Sweet Potato
Mark Traynor, Senior Technical Officer, DPIFM Darwin

Site Selection: Soil should be a well–drained sandy loam.

Ground Preparation: Soil is to be worked with an offset disc to loosen the top 20 cm to allow hilling up. Adjust pH to about 6.5 with Ag-lime. Apply fertiliser prior to hilling as a basal application. See table below.

Hills should be 40 cm wide, 0.5 m high and 1-1.5 m apart. Plant tip cuttings about 30-40 cm long (approximately and nodes) into top of hill at 45° angle. Bury half the cutting and space plants 30 cm apart. Water immediately after planting.

Planting Material: Commercial virus indexed cuttings available from QDPIF. For small-scale plantings, tubers can be purchased from your local supermarket.

Irrigation: Overhead watering is preferred. Irrigate each day at about 2pm for 1 hour, or twice a day for ½ hour each time.

Nutrition: Apply 100 kg N, 90 kg P, 200 kg K and 200 kg Ca/ha/year. Divide into three applications, one base fertiliser at hilling and two side dressings, 1st at 4 weeks, 2nd at 10 weeks (see table).

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<thead>
<tr>
<th></th>
<th>Basal application</th>
<th>1st side dressing</th>
<th>2nd side dressing</th>
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<tbody>
<tr>
<td>N</td>
<td>50 kg/ha</td>
<td>25 kg/ha</td>
<td>25 kg/ha</td>
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<tr>
<td>P</td>
<td>90 kg/ha</td>
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<tr>
<td>K</td>
<td>50 kg/ha</td>
<td>75 kg/ha</td>
<td>75 kg/ha</td>
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<tr>
<td>Ca</td>
<td>200 kg/ha</td>
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Note: Some calcium will be supplied in the application of Ag-lime, and any additional can be applied in the basal as gypsum.

Pests: Sweet potato weevil and termites.

Diseases: Mycoplasma (little leaf), source ‘clean’ planting material (contact DPIFM), Feathery mottle virus.

Pruning: Plants can be pruned at six weeks to obtain cuttings for successive planting.

Harvest: Roots should be ready for harvest at 18-22 weeks depending on variety and temperature during growth period. Test for maturity by cutting tuber, if sap dries white it is mature, if it dries dark or green, tuber is immature. Vine can be cut and removed. Lift tubers carefully with a fork, or modified potato harvester, avoid skin damage.

Post Harvest: Tubers should be washed and stored at 13-16°C at 85-95% relative humidity.