

Gunnera tinctoria

“Chilean rhubarb, Chilean gunnera, giant rhubarb, dinosaur’s food, nalca, panque”



Gunnera tinctoria at San Francisco Botanical Gardens

Family: Gunneraceae

Taxonomic Description: *Gunnera tinctoria* is a large, clump-forming herbaceous flowering perennial; it is evergreen, however, it can be deciduous in climates with cold winters. The plant typically grows 1.5m to 3m (5 to 10 ft) tall, and spreads just as wide. The large 0.6m to 2m (2 to 6 ft) wide leaves are dark green, palmately lobed, roughly toothed, and covered with prickles on the veins and petioles. Inflorescences are cone shaped, 120mm to 250mm (5 to 10 in.) in circumference, and grow 0.6m to 1m (2 to 3 ft) tall from the base of the plant, and may contain many thousands of male and female flowers that turn into orange or red colored fruit on short 25mm to 50mm (1 to 2 in.) stiff branches.

Growth Form/Habitat/Soil Characteristics of where found: Fast growing, *Gunnera tinctoria* prefers rich, damp, well-draining soil, and cooler temperatures, although it can adapt to a wide temperature range. It can grow in both full sun and part shade. It can be found near streams, river bank, pond edges where moisture is readily available. The plant has a symbiotic relationship with blue green alga (cyanobacterium) *Nostoc* that facilitates fixation of nitrogen from air. Cyanobacteria live in the plant cells, fix nitrogen, and provide the plant with usable nitrogen like ammonium, and in return bacteria get fixed carbon from the plant. Gunnera genus is the only group of land plants known to have an intercellular symbiotic relationship with cyanobacteria.

Distribution: Native to Chile, *Gunnera tinctoria* can also be found naturally in South American countries, such as Argentina, Bolivia, Brazil, Columbia, Ecuador, and Peru. It has been

naturalized in many other countries outside South America, including Australia, France, Ireland, New Zealand, Portugal, Canada, United Kingdom, and the United States.

Propagation/Reproduction: *Gunnera* can be propagated by two methods – seed or rhizome division. *Gunnera* seed production is prodigious (up to 250,000 seeds can be produced by a single plant in one year), are easily distributed by birds, wind, and water, and have a very high germination rate.

Uses: In South America, particularly Chile, the stems of the *Gunnera tinctoria* are peeled and eaten raw with salt and chili, in salads, or served with a sweet syrup. Its taste is described as “acidic and refreshing.” Stems are also processed into liquor and marmalade. Its juice is used as an astringent. Its roots are used as a black dye. Its leaves are used as covering material in cooking and also as roofing material in rural areas. Outside of South America, *Gunnera tinctoria* is mainly used as an ornamental landscape plant for their distinctive large, showy, prehistoric-looking foliage. Interestingly, it has become an invasive pest in New Zealand where it is illegal to propagate and sell.

References:

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