

***Bacopa monnieri* (L.) Pennell syn. *Bacopa monniera* (L.) Wettstein**

**Bacopa Aerial Parts**

*Herba bacopae*

Pinyin: Jia ma chi xian

Sanskrit: Brahmi

Scrophulariaceae

Bacopa is one of the most highly esteemed herbs of ayurvedic medicine of India; it is also recognized in the Chinese *materia medica*. Its most prominent use in the West is based on its putative effects in enhancing cognitive functions; this function is supported by numerous clinical and preclinical studies. Bacopa shares the common Sanskrit name of *brahmi* with another commonly used Indian herb known in the West as *gotu kola* (*Centella asiatica*). Thus, the two may be traded interchangeably or mistakenly but can be readily differentiated microscopically. The differentiation between the two species is provided.

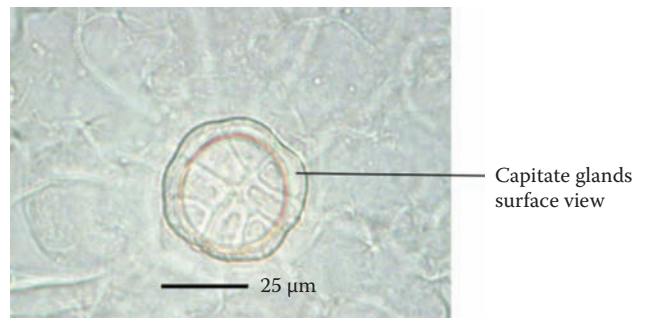
**Leaf**

**Surface view:** Upper and lower epidermis are uniform; anisocytic stomata with guard cells approximately  $20 \times 10$ – $12$  mm and subsidiary cells lacking striations; capitate glands (seven or eight cells) occur on both leaf surfaces.

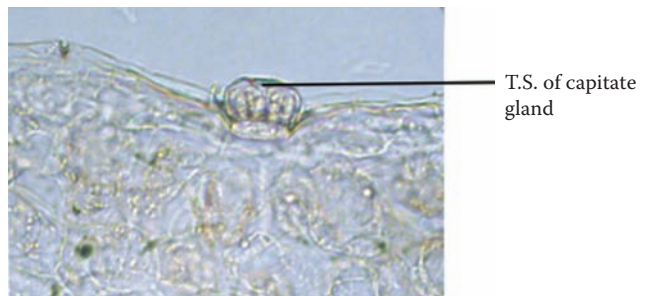
**Transverse section:** Dorsiventral, isobilateral, or composed of homogenous mass of isodiametric cells; cells ovate to oblong approximately  $30$ – $40 \times 40$ – $80$  mm, sometimes

with large idioblast; (approximately  $200$ – $250 \times 100$ – $150$  mm) lacking oxalate crystals.

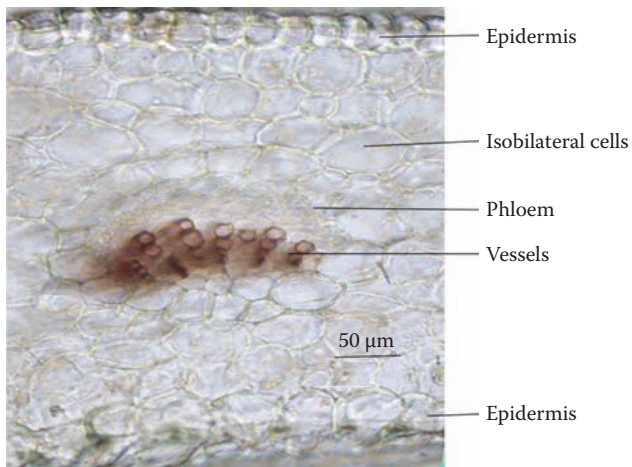
**Powder:** Pale green; fragments of epidermis with anisocytic stomata, capitate glands, ovate to oblong cells, and large idioblasts.



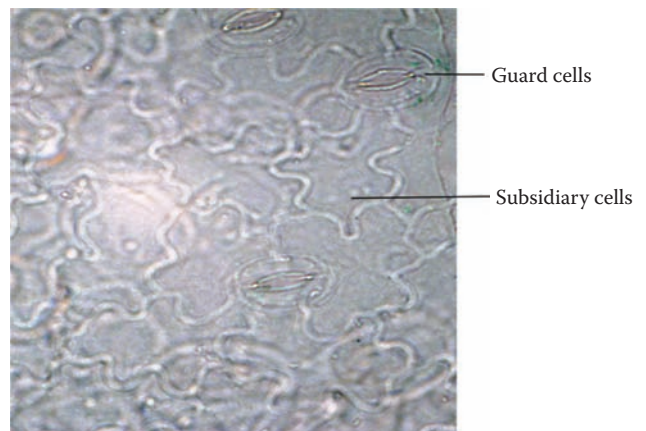
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