

Croton tiglium

[Synonyms : *Tiglium officinale*]

CROTON is an evergreen shrub or tree. Native to tropical Asia (particularly the Malabar coast (south-west India) and Tavoy (Myanmar, more familiar in the West as Burma)), it has tiny straw-coloured flowers.

It is also known as *Chengkian* (Malay), *Cheraken* (Javanese), Croton-oil plant, Croton seed, *Jamalgota* (Hindi), *Jayapala* (Sanskrit, Singhalese), *Jaypal* (Bengali), *Kemalakiyan* (Sundanese), *Krotonöl* (German), *Nepala* (Telugu), *Nervalam* (Malayalam, Tamil), Physic plant, *Purgierbaum* (German), Purging croton, Purging nut, *Salood* (Thai), Tiglium, Tiglium seed, and *Túba* (Filipino/Tagalog).

A clear, yellow, orange or brownish oil is extracted from the seeds which has a nauseous smell and a burning taste.

Warning – croton is poisonous as it can severely aggravate the stomach and intestines. It can cause severe abdominal pain, rapid and weak pulse, vomiting, purging and may cause death. The oil can also cause severe external blistering on the skin. It should only be used under supervision of a qualified practitioner. It should not be taken when pregnant and should not be given to children. In Britain this is a prescription only medicine. Its wood smoke can irritate the eyes.

Authorities note that croton seeds were familiar medicinally in India before 450 BC – and were also being used in Chinese medicine by at least the early centuries AD. It is thought that the Arab traders learnt of them from the Chinese. Whereas the Europeans met them for the first time only in the late 16th Century after the Portuguese explorers had captured Goa (on the western coast of India south of Mumbai, more familiar in the West as Bombay) in 1510 and their merchants had established their own trade routes from that Continent.

The pounded seeds have long been used locally to stupefy fish, and in the areas of croton's natural habitat they have also been used maliciously in the past to poison water wells.

Locally the seeds also provide a medicine. People chew a seed or two, or drink some of the juice as a laxative, apparently with no harmful effects. It has been suggested that local people might have built up an immunity to the poisons, as in the 1960s two soldiers tried this remedy in Hawaii and died, despite doctors' ministrations.

Although prime interest in the plant centres on the seeds, other parts of the plant have also attracted human interest.

In the Himalayas an extract from the bark was used (as an alternative to monk's-hood, *Aconitum napellus*) in an arrow poison that could sometimes have had a long-delayed action (even of days). While in the Indonesian island of Sumatra a similar poison was extracted from the leaves.

Apart from its medicinal applications, the oil has been used commercially in the manufacture of soap and for lighting.

Medicinally, the seeds were used as a purgative in European medicine from the end of the 16th Century and then they were progressively ignored until 1812 when English doctors working in India re-introduced them. In India it has been used to treat snake bites. Now it is used internally rarely to treat constipation, and externally it is only applied with great

care (for fear of blistering) in the treatment of rheumatism, gout or neuralgia. Today this is one of the many plants that is the subject of research as a possible source of a cure for cancer. Very small doses are still used in Chinese medicine, particularly as a remedy for intestinal disorders and malaria. At the turn of the 20th and 21st Centuries the oil is used commercially by the pharmaceutical industry in the West.