

Keys to the Seychelles Fauna

1. Holothyrid giant mites

J. Gerlach

A characteristic component of the Seychelles montane forest fauna are the giant mites belonging to the family Holothyridae. These are approximately 8mm in diameter and have a total leg span of over 10mm, making them the world's largest mites. All the Seychelles species are endemic although the family is also found in Mauritius and Australasia (Thon 1906).

In addition to their large size these mites are notable for their remarkable adaptation to a predatory life. They have modified the typical mite feeding stylets into a rasping radula. This character, normally considered characteristic of molluscs, is probably used to bore holes through arthropod exoskeletons. The precise details of their feeding mechanism remains obscure as nothing is known of their ecology.

There are four Seychelles species with the following distributions:

<i>Holothyus braueri</i> Thon, 1906	Silhouette & Mahé
<i>H. gardineri</i> Warburton, 1912	Mahé
<i>H. niger</i> Thon, 1906	Silhouette
<i>H. seychellensis</i> Thon, 1906	Silhouette

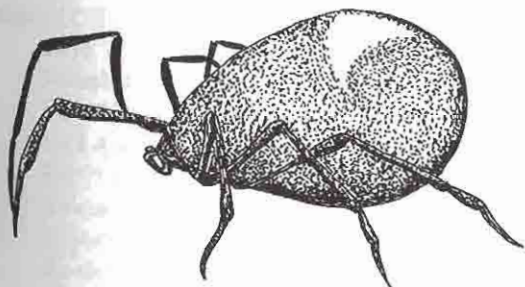


Fig. 1. *Holothyus niger*. Scale bar = 5mm

NOTES

Full descriptions are given by Thon (1906) and Warburton (1912), the former with a detailed account of the morphology, including the radula and musculature. The main characters used to distinguish the species are those of the structure of the genital plate of the abdomen. The key below uses external body colour as an easily used means of distinguishing the species. Two species are not separable on colour but available data indicates that they are found on separate islands.

Key:

- | | | | |
|----|-------------------|--------------------------------------|-----------------|
| 1. | Back colour - | black | 2. |
| | red, tarsii white | <i>H. braueri</i> | |
| 2. | Tarsii colour - | black | <i>H. niger</i> |
| | white | <i>H. gardineri</i> (Mahé) | |
| | | <i>H. seychellensis</i> (Silhouette) | |

References:

Thon, K. 1906

Die äußere Morphologie und die Systematik der Holothyriden. *Zool. Jahrb.* 23; 677-724

Warburton, C. 1912

The Acarina of the Seychelles. *Trans. Linn. Soc., Lond.* (2) 15; 349-360