

Zingiber mioga and its cultivars

In temperate gardens *Zingiber mioga* is a good companion for other exotic-looking plants

As hardy as the hardiest roscoes, this edible ginger also has desirable ornamental qualities.

THEODOR CH COLE
and SVEN
NÜRNBERGER look
at its many aspects
and discuss its garden
use and cultivars

HEAPS OF MYOGA in a Japanese supermarket in Hawai'i sparked our interest in *Zingiber mioga*. Orchid-like flowers and a tropical appearance belie its hardiness. As well as being a popular culinary herb in the Far East, Japanese ginger grows well in temperate gardens.

In this article we hope to demonstrate what a good garden plant it is, and highlight some of the ornamental cultivars. Knowledgeable gardeners in Europe and North America are aware of this plant, but its potential is still greatly underestimated in the West.

As well as being called myoga in Japan, it is known as rang he in China and yang ha in Korea.

Wild distribution

The native range of *Z. mioga* extends from central and southeast China to the mountains of north Vietnam and into South Korea. It is also found in Japan, but not Hokkaido. Colonies, favouring rich, moist, well-drained soils, usually grow on shady slopes and in mountain valleys in the understory of deciduous and mixed forests. The species probably originated in southeast China.

Plant description

Zingiber mioga is a rhizomatous perennial with short vegetative shoots. The pseudostems are formed mostly by the leaf sheaths and the alternate leaves are lanceolate. The inflorescences, borne on a short



Theodor CH Cole



Theodor CH Cole

Questing rhizomes (above) show how the plant spreads to form dense colonies. The basally produced flowers are usually white (above & right) but yellow in plants from China (below right). These are followed by fruits with vivid red interiors bearing black seeds in white arils (below left)



Theodor CH Cole
Cassian Schmidt



Theodor CH Cole

underground stalk, consist of several layers of fleshy bracts and emerge from the soil in midsummer, often remaining at ground level and partly buried. The delicate and ephemeral flowers, usually white to yellowish, arise from between the inflorescence bracts. The corolla tube bears an upper, arching lobe and two lower ones, but the most conspicuous part of the flower is the 3cm-long labellum flanked by two petaloid staminodes. The style runs through a groove on the stamen formed by the connective of the anther and terminates with a tufted stigma. Dull green fruits split open to reveal many glossy, black seeds partly enclosed in creamy white arils attached to the shiny, bright red inner walls of the capsule.

Natural diversity

The most vigorous variants of *Z. mioga* are from central and southeast China. Here, vegetative shoots can reach 2m in height and abundant flowers lead to plenty of viable seeds.

Japanese variants grow to about 1m in height and are mostly infertile under natural conditions, spreading exclusively by rhizomes.

Most plants that are commercially available in the UK, Germany and the US are of Japanese origin.

The flower colour of *Z. mioga* also varies; buttercup-yellow in southwest China, creamy white in Japan, and yellow to white corolla with lilac-pink staminodes in South Korea.

Ornamental cultivars

Three variegated cultivars are available: 'Dancing Crane', 'Silver Arrow' and 'White Feather'. Also, a green-leaved cultivar, 'Crûg's Zing', collected on the South Korean island of Jeju by Bleddyn and Sue Wynn-Jones of Crûg Farm Plants, north Wales, is about 1m high, has lilac-pink flowers and rarely sets fruit.

'Dancing Crane' is the most popular variegated cultivar. It has leaves bearing a combination of narrow and broad, white, longitudinal marks.

'Silver Arrow' has a dense pattern of narrower, but more numerous, yellow marks, giving the entire leaf a yellowish green appearance.

'White Feather' has few, ➤



Bridget Wynn-Jones



Sven Nitzberger

Zingiber mioga cultivars: 'Crüg's Zing' (above left), 'White Feather' (above right) and 'Silver Arrow' (right).

narrow, white to yellow stripes, particularly along the leaf margins.

The variegated cultivars grow to a height of around 50–80cm and are less hardy than unvariegated plants.

Garden use

Robust and fast-growing, *Z. mioga* gives a tropical look to temperate, perennial gardens. It combines well with plants such as *Begonia grandis*, *Cautleya*, *Deinante bifida*, *Peltoboykinia tellimoides*, *Saruma henryi* and ferns. Suitable taller plants might include *Diphylleia cymosa*, *Kirengschoma palmata* and *Tricyrtis latifolia*, along with *Arisaema consanguineum* and tall *Astilbe* and *Paeonia* whose autumn leaf and fruit colours contrast well with *Z. mioga*. Taller plants such as *Musa basjoo* and tree ferns can provide exotic-looking shade.

The yellowish green variegated foliage of 'Silver Arrow' makes a good contrast to darker green woodland plants and its similarly coloured young shoots combine nicely with the dark purple ones of *Disporum longistylum* 'Night Heron'.

Alternatively, the relatively late emergence of *Z. mioga* means that spring-flowering bulbs can be grown nearby. In autumn, the foliage turns yellow then silvery brown and dies away quickly.

Cultivation

Shoots of *Z. mioga* emerge from the ground from April to mid June, and then rapidly attain full height. It is hardy to -16°C or below, depending on soil conditions and degree of protection, but excessive soil wetness in winter should be avoided. In colder climates it is advisable to protect the plants with mulch. Plants in containers should be moved to a sheltered site if temperatures drop below -10°C.

Pest and disease problems are few. Young plants are susceptible to slugs and snails, and older plants can suffer from scale insect and red spider mite. Fungal pathogens such as *Pythium zingiberum* and *Pyricularia zingiberi* can also infect plants. *Cucumber mosaic virus* is another possible infection.

Propagation

Established plants can be divided in early spring. Alternatively, 15–20cm-long sections of rhizome from robust plants can be dug out and replanted in spring to early summer. These should be planted 3cm deep in a rich, organic, free-draining soil at pH 5.5–7 with a small amount of fertilizer. The soil should be kept semi-moist, but never waterlogged. Plants benefit from a mulch, and this



will aid emergence of the flower buds, especially if one intends to use them for culinary purposes.

Plants can also be propagated from seed, which germinate readily at 20°C. Plants originating from China generally produce seeds successfully in cultivation. Pollination does not seem to require particular conditions or agents; they may even pollinate by selfing. Cassian Schmidt of Hermannshof garden, Germany, collected seed



Robert Toth



Masahiro Kagami

etiolated shoots, referred to as myoga take (myoga bamboo). These look like thin pencils with pale green and pink stripes.

The taste of myoga is deliciously fresh and spicy, and crispy to the bite, and not like common ginger!

Myoga is deeply rooted in Japanese culture and tradition. Annual myoga festivals (myoga matsuri) celebrate its mythology and folklore. One of the ten most common Japanese family crests consists of two myoga 'buds' facing each other. It is also widely grown in home gardens and commonly available in markets.

Myoga crops are now extensively grown in New Zealand and Australia (including Tasmania) to supply the Japanese market during the northern hemisphere winter.

Conclusion

With its ornamental credentials and a growing interest in Asian food plants, this hardy Asian ginger has great potential to become more widely grown in the West. It may even become more widely grown as a commercial cultivated crop in Europe and North America.

THEODOR CH COLE is an American botanist at Heidelberg University, Germany.

SVEN NÜRNBERGER is Alpine Horticulturist at Palmengarten, Frankfurt, Germany and a regular contributor to *GartenPraxis* horticultural magazine.

ACKNOWLEDGEMENTS

Many thanks to Masahiro Kagami (Gakugei University, Tokyo), Clifford W Morden and Mitsuko Yorkston (University of Hawai'i) and Cassian Schmidt (Hermannshof, Weinheim) for valuable support, plant material and photographs.



Mitsuko Yorkston

Zingiber mioga 'Dancing Crane' (top left) has the boldest variegation and is the most widely available cultivar. Blanched shoots (top right) and young inflorescences (above) are a popular food item in Japan.

in Jiangxi, China, in 2010 which germinated readily; the resultant plants were producing their own viable seeds in 2013.

BIBLIOGRAPHY

- Branney, TME** (2005) *Hardy Gingers*. RHS / Timber Press, Portland, Oregon
- Gracie, AJ, Brown, PH & Clark, RJ** (2004) Study of some factors affecting the growth and development of myoga (*Zingiber mioga* Roscoe). *Sci. Hort.* 100: 267–278
- Staples, GW & Kristiansen, MS** (1999) *Ethnic Culinary Herbs – A Guide to Identification and Cultivation in Hawai'i*. University of Hawai'i Press, Honolulu

Traditional uses

In China there is a long tradition of using *Z. mioga* as a medicinal plant. However, it is more widely eaten in Japan. There, the young, plump, pinkish flower 'buds' (actually young inflorescences), known as myoga no ko (children of myoga) or tsubomi, are widely consumed. They are finely sliced and added as a garnish to foods such as soups, tofu, pickled vegetables, salads, sushi and sashimi, and also served as tempura. Another speciality in Japan is the blanched,