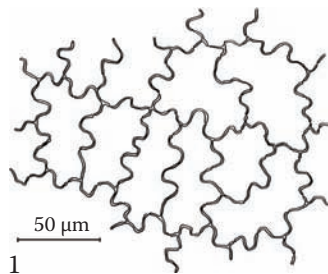


Epimedium spp.**Epimedium Leaf***Folium Epimedii***Pinyin: Yin yang huo***Berberidaceae*

Epimedium is used in traditional Chinese medicine as a vitalizing tonic, especially for sexual dysfunction, which has given it one of its more common names: “horny goat weed.” The Chinese pharmacopoeia (PPRC 2005) recognizes five different species of *Epimedium* as interchangeable: *E. brevicornum* Maxim., *E. koreanum* Nakai, *E. pubescens* Maxim., *E. sagittatum* (Sieb. et Zucc.) Maxim., and *E. wushanense* T. S. Ying. These are reported to be microscopically similar, with small differences that are outlined in Asian microscopy literature. Adulteration in the American market does not appear to occur.

Surface view: Upper epidermal cells with sinuous anticlinal walls, walls slightly thickened and pitted, stomata and trichomes absent; lower epidermal cells with sinuous anticlinal walls and thick-walled papillae ~20 μm long that often occur as a ring ~20 μm diameter; numerous anomocytic stomata, ~25–30 μm in length; uniseriate covering trichomes of several thick-walled cells occur along the veins, basal cells shorter than terminal cells, rounded apex, up to ~1 mm in total length; fibers in bundles along veins; fiber bundles sheathed by rod-shaped calcium oxalate prisms up to 40 μm long (considerably larger than in usual prism sheaths).



Transverse section: Isobilateral; upper epidermal cells with a thick outer cell wall; palisade layer is absent; mesophyll cells are more spherical toward the upper epidermis and more irregular in shape, with large intercellular spaces toward the lower epidermis; most cells are filled with a dark brown substance and cell borders are often difficult to identify; lower epidermal cells have a thick outer wall and abundant thick-walled papillae.

Powder: Prism crystals of calcium oxalate; sinuous epidermal cells with anomocytic stomata.

