

MycoGold® Shield Foliar Application Guide

MycoGold® Shield provides a living biological shield for crops by combining beneficial fungi, bacteria, and endophytes that colonize the leaf surface and root system. When used as a foliar spray, it protects against insect pests and foliar diseases while strengthening plant immunity and promoting natural vigor across major crops — including pulses.

General Foliar Mode of Action:

- **Direct Pest Suppression:** Entomopathogenic fungi infect and kill sap-sucking and chewing insects.
- **Biological Surface Film:** Beneficial microbes form a living barrier that reduces pathogen colonization.
- **Systemic Immunity Activation:** Induces plant defense enzymes (ISR) for durable disease resistance.
- **Nutrient Efficiency & Antifeedant Effects:** Enhances foliar nutrient assimilation and deters pest feeding.

Crop-by-Crop Foliar Recommendations

Corn

Target Pests & Diseases: Aphids, leafhoppers, armyworms, anthracnose, southern rust, tarspot

Rate: 3 oz per acre

Timing: V4–V8 or early tassel

Key Benefit: Reduces sap-sucking and foliar feeding insects; builds leaf resilience to fungal pathogens.

Soybean

Target Pests & Diseases: Aphids, thrips, whiteflies, brown spot, frogeye leaf spot, white mold

Rate: 3 oz per acre

Timing: R1–R3 (early bloom to pod set)

Key Benefit: Creates a microbial leaf barrier to deter pests and suppress foliar pathogens.

Wheat / Barley

Target Pests & Diseases: Aphids, leafhoppers, rusts, Fusarium head blight

Rate: 3 oz per acre

Timing: Early boot to heading

Key Benefit: Maintains greener flag leaves and protects against leaf and head diseases.

Cotton

Target Pests & Diseases: Leafhopper jassids, whiteflies, Fusarium wilt, Rhizoctonia, and early blight

Rate: 3 oz per acre

Timing: Just before flowering or at early bloom (squaring to first flower), Mid to Late Bloom (75–90 DAP,

optional if high pest pressure)

Key Benefit: provides biological suppression of jassids and other foliar pests, improves root establishment, and strengthens plant tolerance against stress and disease.

Potato

Target Pests & Diseases: Aphids, whiteflies, Colorado potato beetle larvae, early blight, late blight

Rate: 3 oz per acre

Timing: Early vegetative to tuber initiation

Key Benefit: Provides dual protection by suppressing foliar pests and reducing blight spore establishment.

Vegetables (Tomato, Pepper, Cucumber, Leafy Greens)

Target Pests & Diseases: Whiteflies, thrips, jassids, powdery mildew, gray mold (Botrytis)

Rate: 3 oz per acre

Timing: Every 30 days during active growth

Key Benefit: Maintains continuous microbial protection, reduces foliar disease development, and enhances leaf vigor.

Pulses (Lentils, Chickpeas, Peas, Beans)

Target Pests & Diseases: Aphids, jassids, whiteflies, pod borers, Ascochyta blight, anthracnose, and rust

Rate: 3 oz per acre

Timing: Early flowering to pod fill

Key Benefit: Improves canopy health, suppresses pest feeding, and reduces fungal and bacterial foliar diseases. Supports stronger nodulation and nitrogen efficiency when combined with seed or soil applications.

Best Application Practices

- **Hydration:** Dissolve MycoGold® Shield in water for at least 5 hours before spraying.
- **Timing:** Apply early morning or late afternoon to preserve microbial viability.
- **Compatibility:** Compatible with most foliar feeds, micronutrients, and biologicals. Avoid strong chemical fungicides during or shortly after application.

Expected Results

- 50–70% reduction in pest feeding and population pressure
- Suppression of foliar diseases through microbial competition and systemic resistance
- Improved leaf vitality, canopy color, and drought resilience
- ROI up to 4× cost of product through reduced pest stress and yield gains

Summary: MycoGold® Shield provides natural, residue-free foliar protection for Corn, Soybean, Wheat, Potato, Vegetables, and Pulses. Through microbial colonization and systemic plant defense, it delivers sustainable protection from pests and pathogens while improving plant health and yield potential.