



Pod_{fx}TM *For use on dry edible beans and peas*

What is Pod_{fx} and what does it do?

Pod_{fx} combines a mix of selected and tested microbials that support a positive crop response, leading to yield. Pod_{fx} aids the plant in producing growth regulators and metabolites that enhance production through biosynthetic pathway efficiencies. Some benefits include: increased flower retention, increased leaf area, larger seeds, phosphate solubilization through microbial activity, reduced ethylene production (associated with aging and senescence), pH regulation, reduced reactive oxygen species, and general stress mitigation.

Mechanisms of actions:

- Promotes iron and phosphorus solubility for more efficient plant functions
- Plant pH modulation maximizes biosynthetic pathways
- Facultative anaerobic bacteria support the production of nodules in upper inch of soil
- Recycles electron receptors of potassium and magnesium to create plant efficiencies
- ACC Deaminase bacteria minimize the production of ethylene (stress hormone)
- ACC Deaminase bacteria reduce ROS (Reactive Oxygen Species) signaling and mitigate stress
- Slow yet continuous action microbes facilitate micronutrient availability within the plant
 - oRegulate the plant environment to support water movement and nutrient availability

What to watch for:

Improved seedling vigor with larger plants if applied to the seed before planting. Pod_{fx} stimulates root growth when applied early or to the seed, leading to a larger tap root. It will also stimulate shoot growth along with a leaf size increase. Microbes help reduce heat stress and associated wilting to continue production at a better rate in such conditions. The robust plants have increased pod counts and greater pod fill.

Morphological response:

- Larger taproot
- Thicker stem to support the plant
- Increased number of pods per plant and per node
- Larger and longer bean pods
- Larger beans in the pods

How to apply

Seed: 1 fl. oz. per 50 lbs. (2 fl. oz./cwt) via seed treater. Can be applied in combination with other seed treatments

In furrow: 16 fl. oz. per acre and minimum of 5 gpa total volume.

Foliar: 1 pt. per acre with 10 to 20 gallons water. Generally, Pod_{fx} is applied with water alone, though it may be tank mixed with other products. While the window of application is not limited, earlier plant growth stages provide a season long response. Early vegetative (V2-V4) would be ideal.

Tank mixtures:

No surfactant is needed for the microbes to enter the plant, though a surfactant may be acceptable if tank mixing with other products (perform a jar test to verify compatibility of product mixture). Do not use with antimicrobial water conditioners, or water containing levels not approved under EPA human drinking water standards. This includes copper, bleach, fluoride, chloramines, chloride, bactericides, phosphoric or sulfuric acid. Do not use with propiconazole (SlantTM, Tilt[®], Quilt[®]...). Mixing with glyphosate may result in microbial mortality.



Cautions:

Should not use hormone-based plant growth regulators (PGR) with this product because the combination may result in stunted plant growth. Do a jar test to verify compatibility with other products.

Spray tip selection

TEEJET™ XR, XRC OR TEEJET TURBO		
	Line Pressure	Application Speed
Red Tip	20 psi	8 mph
Red Tip	30 psi	10 mph
Red Tip	Max 40 psi	12 mph
Brown Tip	20 psi	8 mph
Brown Tip	30 psi	10 mph
Brown Tip	Max 40 psi	12 mph

Application Standards:

Follow good sprayer (and line and nozzles) cleanout before using these biologicals. Don't mix concentrated microbials with concentrated pesticides or fertilizers.

For foliar applications use a minimum of 10 gpa total solution.

Aerial application is acceptable; thoroughly clean the tank/line and only apply Pod_{fx} and water.

Screen size recommendation: Not smaller than 50 mesh. No tip screen required.

Residence time on the plant before rain (rainfast): 3 hrs.

Application temperature range: 40° to 85° F (4° to 29° C)

Improving yield:

For best results apply proper nutrients and rates so they don't become the yield limiting factor. BioPryme can also be used to support seed development and maximize yield. Best timing to apply BioPryme would be after pollination, as seeds start to develop and fill. BioPryme contains plant nutrients and enzymes that enhance yield and facilitate the flow of plant synthates to the seed.

Storage and use:

Store between 50° and 90° F in a place out of the sun. Use contents within 72 hrs. of opening the seal on the container.

Shake container well before using. Keep jugs upright and don't "burp." This is a combination of living organisms in the jug so be mindful that it may swell or contract. The jug has a pressure sensitive seal and will self-regulate as designed.

Guaranteed Analysis:

Soluble Potash (K₂O) 1.00% From potassium carbonate

Nonplant food:

Bacillus megaterium 1.0 x 10⁵ CFU/ml

Erwinia aphidicola 1.0 x 10² CFU/ml

Microorganisms exempt from CFR requirements – 40 CFR 725.

Packaging: 2 x 2.5g jugs