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ADVICE FOR THE CULTIVATION OF THE POTATO VARIETY "LADY ROSETTA" UNDER SUB-TROPICAL CONDITIONS WITH IRRIGATION

1. PREPARATION OF PLANTMATERIAL

- 1.1. Need at least 90 days from vine-kill to plant ready.
- 1.2. Make sure that apical dominance is broken (remove long apical sprouts).
- 1.3. Avoid high temperatures > 30 °C and direct sunlight.
- 1.4. Do not allow sprouts to grow long before planting - best is 1 to 3 mm.
- 1.5. Reacts well on treatment with gibberellic acid (Progibb) when seed is not yet plant ready. It should not be common practice.

2. FERTILIZATION

- 2.1. The given amounts are only an indication and are for an expected yield of 40 tons per hectare. (Nutrients in the soil must be included).
- 2.2. Lady Rosetta will respond well to up to 25% more N and K than is normally given to local varieties.

2.3. Nitrogen

- 2.3.1. 260 - 300 kg N per ha.
- 2.3.2. Planting in the hot months when tuber initiation is retarded less N should be given at planting and more after tuber set (Tubers starting to colour red).
- 2.3.3. Planting in the colder month's, give more N before tuber initiation to boost canopy growth.

2.4. Phosphate

- 2.4.1. 150 kg P per ha given before planting mixed well with soil.

2.5. Potash

- 2.5.1. 350 - 400 kg K per ha.
- 2.5.2. Enough K should be available early in the season till late-flowering where after root up take becomes gradually less efficient.

- 2.6. Calcium, Magnesium, Sulphate and micro-elements need to be available in adequate quantities.

- 2.7. No fertiliser should be given after 4 - 6 weeks before harvest depending on soil type.
- 2.8. Soil pH is optimal around 5.5-6.5 . Fields with pH approaching 4.5 or 8 will limit the availability of nutrients.

3. PLANTING

- 3.1. Make sure to have at least 15 to 20 cm of soil above the seed piece after the soil has settled. Not more than 25 cm.
- 3.2. There should be 20 to 30 cm of well-cultivated loose soil below the seed piece.
- 3.3. Plant 45 000 - 65 000 plants per ha depending on expected stems per tuber.
- 3.4. Aim for 150 000 - 180 000 stems per ha.
- 3.5. An average row spacing of 75 to 85 cm should give an optimal spatial distribution of plants.

4. PEST MANAGEMENT

- 4.1. Susceptible to leaf blight (*Phytophthora infestans* and *Alternaria solani*). Special attention should be given to manage Late Blight properly.
- 4.2. Good resistance against Common Scab (*Streptomyces scabies*).
- 4.3. Treat seed and or soil when *Rhizoctonia* is a risk. Specifically when circumstances favour slow emergence - low soil temperatures etc.
- 4.4. Tubers will show Nematode damage quickly and clearly.
- 4.5. Tubers are resistant against rotting during high temperatures but good ventilation/drainage is necessary.
- 4.6. Good resistance against second growth.
- 4.7. Good resistance against the Golden cyst nematode (*Globodera rostochiensis*) pathotype 1 and 4
- 4.8. Good resistance against potato virus A and X.
- 4.9. Tubers develop close to and above the seed piece and care should be taken to minimise tuber moth damage.

5. WEED CONTROL

- 5.1. Metribuzin (Sencor) full dose pre-emergence.
- 5.2. Metribuzin 10% dose post-emergence (up to 3 weeks) when necessary.
- 5.3. **Do not use** bendioxide (Basagran).

6. PROCESSING

- 6.1. Black spot (bruising) sensitive. Fields with a high stone content or clods should be avoided.
- 6.2. Tubers should never fall more than 30 cm at any time during handling.
- 6.3. Take care that the potato lifter picks up enough soil to prevent bruising on the matt.

7. GENERAL

- 7.1. Growing period is 90 - 105 days from emergence to vine-kill.
- 7.2. Leaves have a rosette like appearance.
- 7.3. Lady Rosetta is not a high yielder. A yield of 40 to 50 tons per ha is possible although 65 tons per ha have been attained.
- 7.4. Tubers are round with pale-yellow flesh colour and red skin. It is the best crisping variety in the world due to the shape, high specific gravity and low reducing sugar content. These characteristics are very stable over a wide range of circumstances.

Please note that the information in this profile is given in good faith and is provided to assist the grower in the management and cultivations of the crop. However, final responsibility for this rests with the grower and accordingly liability cannot be accepted for any loss, which may arise.