



# Biotechnica

## First in Bioagronomy

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# BioRoote



Mycorrhizal inoculant tailored to your conditions

Mycorrhizae are fungi that live in an intimate and mutually beneficial relationship with plants. Intensive farming has depleted or destroyed much of the biology of agricultural soils including mycorrhizae. When they co-exist mycorrhizae make a significant difference to a plant's ability to use soil nutrients. They do this by forming a living web in and around the roots which acts as root extensions, bringing nutrients back to the plant. In effect they extend the root mass many times over.

While the vast majority (>90%) of plants can form a connection with a mycorrhizal fungi, it is often difficult to optimize this in cultivation for a number of reasons. Firstly, we often sterilize soil (chemically and by heat) to kill off unwanted pests, pathogens and weeds. These treatments also kill mycorrhizae. Other practises that will kill or damage mycorrhizae include seed sterilization, fungicide application, ploughing, rotation excessive fertilizer application and waterlogged soils. After such events, we recommend reseeding the soil/growing media with **BioRoote** to allow new mycorrhizal connections to form.

## Why choose **BioRoote**?

We use more than one strain of fungus to improve the chances that a good connection is formed with all your plants.

Mycorrhizae contribute to the build-up of stable humus and thereby to a better soil structure retaining more carbon. This benefits future crops.

Cultivation techniques can cause microbial populations to be inhibited.

When grass seed is sown with **BioRoote** germination is faster and much more uniform, and root development is far greater.

## Application protocols

Suitable for use in both professional and amateur horticulture.

Apply at 2.5kg/ha in situations where it will come into contact with the root easily (i.e. At planting or worked in after top dressing). Higher dosages required if not worked into the soil or growing media.

For crop specific dose rates speak to your Biotechnica representative.

## Organic cultivation

**BioRoote** is approved for use in organic cultivation by the Organic Farmers and Growers Association.



## Incompatibilities

No known incompatibilities, but Biotechnica cannot predict or guarantee mix success for any product. For dispersible formulations conduct a bucket test to confirm compatibility.

While over 90% of plants will form a connection with mycorrhizal fungi, there are some exceptions. Mycorrhizae will not form connections with *Brassica* crops and a very limited number of ornamental plants (contact Biotechnica for more details). For conifers and ericaceous crops contact Biotechnica for products containing the specific fungi they must form a connection with for successful cultivation.

## Trial results

In trials on grassland using **BioRoote**, plant nutrient content improved as follows:

- Phosphorus +80%
- Magnesium +52%
- Potassium +64%
- Manganese +97%
- Calcium +36%
- Iron +56%
- Copper +118%
- Dry matter +40%.

For more information on any of our products see [www.biotechnica.co.uk](http://www.biotechnica.co.uk)