



**British
Pharmacopoeia**

Bacopa Monnieri – BP 2016

Photographs and micrographs are provided for information. To be used in conjunction with the published British Pharmacopoeia monograph.

Identification A

Pieces of herb, consisting mainly of stem and leaf; green or purplish angular stems, 1 to 2 mm in diameter and 10 to 30 cm long, nodes prominent, often showing sprouting rootlets and with numerous ascending branches; green leaves sessile or short petioled, fleshy, glabrous on the upper surface, simple, opposite, decussate, 0.6 to 2.5 cm long and 3 to 8 mm wide, reniform, spatulate or oblanceolate, margin entire or, rarely, dentate. If present, flowers are axillary and solitary, on peduncles usually longer than the leaves; corolla white or pale pink or purple, with purplish veins and tips, up to 1 cm long, five lobed, oblong, obtuse; fruit capsule ovoid-acuminate or slightly beaked at the apex, glabrous, up to 5 mm long.



fig. 1 Dried fragments of stem and leaf of herb



fig. 2 Separated dried pieces of herb showing prominent nodes, leaves and flowers.

Identification B

Reduce to a powder (355). The powder is greenish or yellowish-brown. Examine under a microscope using *chloral hydrate solution*. The powder shows fragments of the epidermis, with a thin striated cuticle, multicellular glandular trichomes, *anomocytic* stomata, Appendix XI H; numerous xylem vessels with reticulate thickening. Examine under a microscope using 50% v/v of *glycerol* in water. Starch granules are present, usually simple, round or ovoid, 4 to 14 μm in diameter, without a visible hilum.

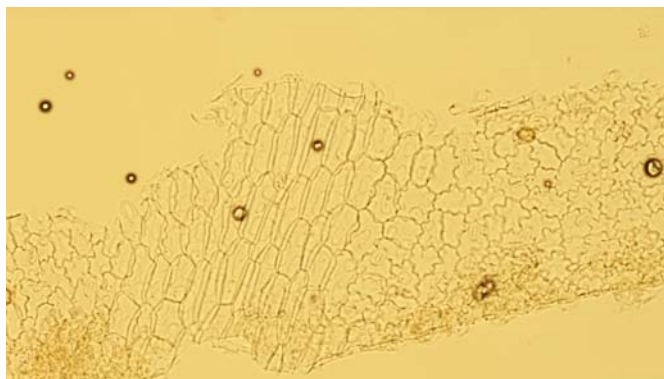


fig. 1 Fragment of the epidermis (100x)

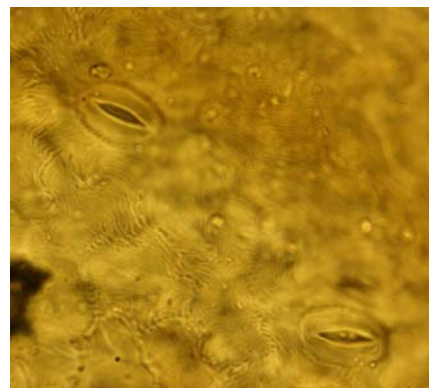


fig. 2 Epidermis with thin striated cuticle (500x)

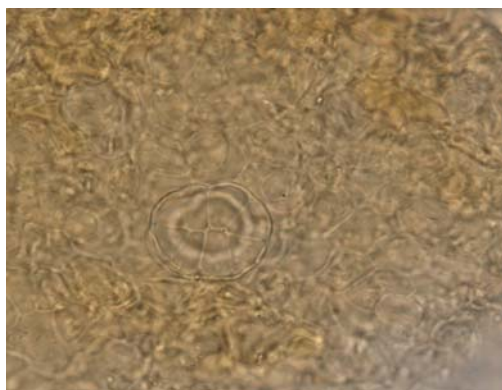


fig. 3 Epidermis with multicellular glandular trichome (500x)

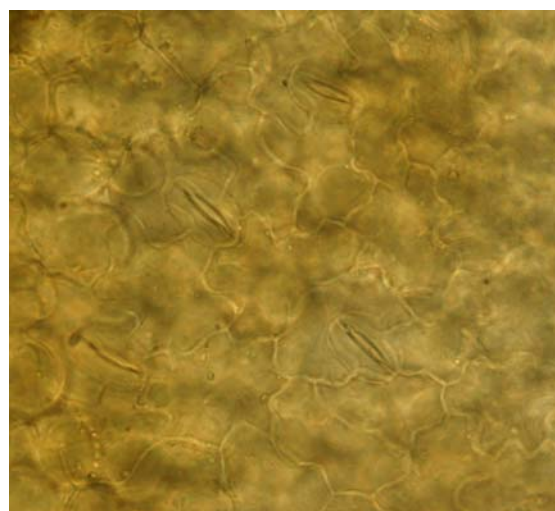


fig. 4 Epidermis with anomocytic stomata (500x)

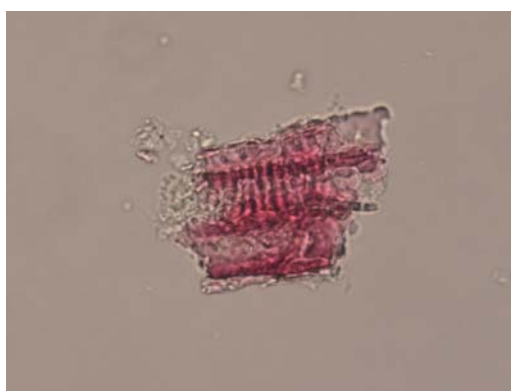


fig. 5 Xylem vessels with reticulate thickening stained with phloroglucinol (500x)

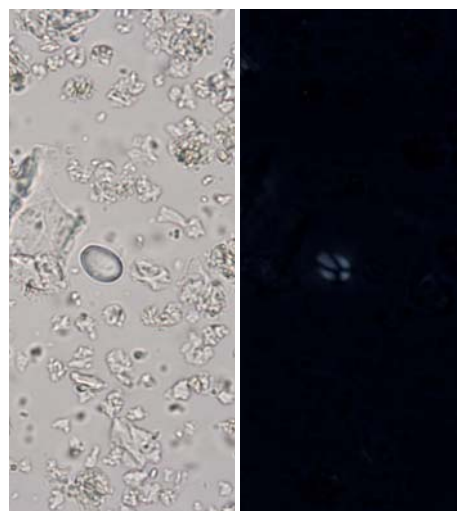


fig. 6 and 7 Starch granule without a visible hilum in non-polarised and polarised light (500x)