



**British
Pharmacopoeia**

Azadirachta Indica Leaf – BP 2016

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

Identification A

Leaflets thin and fragile, ovate to lanceolate, 3 to 10 cm long and 1 to 2.5 cm wide, curved with a serrate margin; base markedly asymmetrical, apex acuminate and terminating in a fine point; upper surface dark brownish-green, lower surface paler with distinct midrib and lateral veins running to the margins; both surfaces glabrous.

Fragments of the rachis may be present; these are pale brown, slender, up to about 10 cm long, cylindrical with faint longitudinal striations and bearing alternating pairs of scars where the leaflets were attached.



fig. 1 Leaflets.



fig. 2 Curved, markedly asymmetrical leaflets with lateral veins running to the serrate margins.



fig. 3 Upper and lower surfaces of the leaflets.



fig. 4 Fragments of the rachis with faint longitudinal striations and alternating pairs of scars where the leaflets were attached.

Identification B

Reduce to a powder (355). The powder is green. Examine under a microscope using *chloral hydrate solution*. The powder shows fragments of the epidermis composed of thin-walled tangentially elongated cells with abundant *anomocytic* stomata, Appendix XI H; abundant fragments of single layered palisade and thin-walled parenchymatous cells of the spongy mesophyll present, some with associated vessels; some fragments display rosette crystals of calcium oxalate often in rows.

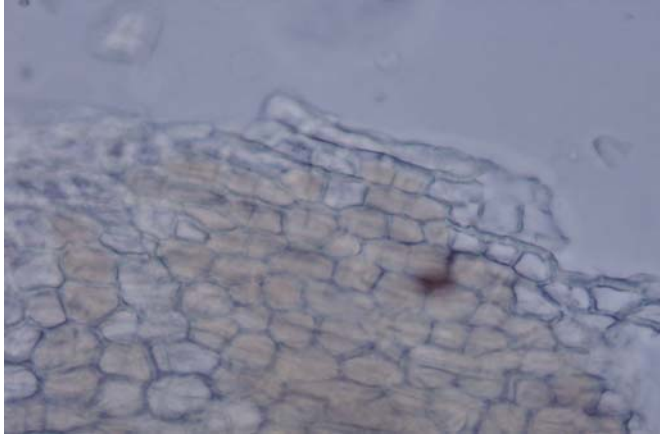


fig. 1 Epidermis composed of tangentially elongated cells (500x)

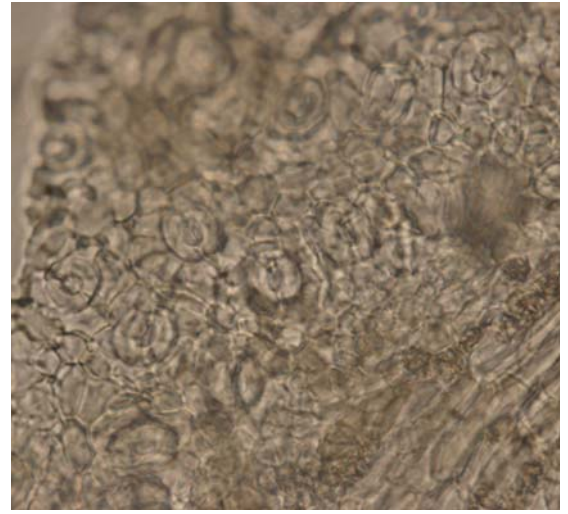


fig. 2 Abundant anomocytic stomata (500x)

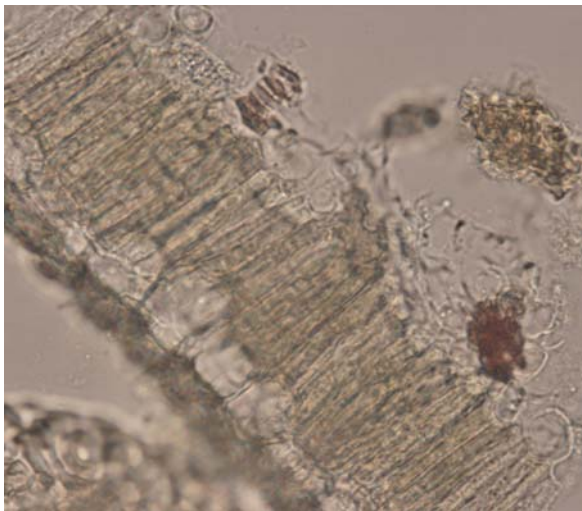


fig. 3 Fragment of single layered palisade cells (500x)

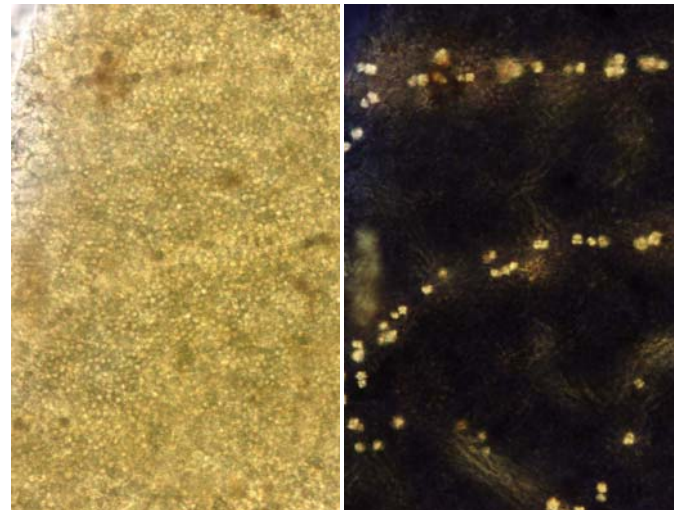


fig. 4 and 5 Fragment of leaf in surface view displaying rows of rosette crystals of calcium oxalate in non-polarised and polarised light (200x)