

SPIDERS (ARANEAE)

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Available information.

Information on the spiders of the Limpopo Province, which includes the Soutpansberg, is still rudimentary. Most of the practising Arachnologists between the periods 1890–1970 were stationed in the coastal provinces where most of the earlier collecting and description of spiders was done. It is only in the seventies that serious collecting started in the more northern provinces. The bias could be illustrated by the mygalomorphs where, of the 281 known species from Southern Africa, only 16 so far have been recorded from the Limpopo Province (Dippenaar-Schoeman, 2002). This under representation of the fauna of this province is due to a lack of surveys and research.

The only quantitative survey of the Soutpansberg is a recent survey of the Western Soutpansberg (Foord *et al.* 2002) over a period of five years (1996–2000). Data on the spider fauna of the northern and eastern parts consists mainly of ad hoc collecting trips by museum curators and visiting scientists. Numerous specimens collected from the Soutpansberg have been described as new to science and this data is scattered through the literature and has not been summarized in any meaningful way. Numerous specimens are housed at the Spider Research Centre at the ARC-Plant Protection Research Institute (PPRI) in Pretoria. The unit has extensive specimen and literature reference in general and as part of the South African National Survey of Arachnida (SANSA), launched in 1997, is compiling an inventory of the arachnid fauna of South Africa (Dippenaar-Schoeman & Craemer, 2000).

We define the Soutpansberg as incorporating the mountain massif proper including a 25 km boundary stretching into the surrounding flat lands. Lajuma (23° 02'S–29° 26'E), falls within this area.

Summary statistics

During a five-year survey in the Western Soutpansberg, a total of 46 families represented by 110 genera and 130 species was collected (see Table 1). This constitutes 70% of the families recorded for South Africa, 26% of the SA genera and 5% of SA species. It must however be emphasised that collecting was almost exclusively restricted to Lajuma, an area less than 50 km² in extent. It still compares well with other more comprehensive surveys that have been undertaken in South Africa for example: Roodeplaat Dam Nature Reserve (98 spp.), Rietondale Research Station (55 spp.), the Karoo National Park (116 spp.) 4 600 km² and Kruger National Park (139 spp.) 250 000 km². The richness of this component of the fauna/flora is even more remarkable when one considers that a country such as Switzerland, which is

very much larger (39 770 km²), has only 875 spp, and 39 families. France with a size of 551 263 km² has 1 400 spp. Worldwide there are 95 families. About 96% of the species collected were new records for the area with 10 possibly new species. Descriptions of three new species have already been published in peer reviewed literature. These include new species of the families **Miturgidae** and **Pholcidae**.

Due to a lack of baseline information on spiders very little is known about their conservation status except for species lists of a few National Parks (Mountain Zebra National Park, Karoo National Park and Kruger National Park) and reserves (Roodeplaatdam Nature Reserve, Makelali Game Reserve and Swartberg Nature Reserve). No spiders are on the red data list. It is mainly the suborder Mygalomorphae, which represent the larger baboon and trapdoor spiders that have received some attention in the past. The larger Theraphosidae (baboon spiders) are in great demand as pets and are consequently regarded as commercially threatened by the International Union for the Conservation of Nature (IUCN) (De Wet & Schoonbee, 1991). It is suspected that the demand for South African theraphosid spiders has increased since the Mexican red-kneed tarantula was placed on the Appendix II of the Conservation of International Trade of Endangered Species (CITES). In February 1987 three theraphosid genera *Ceratogyrus*, *Harpactira* and *Pterinochilus* were added to Schedule VII of the Transvaal Provincial Nature Conservation Ordinance of 1983 as Protected Invertebrate Animals. At present all the Provinces of South Africa follow this recommendation as a guideline and permits are needed to collect and transport the above genera in South Africa (Dippenaar-Schoeman, 2002).

Some unique mygalomorph species are found in the Soutpansberg.

- A nemesid trapdoor spider, *Entypesa schoutedeni* Benoit has its type locality in the Soutpansberg, and seems to be endemic to the mountain;
- An undescribed migid trapdoor spider is a new species of *Poecilomigas* and is the only record of this genus for the Limpopo Province;
- The only other migid known from the Soutpansberg is *Moggridgea pyymi* Hewitt.
- *Ceratogyrus bechuanicus* Purcell (starburst horned baboon spider), *C. brachycephalus* Hewitt (rhino-horned baboon spider) and *Harpactirella flaviposa* Lawrence are the only theraphosid (baboon spider) recorded for the Limpopo Province and found on the Soutpansberg.

- The very rare atypid *Calommata simoni* was collected on the Soutpansberg and a specimen is housed in the NFI: Transvaal Museum. There are only two localities recorded for this species in South Africa
- An idiopid *Galeosoma vandami* known as the shield-bum trapdoor spiders are known only from the Soutpansberg and Leydsdorp.

Major studies and publications

- FOORD, S. H., DIPPENAAR-SCHOEMAN, A. S., VAN DER MERWE, M. 2002. A check list of the spider fauna of the Western Soutpansberg, South Africa (Arachnida: Araneae). *Koedoe* 45: 35–43.
- DIPPENAAR-SCHOEMAN, A. S. & CRAEMER, C. 2000. The South African National Survey of Arachnida. *Plant Protection News* 56: 11–12.
- DIPPENAAR-SCHOEMAN, A. S. 2002. Baboon and trapdoor spiders of Southern Africa: an identification manual. *Plant Protection Research Institute*

Handbook 13. Agricultural Research Council, Pretoria 129 pp.

- DE WET, J. I. & SCHOONBEE, H. J. 1991. The occurrence and conservation status of *Ceratogyrus bechuanicus* and *C. brachycephalus* in the Transvaal, South Africa. *Koedoe* 34: 69–75.

Recommendations for priority studies required to fill any gaps identified

Not given.

“Hot spots” of particular importance

Spider hotspots are more a function of which areas were collected in than anything else: these include: Lajuma, Hanglip, and Entabeni. The forests at Hanglip and Entabeni are home to several families that are only found in the Afromontane forests in KwaZulu-Natal, Eastern and Western Cape. The only representatives of the arachnid order Opiliones from Gauteng and Limpopo Province are found here.

TABLE 1. Checklist of spiders of the Western Soutpansberg region collected from 1996–2000.

Family	Species	Guilds	Habitat	Abundance
Agelenidae	<i>Benoitia australis</i> (Simon, 1896)	FWB	G	2
	<i>Olorunia ocellata</i> Pocock, 1900	FWB	G	2
Amaurobiidae	<i>Pseudauximus annulatus</i> Purcell, 1908	RWB	G	2
Anapidae	<i>Metanapis bimaculata</i> (Simon, 1895)	OW	F	1
Araneidae	<i>Araneilla</i> (undetermined sp.)	OWB	F	1
	<i>Araneus strupifera</i> Simon, 1886	OWB	F	2
	<i>Caerostris sexcuspidata</i> (Fabricius, 1793)	OWB	F	2
	<i>Cyclosa insulana</i> (Costa, 1834)	OWB	F	3
	<i>Cyrtophora citricola</i> (Forsk., 1775)	OWB	F	3
	<i>Gasteracantha sanguinolenta</i> C.L. Koch, 1845	OWB	F	3
	<i>Neoscona blondeli</i> (Simon, 1885)	OWB	F	3
	<i>N. quincasea</i> Roberts, 1983	OWB	F	2
	<i>N. subfusca</i> (C.L. Koch, 1837)	OWB	F	3
	<i>Nemoscolus vigintipunctatus</i> Simon, 1897	OWB	F	2
Caponiidae	<i>Caponia</i> sp.	FGW	G	2
Clubionidae	<i>Clubiona</i> sp. (undetermined sp.)	FPW	F	1
	<i>C. lawrencei</i> Roewer, 1951	FPW	F	2
Corinnidae	<i>Castianeira fulvipes</i> Simon, 1896	FGW	G	1
	<i>Cetonana simoni</i> (Lawrence, 1942)	FGW	G	2
Ctenidae	<i>Trachelas scopulifer</i> Simon, 1896	FGW	G	1
	<i>Ctenus transvaalensis</i> Benoit, 1981	FGW	G	2

Family	Species	Guilds	Habitat	Abundance
Cyatholipidae	<i>Cyatholipus isolatus</i> Griswold, 1987	SHWB	F	1
Cyrtaucheniidae	<i>Homostola pardalina</i> (Hewitt, 1913)	BGW	G	2
Deinopidae	<i>Deinopis cornigera</i> Gerstaecker, 1873	AOWB	F	1
Dictynidae	<i>Devade</i> sp. (immature)	RWB	F	2
Eresidae	<i>Penestomus</i> sp. (immature)	RWB	G	1
Gnaphosidae	<i>Aphantaulax inornata</i> Tucker, 1923	FGW	G	3
	<i>Asemesthes numisma</i> Tucker, 1923	FGW	G	3
	<i>Drassodes</i> (undetermined sp.)	FGW	G	1
	<i>Echemus erutus</i> Tucker, 1923	FGW	G	3
	<i>Megamyrmekion transvaalense</i> Tucker, 1923	FGW	G	2
	<i>Setaphis arcus</i> Tucker, 1923	FGW	G	3
	<i>Xerophaeus</i> sp. (undetermined sp.)	FGW	G	1
	<i>Zelotes tuckeri</i> Roewer, 1951	FGW	G	3
Hahniidae	<i>Hahnia</i> sp. (immature)	FPW	G	1
Hersiliidae	<i>Hersilia sericea</i> Pocock, 1898	SWB	F	1
	<i>Tama arida</i> Smithers, 1945	RWB	G	1
Idiopidae	<i>Idiops castaneus</i> Hewitt, 1913	BGW	G	1
Linyphiidae	<i>Microlinyphia sterilis</i> (Pavesi, 1883)	SHWB	G	2
	<i>Neriere natalensis</i> Van Helsdingen, 1969	SHWB	G	2
	Linyphiidae genus A	SHWB	F	1
	Linyphiidae genus B	SHWB	F	1
Liocranidae	<i>Hortipes contubernalis</i> (Bosselaers & Jocqué, 2000)	FGW	G	1
Lycosidae	<i>Pardosa crassipalpis</i> Purcell, 1903	FGW	G	3
	<i>P. leipoldti</i> Purcell, 1903	FGW	G	2
	<i>Proevippa fascicularis</i> (Purcell, 1903)	FGW	G	3
	<i>P. wanlessi</i> (Russell-Smith, 1981)	FGW	G	1
Migidae	<i>Poecilomigas</i> (sp. nov.)	BPW	F	1
Mimetidae	<i>Mimetus</i> (sp. nov.)	FPW	F	1
Miturgidae	<i>Cheiracanthium africanum</i> Lessert, 1921	FPW	F	3
	<i>Cheiramiona simplicitarise</i> Simon, 1910	FPW	F	2
	<i>Cheiramiona</i> (sp. nov. in press)	FPW	F	1
Mysmenidae	undetermined new sp.	OWB	F	1
Nemesidae	<i>Entypesa schoutedeni</i> Benoit, 1965	BPW	F	1
Oecobiidae	<i>Uroecobius ecribellatus</i> Kullman & Zimmerman, 1976	RWB	G	2

Family	Species	Guilds	Habitat	Abundance
	<i>Hamataliwa kulczynskii</i> (Lessert, 1915)	FPW	F	2
	<i>Oxyopes jacksoni</i> Lessert, 1915	FPW	F	2
Oxyopidae	<i>O. longispinosus</i> Lawrence, 1938	FPW	F	2
	<i>O. pallidecoratus</i> Strand, 1906	FPW	F	2
	<i>Peucetia viridis</i> (Blackwall, 1858)	FPW	F	1
Palpimanidae	<i>Palpimanus transvaalicus</i> Simon, 1893	FGW	G	1
	<i>Philodromus browningi</i> Lawrence, 1952	FGW	F	1
Philodromidae	<i>Suemus punctatus</i> Lawrence, 1938	FGW	F	1
	<i>Thanatus vulgaris</i> Simon, 1870	FGW	F	2
	<i>Micropholcus</i> (<i>sp. nov.</i>)	SPWB	G	1
Pholcidae	<i>Pholcus ciliatus</i> Lawrence, 1938	SPWB	G	2
	<i>Smeringopus natalensis</i> Lawrence, 1947	SPWB	G	2
	<i>Spermophora peninsulae</i> Lawrence, 1964	SPWB	G	2
Phyxelididae	<i>Vidole sothoana</i> Griswold, 1990.	RWB	G	2
	<i>Euprosthenoopsis pulchella</i> (Pocock, 1902)	FWB	F	2
Pisauridae	<i>Cispius problematicus</i> Blandin, 1978	FWB	F	2
	<i>Austrodomus</i> sp.	FGW	G	1
Prodidomidae	<i>Theuma purcelli</i> Tucker, 1923	FGW	G	2
	<i>Brancus bevisi</i> Lessert, 1925	FPW	F	2
	<i>Cosmophasis australis</i> Simon, 1902	FPW	F	2
	<i>Heliophanus orchestra</i> Simon, 1885	FGW	G	2
	<i>Festucula</i> sp. (immature)	FGW	F	1
	<i>Massagris</i> sp. (<i>sp. nov.</i>)	FGW	G	2
Salticidae	<i>Natta horizontalis</i> Karsch, 1879	FGW	G	2
	<i>Pachyballus transversus</i> Simon, 1900	FPW	F	1
	<i>Stenaelurillus</i> sp.	FPW	F	2
	<i>Thyene inflata</i> (Gerstaecker, 1875)	FPW	F	2
	<i>Thyenula ogdeni</i> (Peckham & Peckham, 1903)	FPW	F	3
	<i>Scytodes</i> sp. A	FGW	G	1
Scytodidae	<i>Scytodes</i> sp. B	FGW	G	2
	<i>Scytodes fusca</i> Walckenaer, 1837	FGW	G	3
Segestriidae	<i>Ariadna</i> sp.	RWB	F	2
	<i>Selenops brachycephalus</i> Lawrence, 1940	FGW	G	2
Selenopidae	<i>S. tenebrosus</i> Lawrence, 1940	FGW	G	2
	<i>S. zuluanus</i> Lawrence, 1940	FGW	G	1
Sicariidae	<i>Loxosceles spiniceps</i> Lawrence, 1952	FGW	G	1

Family	Species	Guilds	Habitat	Abundance
Sparassidae	<i>Olios</i> sp.	FPW	F	1
	<i>Palystes johnstoni</i> Pocock, 1896	FPW	F	2
	<i>Diaea puncta</i> Karsch, 1884	FPW	F	2
	<i>Heriaeus fimbriatus</i> Lawrence, 1942	FPW	F	1
	<i>Misumenops rubrodecoratus</i> Millot, 1941	FPW	F	3
	<i>Monaeses austrinus</i> Simon, 1910	FPW	F	2
	<i>Oxytate argenteooculata</i> (Simon, 1886)	FPW	F	2
	<i>O. concolor</i> (Caporiacco, 1947)	FPW	F	1
	<i>Runcinia aethiops</i> Simon, 1901	FPW	F	2
Thomisidae	<i>R. flavida</i> Simon, 1881	FPW	F	3
	<i>Synema imitator</i> Roewer, 1951	FPW	F	2
	<i>Thomisops pupa</i> Karsch, 1879	FPW	F	2
	<i>Thomisus daradioides</i> Simon, 1890	FPW	F	3
	<i>T. granulatus</i> Karsch, 1880	FPW	F	1
	<i>T. kalaharinus</i> Lawrence, 1936	FPW	F	2
	<i>Tmarus cameliformis</i> Millot	FPW	F	2
	<i>Xysticus natalensis</i> Lawrence, 1938	FGW	G	2
	Tetragnathidae	<i>Genognatha</i> sp.	OWB	F
<i>Leucauge festiva</i> (Blackwall, 1866)		OWB	F	2
<i>L. decorata</i> (Blackwall, 1864)		OWB	F	2
<i>Nephila pilipes</i> (Fabricius, 1793)		OWB	F	2
Theraphosidae	<i>Ceratogyrus bechuanicus</i> Purcell, 1902	BGW	G	1
	<i>Harpactirella flavipilosa</i> Lawrence, 1936	BGW	G	2
	<i>Coscinida tibialis</i> Simon, 1895	GWB	F	1
Theridiidae	<i>Crustulina</i> sp.	GWB	F	1
	<i>Latrodectus geometricus</i> O.P.-Cambridge, 1904	GWB	F	3
	<i>Phoroncidia eburnea</i> (Simon, 1895)	GWB	F	1
	<i>Steatoda</i> sp.	GWB	G	2
	<i>Tidarren</i> sp.	GWB	F	1
	<i>Theridion</i>	GWB	F	3
Trochanteriidae	<i>Platyoides walteri</i> (Karsch, 1886)	FPW	F	1
Uloboridae	<i>Miagrammopes</i> sp. (immature)	AOWB	F	1
	<i>Uloborus lugubris</i> Berland, 1939	OWB	F	3
	<i>U. plumipes</i> Lucas, 1845	OWB	F	2
Zodariidae	<i>Diores auricula</i> Tucker, 1920	FGW	G	2
	<i>Psammoduon</i> sp.	FGW	G	1

Glossary to table

Guilds

None Web Living

- BGW = burrow living ground wanderers
- BPW = burrow living plant wanderers
- FGW = free living ground wanderers
- FPW = free living plant wanderers

Web Living

- AOWB= adapted orb-web
- FWB = funnel-web
- GWB = gumfoot- web
- OWB = orb-web

- RWB = retreat-web
- SWB = sheet-web
- SPWB = space-web

Habitat

- F = foliage (plants)
- G = ground

Abundance

- 1 = rare
- 2 = common
- 3 = abundant



N. Hahn