

Saussurea costus (Falc.) Lipsch.
Root syn. Aucklandia costus Falc.;
Aucklandia lappa Decne.; Saussurea
lappa Decne. C. B. Clarke

Costus Root

Saussureae Radix

Pinyin: Yun mu xiang, mu xiang

Sanskrit: Kushtha

Asteraceae

Costus root, more commonly known as saussurea, is used predominantly in Chinese medicine for the treatment of specific types of pain, abdominal distention, nausea and vomiting, and liver and gallbladder conditions. Known as mu xiang in Mandarin, costus root is one of many botanicals that have the potential for adulteration with botanicals that contain aristolochic acid (AA)—specifically, *Aristolochia debilis*, which is also known as qing mu xiang.

Transverse section: Brown, narrow cork; secondary phloem of radially elongated regions of sieve and companion cells with thickened walls, alternating with parenchymatous medullary rays several cells broad; orange-brown secretory cavities, up to 400 µm diameter, are scattered throughout the secondary phloem; near the cambium, secondary xylem vessels occur in narrow radial rows interrupted by parenchyma or secretory cavities; vessels up to 100 µm diameter; broad medullary rays with numerous secretory cavities; toward the root center, parenchyma cells are larger and vessels are scattered in small groups; primary xylem is present.

Longitudinal section: Predominantly reticulate, occasionally pitted vessels.

Inulin: Present in parenchyma cells; amorphous, colorless masses may completely fill the cell lumen.

Powder: Brown fragments of cork and, although most fragments are colorless and parenchymatous, larger fragments frequently show secretory cavities; vessels in longitudinal view; water; inulin.

