

Caesalpinia decapetala

Cat's claw

Introduction

The genus *Caesalpinia* contains more than 100 species, occurring in tropical and temperate regions worldwide. Seventeen species are reported from China, occurring primarily in the southwest and north [200].

Species of *Caesalpinia* in China

| Scientific Name | Scientific Name |
|---|-----------------------------------|
| <i>C. bonduc</i> (Linn.) Roxb. | <i>C. millettii</i> Hook. et Arn. |
| <i>C. caesia</i> Hand.-Mazz. | <i>C. mimosoides</i> Lam. |
| <i>C. crista</i> Linn. | <i>C. minax</i> Hance |
| <i>C. cucullata</i> Roxb. | <i>C. pulcherrima</i> (Linn.) Sw. |
| <i>C. decapetala</i> (Roth) Alston | <i>C. sappan</i> Linn. |
| <i>C. digyna</i> Rottler | <i>C. sinensis</i> (Hemsl.) Vidal |
| <i>C. enneaphylla</i> Roxb. | <i>C. tortuosa</i> Roxb. |
| <i>C. hymenocarpa</i> (Prain) Hattink | <i>C. vernalis</i> Champ. |
| <i>C. magnifoliolata</i> Metc. | |



Leaves and flowers of *Caesalpinia decapetala*.

uplands, and along streams in temperate and tropical regions [200].

Distribution

C. decapetala is found in Anhui, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hainan, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Shaanxi, Sichuan, Yunnan, and Zhejiang provinces [159][200].

Economic Importance

The bitter tasting stems and roots can be used medicinally, while other parts of the plant are useful in the chemical industry. The fruits and bark are rich in tannin. With an oil content of 35 percent, the seeds serve as a source of lubricant and soap. *C. decapetala* is also grown as a hedge plant in China [200].

Taxonomy

Family: Leguminosae (Fabaceae)

Genus: *Caesalpinia* Linn.

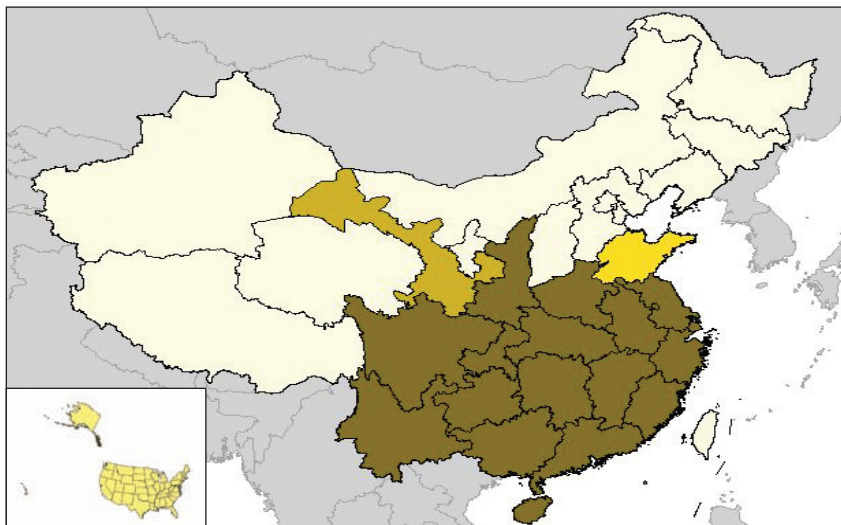
Description

C. decapetala is a shrub bearing thorns and fine hairs on the inflorescence and red stems. Leaves are bipinnate, 20-30 cm long, divided into three to ten pairs of opposite pinnae with 8-12 pairs of leaflets each with one pair of thorns in the joint between the pinna and leaf axil. Each leaflet is glabrescent, membranous, oblong, 10-25 mm long and 6-12 mm wide, and obtuse at both ends. The stipule is slender, oblique-ovate with an acuminate apex. The terminal raceme is erect and 15-30 cm long. Petals are yellow and revolute during full bloom, but easily shed due to the presence of the node on the pedicel near the base of the calyx. Smooth, brown, leathery pods, containing 6 - 9

brown seeds, are ligule-shaped, 6-12 cm long and 2.5 -3 cm wide, beaked at both ends, splitting along the ventral suture at maturity [200].

Habitat

C. decapetala occurs on bushy hillsides,



Natural Enemies of *Caesalpinia*

Three fungi and five arthropods are reported to be associated with *Caesalpinia*. In China, the fungus *Phyllactinia caesalpiniae* Yu, also known as *Phyllactinia corylea* (Pers)

Karst., infects *C. decapetala*. Five arthropod species are known to damage cat's claw ^{[22][23]}.

Fungi

| Phylum | Family | Species | H. R. | Ref. |
|----------------------------------|--------------|---|-------|------|
| Ascomycota | Erysiphaceae | <i>Phyllactinia caesalpiniae</i> Yu | o | 22 |
| | Meliolaceae | <i>Meliola caesalpinicola</i> Deighton | oo | 61 |
| Anamorphic <i>Mycosphaerella</i> | | <i>Pseudocercospora caesalpiniae</i> Goh & W.H. Hsieh | oo | 110 |

Arthropods

| Order | Family | Species | H. R. | Ref. |
|-------------|--------------|---------------------------------------|---------|-----------|
| Coleoptera | Cerambycidae | <i>Apriona swainsoni</i> (Hope) | p | 65 |
| | | | p | 79 |
| Hemiptera | Plataspidae | <i>Coptosoma lasciva</i> Bergroth | p | 193 |
| | | <i>Megacopta horvathi</i> (Montandon) | p | 193 |
| Lepidoptera | Lycaenidae | <i>Catochrysops panormus</i> (Felder) | po | 203 |
| | Pieridae | <i>Eurema hecabe</i> L. | p po | 24 158 |