

Nutrition Program for Potatoes

BRANDT products used in conjunction with a good core fertility program on potato are a proven way to reliably enhance potato quality and reach high yield goals.

Application Timing	Application Type	Product	Application Rate
At planting	In furrow or 2x2	BRANDT® EnzUp® Zn	1 qt/ac
At planting or before or at tuber initiation	In furrow or 2x2 or through irrigation	BRANDT EnzUp P DS	5-20 lbs/ac*
At planting or in-season	In furrow or 2x2 or through irrigation	BRANDT EnzUp NPKS formulation**	5-10 gal/ac
Dime-size tubers to early maturation	Foliar	BRANDT Smart K B	1-2 qts/ac
Dime-size tubers to early maturation	Foliar	BRANDT Manni-Plex® K	1-2 qts/ac
Dime-size tubers or as needed	Foliar	BRANDT Smart Trio®	1-2 qts/ac
Dime-size tubers or as needed	Foliar	BRANDT Smart Quatro® Plus	1-2 qts/ac
Dime-size tubers or as needed	Foliar	BRANDT Smart Sulfur Plus	1-2 qts/ac
As needed	Foliar	BRANDT Smart P, BRANDT Smart Mg, BRANDT Smart B, BRANDT Smart Zn, BRANDT Smart Mn, BRANDT Smart Mn Plus, BRANDT Smart Fe, and BRANDT Smart Cu	See label
As needed	Foliar	N-Boron®, BRANDT Manni-Plex Mg, BRANDT Manni-Plex Zn, BRANDT Manni-Plex Mn, BRANDT Manni-Plex Fe	See label

*For every gallon of ammonium polyphosphate (10-34-0 or 11-37-0), replace with 0.5 lbs of BRANDT EnzUp P DS in 1 gal of water

** Talk to your BRANDT Rep about options in your region

Key Product	Analysis	Key Benefits
BRANDT EnzUp Zn	4.0% EDTA-chelated Zn with enzyme technology	Improved early-season root and shoot growth. Improves water and nutrient uptake and enhances activity of beneficial microbes.
BRANDT EnzUp P DS	12-58-0 with organic acids and enzyme technology	Improved root growth and tuber set. Phosphate in formula is highly available with organic acids and enzymes to make inorganic and organic P from the soil available as well.
BRANDT Smart K B	2-0-16, 2.5% B, 0.2% Mo	Improved tuber bulking.
BRANDT Manni-Plex K	0-0-20	Improved tuber bulking.
BRANDT Smart Trio	4-0-0, 3% S, 0.25% B, 3% Mn, 3% Zn	Enhanced nutrition to prevent or correct deficiency.
BRANDT Smart Quatro Plus	5-0-0, 2% S, 0.5% B, 2% Mn, 0.05% Mo, 2.0% Zn	Enhanced nutrition to prevent or correct deficiency.
BRANDT Smart Sulfur Plus	5-0-0, 5% S, 0.5% B, 1.5% Mn, 0.05% Mo, 1.5% Zn	Enhanced nutrition to prevent or correct deficiency.

Potato Field Trials

Potatoes

CO, 2020 (cwt/ac) **26.9** Advantage



OR, 2021 (cwt/ac) **9.5** Advantage



WA, 2019 (cwt/ac) **18** Advantage



CO, 2020, Early maturation, late tuber bulking (cwt/ac) **20.1** Advantage



OR, 2021, Dime to quarter-size tubers (cwt/ac) **41.3** Advantage



WA, 2019 (cwt/ac) **21.3** Advantage



Nutrient	Key Functions or Effects on Potatoes and Selected Key Fertility Considerations
Nitrogen	Optimum shoot growth, and tuber growth and bulking. However, excess N late in-season is detrimental by delaying maturity, reducing starch and dry matter content. Because of poor rooting systems of potatoes and leaching potential, especially in sandy soils, spoon-feeding through irrigation events can be beneficial.
Potassium	Optimum tuber yield, bulking, starch synthesis and shoot growth. Generally, potassium sulfate should be preferred to muriate of potash.
Phosphorous	Optimum early growth, better tuber set, and enhanced tuber maturity. Availability can be limited by cool soils early in-season and soil pH. Very immobile in soil. Banding of phosphate and applying more available forms important.
Sulfur	Optimum N uptake, tuber development and stress resistance. Indirectly promotes chlorophyll production.
Magnesium	Deficiency results in impaired photosynthesis and carbohydrate partitioning, among other effects. High rates of K can induce Mg deficiency due to antagonism in uptake.
Calcium	Needed for cell wall and membrane integrity and helps prevent tuber physiological disorders such as brown spot and hollow heart. Tubers take up Ca through the soil by stolon and tuber roots.
Boron	Needed for cell wall and membrane integrity and proper functioning of meristematic tissue. Helps prevent physiological disorder such as internal rust spot.
Zinc	Optimum functioning of enzymatic reactions in plant, auxin production, and stress reduction. Important in root and shoot growth. Zn uptake is antagonistic with phosphate uptake, so additional Zn fertility may be needed when high levels of phosphate are applied, especially on high pH soils.
Manganese	Optimum photosynthetic activity, levels of carbohydrates, enzyme function, and stress reduction.
Iron	Optimum photosynthetic activity, protein synthesis, among other effects.

To learn more or to find a BRANDT distributor near you, download the BRANDT Product Finder App today.



This information is to be used only as a guide. Local conditions such as soil properties, agronomic practices, weather and varieties should be taken into account when interpreting this table. The suggested applications are designed to enhance your nutrition program not replace it. They do not represent a complete fertility program for potato.

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