



# Growing super-sweet white asparagus

## Introduction

White (blanched) asparagus is produced in the absence of sunlight. It is commonly grown in Asia and Europe. However, fresh white asparagus is rare in New Zealand and sells for five to six times that of green asparagus.

### Traditional growing method

The traditional growing method is to mound up soil over the plant row to 50 to 70cm high just before the spears start to grow in the spring. Once the tip of the soil mound starts to crack above the emerging spear, the spear is dug out of the soil before it is exposed to light.

### The traditional growing method:

- is very labour intensive - it takes much longer to harvest white asparagus than green asparagus
- often causes damage to spears close to the one being harvested

The preparation of white asparagus for cooking is also labour intensive since each spear needs to be peeled to remove the tough outer layers of fibre prior to cooking.

There is increasing demand for white asparagus from both our traditional fresh export markets e.g. Japan, and the local restaurant trade to supply European and Asian tourists used to eating white, rather than green, asparagus.

## Aim

To develop methods for production of **super-sweet white asparagus** that are less labour intensive than traditional methods.

## Recommended Method

### Cultivar: Pacific Purple

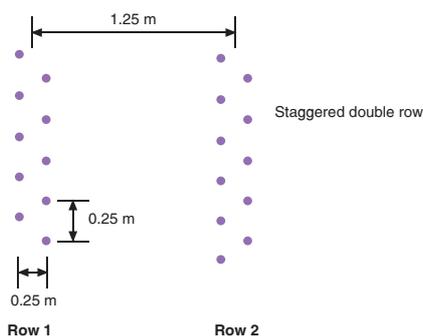
Spears of Pacific Purple are sweeter, have less fibre and have bigger diameter than varieties grown for white asparagus.



## Planting

Planting depth 20cm

In-row / between row spacing



Yields of 1 kg/square m have been produced with this planting arrangement ie a 50m x 5 m house should produce 250 kg of white asparagus when in full production.

### Tunnelhouse

Erect a tunnelhouse frame over the asparagus during winter before the first harvest season.

- Cover the frame with two layers of plastic film
  - inner layer 250 micron black film (used under concrete floors)
  - outer skin 150 micron black/white film with the black side outermost.
- Reverse outer skin (white side out) when conditions get hotter later in the spring.
- Build a light trap at the entrance.



### Harvesting

Harvest the spears when they reach 24 to 25 cm long. (Note: heads will not open until they are 80 to 100cm tall when kept in the dark). Use an LED head light when harvesting the spears.

## Results

White asparagus spears weigh considerably more than similar sized purple or green spears

### Super-sweet white asparagus

- tastes sweeter,
- is more juicy and
- has very low fibre content when compared with green or purple spears.

Super-sweet white spears sold for \$20 per kg for the entire season (October to December). Demand could not be satisfied.

### Costs

Tunnelhouse frame	50m x 5 m	\$3000.00
250 micron black plastic		\$503.78
150 micron black /white plastic		\$200.00
Head-lamp		\$40.00
<b>Total</b>		<b>\$3743.78</b>

## Acknowledgements

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