

# NIWA



# National Institute of Water & Atmospheric Research Ltd



# NIWA

## *(Taihoro Nukurangi)*

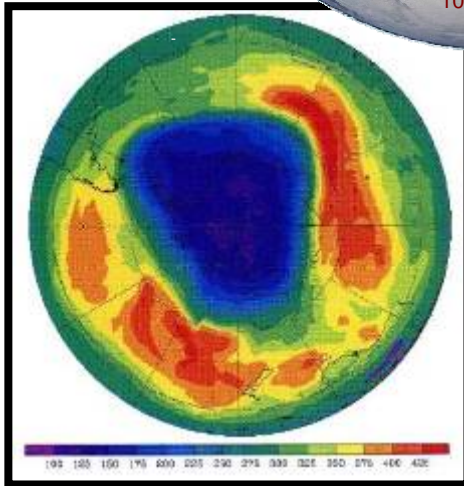
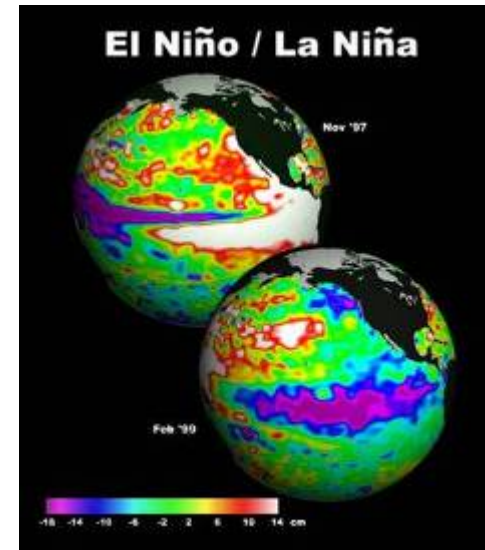
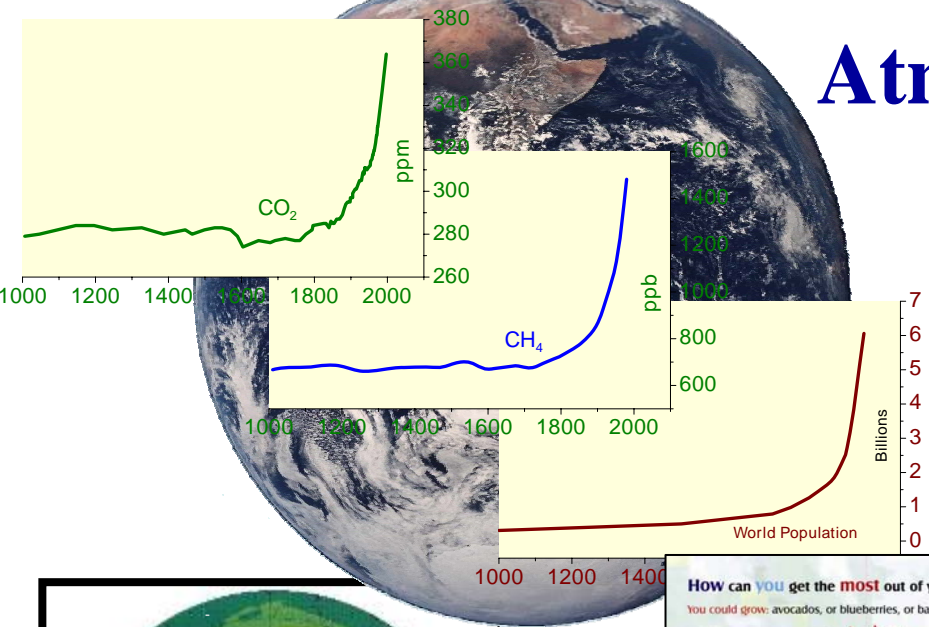
- **Crown Research Institute (CRI Act) formed in 1992**
- **Over 650 staff**
- **Annual Revenue \$106 m**
  - (48%) FRST**
  - (18%) MFish**
  - (34%) Consultancy**



NIWA has over  
650 employees



# Atmosphere, GHG & Climate



**How can you get the most out of your land?**  
 You could grow: avocados, or blueberries, or bananas, or ...

**Climate Information**  
 NIWA

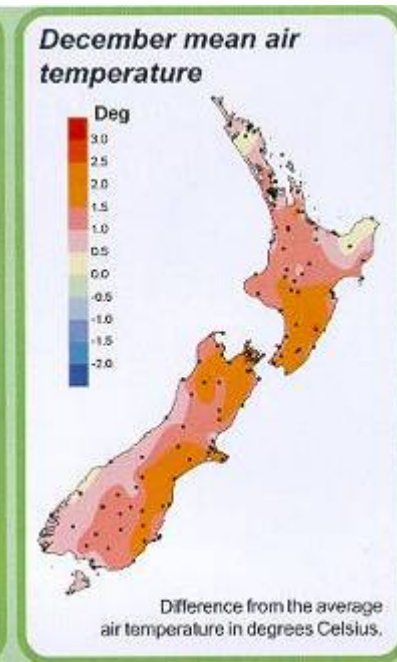
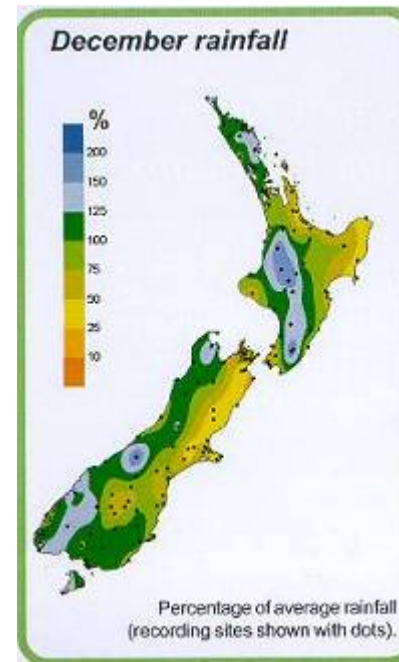
**Soil Information**  
 For more Soil Data

**Crop Information**  
 For example, to grow figs you need:

- well aerated and well drained soils
- deep soils
- flat or gently sloping ground
- soil pH of 6.0-6.5
- extreme minimum air temperature > 0°C
- at least 100 hours of winter chilling

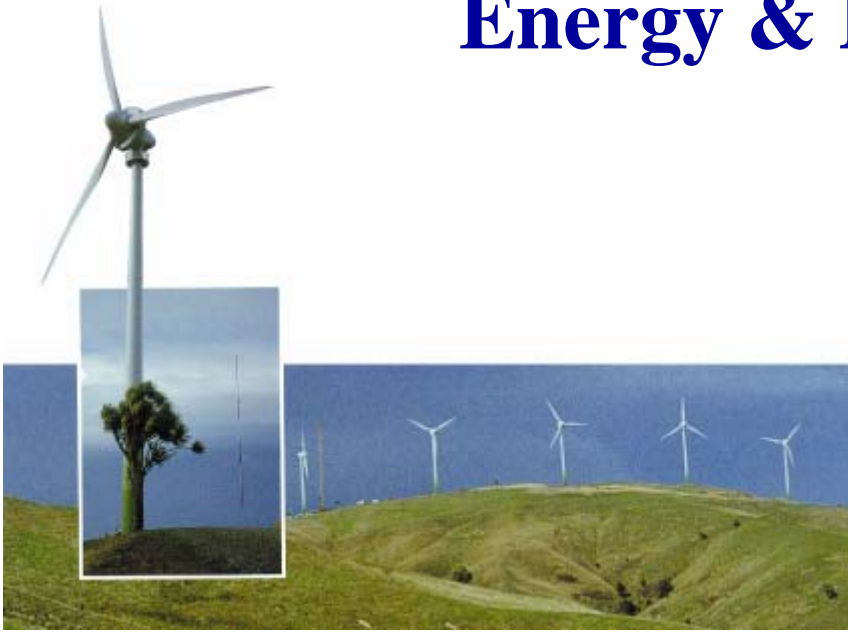
Identify whether you can grow this crop.

Logos for HortResearch, NIWA, and Kaitiaki Takekōwhiri are present.





# Energy & Hazards



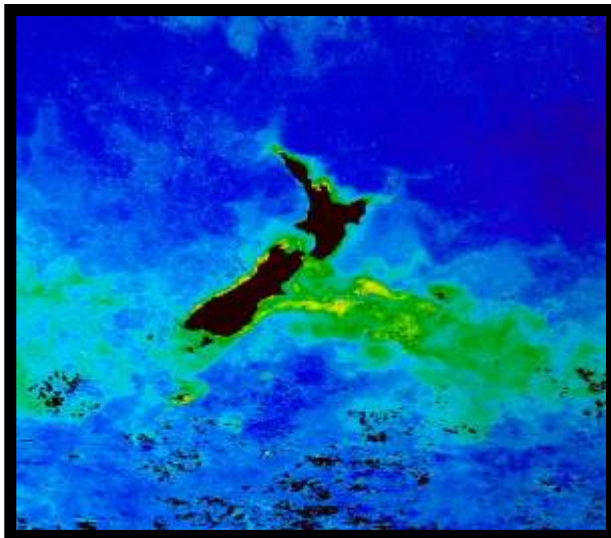
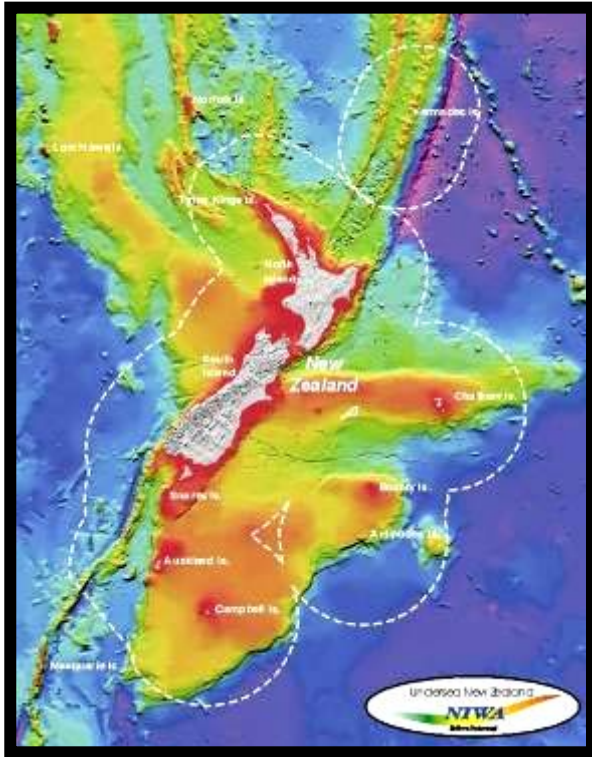


# Water Resources





# Coasts & Oceans



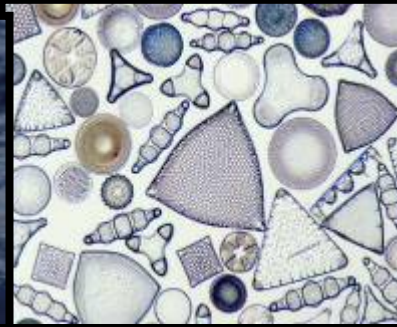
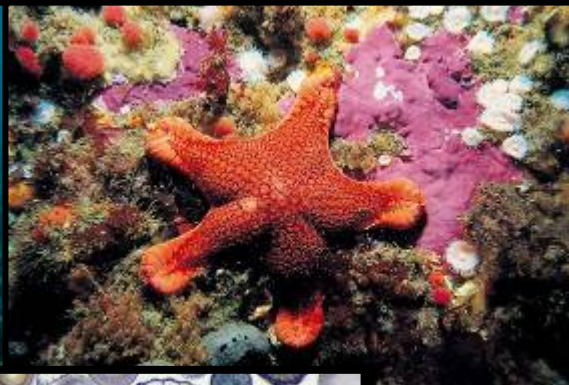


# Fisheries & Aquaculture





# Aquatic Biodiversity & Biosecurity









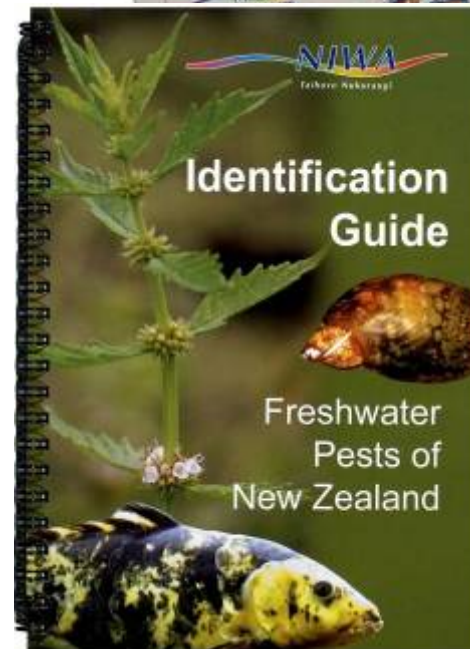
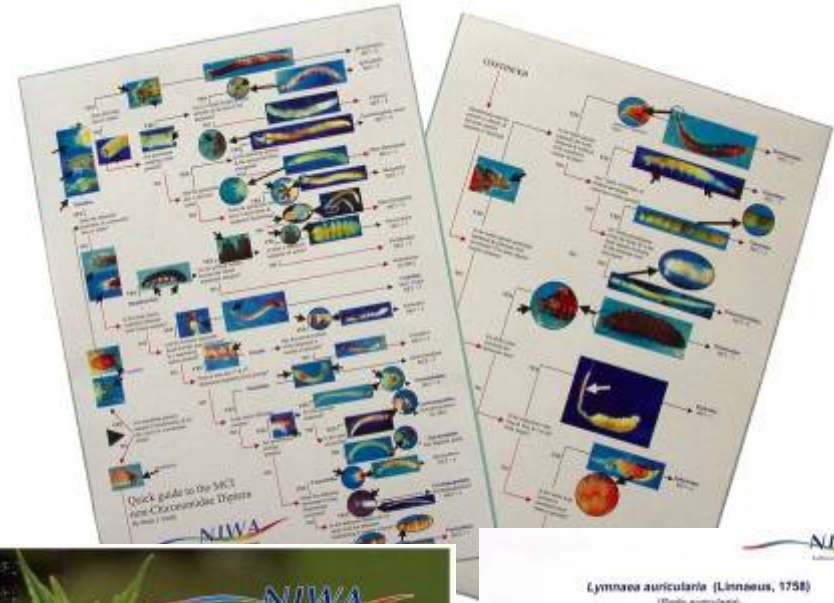
# Education & Training





# Products & Services

- **National Centres:**
  - Climate
  - Natural Hazards
  - Fisheries & Aquaculture
  - Climate-Energy Solutions
  - Water Resources
  - Coasts & Oceans
  - Aquatic Biodiversity & Biosecurity



***Lymnaea auricularia* (Linnaeus, 1758)**  
(*Radix auricularia*)  
Ear pond snail



**Known distribution** Probably widespread in the central North Island, with records from Hamilton, Taranaki, and Palmerston North; first recorded in New Zealand in 1977.

**ID features** Easily identified from other lymnaeids by its relatively large size, short spire, and large lower ear; black blotches visible through the shell.

**Similar species** Morphologically similar to *Lymnaea stagnalis*, which has not been recorded in New Zealand.

**Dispersal mechanism** Dispersal enhanced artificially through transport of infested pond weed, aquarium trade.

**Biosecurity risk** Serves as an intermediate host to flukes such as *exocheloneis* and trematodes parasitic in aquatic birds; studies have shown that *L. auricularia* is an unlikely host for the liver fluke (*Fasciola hepatica*).

NIWA  
Identification guide: Freshwater pests of New Zealand





# NIWA Natural Solutions





# NIWA Vessel Management Ltd





# NIWA Co operative agreements

## Chile

- Fisheries Stock assessment

## Peru

- ENSO predictions
- Deep water fisheries

## CAMLR

- Ecosystem modeling
- Stock assessment- Tooth fish

## Western Pacific Tuna Commission

Observer Status at ICES on behalf of New Zealand



# Science Collaboration in North Pacific Region

Fe addition experiments

- SERIES
- SEEDS II



# Proposed Interactions in South Pacific

## South Pacific Regional Fisheries Management

- High Seas
- Collaborative effort for science underpinning fisheries and biodiversity

# Areas Interaction and Collaboration

NIWA is interested in feedback from PICES  
regarding mechanisms for interaction and areas of  
potential collaboration