



A simple chamber for curing cut seed potatoes

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Cutting of seed potatoes before planting is often necessary in Australia because of the large tubers produced by an economical crop. Seed is normally cut just before planting and the cut sets placed in a cool, moist soil where curing conditions are good.

If the weather breaks at planting time, cut seed may be held under conditions which are not satisfactory for healing and this may result in breakdown of sets before or after planting.

To overcome this problem, the Institute for Horticultural Development at Toolangi developed a small chamber to assist in the curing of cut surfaces for seed potatoes. A series of trials which varied both the temperature and time for optimum curing showed that 15°C for about 10 days was optimum. Relative humidity was maintained at 90-95% throughout this period using a simple misting device such as a Defensor 503 humidifier.

The curing chamber

The frame of the chamber was made from 25 mm galvanised iron pipe to form a frame measuring 3.0m x 3.0 m x 2.5 m high. The frame was covered with heavy duty plastic or polypropylene with a flap doorway and lacing eyelets to enable easy access to the chamber.

A Tangi heater (or similar) was set into the rear of the chamber as illustrated in Figure 1 and linked with a simple thermostat to maintain the temperature at about 15°C. An interior baffle prevents direct heating of tubers.

The misting device is placed inside the chamber so as to keep the humidity high throughout the curing period.

If seed potatoes are cured correctly, the cut and cured seed can be returned to the cool store at 4°C for storage prior to planting.

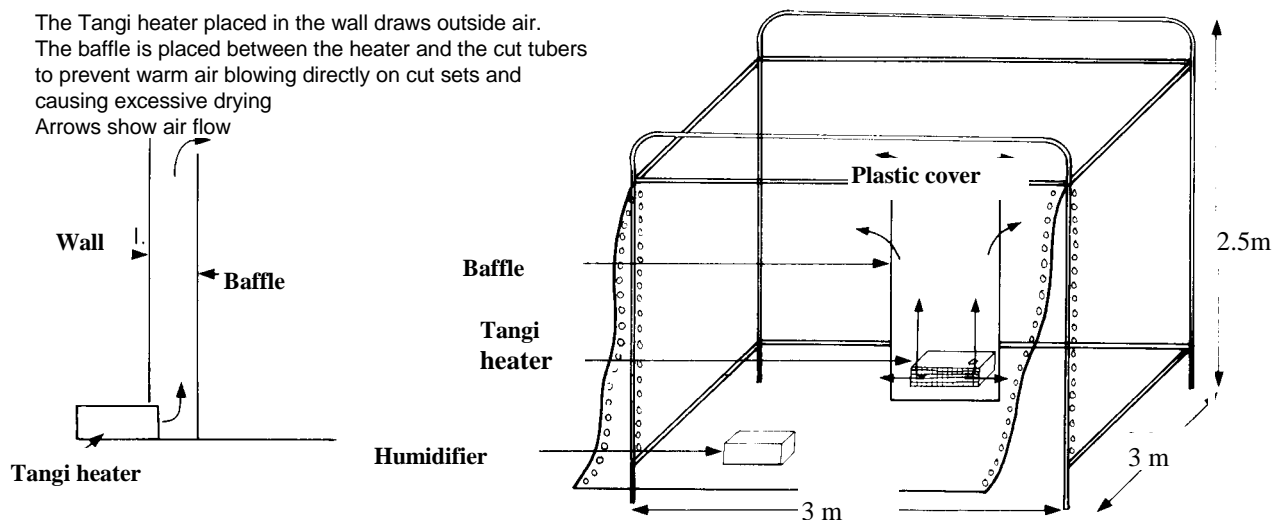


Figure 1. A curing chamber for cut seed

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