



THE OECOBIIDAE OF SOUTH AFRICA

Compiled by: A.S. Dippenaar-Schoeman, C.R. Haddad, S.H. Foord & L.N. Lotz

South African National Survey of Arachnida Photo Identification Guide Oecobiidae 2021 version 1: 1-19

© Reginald Christiaan

THE OECOBIIDAE OF SOUTH AFRICA

Dippenaar-Schoeman, A.S.^{1,2}, Haddad, C.R.³, Foord, S.H.², & Lotz, L.N.⁴ 2021. *South African National Survey of Arachnida Photo Identification Guide: The Oecobiidae of South Africa*. 2021 version 1: 1-19.

¹ARC-Plant Health and Protection, Private Bag X134, Queenswood, Pretoria, 0121, South Africa

²Department of Zoology, University of Venda, Private Bag X5050, Thohoyandou, 0950, South Africa;

³Department of Zoology and Entomology, University of the Free State, P.O. Box 339, Bloemfontein, 9300, South Africa

⁴National Museum, Bloemfontein, P.O. Box 266, Bloemfontein, 9300, South Africa

ABSTRACT

The Oecobiidae is a small family of spiders represented by six genera and 119 species. Seven of the species represented by three genera have been recorded from South Africa. The two species of *Oecobius* are both known to be invasive and have a wide world wide distribution. The genus *Paroecobius* was described by Lamoral (1981) and is an African endemic. Only one species *Paroecobius nicolaii* Wunderlich, 1995 is known from South Africa. The species is under collected and known only from two provinces. Some more sampling is needed to determine the species range and it is therefore listed as Data Deficient. The genus *Uroctea* is represented by three species in South Africa.

Uroctea quinquenotata Simon, 1910 is a South African endemic while the other two are southern Africa endemics. All three are listed as Least Concern. The genus *Uroecobius* is monotypic and known only from *Uroecobius ecribellatus* Kullmann & Zimmermann, 1976, a species with a wide distribution endemic to South Africa.

ACKNOWLEDGEMENTS

We thank the Agricultural Research Council (ARC) and the South African National Biodiversity Institute (SANBI) Threatened Species Programme; the Universities of the Free State, Venda and Pretoria; the National Research Foundation (NRF) for generously funding and support. The staff of the Arachnology section at the National Collection of Arachnida (Connie Anderson, Petro Marais, Sma Mathebula, Robin Lyle and Annette van den Berg), as well as several volunteers from the public, are thanked for their assistance with the sorting and databasing of specimens collected during the SANSA surveys. Various students, members of the public and members of the Spider Club of South Africa collected material for SANSA. We also thank the South African National Parks, E. Oppenheimer & Son for support and providing opportunity to collect in the parks and reserves. All the provincial conservation agencies for collecting permits. We are especially thankful to all the photographers that have provided photographs for the SANSA Virtual Museum without their contribution this guide would have not been possible.



CONTENT

FAMILY OECOBIIDAE Blackwall, 1862

GENUS *OECOBIUS* Lucas, 1846

- *Oecobius navus* Blackwall, 1859 *
- *Oecobius putus* O. P.-Cambridge, 1876 *

GENUS *PAROECOBIUS* Lamoral, 1981

- *Paroecobius nicolaii* Wunderlich, 1995

GENUS *UROCTEA* Dufour, 1820

- *Uroctea quinquenotata* Simon, 1910
- *Uroctea schinzi* Simon, 1887
- *Uroctea semilimbata* Simon, 1910 ¥
- *Uroctea septemnotata* Tucker, 1920

GENUS *UROECOBIUS* Kullmann & Zimmermann, 1976

- *Uroecobius ecribellatus* Kullmann & Zimmermann, 1976

* Not listed from South Africa on World Spider Catalog (2021)

¥ Erronously listed from South Africa on World Spider Catalog (2021)



Uroecobius ecribellatus retreat on rocks at Mphuphuli Photo Peter Webb



Uroecobius ecribellatus retreat on bark at Pafuri Photo Peter Webb

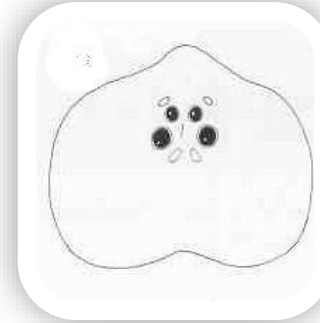
FAMILY OECOBIIDAE Blackwall, 1862

The Oecobiidae is a small family of spiders represented by six genera and 119 species. Genera arranged in three subfamilies.

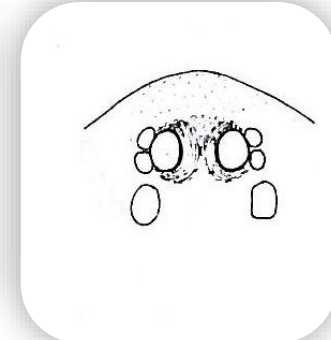
MORPHOLOGY: Body size: 3-16 mm. Colour: smaller species pale with faint, variable, darker patterns with white guanine granules; larger species yellow, orange to dark with pale spots (5-7) on dorsum. Family can be recognized by large two-segmented anal tubercle large with a double fringe of curved setae. Carapace subcircular; wider than long; fovea absent; sternum heart-shaped, wider than long, apex pointed, separating coxae IV; males with fringe of specialized spatulate setae on sternal margin; eyes: 6-8, arranged in two rows in a compact group near centre of carapace; posterior median eyes variable: circular or subcircular in Urocteinae and Oecobiinae, reduced in Uroecobiinae; chelicerae short; fangs short; cheliceral teeth lacking; labium free, wider than long; endites converging, almost touching. Abdomen more or less flattened; oval to round; slightly overlapping carapace; anal tubercle large, two-segmented, provided with double row of fringed setae; anterior spinnerets short and domed, two-segmented with distal segment short; posterior spinnerets two-segmented with distal segment long and curved; colulus consisting of a large plate, present in Urocteinae and Uroecobiinae; cribellum: divided in Oecobiinae; absent in Urocteinae and Uroecobiinae; calamistrum biseriate in proximal half (lacking in males); Legs with three claws; legs short, subequal in length; arranged around body in a star-like fashion; with a few or no spines.

LIFESTYLE: Members of the Oecobiinae and Uroecobiinae live in star-shaped mesh-webs made over cracks, crevices and in corners of rocks or walls. The web serves as a protective retreat while the anchor threads attached to the substrate warn the spider of approaching prey. The spider sits beneath the web on the substrate with its back facing the sheet. When prey touches a thread, the spider rushes out and, while rapidly circling the prey in an anti-clockwise direction, ensnare it in silk using the stout, curved setae of the anal tubercle to comb the silk from the large posterior spinnerets. When disturbed, the spider runs rapidly away from the retreat into a crevice nearby.

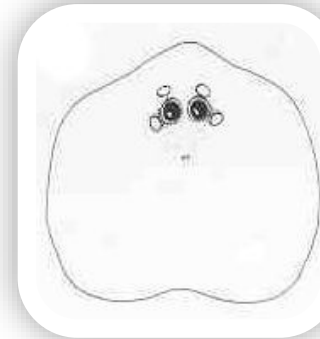
EYE PATTERN OF SOUTH AFRICAN GENERA



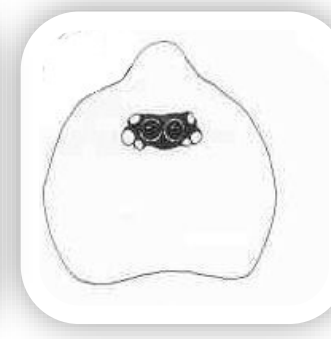
Oecobius spp.



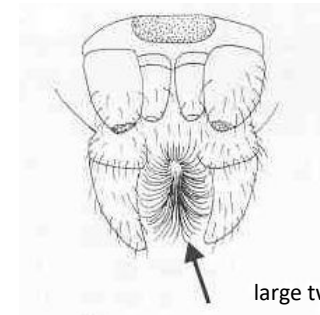
Paroecobius sp.



Uroecobius sp.



Uroctea sp.



large two-segmented anal tubercle

GENUS *OECOBIOUS* Lucas, 1846

The *Oecobius* described by Lucas (1946) is a fairly large genus represented by 90 species (World Spider Catalog 2021).

COMMON NAME: Dwarf round-headed spiders

TYPE SPECIES: *Oecobius cellariorum* (Dugès, 1836)

MORPHOLOGY: Body size both sexes small (3 mm). Colour pale, with faint, variable darker patterns and white subcutaneous pigment granules; legs banded. Carapace sub circular, wider than long without a fovea; 8 eyes arranged in 2 rows in compact group near centre of carapace; posterior median eyes sub circular. The abdomen is a more or less flattened and oval, slightly overlapping carapace; large, 2-jointed anal tubercle with double row of fringed setae. Legs short and sub equal in length, arranged star-like around body.

LIFESTYLE: They construct irregular, star-shaped sheets as retreats anchored to the substrate with threads which serve as trip lines. The sheet is small, about 10 mm in diameter, creamy-white, and has several entrances. Retreats are built over small crevices, indentations in rocks, and in corners of man-made structures such as windowsills. The spider sits on the substrate under the sheet with its back towards it. The sheet serves as a protective structure for the spider, while the anchor signal threads warn of approaching prey. When prey touches a thread, the spider rushes out and rapidly circles it in an anti-clockwise direction, covering it with layers of silk. It uses the stout, curved setae of the anal tubercle to comb the silk from the large posterior spinnerets. When disturbed, the spider runs rapidly away from the retreat and hides in a nearby crevice. The egg-sac contains only a few (3–10) eggs and is usually attached to the substrate close to, or under, the sheet. Several species of *Oecobius* are synanthropic and from South Africa two species *O. navus* Blackwall, and *O. putus* O. F.-Cambridge, are known. It is commonly encountered in and around houses. Ants seem to constitute the main prey, but reported that minute Diptera are taken as well. Mating occurs in a special web constructed by the male, which takes up position facing the female (Dippenaar-Schoeman & Jocqué 1997).

TAXONOMY: African species not revised.



Oecobius sp. Photo Peter Webb



Oecobius sp. Photo Rudi Steenkamp

Oecobius navus Blackwall, 1859

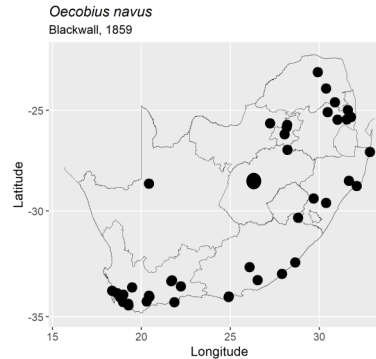
COMMON NAME: House Round Headed Spider

NATIONAL STATUS: LC

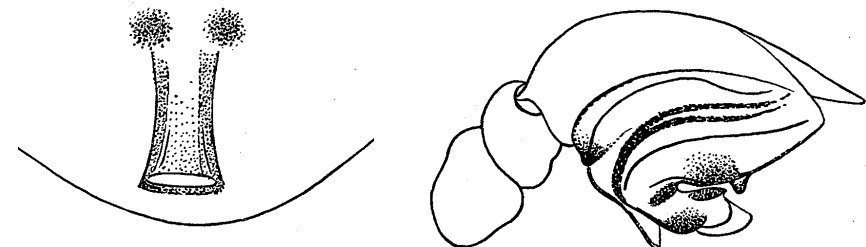
NATIONAL RATIONALE: A cosmopolitan species described by Blackwall (1895) with a very wide distribution. In South Africa, the species is recorded from all the provinces (EOO=991 466 km²; AOO=168 km²; 3-1762 m a.s.l.). Due to its wide geographic range, the species is listed as Least Concern.

GLOBAL DISTRIBUTION: A cosmopolitan species, widely distributed. In South Africa, the species is recorded from all the provinces.

DISTRIBUTION IN SOUTH AFRICA: **Eastern Cape:** Bedford (-32.68, 26.08); East London (-33.01, 27.9); Grahamstown (-33.3, 26.52); Jeffrey's Bay (-34.06, 24.91); Mazeppa Bay (-32.47, 28.64); Paradise Beach (-34.09, 24.89); Bedford (-32.68, 26.08). **Free State:** Oran-jeville (-26.99, 28.2); Bloemfontein (-29.11, 26.22). **Gauteng:** Centurion (-25.85, 28.16); Johannesburg (-26.2, 28.04); Pretoria/ Tshwane (-25.74, 28.19); Irene (-25.85, 28.16); Pretoria National Botanical Garden (-25.74, 28.19); Johannesburg (-26.2, 28.04); Heidelberg (-26.5, 28.36). **KwaZulu-Natal:** Kamberg Nature Reserve (-29.39, 29.67); Matatiele (-30.33, 28.8); Ophathe Game Reserve (-28.52, 31.66); Pietermaritzburg (-29.6, 30.38); Richards Bay (15 km N) (-28.78, 32.1); Banga Nek (Kosi Bay) (-27.0857, 32.8442); Richards Bay Meerensee (-28.78, 32.1). **Limpopo:** Kruger National Park (-22.93, 31.02); Letsitele (-23.88, 30.37); Louis Trichardt (-23.04, 29.91); Nylsvley Nature Reserve (-24.65, 28.67). **Mpumalanga:** Lydenburg (-25.09, 30.46); Kruger National Park (Malelane Gate) (-25.4602, 31.5368); Kruger National Park (Skukuza) (-24.9898, 31.5926); Nelspruit (-25.34, 31.77); Lowveld National Botanical Gardens (-25.47, 31.0); Mariepskop (-24.58, 30.87). **North West:** Rustenburg (-25.65, 27.22). **Northern Cape:** Augrabies National Park (-28.53, 20.29). **Western Cape:** Bellville (-33.9, 18.63); De Hoop Nature Reserve (-34.45, 20.44); Fish Hoek, Peer Hill (residential) (-34.05, 18.35); Hermanus (Fisherhaven) (-34.47, 19.27); Gamkaberg Nature Reserve (-33.31, 21.71); Gouritsmond (Borrelfontein) (-34.34, 21.87); Grootvadersbos (-26.5, 28.36); Hermanus (-34.4, 19.25); Jonkershoek Nature Reserve (-33.98, 18.98); Karoo National Park (-32.28, 22.46); Kogelberg Biosphere Reserve (-34.32, 18.96); Macassar (-34.08, 18.78); Strand (-34.1, 18.82); Swartberg Nature Reserve (Gamkaskloof) (-33.35, 21.67); Oudtshoorn (-33.59, 22.21); Swellendam (-34.02, 20.42); Bontebok National Park (-34.07, 20.45); Robben Island (-33.8, 18.35).



Oecobius navus from Irene Photo Peter Webb



Genitalia after Lawrence (1952)

Oecobius navus Blackwall, 1859

LIFESTYLE: A web dweller that makes small flat sheet signal-webs over different types of substrates. The species is synanthropic and is known to frequently feed on ants. It has been sampled from Fynbos, Grassland, Nama Karoo, Indian Ocean Coastal Belt, Savanna and Thicket biomes (Foord et al. 2011; Haddad et al. 2013).

CONSERVATION MEASURES: There are no significant threats to the species. Sampled from >10 protected areas

TAXONOMIC NOTES: First time reported from South Africa as *Oecobius hortensis* Lawrence, 1952.



Oecobius navus male Photo Hannes Mitchell



Oecobius navus female feeding on ant Photo Johan van Zyl



Oecobius navus female from Heidelberg Photo Johan van Zyl

Oecobius putus O. P.-Cambridge, 1876

COMMON NAME: Putus Round Headed Spider

NATIONAL STATUS: LC

NATIONAL RATIONALE: A species described by O. P.-Cambridge (1876) from Egypt. It has a very wide distribution and is found throughout Africa. In South Africa sampled from two provinces (EOO=>100 km²; AOO=4 km²; 1240 m a.s.l.). Due to wide geographical range in Africa listed as Least Concern.

GLOBAL DISTRIBUTION: Egypt, Sudan to Azerbaijan, USA. New: South Africa.

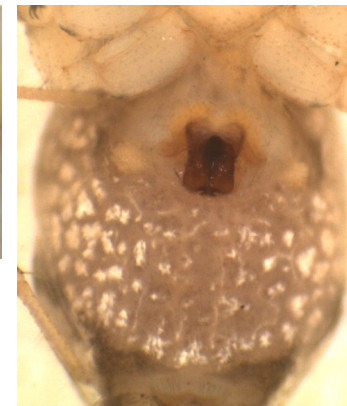
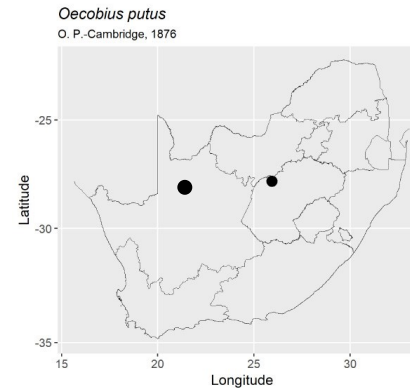
DISTRIBUTION IN SOUTH AFRICA: *Free State*: Sandveld Nature Reserve (-27.85, 25.93).

***Northern Cape*:** 39 km E of Groblershoop (-28.85, 22.30).

LIFESTYLE: They make small flat sheet-like webs over different types of substances. Sampled from the Grassland Biome (Haddad et al. 2013).

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

TAXONOMIC NOTES: Known from both sexes, illustrated.



Oecobius putus female and male Photo ASD



12

After Keitscher (1966)

GENUS *PAROECOBIUS* Lamoral, 1981

The genus *Paroecobius* was described by Lamoral (1981) and it is represented by five species known from Southern Africa and Madagascar (World Spider Catalog 2021).

COMMON NAME: Large-eyed Ant eaters

TYPE SPECIES: *Paroecobius wilmotae* Lamoral, 1981

MORPHOLOGY: These are small spiders (3-4 mm) and the males are slightly smaller than the females. *Paroecobius* can be distinguished from other genera by the dark, large anterior median eyes with a black ring on cuticular base, while all other eyes are opalescent. Carapace sub circular; dome shaped; wider than long; fovea absent; anterior median eyes the largest, followed by the posterior median eyes; the lateral eyes are both much smaller; anterior row of eyes slightly recurved in relation to the anterior margin of the carapace, while the posterior row is very strongly recurved. Abdomen more or less flattened and oval, slightly overlapping carapace. Leg with three claws; legs short, sub equal in length; arranged around body in a star-like fashion; with a few or no spines; calamistrum of female is in a single row, situated in proximal half of metatarsus IV, males do not have a calamistrum.

LIFESTYLE: *Paroecobius* spp. live in shallow crevices covered with a silk hammock, which is usually open on two Sides. Retreats of *P. wilmotae* have been found on outer walls of buildings (Lamoral, 1981). Wunderlich (1995) described *P. nicolaii* based on material collected from tree bark at Nylstroom, South Africa.

TAXONOMY: Genus not revised.



Paroecobius nicolaii female from Wyndford Photo Peter Webb

Paroecobius nicolai Wunderlich, 1995

COMMON NAME: Nicolai's Large-eyed Ant eaters

NATIONAL STATUS: DD

NATIONAL RATIONALE: A South African endemic described by Wunderlich (1995), known from Modimolle in the Limpopo Province. Also recorded from other localities in the North West and Free State (EOO<1000 km²; AOO=8km²; 1155-1556 m a.s.l.). But the species is under collected and some more sampling is needed to determine the species range. Therefore, listed as Data Deficient.

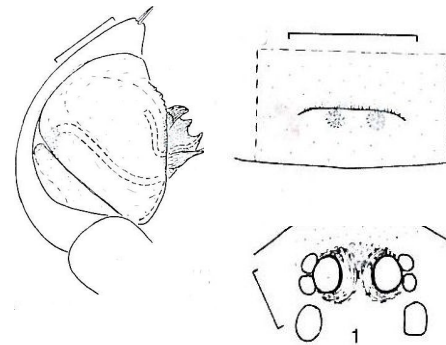
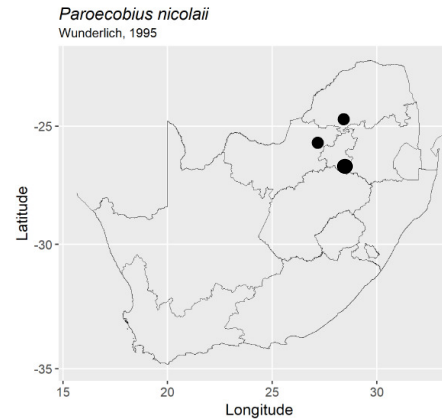
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: **Free State:** Wyndford Guest Farm, Fouriesburg (-28.7, 28.24). **Limpopo:** Nylstroom/Modimolle (-24.69, 28.4). **North West:** Rustenburg Nature Reserve (-25.72, 27.18).

LIFESTYLE: The species lives inside shallow crevices of rocks and bark of Marula and Paper-bark trees, covered with a silk hammock, which is usually open at two ends. Sampled from the Savanna biome (Foord et al. 2011). At Wyndford Guest Farm specimens run very fast from one web to another when disturbed (P. Webb pers. comm).

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

TAXONOMIC NOTES: Known from both sexes.



After Wunderlich (1995)



Paroecobius nicolai female from Wyndford Photo Peter Webb

GENUS *UROCTEA* Dufour, 1820

The genus *Uroctea* is represented by 20 species (World Spider Catalog 2021). Three of the species are known from South Africa. *Uroctea semilimbata* Simon, 1910 is listed in the World Spider Catalog (2021) from South Africa but is known only from “Sud-Herreroland”.

COMMON NAME: Desert Round-headed spiders.

TYPE SPECIES: *Uroctea durandi* (Latreille, 1809)

MORPHOLOGY: Medium-sized. Colour varies from dark with yellow, to dark with orange or dark spots (5-7) on the dorsum; spots more prominent in the young, tending to disappear in adults, but variation does occur; legs colour similar to body. Carapace sub circular, wider than long; without a fovea; distinct clypeal snout; eight eyes; anterior median eyes largest, remainder arranged in compact group around them. Abdomen more or less flattened and oval to round; slightly overlapping carapace; large, 2-jointed anal tubercle with double row of fringed setae; abdominal markings variable between adults and juveniles; spots are more prominent in the young, tending to disappear in adults. Legs short and sub equal in length, arranged star-like around body.

LIFESTYLE: They are ground dwellers that make an easily recognized web under stones. The retreat is a multi-layered sheet made under stones and consists of a flat part facing the stone, with a dome-shaped part facing the ground. The round, scalloped edge is fastened to the stone with stiff guy threads radiating in all directions. Small objects such as stones and bits of debris are frequently attached to the silk threads. The web serves mostly as a retreat with stiff guy threads radiating in all directions. As soon as prey touches the threads, the spider dashes out to capture it. *Uroctea* spp. circle their prey (a large variety of crawling insects but mostly ants), fixing it to the substrate with silk threads.

TAXONOMY: African species not revised. South African species known only from the females.



Uroctea sp. female Photo Norman Larsen



Uroctea sp. juvenile Photo Peter Webb

Uroctea quinquenotata Simon, 1910

COMMON NAME: Five-Spotted Desert Round Headed Spider

NATIONAL STATUS: LC

NATIONAL RATIONALE: A South African endemic described by Simon (1910) from Steinkopf in the Northern Cape. The species has been sampled from Northern and Western Cape (EOO=146 088 km²; AOO=76 km²; 63-1329 m a.s.l.). Due to its wide distribution, it is listed as Least Concern.

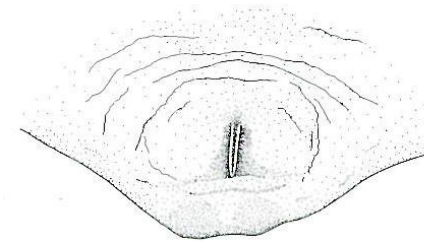
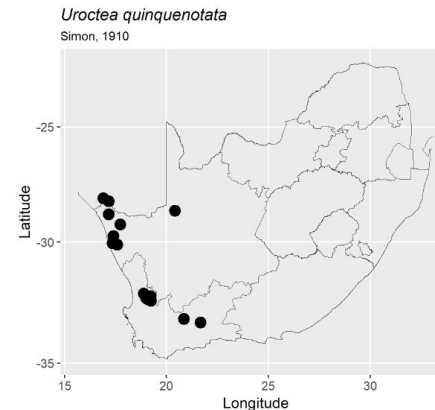
GLOBAL DISTRIBUTION: South Africa.

DISTRIBUTION IN SOUTH AFRICA: **Northern Cape:** Augrabies National Park (-28.53, 20.29); Kamaggas (-29.75, 17.4); Steinkopf (-29.25, 17.73); Richtersveld Transfrontier National Park (-28.25, 17.17); Benfontein Nature Reserve (-28.82, 17.17); Sendelingsdrif (-28.13, 16.90); Soebatsfontein (-30.11, 17.59). **Western Cape:** Clanwilliam (-32.16, 18.89); Swartberg Nature Reserve, Gamkaskloof (-33.35, 21.67); Cederberg Wilderness Area (-32.51, 19.29); Cederberg Wilderness Area -32.4, 19.09; Cederberg Wilderness Area, CIB5.1, 643 m a.s.l. (-32.3958, 19.0873); Cederberg Wilderness Area, CIB5.2, 677 m a.s.l. (-32.3968, 19.0870); Cederberg Wilderness Area, CIB7.1, 1152 m a.s.l. (-32.4607, 19.2395); Cederberg Wilderness Area, CIB8.4, 1366 m a.s.l. (-32.4347, 19.2130); Cederberg, Crystal Pools, CIB16.3, 927 m a.s.l. (-32.3104, 19.1740); Cederberg, Crystal Pools, CIB16.4, 920 m a.s.l. (-32.3099, 19.1754); Cederberg, Driehoek, CIB6.2, 919 m a.s.l. (-32.4241, 19.1627); Cederberg, Niewoudts Pass, CIB4.2, 527 m a.s.l. (-32.3503, 19.0073); Cederberg, Wupperthal, CIB17.4, 524 m a.s.l. (-32.2779, 19.2193); Laingsburg (-33.20, 20.85).

LIFESTYLE: The species makes a multi-layered retreat-web under stones, with a flat web facing the stone and the dome-shaped part facing the ground. Species occurs in more arid regions. The web serves mostly as a retreat with stiff guy threads radiating in all directions. Sampled from the Fynbos, Nama Karoo, Desert and Succulent Karoo biomes.

CONSERVATION MEASURES: There are no known threats to the species. Sampled from four protected areas: Augrabies National Park (Dippenaar-Schoeman 2021), Richtersveld Transfrontier National Park (Dippenaar-Schoeman 2020), and the Swartberg Nature Reserve.

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



After Baums (1980)



Uroctea quinquenotata from Cederberg Photo Norman Larsen



Uroctea quinquenotata Photo ASD

Uroctea schinzi Simon, 1887

COMMON NAME: Namibian Desert Round Headed Spider

NATIONAL STATUS: LC

NATIONAL RATIONALE: A southern African endemic described by Simon (1887) from Jackalsputs in Northern Cape. The species has been sampled from three African countries. In South Africa it is only known from the Northern Cape (EOO=4 566 km²; AOO=16 km²; 250-673m a.s.l.). Due to its wide geographic range in Africa the species is listed as Least Concern.

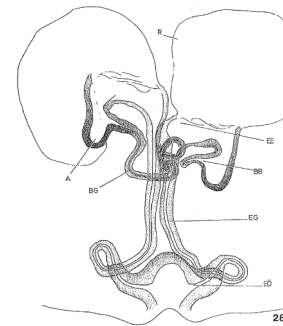
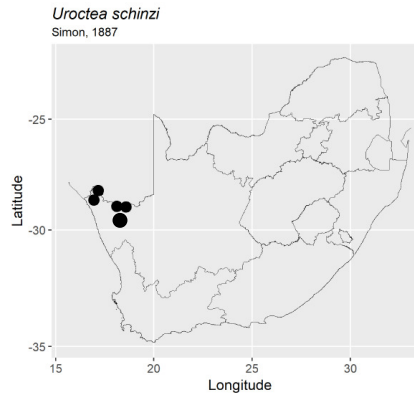
GLOBAL DISTRIBUTION: Botswana, Namibia and South Africa.

LIFESTYLE: The species is a ground dweller that makes a retreat web under stones. Sampled from the Succulent Karoo and Desert biomes.

DISTRIBUTION IN SOUTH AFRICA: *Northern Cape:* Henkries (-28.95, 18.12); Jackalsputs (-28.67, 16.95); Richtersveld Transfrontier National Park (-28.25, 17.17); Naroep (-28.98, 18.58); Jackals water 3 km Nababeep (-29.37, 17.48).

CONSERVATION MEASURES: There are no known threats to the species. Protected in the Richtersveld Transfrontier National Park (Dippenaar-Schoeman 2020).

TAXONOMIC NOTES: Not revised, known only from the female, vulva illustrated. The juvenile specimens have black abdomens with five light conspicuous spots and one terminally; carapace, legs and sternum light yellow.



After Baums (1980)



Uroctea schinzi female Photo Les Oates



Uroctea schinzi immature female from Jackals Water
Photo Peter Webb

Uroctea septemnotata Tucker, 1920

COMMON NAME: Desert Round Headed Spider

NATIONAL STATUS: LC

NATIONAL RATIONALE: A southern African endemic described by Tucker (1920) from Namibia where it is widely distributed. In South Africa only known from Northern Cape (EOO=4 km²; AOO=4km²; 182 m a.s.l.). Due to its wide geographic range in southern African, the species is listed as Least Concern.

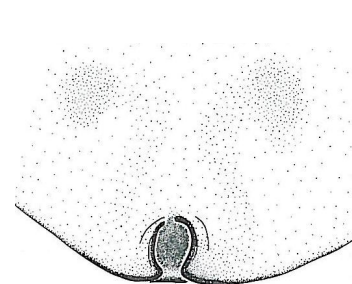
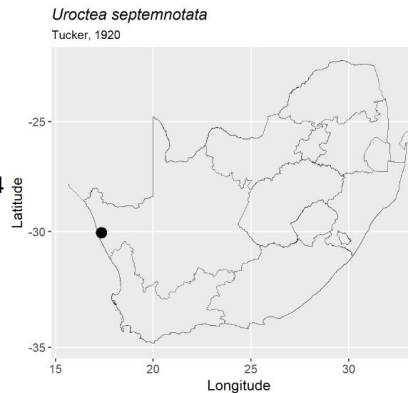
GLOBAL DISTRIBUTION: Namibia and South Africa.

SOUTH AFRICA: *Northern Cape*: Namaqua National Park (-30.05,17.35)

HABITAT: The species is a ground dweller known to make a retreat-web under stones. Sampled from the Nama Karoo Biome.

CONSERVATION MEASURES: There are no known threats to the species protected in the Namaqua National Park (Dippenaar-Schoeman 2020).

TAXONOMIC NOTES: Not revised known only from the female.



After Baums (1980)



Uroctea septemnotata from Namaqua National Park
Photo Reginald Christiaan

UNDETERMINED



Uroctea quinquenotata ? undescribed male from Swartberg Nature Reserve

GENUS *UROECOBIUS* Kullmann & Zimmermann, 1976

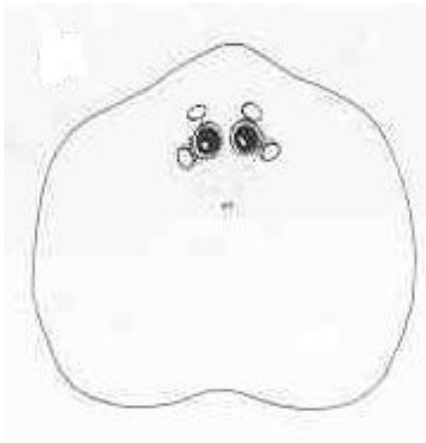
The genus *Uroecobius* is monotypic only known from the South African endemic species

COMMON NAME: Six-eyed Round Headed Spider

TYPE SPECIES: *Uroecobius ecribellatus* Kullmann & Zimmermann, 1976

MORPHOLOGY: Body size: very small spiders (< 5 mm) and the males are slightly smaller than the females. Carapace sub circular, wider than long, without a fovea; six eyes arranged in two rows in a compact group near the centre of the carapace; posterior median eyes reduced and the anterior median eyes large and circular. Abdomen somewhat flattened; oval tapering posteriorly; slightly overlapping the carapace; dark decorated with spots. Legs short and sub equal in length, arranged star-like around body.

LIFESTYLE: They are usually found on rock surfaces, under a small star-shaped web. They construct small retreats very similar to those of *Oecobius* (Kullmann & Zimmermann, 1976).



Eye pattern after Dippenaar-Schoeman & Jocqué (1997)



Uroecobius ecribellatus from Mphaphuli Nature Reserve Photo Peter Webb

Uroecobius ecribellatus Kullmann & Zimmermann, 1976

COMMON NAME: Four Spotted Desert Round Headed Spider

NATIONAL STATUS: LC

NATIONAL RATIONALE: A South African endemic described in 1976, from Mpumalanga with the type sampled between Lydenburg and Tzaneen. The species is recorded from four provinces (EOO = 152 798 km²; AOO=44 km²; 399-1816 m a.s.l.) Due to its wide geographic range the species is listed as Least Concern.

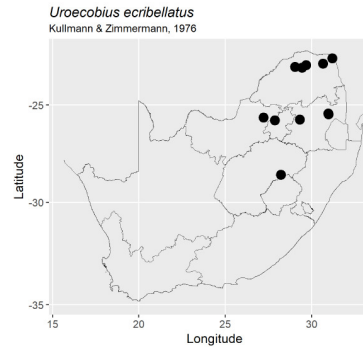
GLOBAL DISTRIBUTION: South Africa.

LIFESTYLE: This species makes star-shaped web retreats on rocks. These retreats are made over small crevices and indentations in rocks. The spider sits beneath the sheet on the substrate with its back to the sheet. When prey touches a thread the spider rushes out and rapidly circles it in an anticlockwise direction. Ants seem to be their main prey but they prey on minute Diptera as well. Sampled from Grassland and Savanna biomes (Foord et al. 2011; Haddad et al. 2013).

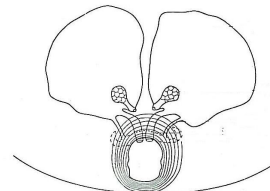
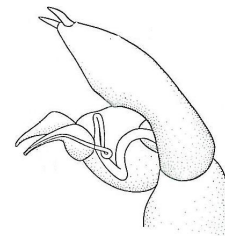
DISTRIBUTION IN SOUTH AFRICA: **Free State:** Fouriesburg (-28.61, 28.23). **Limpopo:** Lhuvhondo Nature Reserve (-23.03, 29.45); Rochdale Prieska (-22.54, 29.41); Kruger National Park (Pafuri) (-22.46, 31.3); Mphaphuli Nature Reserve (-22.813, 30.663); Blouberg Nature Reserve (-22.99, 29.04). **Mpumalanga:** Lowveld National Botanical Gardens (-25.47, 31.00); Nelspruit (-25.47, 30.96); Olifants River (-24.08, 31.07); Nelspruit (-25.4853, 30.9782). **North West:** Broederstroom (-25.78, 27.87); Rustenburg Nature Reserve (-25.65, 27.22).

CONSERVATION MEASURES: Threats to the species are unknown and it is protected in the following areas: Blouberg Nature Reserve (Foord et al. 2016), Lhuvhondo Nature Reserve (Foord et al. 2008), Kruger National Park (Dippenaar-Schoeman 2020), Lowveld Botanical Garden and Rustenburg Nature Reserve.

TAXONOMIC NOTES: Known from both sexes, illustrated.



Carapace Photo ASD



After Kullmann & Zimmermann, 1976



Uroecobius ecribellatus from Mphaphuli Nature Reserve
Photo Peter Webb

REFERENCES

- BAUM S. 1980. Taxonomie und Genitalstrukturen weiterer Arten der Genera *Oecobius* und *Uroctea* (Arach.: Araneae: Oecobiidae). *Verhandlungen des Naturwissenschaftlichen Vereins in Hamburg* 23: 339-355.
- BLACKWALL J. 1859. Descriptions of newly discovered spiders captured by James Yate Johnson Esq., in the island of Madeira. *Annals and Magazine of Natural History* (3) 4: 255-267.
- DIPPENAAR-SCHOEMAN A S. 2014. *Field Guide of the Spiders of South Africa*. Lapa Publisher 424 pp.
- DIPPENAAR-SCHOEMAN A S. 2020. Spiders of the Kruger National Park. SANSA SANParks Final Report (unpublished).
- DIPPENAAR-SCHOEMAN A S. 2020. Spiders of the Namaqua National Park. SANSA SANParks Final Report (unpublished).
- DIPPENAAR-SCHOEMAN A S & JOCQUÉ R. 1997. *African spiders: an identification manual*. Plant Protection Research Institute Handbook no. 9, ARC-Plant Protection Research Institute, Pretoria 392 pp.
- DIPPENAAR-SCHOEMAN A S, VAN DEN BERG A & PRENDINI L. 2009. A checklist of spiders and scorpions of the Nylsvley Nature Reserve, South Africa. *Koedoe* 50(1): 1-9.
- DIPPENAAR-SCHOEMAN A S, LEROY A, DE JAGER M & VAN DEN BERG A. 1999. Spider diversity of the Karoo National Park, South Africa (Arachnida: Araneae). *Koedoe* 42: 31-42.
- DIPPENAAR-SCHOEMAN A S, VAN DER WALT A E, DE JAGER M, LE ROUX E & VAN DEN BERG A. 2005. The spiders of the Swartberg Nature Reserve in South Africa (Arachnida: Araneae). *Koedoe* 48: 77-86.
- DIPPENAAR-SCHOEMAN A S, FOORD S H, HADDAD C R & LE ROUX E 2021. A checklist of the spiders (Arachnida, Araneae) of the Augrabies National Park in the Northern Cape Province, South Africa. *SANSA Newsletter Supplement* 37: 16-24.
- FOORD S H, MAFADZA M M, DIPPENAAR-SCHOEMAN A S & VAN RENSBURG B J. 2008. Small scale heterogeneity in spider (Arachnida: Araneae) species composition and assemblage structure in the Soutpansberg, South Africa. *African Zoology* 43: 156-174.
- FOORD S H, DIPPENAAR-SCHOEMAN A S & HADDAD C R. 2011. The faunistic diversity of spiders (Arachnida, Araneae) of the Savanna Biome in South Africa. *Transactions of the Royal Society of South Africa* 66: 170-201.
- FOORD S H, & DIPPENAAR-SCHOEMAN A S. 2016. The effect of elevation and time on mountain spider diversity: a view of two aspects in the Cederberg mountains of South Africa. *Journal of Biogeography* 43: 2354–2365.
- FOORD S H, DIPPENAAR-SCHOEMAN A S, HADDAD C R, SCHOEMAN C, HAHN N & LYLE R. 2019. Spider checklist for the Blouberg, in the Vhembe Biosphere Reserve, South Africa. *Bothalia - African Biodiversity & Conservation* 49(1), a2455. <https://doi.org/10.4102/abc.v49i1.2455>.
- HADDAD C R, DIPPENAAR-SCHOEMAN A S, FOORD S H, LOTZ L N & LYLE R. 2013. The faunistic diversity of spiders (Arachnida, Araneae) of the Grassland Biome in South Africa. *Transactions of the Royal Society of South Africa* 68: 97-122.
- HADDAD C R & DIPPENAAR-SCHOEMAN A S. 2015. Diversity of non-acarine arachnids of the Ophathe Game Reserve, South Africa: Testing a rapid sampling protocol. *Koedoe* 57(1), Art. #1255, 15 pages. <http://dx.doi.org/10.4102/koedoe.v57i1.1255>.
- HADDAD C. R & DIPPENAAR-SCHOEMAN A S. 2009. The Arachnida of the De Hoop Nature Reserve in the Western Cape. *Koedoe* 51(1): 1-9.
- KRITSCHER E. 1966. Die paläarktischen Arten der Gattung *Oecobius* (Aran., Oecobiidae). *Annalen des Naturhistorischen Museums in Wien* 69: 285-295.
- KULLMANN E & ZIMMERMANN W. 1976. Ein neuer Beitrag zum Cribellaten-Ecribellaten-Problem: Beschreibung von *Uroecobius ecribellatus* n. gen. n. sp. und Diskussion seiner phylogenetischen Stellung (Arachnida: Araneae: Oecobiidae). *Ent. Germ.* 3: 29-40

REFERENCES

LAMORAL B H. 1981. *Paroecobius wilmotae*, a new genus and species from the Okavango Delta, Botswana (Araneae: Oecobiidae: Oecobiinae). *Annals of the Natal Museum* 24: 507-512.

LAWRENCE R F. 1952. New spiders from the eastern half of South Africa. *Annals of the Natal Museum* 12: 183-226.

PICKARD-CAMBRIDGE O. 1876. Catalogue of a collection of spiders made in Egypt, with descriptions of new species and characters of a new genus. *Proceedings of the Zoological Society of London* 1876: 541-630.

SIMON E. 1887. Etudes arachnologiques. 20e Mémoire. XXVIII. Arachnides recueillis dans le sud de l'Afrique protected arear M. le docteur Hans Schinz. *Annales de la Société Entomologique de France* (6) 7: 369-384.

SIMON E. 1910. Arachnoidea. Araneae (ii). In: Schultze, L. (ed.) Zoologische und anthropologische Ergebnisse einer Forschungsreise im Westlichen und zentralen Südafrika. *Denkschriften der Medizinisch-Naturwissenschaftlichen Gesellschaft zu Jena* 16, 175-218.

TUCKER R W E. 1920. Contributions to the South African Arachnid Fauna. II. On some new South African spiders of the families Barychelidae, Dipluridae, Eresidae, Zodariidae, Heracliidae, Uroctidae, Clubionidae. *Annals of the South African Museum* 17: 439-488.

WUNDERLICH J. 1995. Zu Taxonomie und Biogeographie der Arten der Gattung Oecobius Lucas 1846, mit Neubeschreibungen aus der Mediterraneis und von der Arabischen Halbinsel (Arachnida: Araneae: Oecobiidae). *Beiträge zur Araneologie* 4: 585-608.

WUNDERLICH J. 1995. Beschreibung der zweiten Art der Gattung Paroecobius Lamoral 1981 aus Süd-Afrika (Arachnida: Araneae: Oecobiidae). *Beiträge Araneologie* 4: 581-584.

WORLD SPIDER CATALOG 2020. World Spider Catalog. Version 21.5. Natural History Museum Bern, online at <http://wsc.nmbe.ch>, accessed on 30 October 2020 doi: 10.24436/2