Low-peat blends for pressable plugs and trays: From screening to crop validation

Alternative Materials

Local components can partly replace peat in growing media.

- Compost
- Wood Fibre
- Bark
- Grass Fibre
- Flax Fraction
- Clay
- Bentonite
- Fat Yellow Loam
- Sugar Beet Lime Sludge

Blend Components

Combined with no more than 30% peat to make firm, pressable plugs.

From screening to crop validation

A three-step pathway for low-peat seedling growing media

1 Build the blend

Aim for firm plugs and trays suited to automated handling.

2 Screen & Select

(INAGRO facilities)

Test stability, germination, plant growth and, where relevant, pressability.

62 candidate blends

Trials: lettuce, cauliflower and organic celeriac

3 Validate in Crops

(INAGRO facilities)

Assess crop growth, transplant quality and yield in hydroponic and soil-based systems.

8 selected blends

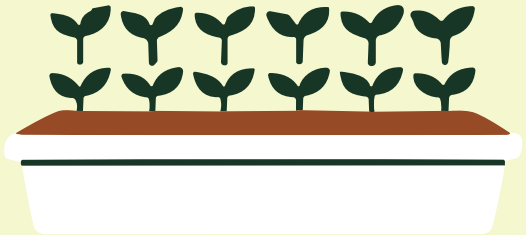
What matters for growers?

Reliable plugs need the right balance.

- Water retention
- Aeration
- Plug Strength

Seedling Trays / Pressed Plugs

No single material provides an all-in-one solution



Key message for growers

Balance water retention, aeration and plug strength. Binder levels above 20% may harden plugs and reduce water retention; coarse fibres can weaken plugs.

Current status and next steps

Eight blends are in research validation. Selection for commercial demonstration is ongoing.

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