



Growing beet

No shortcuts!

Beet is one of the highest yielding, highest quality crops you can grow and it's a great investment. But like everything in life, there's give and take. Beet does require planning and preparation in advance and more care and attention during growth than lower yielding crops. But it's not too difficult and it will definitely pay off.

Paddock selection

Ideally identify paddocks a year in advance.

Choose one with a known chemical history, optimum nutrient availability and that can be prepared to an acceptable standard.

Don't choose a paddock where chemicals such as post emergence herbicides for brassicas, sulfonyl urea, chlorsulfuron, atrazine and mesotrione have been used in the past two years.

Never double crop fodder beet as this will result in significant problems.

Aim for a pH of 6.2 at planting and determine what other key nutrients are present.



Up to two thirds of total yield depend on starting right.

Paddock preparation

First cultivation

The roots of beet can go down as far as 1.5m to access deep moisture so make sure there's nothing beneath the surface of the paddock that will get in the way of these.

Dig a soil inspection pit to see if there is any hard compacted soil. If so, this will need breaking up.

After spraying out, use a subsoiler/ripper (if required) set to a depth of 50mm max below the compacted soil.

Main cultivation

Do this well before planting to allow soil weathering and a weed flush.

Be patient for the right conditions to allow working and try to group workings within a few days of each other so as not to lose too much moisture.

Apply base fertiliser

Do this after the main cultivation and aim for level finish.

Apply at least one week prior to planting so you don't burn the emerging seedlings. If you don't have a week, apply half before and half after planting.

What you apply will depend on the soil test from the paddock selection stage; ensure you include key elements for best plant establishment and growth. This application should include the first third of the nitrogen (N) required.

Incorporate with the final surface workings.

Final cultivations

A fine, firm and moist seedbed is essential. Do not over cultivate or compact the seedbed.

Do no more than two passes with a maximum depth of 75mm.

Use straight tine equipment to avoid overworking.

Use low tyre pressures to minimise compaction.



Planting

Plant after the risk of frosts has ended, generally September to November is the best time for planting, possibly earlier in the North Island.

Precision plant seeds 20mm deep into moisture and no deeper than 25mm if losing moisture.

Plant at a maximum ground speed of 6kph so you don't bounce the planter units, which causes uneven depth spacing between seeds.

Plant 90,000 to 100,000 seeds p/ha for in-situ grazing and 110,000-120,000 for machine harvested crops.

Pre-establishment

After planting apply post plant/pre-emergence herbicide.

Post-establishment

Correct timing for any application is crucial! For maximum control target weeds that emerge early before they steal light, moisture and nutrients your crop needs.

Growing stage

Fertiliser/fungicide applications

Fully expanded cotyledon nitrogen should be the second third of the crop's N requirements. If you miss the timing of this stage wait until the plant's eight-leaf stage to avoid plant burn. This application optimises plant growth and leaf expansion so the crop can cover the ground as quickly as possible, which means it gets as much light as possible during its development.

Right before the canopy closes, apply the final third N.

Use registered fungicides at their recommended timings to maintain a healthy canopy. Make sure you adhere to grazing withholding periods too.

Bolters

To manage any bolters in the crop, either break the stem before flowering or remove the whole plant from the field after flowering.

It's really important to control bolters or it could mean you can't grow beet in that paddock again for number of years.

