozambique Photo Len de Beer



Photo Ernst Klimsa



Photo Len de Beer

Megaraneus gabonensis (Lucas, 1858)

COMMON NAME: Gabon Megaraneus Orb-Web Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: An African endemic described from Gabon by Lucas (1858) as *Epeira gabonensis*. This species has been recorded from seven African countries. In South Africa, the species is known from a single province (EOO=3 933 km²; AOO=16 km²; 51-93 m a.s.l.). Due to its wide geographical range, the species is listed as Least Concern.

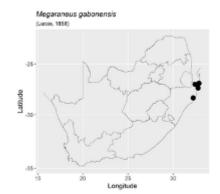
GLOBAL DISTRIBUTION: Angola, Cameroon, Congo Republic, Gabon, Sierra Leone, Mozambique and South Africa.

DISTRIBUTION IN SOUTH AFRICA: *KwaZulu-Natal*: Dukuduku Forest Station (-28.37, 32.23) Lake Sibaya (-27.35, 32.70); Tembe Elephant Park (-26.94, 32.47); iSimangaliso Wetland park, Sodwana Bay National Park (-27.4, 32.76); iSimangaliso Wetland park, Kosi Bay Nature Reserve (-26.93, 32.87).

LIFE STYLE: An orb-web spider with the web consisting of 25-30 radii with 25 viscid spirals. The free zone is narrow and the hub composed of a small rounded area (Lawrence 1968). Sampled from the Forest, Indian Coastal Belt and Savanna biomes (Foord et al. 2011).

CONSERVATION MEASURES: There are no known threats to the species. Protected in three protected areas.

TAXONOMIC NOTES: Redescribed by Lawrence (1968). Known from both sexes.





Megaraneus gabonensis from Tembe GR Photo H. de Klerk



Megaraneus gabonensis ventral view Photo L. de Beer



Megaraneus gabonensis Photo L. de Beer







After Lawrence (1968)

MEGARANEUS OR ACANTHEPEIRA ???

Megaraneus species







Lekgalameetse NR female Photo P. Webb

Male?

Thyspunt female Photo Linda Wiese







Lajuma



Maybe same as Acanthepeira ??

GENUS NEMOSCOLUS Simon, 1895

Nemoscolus is a genus described by Simon (1895) and it is known from 14 species of which 13 are known from Africa and four from South Africa (World Spider Catalog 2020).

COMMON NAME: Stone-Nest Spiders

TYPE SPECIES: Nemoscolus laurae (Simon, 1868)

MORPHOLOGY: Size: TL female 4-6 mm, male 3-5 mm. These small spiders have slightly elongate bodies. Carapace is pear-shaped and narrower in eye region. Abdomen is round oval; it is usually whitish with median and lateral longitudinal bands merging posteriorly. Their legs are similar in colour to the carapace and are kept tightly against the body. Males are a little smaller than females.

LIFE STYLE: Orb-web spiders that make a stone nest in the centre of the orb-web. The webs are usually made in grass. The web lacks a stabilimentum. A small conical or helicoid retreat is made of material such as soil particles, silk and vegetable matter (Lawrence, 1964). The opening of the tube is in the centre of the horizontal orb-web, and the conical tube serves as a retreat and a repository for eggs. The spider sits in the entrance of the web waiting for prey. Prey is usually jumping insects like second-instar locusts (Dippenaar-Schoeman & Haddad 2014; Dippenaar-Schoeman 2014).

TAXONOMY: African species not revised. Most of the species based on short descriptions without any drawings causing problems with placement of species.



Nemoscolus tubicola web with stone retreat Photo P. Webb



Nemoscolus cotti undesribed female Photo P. Webb



Nemoscolus sp. with stone retreat Photo P. Webb Nemoscolus sp. Photo P. Webb





Nemoscolus sp. with very long stone retreat Photo P. Webb



Nemoscolus sp. Photo P. Webb

Nemoscolus cotti Lessert, 1933

COMMON NAME: Cott's Stone-Nest Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: A Southern African endemic described by Lessert (1933) from Mozambique. This species has been recorded from three countries. In South Africa, the species is known from seven provinces (EOO=427 772 km²; AOO=64 km²; 93-1838 m a.s.l.). Due to its wide geographical range, the species is listed as Least Concern.

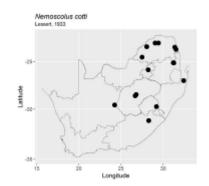
GLOBAL DISTRIBUTION: Zimbabwe, Mozambique and South Africa.

DISTRIBUTION IN SOUTH AFRICA: Eastern Cape: Prentjiesberg (-31.18, 28.28). Free State: Erfenis Dam Nature Reserve (-28.5, 26.8); Amanzi Private Game Reserve (-28.62, 26.68). Gauteng: Irene Gem Village Field (-25.89, 28.23). KwaZulu-Natal: Garden Castle (-29.75, 29.2); Tembe Elephant Park (-26.94, 32.47). Limpopo: Kruger National Park, Mopani, Tsendze (-23.688, 31.518); Kruger National Park, Mopani, Dzombo (-23.452, 31.384); Blouberg Nature Reserve (-22.99, 29.04); Lephahlale (-23.4, 28.05); Marakele National Park (-24.531, 27.4977); Goro Game Ranch (-22.99, 29.43). Mpumalanga: Kruger National Park, Pretoriuskop, Kambeni (-25.153, 31.253); Kruger National Park, Pretoriuskop, Numbi (-25.140, 31.208); Kruger National Park, Pretoriuskop, Shabeni (-25.123, 31.237). Northern Cape: Hopetown (Farm Suffolk) (-29.58, 24.24).

LIFE STYLE: An orb-web spider that makes a stone nest in the centre of the orb-web usually in grass. It is known from the Savanna, Nama Karoo and Grassland biomes (Foord et al. 2011; Haddad et al. 2013).

CONSERVATION MEASURES: There are no known threats to the species. Protected in six protected areas such as Erfenis Dam Nature Reserve (Fourie et al. 2013); Kruger National Park; Blouberg Nature Reserve (Foord et al. 2019) and Marakele National Park (Dippenaar -Schoeman et al. 2020).

TAXONOMIC NOTES: Not revised. Known only from the male. Female collected but not yet described.





Nemoscolus cotti male and female Photo ASD



After Lessert (1933)



Nemoscolus cotti from Irene Photo P. Webb





Nemoscolus cotti undescribed female from Irene Photo P. Webb

Nemoscolus obscurus Simon, 1897

COMMON NAME: Stone-Nest Spider

CONSERVATION STATUS: DDT

NATIONAL RATIONALE: A South African endemic described by Simon (1897) with type locality given only as "Transvaal". The species is known from three localities that are about 100.61 km² apart. Too little is known about the location, habitat and threats of this taxon for a full assessment to be made. More sampling is needed, to collect the male and determine the species' range. Therefore listed as Data Deficient for Taxonomic reasons.

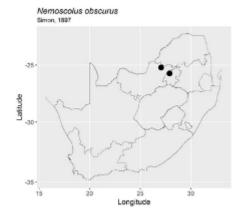
LIFE STYLE: An orb-web spider. The species makes a stone nest in the centre of the orb-web in grass. This species is known from the Savanna Biome (Foord et al. 2011).

GLOBAL DISTRIBUTION: South Africa.

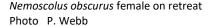
DISTRIBUTION IN SOUTH AFRICA: type locality only as "Transvaal"*. *Gauteng:* Irene Gem Village Field (-25.89, 28.23). *North-West*: Hartebeespoort Experimental Farm (-25.60, 27.82); Pilanesberg Nature Reserve (-25.25, 27.08).

CONSERVATION MEASURES: Protected in the Pilanesberg Nature Reserve. More sampling is needed, to collect the male and determine the species' range.

TAXONOMIC NOTES: Not revised known only from the female.











Nemoscolus obscurus female from Irene Photo P. Webb

Nemoscolus tubicola (Simon, 1887)

COMMON NAME: Tube Stone-Nest Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: A southern African endemic described by Simon (1887) as *Cyclosa tubicola* from Grahamstown. The species has also been recorded from Namibia. In South Africa, it is known from seven provinces (EOO=1 049 472 km²; AOO=76 km²; 54-1513 m a.s.l.). Due to its wide geographical range, the species is listed as being of Least Concern.

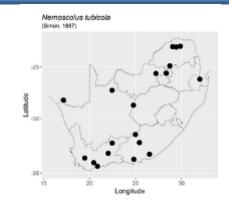
GLOBAL DISTRIBUTION: Namibia, Swaziland and South Africa.

DISTRIBUTION IN SOUTH AFRICA: *Eastern Cape*: Baviaanskloof Nature Reserve (-33.76, 24.81); Grahamstown (-33.3, 26.52); Middelburg (-31.49, 24.99); Mountain Zebra National Park (-32.24, 25.43). *Gauteng*: Roodeplaatdam Nature Reserve (-25.64, 28.36). *Limpopo*: Blouberg Nature Reserve (-22.99, 29.04); Lhuvhondo Nature Reserve (-23.03, 29.45); Little Leigh (-22.95, 29.87); Springbok Flats (Tuinplaas) (-24.56, 28.46). *Northern Cape*: Richtersveld Transfrontier National Park (-28.25, 17.17); Kimberley (-28.73, 24.76); Tswalu Game Reserve (-27.3, 22.44). *North West*: Rustenburg (-25.65, 27.22). *Western Cape*: Karoo National Park (-32.28, 22.46); Prince Albert (-33.22, 22.03); Witsand Nature Reserve (-34.39, 20.85); Bontebok National Park (-34.07, 20.45); Worcester (-33.64, 19.47)

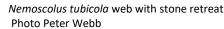
LIFE STYLE: An spider. The species makes a orb-web with a stone nest in the centre of the web in grass. Sampled from the Fynbos, Grassland, Nama Karoo, Savanna, Succulent Karoo and Thicket biomes (Foord et al. 2011; Haddad et al. 2013).

CONSERVATION MEASURES: There are no known threats to the species. Protected in 10 protected areas such as Bontebok National Park (Dippenaar-Schoeman 2020); (Mountain Zebra National Park (Dippenaar-Schoeman 2006); Roodeplaatdam Nature Reserve (Dippenaar-Schoeman et al. 1989); Blouberg Nature Reserve (Foord et al. 2019); Richtersveld Transfrontier National Park; Tswalu Kalahari Reserve (Dippenaar-Schoeman et al. 2018).

TAXONOMIC NOTES: Not revised. Known only from the female.







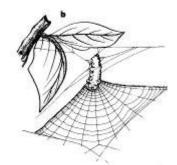


Retreat after Simon (1887)





Nemoscolus tubicola female Photo Les Oates



After Dippenaar-Schoeman & Van den Berg 2010

Nemoscolus vigintipunctatus Simon, 1897

COMMON NAME: Spotted Stone-Nest Spider

CONSERVATION STATUS: LC

NATIONAL RATIONALE: A South African endemic described by Simon (1897).from the type locality only listed as "Transvaal". It is known from eight provinces including seven protected areas (EOO=637 683 km²; AOO=52 km²; 20-1646 m a.s.l.). The species has also been recorded from Zimbabwe. Due to its wide geographical range, the species is listed as being of Least Concern.

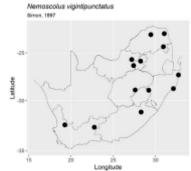
GLOBAL DISTRIBUTION: Zimbabwe and South Africa.

DISTRIBUTION IN SOUTH AFRICA: Eastern Cape: Prentjiesberg (-31.18, 28.28). Free State: Mpetsane Conservation Estate (-28.92, 27.58). Gauteng: Abe Bailey Nature Reserve (-26.36, 27.4); Irene, Smuts House (-25.89, 28.23); Ezemvelo Nature Reserve -25.80,28.77 KwaZulu-Natal: Cathedral Peak (-28.94, 29.19); Richards Bay (-28.78, 32.1); iSimangaliso Wetland Park (Lake Sibaya) (-27.35, 32.70). Limpopo: Lhuvhondo Nature Reserve (-23.03, 29.45); Makalali Nature Reserve (-24.34, 30.93); Kruger National Park (-22.93, 31.02). North West: Kgaswane Mountain Reserve (-25.72, 27.18). Western Cape: Beaufort West (Farm Katdoornkuil) (-32.42, 22.47); Dwarsrivier, Sanddrift (-32.47, 19.27)

LIFE STYLE: An orb-web spider. The species makes a stone nest in the centre of the orb-web in grass. The stone nest observed in Irene was long elongated. Sampled from the Fynbos, Forest, Indian Coastal Belt, Grassland, Savanna and Succulent Karoo biomes (Foord et al. 2011; Haddad et al. 2013).

CONSERVATION MEASURES: There are no known threats to the species. Protected in seven protected areas such as Makalali Nature Reserve (Whitmore et al. 2001); Lhuvhondo Nature Reserve (Foord et al. 2002) and Kruger National Park (Dippenaar-Schoeman & Leroy 2003).

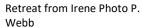
TAXONOMIC NOTES: Not revised. Known from only the female.





Nemoscolus vigintipunctatus female from Irene Photo P. Webb







Nemoscolus vigintipunctatus female from Ezemvelo NR Photo P. Webb

UNDETERMINED SPECIES

Nemoscolus species





Species from Irene









Species from Aardvark NR

STILL UNKNOWN

GENUS NEMOSPIZA Simon, 1903

Monotypic genus known from one South African endemic species (World Spider Catalog 2020).

COMMON NAMES: Nemospiza Orb-Web Spiders

TYPE SPECIES: Nemospiza conspicillata Simon, 1903

MORPHOLOGY: Size TL female 3 mm. Carapace smooth and hairless, olive green with black reticulation. Abdomen is cylindrical, dark above. Only recorded from "Transvaal"

ABUNDANCE: Very rare

LIFE STYLE: Unknown.

TAXONOMY: Monotypic

STILL UNKNOWN

Nemospiza conspicillata Simon, 1903

COMMON NAME: Nemospiza Orb-Web Spider

CONSERVATION STATUS: DDT

NATIONAL RATIONALE: A South African endemic described in 1903, from the type locality given as "Transvaal". The species is only known from one locality, Makalali Nature Reserve (EOO=4 km²; AOO=4 km²; 457 m a.s.l.). Too little is known about the location, LIFE STYLE: and threats of this taxon for a full assessment to be made. Identification of the species is also problematic; it is therefore listed as Data Deficient for Taxonomic reasons.

GLOBAL DISTRIBUTION: South Africa: Limpopo.

DISTRIBUTION IN SOUTH AFRICA: type locality only as Transvaal*.

LIFE STYLE: The species is known from the Savanna Biome.

CONSERVATION MEASURES: Unknown.

TAXONOMIC NOTES: Not revised. Known only from female, not illustrated.

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