

# China Doll

## *Radermachera*

### *sinica*

**Beware the indoor plant that can grow into a giant!**

China Dolls (*Radermachera sinica*) are attractive, graceful house plants with erect stems and branching foliage that make them look like miniature trees. You may find web sites that tell you that China Dolls grow just over a metre tall. Don't believe it! In their natural environment and even in Sydney gardens, they can grow into graceful, elegant trees, 10 metres and more tall.

*Radermachera sinica*, variously known as *Serpent Tree* or *Emerald Tree* when it grows to its full height, and *China Doll* or *Asian Bell Tree* it is grown as a potted house plant, is an evergreen tree from the subtropical forests of mountainous regions of south-western China, Bhutan, India, Myanmar and Vietnam. As a house plant, apart from the feathery



Fallen flower



Seed pod and seeds



Seed pods at ends of branches

glossy green leaves, it has become very popular because it *looks like a small tree in a pot* but be wary of planting one out in your garden unless you have plenty of room.

*Radermachera sinica*, is one of about 17 species of *Radermachera*, evergreen trees mostly distributed throughout south-east Asia, from the Himalaya to Borneo, Java, Sumatra and the Philippines. There are seven species in China. The white flowers are very typical of those of many other well-known species in the family Bignoniaceae, such as *Bignonia*, *Catalpa* and even *Jacaranda*. It is suggested that the long-tubed, fragrant, night-blooming flowers that last only one night are pollinated by moths and bats. The name *Serpent Tree* describes the long, snake-like seed pods (capsules).



*Radermachera sinica* dwarfed by plant growth regulating chemicals, with short stem internodes and short leaves.



*Radermachera sinica* grown normally from seed.

In European nurseries, particularly those in Holland, mimics of naturally occurring growth regulators are applied to the stems to create a dense foliage and a dwarfed plant.

Ethylene is an especially significant natural growth regulator that has had a significant impact on the horticultural production of many plants, including China Dolls. Nurserymen in Europe and North America frequently found that shipments of China Dolls lost their leaves during shipment from plant production nurseries to retail stores, the leaf loss attributed to sensitivity to the gas, ethylene. Most flowers mature and die more quickly when under the influence of ethylene. One promising treatment to reduce these hazards and leaf drop in China Dolls is a foliar treatment with silver thiosulfate, an inorganic chemical, blocking the influence of ethylene and extending the life of the flowers and leaves.



Subtropical rainforest in Guizhou Province, south-western China, typical of the natural environment of *Radermachera sinica*.

Bananas and some (but not all) fruits also ripen prematurely when enclosed in an ethylene-rich atmosphere. The first shipments from the colonies of the Caribbean to Europe in the 1600s often arrived overripened because of ethylene build-up in the ships' holds. While other technologies have been used to address this, adding rather toxic salts of silver is no solution in an edible product.

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Flora of China: [http://www.efloras.org/florataxon.aspx?flora\\_id=2&taxon\\_id=200021438](http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=200021438)

Lucid Central:

[https://keys.lucidcentral.org/demo/js\\_player/sew2/text/radermachera\\_sinica.htm](https://keys.lucidcentral.org/demo/js_player/sew2/text/radermachera_sinica.htm)

Missouri Botanical Garden:

<https://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=277931#:~:text=Radermachera%20sinica%2C%20commonly%20called%20China,of%20southern%20China%20and%20Taiwan.>

Wikipedia: <https://en.wikipedia.org/wiki/Abscission>

Wikipedia: <https://en.wikipedia.org/wiki/Radermachera>

Wikipedia: [https://en.wikipedia.org/wiki/Radermachera\\_sinica](https://en.wikipedia.org/wiki/Radermachera_sinica)



Subtropical rainforest on magnificent karst landforms in Guizhou Province, southern China, typical of the natural environment of *Radermachera sinica*.



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