





## Kangkong

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**Name:** Kangkong (water spinach, water convolvulus) *Ipomoea aquatica* (Convolvulaceae).

**Origin:** Probably originated in India and has been distributed throughout the tropics since.

**Distribution:** Now considered native to China, but widely cultivated and naturalised in Africa, Asia, Australia, the Pacific Islands, and South America.

**Australian Distribution:** Grown in tropical areas like Darwin – Cairns and also in temperate areas like the Sydney basin.

**Preferred Climate and Soil Types:** Kangkong prefers lowland humid tropics with stable high temperatures above 23°C, and short day conditions. Soils with a high organic content and a high soil moisture level, and clay soils are generally suitable.

**Description:** A perennial semi-aquatic plant producing long vine like hollow stems that trail over the soil or float on water. Roots develop at the nodes when in contact with wet soil or water. The stem tips and foliage are succulent and light green, leaves are arrowhead shaped and narrow. Flowers are white and light pink or purple, broadly funnel shaped, 'morning glory' like, and solitary from the leaf axis. Seeds are borne in spherical capsules holding 1-4 greyish seeds.

**Varieties:** Two types are recognised. Red kangkong, has dark green leaves with purple markings on the veins petioles and stems, with light purple to white flowers. This type is usually found growing wild in tropical South East Asia, and is gathered by local people for food. The white kangkong has green to white stems and petioles, green leaves and white flowers, and is generally cultivated. Two cultivars are recognised, one with broad leaves and one with narrow pointed leaves.

**Culture:** Kangkong can be grown in various ways. Under dry cultivation the plant is grown in soil which is not inundated. Seeds are broadcast, sown in rows or into raised beds. Cuttings can also be used. Organic fertiliser and urea is applied after planting and soil must be kept moist. Using wet cultivation the plants are planted into a paddy field situation, either as cuttings or seedlings. When the plants are established they are flooded, and the water level raised according to development. In some areas kangkong is grown floating on the water in ponds or rivers. The roots are not in contact with the soil and cuttings are anchored in the water using bamboo sticks.

**Pests and Diseases:** Due to the short growing season of dry land kangkong pests and diseases don't cause much harm, but rusts, nematodes, caterpillars, and aphids can be a problem when subsequent crops are harvested.

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Fruiting Season: Kangkong is available all year.

**Harvesting:** About 20-30 days after planting the plants are uprooted when the stems are big and tender but crisp. From the paddy field young shoots are cut 1-2 months after planting, and the plants left to grow. Subsequent harvests occur at regular intervals. The stems are thinner, more fibrous and tougher than the dry land plants.

**Storage Conditions:** Stems are tied in bundles and wrapped in plastic to prevent wilting. They can be stored at 10°C and 90-100% humidity.

**Culinary Use:** The young leaves and stems can be steamed, boiled, or lightly fried in oil and used in a stir-fry. Also eaten raw in salads.