

The first record of the Fiddle-back Spider *Loxosceles rufescens* (Araneae: Sicariidae) from Western Australia

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The venom of several species of *Loxosceles* (often termed Fiddle-back Spiders due to the distinctive markings on the carapace) are reported to have deleterious effects upon humans and several species are capable of forming severe necrotic lesions and occasionally death (Schenone and Suarez 1978).

These spiders, previously placed in their own family, Loxoscelidae (e.g., Gertsch 1949; Gertsch and Ennik 1983) or in the Scytodidae (e.g., Gertsch 1967), are now placed in the subfamily Loxoscelinae, in the Sicariidae (e.g. Simon 1893; Platnick *et al.* 1991). Numerous species have been described from Africa, southern Europe and the Americas, which appears to represent the full natural distribution of the genus.

Two *Loxosceles* species are reported to have been transported to various parts of the world through indirect human agency. The most widely distributed is *L. rufescens* (Dufour), a species with a natural circum-Mediterranean distribution, now reported from many other regions including U.S.A., east Asia, Australia, Madagascar, many islands of the Pacific and Atlantic (such as Hawaii) (see references in Bonnet 1957; Gertsch and Ennik 1983; Platnick 1989, 1993). The sole Australian records of this species are from Adelaide and other regions of South Australia (Gray 1974; Southcott 1976, 1978), where the species seems to have been established for some time. Southcott (1978) reported that specimens in museum collections dated back some 'forty years'.

The second is *L. laeta* (Nicolet) from western South America, which has been introduced into other areas of South and central America (e.g., Brazil, Argentina, Colombia, Ecuador and Belize), U.S.A., Canada, Australia and Finland (Gertsch and Ennik 1983). The sole Australian record was of a single male from the central city area of Sydney, New South Wales [Gray 1974; under the name *L. rufipes* (Lucas) – see Gertsch and Ennik (1983) for a clarification of this nomenclatural problem].

An examination of some spider material donated to the Western Australian Museum by Dr B.Y. Main uncovered a previously unrecognised specimen of *L. rufescens* collected in Nedlands, an

inner suburban area of Perth, in early 1957. The identification of this specimen, an adult female, was confirmed by examination of the internal genitalia which conform to that described for the species by Gertsch and Ennik (1983, figures 349–351). The specimen was found amongst packing cases which had been delivered from Singapore. However, it may well prove impossible to ascertain the exact provenance of the specimen, as the association with packing cases from Singapore may be fortuitous.

No other specimens of *Loxosceles* has been found amongst the collections of the Western Australian Museum or any similar repository (such as the Department of Agriculture, Perth), and none has ever been reported from Western Australia. Therefore, it seems likely that the species has not become established in Perth, and that the sole specimen reported here was a chance introduction.

Despite the long presence of *L. rufescens* in Australia, it seems that bites from these spiders are either very infrequent or are misdiagnosed. Sutherland (1983) reported that no bites by this spider have occurred in Australia.

Material Examined

Australia: Western Australia: 1 ♀, Nedlands, Perth, 'found amongst packing cases from Singapore', April 1957, S. Barker (WAM 96/854, BYM 1957/A8).

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REFERENCES

- Bonnet, P. (1957). *Bibliographia Araneorum*, vol. 2(3). Douladoure, Toulouse.
- Gertsch, W.J. (1949). *American Spiders*. D. Van Nostrand, New York.

- Gertsch, W.J. (1967). The spider genus *Loxosceles* in South America (Araneae, Loxoscelidae). *Bulletin of the American Museum of Natural History* **136**: 117–174.
- Gertsch, W.J. and Ennik, F. (1983). The spider genus *Loxosceles* in North America, central America, and the West Indies (Araneae, Loxoscelidae). *Bulletin of the American Museum of Natural History* **175**: 264–360.
- Gray, M.[R.] (1974). Records of loxosceline spiders from Australia. *Journal of the Entomological Society (New South Wales)* **8**: 46.
- Platnick, N.I. (1989). *Advances in Spider Taxonomy 1981–1987*. Manchester University Press, Manchester.
- Platnick, N.I. (1993). *Advances in Spider Taxonomy 1988–1991 with Synonymies and Transfers 1940–1980*. New York Entomological Society, New York.
- Platnick, N.I., Coddington, J.A., Forster, R.R. and Grsiwold, C.E. (1991). Spinneret morphology and the phylogeny of haplogyne spiders (Araneae, Araneomorphae). *American Museum Novitates* **3016**: 1–73.
- Schenone, H. and Suarez, G. (1978). Venoms of Scytodidae. Genus *Loxosceles*. In: Bettini, S. (ed.), *Arthropod Venoms*: 247–275. Springer-Verlag, Berlin.
- Simon, E. (1893). *Histoire Naturelle des Araignées*, 2nd edition. Vol. 1. Librairie Encyclopédique de Roret, Paris.
- Southcott, R.V. (1976). Spiders of the genus *Loxosceles* in Australia. *Medical Journal of Australia* **1**: 406–408.
- Southcott, R.V. (1978). *Australian Harmful Arachnids and their Allies*. R.V. Southcott, Mitcham, S.Aust.
- Sutherland, S.K. (1983). *Australian Animal Toxins*. Oxford University Press, Melbourne.

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