

### Environmental Stress Benefits

<b>Acetoin</b> BS, BA	Secretes acetoin which triggers induced systemic resistance (ISR), mediating stress
<b>Cytokinin</b> AB	Secretes cytokinin, a biochemical messenger supporting plants under stress
<b>Exopolysaccharides</b> BS	Secretes EPS which forms a biofilm layer on roots mitigating damage from abiotic stress
<b>Gibberellic Acid</b> AB	Secretes GA which plays a central role in the plant's response to abiotic stress
<b>IAA</b> PP, AB	Secretes IAA, a common auxin that enables cell division and movement of photosynthates
<b>PAL</b> BS, BA	Secretes PAL, a key enzyme that supports systemic resistance against abiotic stress

Microbial Species	Abbreviation	Microbial Species	Abbreviation
Azospirillum brasilense	AB	Cellulomonas cellasea	CC
Bacillus amyloliquefaciens	BA	Pseudomonas fluorescens	PF
Bacillus subtilis	BS	Pseudomonas patida	PP



### Plant Nutrition Benefits

<b>Phosphorus</b> BS, BA, AB, PF	Able to solubilize and make plant available insoluble forms of phosphate
<b>Nitrogen</b> AB	Capable of fixing atmospheric nitrogen (N <sub>2</sub> ) into biologically useable and available ammonia
<b>Potassium</b> PP	Able to solubilize insoluble forms of potassium
<b>Zinc</b> PF	Able to solubilize insoluble forms of zinc
<b>Sulfur</b> BS	Able to convert (oxidize) insoluble sulfur into plant available sulfates
<b>Iron</b> BS, AB, PF	Able to convert insoluble forms of iron into iron-chelating siderophore compounds

### Biodegradation Benefits

<b>Amylase</b> BS, BA	Secretes amylase, an enzyme that hydrolyzes starch and breaks it down into smaller sugars
<b>Cellulase</b> BS, BA, CC	Secretes cellulase, an enzyme that breaks down cellulose into its monosaccharide units
<b>Glucanase</b> BS, BA	Secretes glucanase, an enzyme that breaks down large polysaccharides like glucans
<b>Laccase</b> BS, BA	An enzyme that biodegrades lignin and can oxidize and degrade aromatic pollutants
<b>Lipase</b> BS	Secretes lipase to help support the break down of fats, oils, and lipids
<b>Protease</b> BS, BA	Secretes protease, an enzymes that break down proteins down into amino acids
<b>Urease</b> BA	Secretes urease, enzyme capable of breaking down urea into ammonia and CO <sub>2</sub>
<b>Xylanase</b> BS, BA	Secretes xylanase, an enzyme that breaks down hemicellulose in plant cell walls

## CanGrow ReNew™ - Biological Fertilizer & Stimulant

### Stronger Plants, Stronger Profits

CanGrow ReNew™ offers a diverse team of microbes that are not genetically modified, non-pathogenic, and 100% naturally occurring. CanGrow ReNew™ helps promote the fundamental relationship between the plant and soil to ensure efficiency and maximize the plant's ability to grow.

CanGrow ReNew™ provides a team of beneficial microbes that improve nutrient availability and increased abiotic stress tolerance for plants. CanGrow ReNew™ is easy to use, just add to water or liquid starter in-furrow.

These microbes support:

- Nitrogen fixing
- Phosphorus solubilization
- Sulfur, Zinc, Iron, and other nutrient increased availability
- Production of environmental stress reducing factors such as EPS and PAL
- Production of biodegradable enzymes such as cellulase, laccase, and urease



Control



Treated with 

### Application Rate

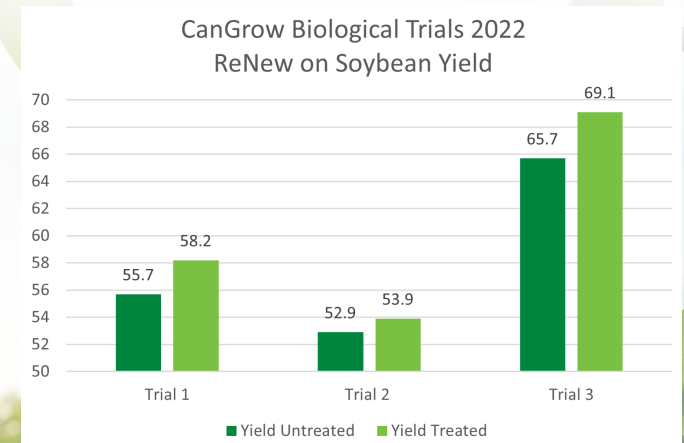
**In-Furrow or 2x2:** 330 mL (12 oz) per acre

### 2022 Ontario Field Trials

Soybean trials resulted in an average yield increase of 2.3 bushels/acre and an average return of investment (ROI) of \$29.40/acre.

Corn trials resulted in an average yield increase of 3.0 bushels/acre.

Potato trials resulted in an average yield increase of 17.0 hundredweight (cwt).



# #BetterBiology