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# **BioBuild® BioComplete II**



PCT | Sunrise<sup>®</sup> BioBuild<sup>®</sup> BioComplete II is a blend of over two dozen various strains of beneficial microbes that enhance plant health and vigor. This product is designed to increase flower production, healthier and more vigorous root systems along with phosphate solubilization and nitrogen fixation.

BioComplete II contains millions of organisms that have been chosen for our soils and climate to maximize corn and soybean production. There are eight (8) different genera and 15 different species of microbes included in BioComplete II.

There are several strains of beneficial microbes that produce plant growth stimulating hormones. This blend of beneficial microbes has many modes of action and increases the number of naturally occurring organisms.

BioComplete II can be applied in-furrow or foliar. The most effective way to introduce the microbes in the soil close to the roots is in-furrow at a rate of 1 pint per acre. If applying as a foliar the use rate is 8 ounces per acre. BioComplete II can be mixed with

pesticides, fungicides, insecticides, micronutrients, etc.

#### **Usage Rates:**

- → <u>Soil</u>: 16 oz/acre
- └→ <u>Foliar</u>: 8 oz/acre



### Advantages of Organic Acid

#### Stimulates Metabolism

Organic acid appears to cause the genetic mechanism of plants to function at a higher level. It has been concluded that any means by which plant cells are exposed to organic acid can improve growth.

Oxygen is absorbed more intensely in the presence of organic acids. Organic acid aids in penetrating roots and then quickly transports to the shoots of plants.

#### Multiple Strains Bacteria

Beneficial microbes that provide broad benefits for many plants including:

- └→ Increased health and vigor
- Healthier roots
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- → Stronger and longer stems
- └→ Increased flower/fruit production
- ➡ Phosphate solubilization capabilities
- → Nitrogen fixing capabilities

Multiple strains are better for variable soil conditions and overall plant health long-term!



## BioBuild BioComplete II

Product	Rate/Acre	Active Ingredient	Company	Description
Serenade Soil	In-furrow - 1-4 pt	Bacillus Subtillis	Bayer	<ul> <li>Directly attacks diseases in the soil including Pythium, Rhizoctonia, Fusarium and some strains of Phytophthora</li> <li>Activates plant's natural defenses by priming systemic responses in the plant</li> <li>Promotes growth and stress resistance</li> </ul>
Ethos XB	In-furrow - 4-8 oz	Bifenthrin Bacillus amyloliquefaciens	FMC	<ul> <li>Defend against corn rootworms, wireworms, grubs, seed corn maggots, cutworms and common stalk borers</li> <li>Disease defense includes Fusarium, Pythium, Rhizoctonia, and Phytophthora</li> </ul>
VGR Soil Amendment	In-furrow - 0.18 oz	Bacillus Licheniformis	FMC	<ul> <li>VGR<sup>™</sup> Soil Amendment contains a specific strain of bacillus licheniformis, a naturally occurring bacteria, with properties that result in larger root systems, improved water use efficiency, increased phosphorus solubility for better nutrient uptake and improved plant defense against abiotic stresses</li> </ul>
Xanthion	In-furrow - (Co Pack) .6 - 1.2 oz (A) 3.0 - 6.0 oz (B)	Bacillius Subtills (A) Pyraclostrbin (B) Pyrazol (B)	BASF	<ul> <li>Controls Rhizotonia and Fusarium spp. and suppresses Pythium spp.</li> <li>Enchances root growth, seedling vigor and cold tolerance</li> <li>Complementary biological and chemical modes of action deliver longer lasting residual disease control</li> </ul>
PCT   Sunrise® BioComplete II	In-furrow - 16 oz	Azosirillum Bacillus Subtilis Bacillus Cereus Bacillus Licheniformis Cellulomonas Pseudomonas Steptomyces Has over twenty strains	PCT	<ul> <li>Nitrogen fixation and release inhibitory compounds and enhance plant resistance against numerous diseases and pathogens</li> <li>Root growth colonization and promotion of nutrient uptake</li> <li>Solubilizes unavailable Phosphate, plant hormone stimulation and siderophore secretion</li> <li>Growth enhancement, produce antifungal compounds and aid pathogen exclusion</li> </ul>
QuickRoots®	Wettable Powder 7.2 grams per 80,000 seeds	Bacillus amyloliquefaciens Trichoderma vierns	Monsanto	<ul> <li>QuickRoots<sup>®</sup> is a microbial seed inoculant for improving availability of nitrogen, phosphorus and potassium resulting in improved yield potential</li> </ul>

