

## Characteristics of Endo Species Used in DIEHARD™ Inoculants

### *Glomus dussii*

Adapted to a large range of pH from 4,5 to 7, and is efficient on plant growth, and preferably on tropical plants.

### *Glomus intraradices*

Very common throughout the world. Shows disease resistance mechanisms against *Fusarium oxysporum*.

### *Glomus fasciculatum*

Adapted for drought conditions in high phosphorus soil. Also very effective in high salinity conditions and is efficient on plant protection against some pathogenic fungi within soil.

### *Glomus deserticola*

Adapted for drought conditions, and has shown good agronomical effect under low soil fertility.

### *Glomus microaggregatum*

Adapted for drought conditions, and can have agronomical effect under low soil fertility.

### *Glomus clarum*

Adapted to acidic pH 5-6, this species is highly proliferous and can produce large quantity of external mycelium in the soil and can occupy the rhizosphere.

### *Glomus mosseae*

Adapted to acidic pH 6-8.5, this species is highly proliferous and can produce large quantity of external mycelium in the soil and can occupy the rhizosphere.

## Sporulation Characteristics of Endo Species Used in DIEHARD™ Inoculants

Some strains such as *Glomus deserticola*, *Glomus microaggregatum*, *Glomus mosseae*, and sometime *Glomus intraradices* produce clusters of spores very (like a popcorn ball)

Most of time, *Glomus deserticola* and *Glomus microaggregatum* produce clusters with as many as 500 spores minimum stuck together.

*Glomus mosseae* produce external sporocarps (5-10 spores inside) or external clusters of "young spores" and *Glomus dussii* produce external sporocarps (containing hundred of very small spores) and also external spores entrapped within the external mycelium.

*Glomus intraradices* produce large quantity of INTERNAL spores inside the root (hundred spores /cm of root can be counted sometime).

All these "natural occurring" sporulation configurations must be considered for the counting of spores.

Endomycorrhizae are not Ecto. and this difference must be considered.

The most important aspect is the standardization of the product and the efficiency and quality.