

Plant in Focus, March 2024

## *Canna* Canna Lilies



***Canna* 'Roma'** is a tall aquatic Italian Group cultivar, equally at home as a water marginal or in the border. Painting by Charlie Taylor, Wikipedia  
CC BY-SA 3.0

### History

The name *Canna* originates from the Latin word for a cane or reed.

*Canna indica* has been cultivated by Native Americans for thousands of years, and was one of the earliest domesticated plants in the Americas. The starchy root is edible.

### Introduction

*Canna* or Canna lily is the only genus of flowering plants in the family Cannaceae, consisting of 13 species. All are native to the American Tropics. However most cultivars have been developed in temperate climates and are easy to grow in most countries of the world as long as they receive at least 6-8 hours of sunlight during summer.

Cannas are not true lilies but are in the order of Zingiberales together with their closest relatives the Gingers, Bananas, Arrowroot, Heliconias and Birds of Paradise, some of which may be seen in the GBG Conservatory and the gardens.

The plants have large foliage, so horticulturists have developed forms as large flowered garden plants. Cannas are also used in agriculture as a source of starch for human and animal consumption.

[www.friendsgbg.org.au](http://www.friendsgbg.org.au)

Phone: 5222 6053

[www.geelongaustralia.com.au/gbg/](http://www.geelongaustralia.com.au/gbg/)



**Canna**  
**'Antonin Crozy'**  
 Photo: Claines Canna,  
 Wikipedia  
 CC BY-SA 3.

### Description

Cannas grow from swollen underground stems, correctly known as rhizomes, which store starch. This is the main attraction of the plants for agriculture, having the largest starch granules of all plant life. The size of starch grains influences its suitability for cooking and baking different foods. Large starch granules are considered to be easily digested by infants and invalids

The broad, flat, alternate leaves grow out of a stem in a long narrow roll and then unfurl, they can be solid green, brownish, maroon, and a variety of variegations.

The flowers are composed of three sepals and three petals that are hidden under extravagant stamens. The flowers are typically red, orange yellow, pink or a combination of colours. The main pollinators of the flowers are bees, hummingbirds, sunbirds and bats.

*C. indica* has been naturalized in many tropical areas around the world, is a difficult plant to remove and is invasive in some places.

### Ecology

Cannas are largely pest free, however slugs and snails are fond of the Canna's large juicy leaves.

Cannas are generally free of diseases compared to many genera. However they may fall victim to Canna rust.

The flowers are sometimes affected by a mould called *Botrytis*. Treatment is to simply to remove the old flowers to prevent spread.

### Cultivation

Cannas grow best in full sun with moderate water in well drained, rich or sandy soil and protected from high winds, which can tear the leaves. They are also sensitive to frost.

**Top: *Canna* 'Tropicana'** The large leaves can be variegated and show various colours.

Photo: Shotaku, Flickr  
CC BY-NC-ND 2.0.

**Middle: *Canna* 'Flameche'** Miniature Group.

Photo: Claines Canna, Wikimedia Commons  
CC BY-SA 3.0

**Bottom: *Canna*** ripe fruit and ripe seed.

Photo Giantsshoulders,  
Wikimedia Commons, Public domain.

### Uses

Perennial border plantings.

The rhizomes are rich in starch so have commercial value, the stems and foliage for animal fodder, young shoots as a vegetable and young seeds as an addition to tortillas.

The seeds are used as beads.

The seeds are used in several musical instruments.

In some remote areas of India, Cannas are fermented to produce alcohol.

Fibre from the stems is used as a jute substitute.

The fibre can be used for making paper.

A purple dye is obtained from the seeds.

Smoke from the leaves has been used as an insecticide.

In Thailand Cannas are a traditional flower for Father's Day.

In Vietnam Canna starch is used to make cellophane noodles known as Mien dong.

Cannas attract hummingbirds so can be part of a pollinator and wildlife habitat strategy.

### Propagation

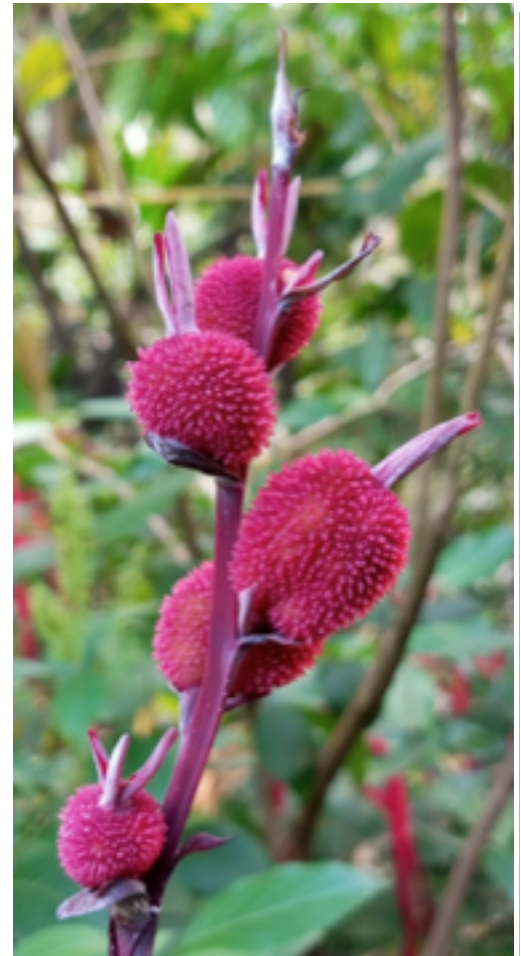
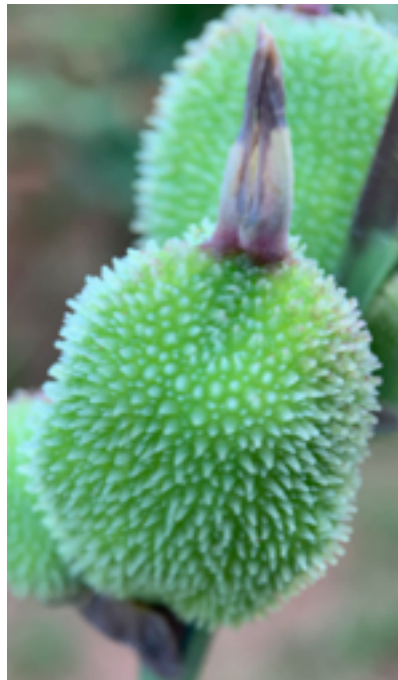
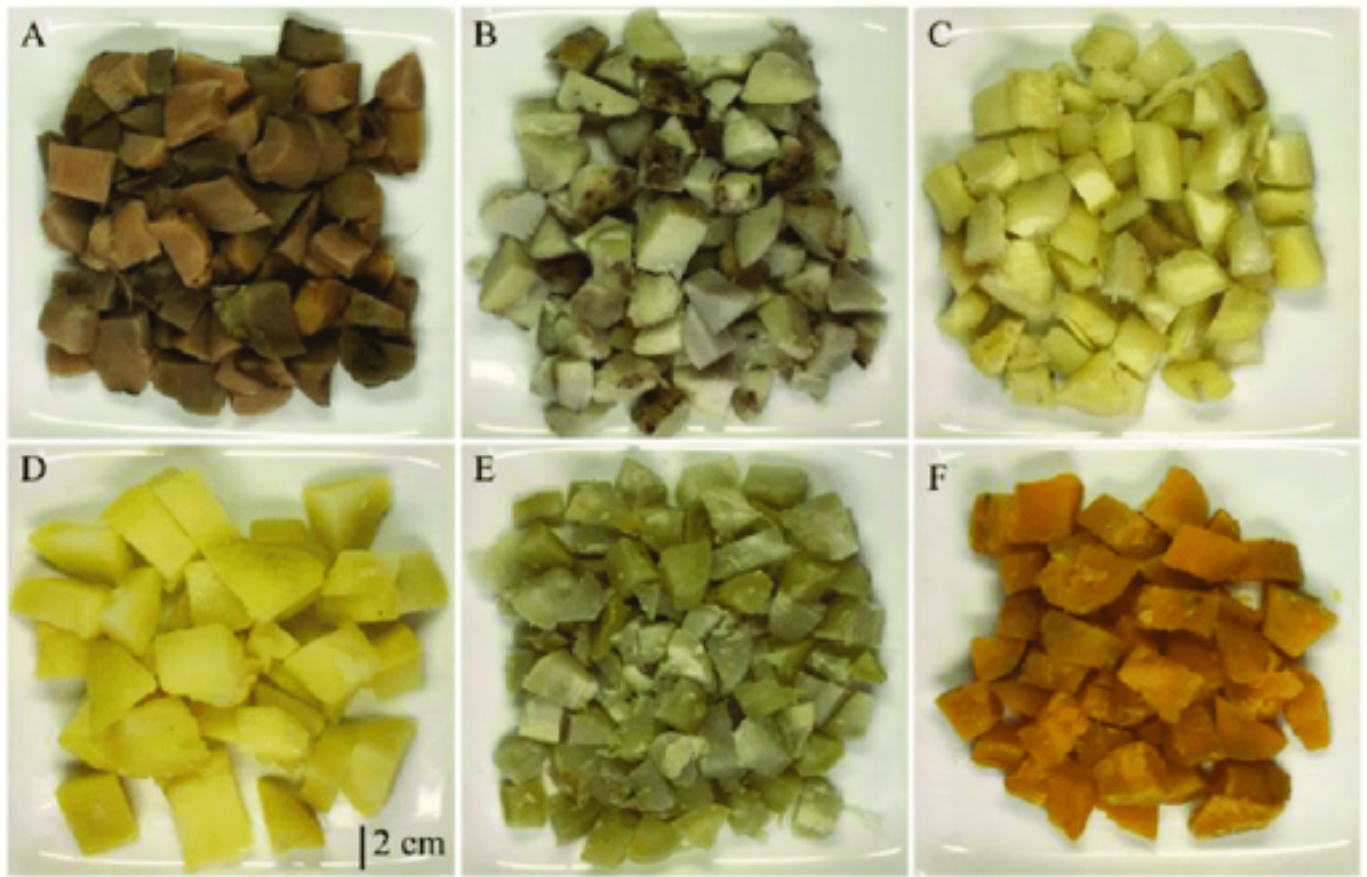
Seeds are produced from sexual reproduction, involving the transfer of pollen from the stamen of the pollen parent onto the stigma of the seed of the parent.

Canna seeds have a very hard coat which contributes to their dormancy.

The species is capable of self-pollination but most cultivars require an outside pollinator. All Cannas produce nectar so attract insects, bats and hummingbirds that act as the transfer agent, spreading the pollen between stamens and stigmas on the same or different flowers.

Cannas can also be propagated using rhizome division.





**Top:** Boiled tuber pieces of six species used for taste panel comparison. *Canna* is compared with other genera. A: *Canna indica* (Indian Shot) ; B: *Xanthosoma sagittifolium* (Cocoyam, in Aroid family, similar to Taro) ; C: *Manihot esculenta* (Cassava or Tapioca); D: *Solanum tuberosum* (Potato) ; E: *Ipomoea batatas* (purple); F: *Ipomoea batatas* (yellow), (both colours are called Sweet Potato or Kumera). Senevirathna, et al, 2020, Analyses of phylogenetics, starch granule morphology and consumer preference of *Canna indica*. researchgate.net CC BY.

**Bottom, from left:** *Canna indica* Flower, Muhammad Mahdi Karim, Wikimedia Commons, GNU Free Documentation License, V1.2. **Green fruit**, Octavio\_riverah, iNaturalist.org CC BY-NC. **Red fruit**, Nativeplants garden, Wikimedia Common CC BY-SA 4.0



*Canna edulis* botanical drawing showing tubers, flowers, ovary cross-section, seed pod, seed. Watercolour by Agard Hagman 1880-1890, Powerhouse collection, Sydney, CC BY-NC-ND 4.0

# Friends of Geelong Botanic Gardens

