Chinese Hat Plant

Holmskioldia sanguinea

Perhaps the Chinese Hat Plant's greatest claim to fame is that it is a *monotypic genus*, that is, a genus that includes only one species – namely *Holmskioldia sanguinea*! Three species, formerly included in *Holmskioldia*, have now been moved to another genus, *Karomia*. However, both genera are included in the mint family, Lamiaceae.

The Chinese Hat Plant, *Holmskioldia sanguinea,* comes from the Himalayas, most notably India and Pakistan, and has, for many years, been a

popular garden plant in Australia although it is rarely seen these days. It continues to be widely planted and has become naturalised in many countries of southern Asia, also Mauritius, Indonesia, and the West Indies. Its use as a horticultural plant began in 1795 when botanical collectors Peter Good and Christopher Smith

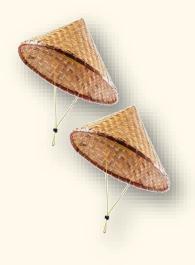


Holmskioldia sanguinea Photo: Ping An Chang, CC BY-SA 4.0 <u>https://creativecommons.org/licenses/</u> <u>by-sa/4.0</u>, via Wikimedia Commons.

brought back plants, including *Holmskioldia*, from India for Kew Gardens in London.

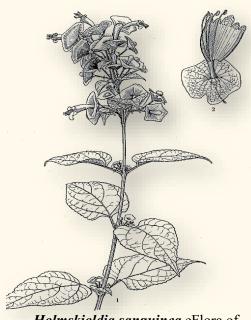
The name *Chinese Hat Plant* refers to the shape of the flowers, particularly the large and conspicuous saucer-shaped calyx and the slender

two-lipped funnel-shaped corolla (the petals fused into a cylinder). The specific name *sanguinea* suggests that the flower colour is red. The yellow form is variously referred to as *Holmskioldia sanguinea* 'Lutea', *H. sanguinea* 'Citrina' and *H. sanguinea* 'Aurea'.





The importance of colour in animal-plant interactions is a complex and incompletely understood phenomenon. *Holmskioldia sanguinea* does appear to have a specific relationship with many flying insects and birds that might be colour-specific. For example, although not native to southern China, *H. sanguinea* (red form) is cultivated on trellises in botanic gardens to attract a range of native birds. Similarly, in Florida, *H. sanguinea* is used to attract both butterflies and hummingbirds to gardens. One wonders whether the yellow forms have similar, or any, capacity to attract animals in the manner of the red form.



Holmskioldia sanguinea eFlora of China: Chen Rong Dao – 陈荣道 1982 <u>http://www.efloras.org/object_page.aspx</u> <u>?object_id=5020&flora_id=2</u>



There are many reports of the use of *Holmskioldia sanguinea* in traditional medicine, including crushed fresh leaves and shoots for rheumatism and rheumatoid arthritis, extracts of leaves and bark for dysentery, headaches and high blood pressure. A review of pharmacological properties, including antibacterial, antifungal, anti-inflammatory, antioxidant, antimicrobial, analgesic and anticancer, determined most to be the result of plant constituents, such as alkaloids, terpenoids, tannins, flavonoids, glycosides and phenols. However, the review came with the caveat that all should be confirmed with *in vitro* and *in vivo* studies together with clinical trials.

- Atkins S. 2008. *Holmskioldia sanguinea* Labiatae, formerly Verbenaceae. *Curtis's Botanical Magazine*. 13:79 - 81. 10.1111/j.1467-8748.1996.tb00545.x.
- Datiles M J, Acevedo-Rodriguez P. 2014. CABI Compendium. https://www.cabidigitallibrary.org/doi/full/10.1079/cabicompendium.27525
- Ledger C R. 2017. Butterflies and hummers love Chinese Hat Plants. *The Ledger*. <u>https://www.theledger.com/story/lifestyle/home-garden/2017/02/23/weekend-plantings-butterflies-and-hummers-love-chinese-hat-plants/22095616007/</u>
- Lin S-S, Liao L, He W, Hu W-S, Sun Y-J. 2017. Ecological landscape construction practice for *Holmskioldia sanguinea*, an excellent plant food source for birds. *Guangdong Gardens Magazine*. 1: 71-75.
- Sati R, Bisht M.2021. Phytopharmacology of *Holmskioldia sanguinea* Retz.: A review. *International Research Journal of Pharmacy*. 12(6): 52-59. DOI: 10.7897/2230-8407.1206144

Wikipedia: https://en.wikipedia.org/wiki/Holmskioldia

Alison Downing, Brian Atwell, Roger Hiller, Karen Marais, Kevin Downing School of Natural Sciences

