

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.

Along with 24 wildflower species native to coastal British Columbia, this product 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

Open Landscape Areas

Purpose: Support long-term soil biology, nutrient cycling, and increase environmental stress tolerance. Reduce soil erosion, decrease maintenance costs, and improve essential habitat for pollinators and wildlife

Timing: Can be applied anytime to bare ground or previously seeded area. For best results apply before a wet period.

Method: Application by hand

1. Determine the application area. Each capsule will provide a sufficient wildflower coverage on 1 square metre. Capsule density per metre can be increased as desired.
2. Open container. Apply seed capsule to open ground by hand. Use the product just prior to irrigation, rainfall, or during rainfall.
3. Can be applied at any time of year. Capsules can be applied to areas that are seeded or unseeded.

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/seed colonize new pore spaces and organic matter.
- For best results, combine application with balanced fertility and proper irrigation practices.
- Select areas where groundcover can grow between 30–36" in height.
- Expect annual species to bloom in the first year of planting, and stronger establishment of perennials in the following year.



Species Contained in Capsules

- *Centaurea cyanus*
- *Gaillardia aristata*
- *Eschscholzia californica*
- *Cheiranthus allionii*
- *Nemophila menziesii*
- *Rudbeckia hirta*
- *Dianthus barbatus*
- *Lupinus nanus*
- *Lupinus polyphyllus*
- *Gypsophila elegans*
- *Linum perenne*
- *Iberis umbellata*
- *Clarkia elegans*
- *Papaver rhoeas*
- *Coreopsis lanceolata*
- *Coreopsis tinctoria*
- *Delphinium ajacis*
- *Linum rubrum*
- *Linaria maroccana*
- *Lobularia maritima*
- *Clarkia amoena*
- *Chrysanthemum maximum*
- *Achillea millefolium*
- *Silene armeria*

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