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.

view this species on IUCN Red List

Species Description
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).

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
Physical: 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.
Chemical: 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)

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ALIEN RANGE

[1] AMERICAN SAMOA
[1] FIJI
[1] GUAM
[1] MICRONESIA, FEDERATED STATES OF
[5] COOK ISLANDS
[2] FRENCH POLYNESIA
[1] MAYOTTE
[1] NEW CALEDONIA

[8] NEW ZEALAND
[1] REUNION
[1] TONGA
[1] NIUE
[1] SAMOA
[1] UNITED STATES

BIBLIOGRAPHY

22 references found for **Hedychium flavescens**

Managment information

Department of Conservation (DOC), undated. Threats and Impacts Wild Ginger.
Summary: Detailed report on how to control *H. flavescens* plus description of the plant and history with regards to New Zealand.
Available from: http://www.doc.govt.nz/templates/MultiPageDocumentTOC.aspx?id=40086 [Accessed 25 August 2008]

Environment Waikato. 2002. Wild Ginger (*Hedychium gardnerianum*, *H. flavescens*)

Hivert, J. 2003. Plantes exotiques envahissantes - Etat des m�thodes de lutte mise en oeuvre par l Office National des For�ts � La R�union. ONF R�union.
Summary: Synth�se des m�thodes de lutte employ�es par l 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*

PIER (Pacific Island Ecosystems at Risk), 2002. *Hedychium flavescens*
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 Plenty.

Royal New Zealand Institute of Horticulture (RNZIH), 2005. Yellow ginger *Hedychium flavescens*
Summary: Available from: http://www.rnzih.org.nz/pages/nppa_097.pdf [Accessed 1 October 2005]

Space, J.C. and Flynn, T. 2002. Report to the Government of the Cook Islands on Invasive Plant Species of Environmental Concern. U.S.D.A. Forest Service Pacific Southwest Research Station:Honolulu. [Accessed 13 February 2006, from:]
Summary: Cook Island management of invasive plants including yellow ginger.
Available from: http://www.hear.org/pier/pdf/cook_islands_report.pdf [Accessed 13 February]

Taranaki Regional Council. 2003. Wild ginger Kahili ginger/yellow ginger (*Hedychium gardnerianum*, *Hedychium flavescens*). The Pest Plant Management Section.

Tasman District Council (TDC) 2001. Tasman-Nelson Regional Pest Management Strategy

General information

Barthelat, F. 2005. Note sur les esp�ces exotiques envahissantes � Mayotte. Direction de l�Agriculture et de la For�t. 30p
Summary: Tableau synth�tique des plantes exotiques de Mayotte class�es en fonction de leur niveau d envahissement.

Brach, Anthony R. *Hedychium flavescens*. Flora of China.
Summary: Good description, some distribution and uses.
Available from: http://flora.huh.harvard.edu:8080/flora/browse.do?flora_id=2&taxon_id=240001280 [Accessed on 29 January 2003].

Carr, Gerald D. Zingiberaceae. University of Hawaii, Botany Department.
Summary: Description, and some general information of the plant with regards to Hawaii.
Available from: http://www.botany.hawaii.edu/faculty/carr/zingiber.htm [Accessed 29 January 2003]

Conservatoire Botanique National De Mascarin (BOULLET V. coord.) 2007. - *Hedychium flavescens* Index de la flore vasculaire de la R�union (Trach�ophytes) : statuts, menaces et protections. - Version 2007.1
Summary: Base de donn�es sur la flore de la R�union. De nombreuses informations tr�s utiles.
Available from: http://flore.cbnm.org/index2.php?page=taxon&num=c6b8c8d762da15fa8dbbdfb6baf9e260 [Accessed 1 April 2008]

Forestry and Wildlife Hawaii, © 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*.
Summary: Description of the plant and some general information.
Available from: http://www.kobakoba.co.uk/hedychium_flavescens.htm [Accessed 29 January 2003]

Macdonald, I.A.W., Th�baud, C., Strahm, W.A., & Strasberg, D. 1991. Effects on alien plant invasions on native v�g�tation remnants on La Reunion (Mascarene Islands, Indian Ocean). Environmental Conservation, 18, 51-61.
Summary: Cet article est le premier à proposer une hi�rarchisation des plantes les plus envahissantes de La R�union. 33 plantes ont été 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 également formul�es.
MacKee, H.S. 1994. Catalogue des plantes introduites et cultiv�es en Nouvelle-Cal�donie, 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.
Available from: http://plants.usda.gov/cgi_bin/topics.cgi [Accessed 29 January 2003].