

# Earthing up in Irish potato

## Recognize the problem

Irish potatoes (called Magwili in Tonga) harvested from un-ridged fields are usually greenish brown and not the normal creamy white, brownish or purplish colour. These tubers have a bitter taste, are poisonous and should not be sold, even not at a low price. Un-ridged fields produce low yields.

## Background

When tubers grow in un-ridged fields, they grow close to the soil surface or even above. Then they are exposed to the sun, and turn green. When turning green they also produce a poison inside and on the skin of tubers. Putting soil around the plant prevents tubers to be exposed to the sun. Ridging also loosens the soil, increases root growth, and increases the plants ability to get nutrients and water from the soil. This results in healthier and bigger shoots and tubers. In addition, ridging reduces the chance of blight spreading to the tubers.

## Management

Ridging (also known as 'earthing up') is the process of putting soil around the growing plant.

- A hoe (Jamba in Tonga) or shovel (Fosholo in Tonga) is used to dig soil from near the growing plant and put it up around the plant
- These ridges should be 25-35 cm high and 30 - 40cm wide
- This should be done 2-3 times during the growing period of Irish potatoes (Magwili)
- The first ridging should be done when plants are 3 weeks old
- The second time when plants are 6-7 weeks old
- The third ridging is not always needed, but can be done to close any open/cracked ridges that have formed due to the development of tubers

Poisonous greening of potatoes due to sunlight. (Photo by Rasbak CC BY-SA)



Earthed up Irish potato plants. (Photo by BBC World Service (CC BY-NC))



When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval.

Scientific name(s) > *Solanum tuberosum*

The recommendations in this factsheet are relevant to: Zambia



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