Largely unknown in Australia until recently the Piel de Sapo melon is increasing in popularity due to sweet flavours and good maturity indicators, leading to a more consistent experience for consumers. Rijk Zwaan has developed several different styles of Piel de Sapo melon in various sizes and taste profiles.

Points for consideration

The common aspect of these melons is that they are dark skinned and crop management needs to also focus on good vine cover to reduce the chance of sunburn.

Growers also need to consider that the maturity of these Piel de Sapo varieties will vary considerably between varieties, e.g.

- Ricura ≈ 70-75 days from transplant
- Bravura ≈ 75 - 85 days from transplant

Field Selection & Preparation

Like most melons, Piel de Sapo melons can be grown across a wide range of soil types, however best results are achieved in well drained soils.

In poorly drained soils or where soil preparation is inadequate, root born issues such as Pythium, Fusarium are common. When soil temperatures are high in the early crop stage (e.g. in the tropics) Mycosphaerella can be common as well.

Soil test prior to ground preparation is advisable as the optimum pH is between 6.0-6.6. Low soil pH can lead to restricted uptake of magnesium and molybdenum and at the other end of the spectrum, high pH can reduce the uptake of zinc, manganese and iron.
Field preparation

Field layout varies significantly from area to area and country to country, but the method favoured in Australia is:

- beds are approx 1.6m apart
- covered with plastic mulch (900mm)
- trickle tape covered by 5cm to 10cm of soil.

Plastic mulch almost eliminates weed growth in the row, and water efficiency is very good.

Weeds in the inter row can be easily controlled with a knockdown herbicide (shielded sprayer), but generally don’t flourish as moisture in that area is limited.

Once the crop starts to run it’s no longer an option, however the weeds are generally over run by the crop at this stage.

Many growers in Australia also use soil fumigation during some point of ground preparation/mulch laying/prior to planting. This method works extremely well for the control of weeds, soil born pests and soil born diseases.

It is important to obtain a preplant / preparation soil test to determine ideal fertiliser application.

Below is a typical fertiliser application in Australia:

<table>
<thead>
<tr>
<th>Nutrition (kg / Ha)</th>
<th>N</th>
<th>P</th>
<th>K</th>
<th>Ca</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>40</td>
<td>85</td>
<td>90</td>
<td>110</td>
</tr>
<tr>
<td>Fertigation</td>
<td>30</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foliar</td>
<td>2</td>
<td>6</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
<td>85</td>
<td>156</td>
<td>115</td>
</tr>
</tbody>
</table>

Leaf analysis is important to continually monitor the balance between elements and fine tune a fertiliser program that ensures quality and fruit production.

Growing

Experienced growers may choose to direct seed when conditions are suitable (not too hot or too cold), and this method without doubt will produce a better plant.

After planting it is important to keep soil moist but not wet. Some growers choose to slightly stress the plants up to flowering which encourages the plants to set a deep and strong root system.

Apply most of the fertigated nitrogen during the first three weeks after planting and the fertigated potassium in two applications, first application at early fruit set/small fruit stage, and a second application 7-10 days later.

Trace elements can be injected in four pre-flowering fertigations to total (kg/ha/crop):

- 15kg ZnSO4
- 8kg MnSO4
- 2kg Solubor

Monitor nutrition through leaf analysis at flowering and again at mid fruit development, and adjust nutrition if necessary.

During the growth stage of the crop and through harvest it is important to maintain a good water management and nutrition.

Fruit size, shelf life and quality are the goal and maintaining good levels of potassium and calcium are important to achieve this.

In growing areas that have low humidity and little rainfall a crop can produce for extended periods. Nutrition is critical in these situations.

It is critical to maintain an effective fungicide and insecticide program throughout the crop cycle. This should begin with some basic fungicides as close to planting/emergence as practical. An early start will have a long lasting result later in the crop, even when pressure is low.

Insects should be monitored at least twice per week, as with disease.

Harvest

At harvest it is important to pick with minimum disruption of the foliage with many growers asking pickers to make sure that the remaining fruits are covered with foliage. This will minimise sunburn on the fruit.

Piel de Sapo melons have several clear maturity indicators:

- the rind changes from dark to a mottled light green, with a yellow patch on the bottom
- a net of longitudinal cracks develop on the rind

Piel de Sapo melons have several clear maturity indicators:

- a yellow gold spot appears around the stem
- the rind changes from dark to a mottled light green, with a yellow patch on the bottom
- a net of longitudinal cracks develop on the rind