MYKE® vs BONE MEAL

MYCORRHIZAE

- Bone meal is a very slow release source of P. The P it provides is not readily available to the plant.
- Bone meal must be mineralized (degraded by soil microorganisms) and solubilized in solution to be absorbed by the plant. Microbial activity is quite variable in most soils.
- Microbial activity is usually not very intense in the reworked and excavated soils of residential areas or communities. Activity is predominantly found in the first 10-15 cm of soil and decreases with depth. Therefore, little bone meal mineralization occurs in a transplantation hole 30-40 cm deep.
- In excess (too much bone meal), the P can be bound to Ca, Al and Fe and other micro-nutrients which makes the plant unable to assimilate them. Too much P and Ca can reduce plant development.
- Bone meal and P it contains does not move in soil unlike the roots which keep growing. New roots are therefore not in contact with bone meal which becomes useless after a certain period of development, while the mycorrhizae will follow (grow with) and even spread out further ahead of root growth.
- Bone meal, like other phosphate fertilizers, amplifies the problem of blue-green algae in watersheds.
- P not being mobile (not very soluble) in the soil, the plant must get it where it is. It is the role of mycorrhizae to draw P from areas unreachable by the root system (remember that there is 100 m of hyphae / 1 m of roots; or 2-25 km of hyphae / 1 kg of soil).
- Less than 15% of the P annually spread from fertilizers is used by the plant during the season.
- Up to 80% of the P absorbed by the plant is via mycorrhizae. So without mycorrhizae, the plant only absorbs 20% of P compared to a mycorrhizal plant.



FEATURES (ARGUMENTS)	MYKE®	BONE MEAL
Increase plant root system	Yes	No
Authorized use along shorelines (riparians)	Yes	No
Improves plant resistance to drought	Yes	No
Protects plants against some fungal diseases	Yes	No
Improves soil structure	Yes	No
Improves assimilation of many nutrients from the soil	Yes	No
Ensures better plant survival	Yes	No
Allows reduction of fertilizer input (up to 50%)	Yes	No
Benefits over the entire life of the plant	Yes	No
Efficacy results approved by CFIA and USDA	Yes	No
Safe for health and environment	Yes	Yes
Attracts rodents and other animals	No	Yes
Can be harmful when overused	No	Yes
Short-term and localized effect	No	Yes

Premier Tech Biotechnologies

For any questions or information,
do not hesitate to contact our customer service at: **1 800 606-6926**