

Product Overview

Every plant is a world unto its own. Microscopic organisms inhabit each plant, helping them adapt to disturbance. If disturbed, simple-to-use microbial products can give plants the advantage; this is what we do at Functional Soils (FS). We are building biology in unnatural places, taking what we know is possible in science and bringing it into the world. After conducting rigorous field science, we find the correct microbes, and synthesize them into safe products for your use. This is biotech made accessible. A data-driven scientific solution empowering you to improve plant and soil health.

FS products contains several beneficial endophytes, isolated from natural environments, from a genus with no known pathogens. Endophytes are a type of fungus that live in the soil and in the spaces between plant cells, which can form symbiotic relationships with plants, residing in the roots, shoots, and leaves of plants with no apparent negative effects. FS microbes are an economical way to make your plants more adaptable, more resilient, and better supported when stressed.

What can this product do for your plants?

- **Enhance germination:** this product will help break down seed coats, increasing germination and initial plant growth
- **Increase Root Mass:** more complex root mass allows better use of nutrients and water
- **Nutrient Utilization:** our endophytes increase bioavailability of nutrients and micronutrients to the plant
- **Increase Stress Tolerance:** this product will assist with environmental stress

Directions for Use

Microbe Capsules

Purpose: Support long-term soil biology, nutrient cycling, and increase environmental stress tolerance. Reduce soil erosion, decrease maintenance costs, and enhance establishment following transplanting.

Timing: Can be applied anytime of year.

Method: Application by hand. For bare ground, apply when irrigating or before rainfall. For new plantings, insert in the plant hole. For established outplantings, spread capsules around base of tree if irrigating, or insert capsules minimum 2-3" deep, with no maximum depth if unable to immediately irrigate. If applying more than one capsule, insert capsules in a clockwise pattern around the plant.

1. Determine the application area or plant size. For open areas each capsule will provide a sufficient to cover 1 square metre. For single application per plant, please use the chart to the right for instruction.
2. Open container. Apply capsule as instructed to the right.

Capsule application tips:

- Apply capsules within 4 months (120 days) of receiving them.
- Apply when soil is moist and cool. For dry soil, light irrigation afterwards can help break down the capsule so they are not transported by wind or wildlife.
- Apply after aerification/topdressing to help microbes colonize new pore spaces and organic matter.
- For best results, combine application with balanced fertility and proper irrigation practices.

Planting Type	Plant Size	Capsule(s) for single application
Plugs	Plant Plug	1
Pots	Size 1	1
	Size 2	1
	Size 3	1
	Size 5	2
Young Trees	Caliper (5-6 cm)	4
	Caliper (6-7 cm)	5
	Caliper (7-9 cm)	6
	Caliper (10-20 cm)	8
Mature Trees	Caliper (20-40 cm)	16
	Caliper (40+ cm)	26

Environmental, Storage & Handling Considerations

- Store in a cool (ideally 4–20 °C), dry location out of direct sunlight.
- Do not freeze or expose to temperatures above 35 °C for prolonged periods.
- Keep capsules in sample container when not in use.
- Use capsules within 4 months.
- Heavy chemical inputs (especially broad-spectrum fungicides and some soil sterilants) can reduce microbial populations; allow an interval between such treatments and microbial applications whenever possible.
- For best performance, integrate with: Proper pH management, adequate organic matter, balanced fertilization and irrigation.

Safety & Precautions

- Capsules are not for human consumption.
- Keep out of reach of children and pets.
- Avoid contact with open wounds.
- Wear standard protective equipment: long sleeves, gloves, and eye protection when mixing and applying.
- Wash hands and exposed skin thoroughly after handling.
- In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice if irritation persists.

Disclaimer

Use only as directed. Performance may vary depending on soil conditions, climate, and management practices. The user assumes all risk from use, storage, or handling of this product when not used according to label directions.

Ready for the next step? Let's talk!

For all product and sales enquiries: info@functionalsoils.com | www.functionalsoils.com