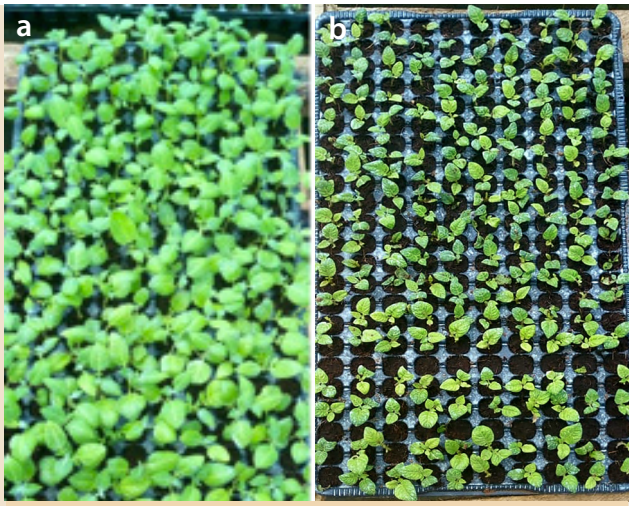
Cleaning cocopeat for production of potato rooted apical cuttings

- Unwashed or poorly washed cocopeat has large amounts of sodium, potassium and chlorides and thus exhibits high salinity/salt contents (Ec >0.6-0.8 units) and has high pH (above 7.0 units).
- At high pH, many nutrients are locked up and are unavailable to the potato crop.
- Potato plants respond to the high salt content by showing stunted growth and leaf chlorosis/yellowing.
- In extreme cases, burning of older leaves occurs at the tip and edges, followed by leaf fall and plant death.
- Follow the below procedure to properly clean cocopeat media- this is for small scale production of rooted apical cuttings.



Cuttings grown in cocopeat media cleaned with calcium nitrate (a) and not cleaned (b).

1

Take a 5 kg block of cocopeat and break it into pieces.

2

Immerse the pieces in a tub/bucket/pot with capacity to hold at least 25 litres of water.

3

Dissolve calcium nitrate in the ratio of 2.5 g per litre of clean water. Soak the cocopeat in this solution for 12 hours. A 5 kg peat block requires 20 l of water and 50 g of calcium nitrate.

4

Spread the soaked cocopeat on a sieve net placed over a drainage tub. Wash the cocopeat with a tap of clean running water, squeezing and firmly pressing the cocopeat with your hands. Start from one end moving to the next.

5

Drain any remaining solution and flush the cocopeat repeatedly in clean running water. Do this until the draining water/runoff turns clear.

Ready for use!

- It takes about 5 cycles of passing enough fresh water through the media to lower the salt content of a cocopeat.
- Always, ensure that the water used is clean and has low salt content (EC <0.5 dS/m).
- Plants grown in cocopeat have a tendency to become calcium or magnesium deficient over time.
- Therefore, as plants develop, add calcium in the form of calcium nitrate and magnesium as magnesium sulphate.

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