Purple sprouting broccoli has never been a popular vegetable which is hard to understand given that it looks well and tastes well. It’s a crop than deserves to be better known and more widely grown. Unlike broccoli it is fully hardy and can be produced almost all year round from June through to May. In practice the main season will be from autumn to spring. Traditionally it was a crop that was produced for the ‘hungry gap’ from March into May. However companies like Tozers, Elsoms and Bejo have done a lot of breeding work with the crop developing varieties that span from summer production right through to late spring.

SOIL TYPE

Purple sprouting broccoli will grow on a wide range of soil types provided they are well drained and structured. Early crops are best suited to lighter soils.

PH

The pH of the soil should preferably be between 6-7.5. Below a pH of 5.7 growth is increasingly restricted.

ROTATION

Allow a break of 4-5 years between all brassicas. In naturally occurring high alkaline soils, continuous production with brassicas is possible without detrimental effects.

ASPECT

For autumn cropping choose fields with an open or even exposed aspect to lessen the incidence of spear rot.

SYSTEM

Purple sprouting broccoli is grown on the flat, on drills or raised beds.

FERTILIZER

Apply the following amounts (kg/ha) according to soil analysis:

<table>
<thead>
<tr>
<th>Index</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>100</td>
<td>90</td>
<td>80</td>
<td>70</td>
</tr>
<tr>
<td>P</td>
<td>60</td>
<td>45</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td>K</td>
<td>250</td>
<td>180</td>
<td>170</td>
<td>125</td>
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</tbody>
</table>

Nitrogen topdressing: 140 kg/ha

Compounds

Normally a boronated compound is used such 8-5-18, 8-3-18 or 6-10-18.

Nitrogen

Purple sprouting broccoli is usually top-dressed with CAN about a month after transplanting with an application that does not exceed a total application to the crop of 240 kg/ha (base and top dressing combined). Spring cropping cultivars can be top dressed in late winter/early spring to encourage growth.

CULTIVARS

Santee F1: June – mid November, February – March
Blaze F1: October – November
Rudolf: November – February
Red Admiral: December – January
Rioja F1: February – March
Mendocino F1: March – April
PROPAGATION
Purple sprouting broccoli is normally propagated in modules under protection and transplanted out after hardening off. Usual module size is 308 or 345. A larger 216 module can be used for first early crops. The length of time from sowing to transplanting is normally 5-7 weeks. See the section on Cropping Programme for times of sowing.

CROPPING PROGRAMME

<table>
<thead>
<tr>
<th>Sowing</th>
<th>Planting</th>
<th>Harvesting</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>April</td>
<td>June - July</td>
</tr>
<tr>
<td>March</td>
<td>April</td>
<td>August</td>
</tr>
<tr>
<td>April</td>
<td>May</td>
<td>September</td>
</tr>
<tr>
<td>May</td>
<td>June</td>
<td>October</td>
</tr>
<tr>
<td>June</td>
<td>July</td>
<td>November</td>
</tr>
<tr>
<td>July</td>
<td>Up to mid-August</td>
<td>November - May</td>
</tr>
</tbody>
</table>

SUCCESSION
For harvesting succession use a combination of planting dates and varieties. Cropping periods for each cultivar can be quite long and overlap.

SPACING
Plant spacing will affect head size. The following spacing is suggested:
60 x 60 cm = 27,700 per ha
60 x 45cm = 37,000 per ha

IRRIGATION
Apply to establish a crop after transplanting in dry weather.

WEEDS
The standard programme is 2.9 l/ha Stomp Aqua applied within 24 hours of planting followed by 1.0 l/ha Butisan S 5-6 days post-planting. For improved control of cleavers, fool’s parsley and fumitory tank-mix Gamit at 0.2 l/ha with Butisan. If small weeds are present 3-4 weeks after planting apply Lentagran at 2 kg/ha. Can be tank mixed with Dow shield at half rate to improve spectrum of weed control. The only graminicide available is Stratos Ultra.

PESTS
Cabbage root fly, aphids and caterpillars are the three commonest pests to attack broccoli.

Cabbage root fly
Apply Tracer or Verimark as a drench to modules just prior to planting out at the rate of 12/15 ml per 1000 modules respectively. These products should be washed of the leaves immediately after drenching. Verimark which is systemic in action is also effective against flea beetle, aphid and caterpillar for the first 6 weeks or so after planting.

Aphids
The two main aphids that attack purple sprouting broccoli are mealy aphid and peach potato aphid. Apply an aphicide as soon as seen. The main build-up period is from July to September.

<table>
<thead>
<tr>
<th>Product</th>
<th>Rate</th>
<th>Max. No.</th>
<th>HI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biscaya</td>
<td>0.4 l/ha</td>
<td>2</td>
<td>1 week</td>
</tr>
<tr>
<td>Movento</td>
<td>0.5 l/ha</td>
<td>2</td>
<td>3 days</td>
</tr>
<tr>
<td>Teppeki</td>
<td>0.14 kg/ha</td>
<td>2</td>
<td>2 weeks</td>
</tr>
</tbody>
</table>
**Caterpillars**

May be troublesome – spray when seen. Diamond Back moth can be very damaging during warm summers and in bad attacks frequent spraying is necessary; use a spreader (e.g. Tarpoon, Silwet or Break-thru) with any of the products below.

<table>
<thead>
<tr>
<th>Product</th>
<th>Rate</th>
<th>Max. No.</th>
<th>HI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karate Zeon</td>
<td>50 ml/ha</td>
<td>4</td>
<td>None</td>
</tr>
<tr>
<td>Steward</td>
<td>85 g/ha</td>
<td>3</td>
<td>1 day</td>
</tr>
<tr>
<td>Coragen</td>
<td>125 ml/ha</td>
<td>2</td>
<td>1 day</td>
</tr>
</tbody>
</table>

**Flea beetle**

Normally only a problem to young plants if numbers are high which can happen during periods of warm settled weather. Apply Decis Protech at 500 ml/ha.

**Slugs**

May damage established plants and curds can be grazed especially around the headlands. Apply just after planting using a metaldehyde based slug pellet or Sluxx HP (ferric phosphate).

**Rabbits**

If known to be in the area fence off the runs prior to planting.

**Pigeons**

Can cause problems at the planting stage, especially during May and June but **major damage** can occur during the colder months and crops have to be netted to keep birds off.

**DISEASES**

Diseases of purple sprouting broccoli include leaf spots, downy mildew white blister and wet rot of the crown to a certain extent.

**Downy mildew**

Cool moist conditions favour this disease and usually not a problem until later in the season in autumn/winter crops. Apply Ridomil Gold at 2 kg/ha in the August to October period. Harvest interval is 30 days.

**White blister**

This disease can occasionally be troublesome especially in intensive production areas. Spray if seen with Ridomil Gold. Amistar, Signum or Nativo used preventatively can be effective against white blister.

**Spear rot**

Also known as wet rot. Occasional. Spear rot first appears as a discrete blemish on the head, the cause of which is not known. Subsequently bacterial rots invade to form water-soaked areas that quickly develop into a black soft rot. It is typically occurs in the autumn and winter when humidity is high. For late crops choose open fields so that wind can dry crops after rain. Watch nitrogen use, as excessive applications will encourage spear rot. Signum may have some effect on reducing levels of wet rot.

**HARVESTING**

Purple sprouting broccoli is normally harvested from June to early May. When shoots develop, first there is a main terminal shoot; this can be cut large and broken up for smaller shoots or taken smaller. After removal of terminal root many auxiliary side shoots develop which will give you the bulk of your crop. Normally sold in 200g overwrapped packs. Loose product goes limp too quickly – poor shelf life.
COOLING  To increase the shelf-life of purple sprouting broccoli it can be cooled post-harvest if required. Equipment should be capable of reducing the temperature to below 6°C within 12 hours. Hold at a temperature of 3-5°C and at a relative humidity of 95%. Will hold in a cold room for about 7-10 days. Broccoli is sensitive to chilling injury and should not be held at temperatures below 2°C.

YIELD  The yield of purple sprouting broccoli can vary but a good average yield over the season would be 5-9 tonnes per hectare.