

## Documents

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**LEAF ANATOMY OF THE MEDICINAL PLANT *Sphagneticola trilobata* (L.) PRUSKI**

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**Abstract**

Leaf anatomical and micromorphological studies were conducted on *Sphagneticola trilobata* in the Asteraceae family. Since there has been no taxonomic study of *S. trilobata* in Malaysia, this study aims to determine and investigate the leaf anatomical and micromorphological characteristics of the species that can be used in its identification and for supportive data in its classification. The methods used in this study include the preparation of transverse sections of the petiole, midrib, lamina and margin using a sliding microtome, as well as epidermal peels, and they were observed under a light microscope. The leaf micromorphological study was conducted using a scanning electron microscope. The findings demonstrated characteristics of the leaf anatomy and micromorphology of *S. trilobata* that could be used in the identification and classification of the species, such as having arc-shaped separated vascular bundles, anomocytic stomata, flakes, crusts and granules of waxes, as well as simple multicellular (long, pointed end, with echinate ornamentation), capitate (multicellular, short stalk, unicellular head) and peltate glandular trichomes. In conclusion, the study revealed that the anatomical and micromorphological characteristics of *S. trilobata* have a taxonomic value that can be useful in terms of identification, differentiation, and classification at the species level. © 2022 Penerbit UMT. All Rights Reserved.

**Author Keywords**

Asteraceae; Leaf anatomy; leaf micromorphology; *Sphagneticola trilobata*

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