

TECHNOLOGYPROFILE

Mycor™

Mycor combines the arbuscular mycorrhizal fungi *Rhizophagus intraradices* and *Funneliformis mosseae* in a granular root-zone format. These fungi form associations with compatible host roots, linking the plant to a wider soil volume through fungal hyphae. The focus is root establishment and nutrient exploration, with host compatibility and phosphorus management shaping its practical role.

1 Product identification

Field	Detail
Product name	Mycor™
Category	Microbial inoculants
Principal components	<i>Rhizophagus intraradices</i> + <i>Funneliformis mosseae</i>
Target crops	Grapes · Strawberry · Tomato
Agricultural purpose	Root establishment & nutrient exploration

2 Product role and biological basis

A fungal extension of roots

Mycorrhizal hyphae connect compatible roots with soil spaces beyond the immediate root surface, giving nutrient exploration a distinct biological basis.

Complement phosphorus supply

Mycorrhizal function depends on the plant–fungus relationship and nutrient context; adequate phosphorus management remains part of the system.

Choose by host compatibility

A compatible crop is essential. Arbuscular mycorrhizal products cannot be assumed to benefit every vegetable or nursery species in the same way.

3 Composition and material characteristics

Arbuscular mycorrhizal fungi

Mycor combines *Rhizophagus intraradices* and *Funneliformis mosseae* in a root-zone material profile. These fungal species are associated with compatible plant roots and extend the plant's connection with the surrounding soil through hyphae.

Host compatibility and phosphorus

The plant–fungus relationship is central to mycorrhizal function. Host compatibility, existing phosphorus supply and root establishment shape the relevance of a mycorrhizal material within a crop programme.

4 Published research

1. Tomato associated with *Funneliformis mosseae* BEG12 under different phosphorus conditions.

Mycorrhizal plants showed greater resistance to the tested biological stresses, but this protection disappeared under severe phosphorus limitation.

Agricultural relevance

Isolate-specific tomato study using *Funneliformis mosseae* BEG12 under contrasting phosphorus conditions. The protective response disappeared under severe phosphorus limitation; conclusions concern BEG12 and the tested host–nutrition system.

Phosphorus availability drives mycorrhiza induced resistance in tomato
<https://doi.org/10.3389/fpls.2022.1060926>

5 Crop programmes and application context

Tomato, many fruit crops and compatible nursery plants are relevant root-establishment contexts. Brassica crops generally do not form the usual arbuscular mycorrhizal association. Existing phosphorus supply, soil condition and transplant establishment should guide crop-specific decisions.

Tomato root establishment

Tomato is a compatible arbuscular-mycorrhizal host. Establishment links the root system with the surrounding growing medium; phosphorus supply and root condition are part of the biological context.

Grapevine establishment

Young grapevines provide a root-establishment context for the two declared mycorrhizal species. The existing soil environment and nutrient supply influence the conditions in which the root association develops.

Strawberry root environments

Strawberry root systems can be considered within a compatible-host programme. Substrate condition and phosphorus nutrition remain important when interpreting root development and the value of the mycorrhizal association.

6 Quality and compatibility

Species and biological characterisation

Species identity and a clear description of the biological material are important quality characteristics. Isolate information, where available, allows research findings to be interpreted at a more specific biological level.

Root-zone material properties

Physical uniformity, storage condition and suitability for the target growing medium are relevant material properties. Crop-host information and phosphorus status provide the agronomic context for their evaluation.

Many horticultural crops form arbuscular mycorrhizae; brassica crops generally fall outside this host group.

7 Product questions

Which mycorrhizal species are declared?

The declared species are *Rhizophagus intraradices* and *Funneliformis mosseae*. Species identity is distinct from a strain or isolate designation and from the biological quantity stated for a finished formulation.

Can the mycorrhizal approach be applied to every crop?

Host compatibility matters. Tomato, grape and strawberry are the listed crop contexts; brassica crops generally do not form the usual arbuscular-mycorrhizal association. Phosphorus nutrition also affects the biological context.

8 References and technical documents

Product specifications and application guidance are provided in the applicable technical data sheet and market label.

1. Phosphorus availability drives mycorrhiza induced resistance in tomato

<https://doi.org/10.3389/fpls.2022.1060926>

2. AM symbiosis: nutrient exchange and plant growth

<https://doi.org/10.1146/annurev-arplant-042110-103846>

3. Root colonisation, plant growth and phosphorus content

<https://doi.org/10.1007/s11104-013-1681-5>

4. Mycorrhizal interactions and environmental context

<https://doi.org/10.3389/fenvs.2019.00026>

Product information and technical support

Contact Huasheng