

Hedychium gardnerianum



Taxon	Family / Order / Phylum
<i>Hedychium gardnerianum</i> Shepard ex Ker-Gawl	Zingiberaceae / Zingiberales / Plantae

COMMON NAMES (English only)

Kahili ginger
Kahila garland-lily
Wild ginger

SYNONYMS

None.

SHORT DESCRIPTION

A large leafy herb that can reach between 1 and 3 m in height. Lance-shaped leaves arise off stems or basal stock. Fragrant yellow flowers are borne in long 25-30cm spikes. Red stamens are not present in the more cream coloured flowers of yellow ginger. Capsules contain seeds that are initially red then grey. This species is found in open habitats in warm moist climates.

BIOLOGY/ECOLOGY

Dispersal mechanisms

By stolons where already established, and by root fragments. Conspicuous, fleshy, red seeds are dispersed by frugivorous birds as well as humans. Illegal dumping of ginger rhizomes on roadsides or in bushland has also been a major source of spread.

Reproduction

Flowers are pollinated by insects. Vegetative reproduction via stolons is important in increasing local abundance.

Known predators/herbivores

Unknown.

Resistant stages (seeds, spores etc.)

Unknown.

HABITAT

Native (EUNIS code)

Semi-evergreen rainforest

Habitat occupied in invaded range (EUNIS code)

F9: Riverine and fen scrubs, H3: Inland cliffs, rock pavements and outcrops, G2: Broadleaved evergreen woodland, G3: Coniferous woodland. Invaded habitat also includes Macaronesian (Laurus) woodland – Azorean, Madeiran and Canarian laurisilvas.

Habitat requirements

The plant grows in wet habitats between sea level and 1,500 m in Macaronesia. Prefers to grow in open, light-filled environments which are warm and moist, but will readily grow in semi and full shade beneath forest canopy, such as in regenerating forest, streamside and alluvial forests, forest gaps and gullies.



Hedychium gardnerianum flowers are very showy and fragrant

Photo: Phil Hulme

DISTRIBUTION

Native Range

Indian Subcontinent: Bhutan; India - Assam, Sikkim; Nepal

Known Introduced Range

Widely cultivated in the tropics, invasive in New Zealand, Réunion, Hawaii and Macaronesia (especially Azores).




Trend

Probably increasing where introduced. Established on most Macaronesian islands where it is a threat.

MAP (European distribution)



Legend

	Known in country		Known in CGRS square		Known in sea
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INTRODUCTION PATHWAY

Ornamental gingers (*Hedychium* spp.) are spread via the horticulture industry.

IMPACT

Ecosystem Impact

Its spatial occupation competes with native species. Permanent smothering of stream ecosystems and forest ground flora, almost entirely preventing regeneration. Once fully established it is extremely difficult for native seedlings to regenerate. May permanently displace rare plants, or cause serious losses to populations of uncommon plants or specialised communities.

Health and Social Impact

Unknown.

Economic Impact

Unknown.

MANAGEMENT

Prevention

Avoiding planting as an ornamental, avoid dumping of plant debris in the wild.

Mechanical

Only small plants and seedlings can be effectively removed manually. Removal requires slashing stems and digging out all rhizomes and tubers. Young seedlings and shade-suppressed plants may appear small but have a

string of rhizomes attached to them. Bury rhizomes at a landfill, or dry and thoroughly burn to prevent resprouting.

Chemical

The herbicide metsulfuron-methyl can be effective when applied following slashing of established plants.

Biological

A pathogenic bacterium (*Ralstonia solanacearum*) was found in Hawaii and tested for biological control but its effectiveness is unclear.

REFERENCES

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