

Hedychium flavescens 简体中文 正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Liliopsida	Zingiberales	Zingiberaceae
Common name	wild ginger (English), kopi rengarenga (English, Cook Islands), cream garland lily (English), longoze (French), e mei jiang hua (Chinese, China), opuhi rea rea (English, French Polynesia), yellow ginger-lily (English), yellow ginger (English), kopi rengarenga (Cook Islands), teuila (English, Samoa), cream ginger lily (English), cream ginger (English), awapuhi melemele (English, Hawaii), re'a rengarenga (English, Cook Islands)			
Synonym	Hedychium emeiense , Z.Y. Zhu Hedychium panzhuum , Z.Y. Zhu			
Similar species	Hedychium gardnerianum			
Summary	Hedychium flavescens has been spread from its home-range in the Himalayas to occupy many locations around the world. It has caused great concern in countries where it has been introduced; for example in New Zealand, Hawaii and La Réunion, as it can form dense vegetative growths that may cover whole areas of land and prevent the regrowth and regeneration of native plant species. Moist warm climates in particular favour successful establishment of Hedychium flavescens.			
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Species Description

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Coarse perennial herbs with leafy shoots 1.5-2m tall. Grows from large branching rhizomes (tuberous shoots) of up to 3.5cm in diameter. Rhizomes are internally pale and fragrant (Wagner *et al.*, 1999, in PIER, 2002). Rhizomes grow vertical stems, grow up to 10cm long and form rhisome beds of up to a metre thick (Mather, Environment B.O.P). Leaves are oblong to lanceolate, 20-45 (-60)cm long, 5-10 (-12.5)cm wide, upper surface glabrous, lower surface sparsely pubescent, apex acuminate, sessile, ligules membranous, (1-) 2-4cm long, entire, pubescent, sheaths glabrous. Flowers fragrant, inflorescences erect, basically ovoid, 15-20cm long, ca. 8cm wide, primary bracts green, membranous along margins, loosely imbricate, broadly ovate to elliptic, 5-8cm long, ca. 3.5cm wide, apex usually obtuse, pubescent to glabrate, rachis permanently concealed, cincinni usually 4-flowered, calyx cylindrical, 4-5cm long, pubescent or rarely glabrate; corolla yellow, the tube slender, 8-9cm long, the lobes linear to linear-lanceolate, 4-5cm long; labellum often centrally flushed with dark yellow, broadly obovate, about as long as staminodes, (2.5-) 3-4cm wide, the base tapered into a claw; stamen yellow, about as long as labellum or slightly longer; lateral staminodes white, spatulate to lanceolate, (2.5-) 4-6cm long. Capsules unknown (Wagner *et al.*, 1999, in PIER, 2002)

Notes

Flowers produce a powerful spicy citrus scent (KobaKoba 2001).

Uses

Medicinal purposes (Brach, Flora of China).



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Habitat Description

Yellow ginger occurs in rainforests, moist forests, along roadsides, in open habitats and along streamsides (PIER, 2002). In India it is found at altitudes of between 1200 metres and 2000 metres (KobaKoba 2001).

Reproduction

Spreads outwards along the ground by way of rhizomes, with new stems sprouting annually (Environment B.O.P).

General Impacts

This species is a major invader of native forests in Hawaii (Carr, University of Hawaii), New Zealand, and La Réunion (PIER, 2002). In New Zealand yellow ginger (*H. flavescens*) exhibits dense rhizomal growth which aids its spread and dispersal and prevents the growth of native plants. There is concern that it may permanently displace uncommon plants or specialised plant communities in this country (NZ DOC).

Management Info

<u>Physical</u>: Plants may be dug out. All seedlings must be removed to prevent regeneration. Stalks and roots are difficult to burn and should not be composted. Even small root fragments will resprout.

<u>Chemical</u>: Treat with herbicide. Escort 25 gm/100 l water + 0.1% Pulse; Roundup 2% + 0.2% Pulse and Amitrole. If in doubt, use concentrations as recommended by the manufacturer. Apply from spring to late autumn. Spray lightly on the leaves and roots. Do not remove the leaves or stalks until they have gone brown and dried out. This will take three to four months. During spraying, non-target plants can be shielded with cardboard or plastic sheets. The use of a marker dye helps to avoid double spraying and wastage, and a foaming agent can be added to the spray to prevent drift.

For larger plants, the cut stump method can be used. Cut the base of the plant close to the ground with a straight flat cut. The cut must be horizontal so the herbicide will stay on the cut area and be absorbed. Apply the herbicide as instructed on the label to the stems and roots. Apply immediately, as the sap ceases to flow once the tissues are severed. There are several convenient ways the application can be made, with a paintbrush, eye dropper or a small squeeze bottle. This method uses less spray and reduces the risk to non-target plants. Make sure you leave the plants in the ground until the roots have died off.

Another approach is to cut and remove all stalks and leaves and rake away ground litter to expose the roots. The roots should then be sprayed, covered with leaves, and left. Don't use this method after the flowering heads have formed seeds. The spray will have noticeable effects in three months, but the plant will take 12 to 15 months to fully die and rot. With all spraying make sure to read the instructions on the manufacturer's label closely and always wear protective clothing (NZ Department Of Conservation).

Pathway

Cultivated in New Zealand gardens since 1865. (Mather, Environment BOP)

Principal source:

Compiler: IUCN/SSC Invasive Species Specialist Group (ISSG)

Review:

Pubblication date: 2006-07-24

ALIEN RANGE

[1] AMERICAN SAMOA[5] COOK ISLANDS[1] FIJI[2] FRENCH POLYNESIA[1] GUAM[1] MAYOTTE[1] MICRONESIA, FEDERATED STATES OF[1] NEW CALEDONIAGlobal Invasive Species Database (GISD) 2024. Speciesprofile Hedychium flavescens. Availablefrom: https://www.iucngisd.org/gisd/species.php?sc=196[Accessed 16 April 2024]



[1] NIUE

[1] SAMOA

[1] UNITED STATES

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[8] NEW ZEALAND[1] REUNION[1] TONGA

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Hivert, J. 2003. Plantes exotiques envahissantes - Etat des mêthodes de lutte mise en oeuvre par l Office National des Forêts ê La Rêunion. ONF Rêunion.

Summary: Synth@se des m@thodes de lutte employ@es par I ONF @ la R@union contre une vingtaine de plantes exotiques envahissantes.

Mather, John. Environment BOP. Wild ginger - Plant pest Control Fact sheet. Environment Bay of Plenty. National Pest Plant Accord, 2001. Biosecurity New Zealand.

Summary: The National Pest Plant Accord is a cooperative agreement between regional councils and government departments with biosecurity responsibilities. Under the accord, regional councils will undertake surveillance to prevent the commercial sale and/or distribution of an agreed list of pest plants.

Available from: http://www.biosecurity.govt.nz/pests-diseases/plants/accord.htm [Accessed 11 August 2005] New Zealand Plant Conservation Network, 2005. Unwanted Organisms. Factsheet *Hedychium flavescens* <u>PIER (Pacific Island Ecosystems at Risk), 2002. *Hedychium flavescens*</u>

Summary: Ecology, synonyms, common names, distributions (Pacific as well as global), management and impact information. Available from: http://www.hear.org/pier/species/hedychium_flavescens.htm [Accessed 29 January 2003]. Plant Pest Control. Undated. (Wild Ginger Fact Sheet PP02/98: *Hedychium gardnerianum, Hedychium flavescens*). Environment Bay of

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General information

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Summary: Base de donn@es sur la flore de la R@union. De nombreuses informations tr@s utiles.

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2000-2001. Yellow Ginger. Hawaii s Most Invasive Horticultural Plants.

Summary: Brief account of Yellow ginger.

Available from: http://www.state.hi.us/dlnr/dofaw/hortweeds/species/hedfla.htm [Accessed 29 January 2003] ITIS (Integrated Taxonomic Information System), 2005. Online Database Hedychium flavescens

Summary: An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals.

Available from:

http://www.cbif.gc.ca/pls/itisca/taxastep?king=every&p_action=containing&taxa=Hedychium+flavescens&p_format=&p_ifx=plglt&p_lang= [Accessed March 2005]

KobaKoba 2001. Hedychium flavescens.

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Summary: Cet article est le premier ***** proposer une hi*****rarchisation des plantes les plus envahissantes de La R*****union. 33 plantes ont *****t***** ainsi class*****es en utilisant une m*****thode d*****velopp*****e en Afrique du Sud. Les bases d une strat*****gie de lutte contre les plantes exotiques envahissantes sont *****galement formul*****es.

MacKee, H.S. 1994. Catalogue des plantes introduites et cultives en Nouvelle-Caledonie, 2nd edn. MNHN, Paris.

Summary: Cet ouvrage liste 1412 taxons (esp@ces, sous esp@ces et vari@t@s) introduits en Nouvelle-Cal@donie. L auteur pr@cise dans la majorit@ des cas si l esp@ce est cultiv@e ou naturalis@e.

Plants Database, 2002. U.S. Department of Agriculture (USDA).

Summary: Comprehensive information concerning taxonomy, distribution, life-history and ecology.

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