

Transfer in vitro potato plantlets to substrate

The potato *in vitro* plantlets that you receive were propagated and maintained in a sterile environment and grows in a synthetic nutrient gel.

This is one of the ways that CIP distributed national and international potato material without the risk of transmission of diseases.

You got the material in the form of in vitro plantlets identified by a bar code label, inside the glass test tube are two plantlets preserved on a substrate that is a nutrient agar used to conserve the plantlets, the tube is sealed with a plastic cap and parafilm to prevent contamination, the tubes are placed inside a box.

Instructions when the seedlings arrive to destination:

As soon as it arrives remove the tubes from the package carefully and observe the plantlets, see if there is chlorosis (yellow leaves) place the tubes in a clean ambient into diffused light for one week.

In the greenhouse:

- Prepare the substrate.
- With clean hands disinfect the tubes outside with alcohol.
- Remove the Parafilm and plastic cover.
- Using disinfected forceps remove the plantlets from the tube.
- Immerse the roots several times in sterile water to wash the entire agar, avoid wetting the plantlets.
- Place each plantlet in a container with appropriate substrate.
- Press the substrate around the plantlet to hold firmly in the pot.
- Roots will form in 10 to 12 days.
- Keep the pots in a clean ambient (greenhouse is recommended), 18 to 25°C with 14 to 16 hours of illumination.
- Water the seedlings with tub water.
- Do not overwater.

Once the plant is established the potato rapid multiplication technique can start; harvesting the cuttings so we can produce large numbers of seedlings with the same characteristics as the mother plant health.