

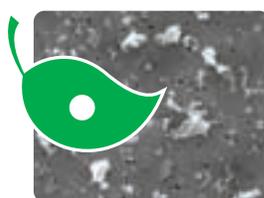
COPPER PROTECTION FOR DRY BEANS.

Bacterial pathogens in dry beans can have a significant effect on yield (including size and quality). Depending on environmental conditions, ChampION⁺⁺™ can help prevent yield losses attributed to bacterial diseases that decrease profit potential. ChampION⁺⁺'s copper hydroxide formulation provides growers with affordable options that can enhance yield by preventing the establishment and spread of destructive diseases.

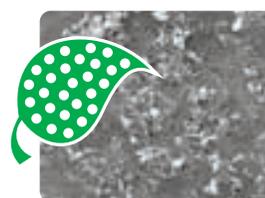
SMALLER COPPER IONS = BETTER COPPER IONS

The key to disease control with copper is coverage: the more uniformly & completely leaf surfaces are covered, the better the performance. ChampION⁺⁺ contains smaller, precisely-sized particles - and more of them.

- A smaller particle size means more available copper ions (Cu⁺⁺), resulting in better coverage and protection.
- ONE 3u diameter (competitive) particle = TWENTY SEVEN 1u diameter ChampION⁺⁺ particles.
- Unlike many dry coppers, easy-to-use ChampION⁺⁺ blooms quickly and resists settling, ensuring consistent copper coverage from application start to finish



Kocide® 3000
1 particle
(3 microns diameter)



ChampION⁺⁺
27 particles
(1 micron diameter)

The smaller particle size of ChampION⁺⁺ provides better coverage, as shown in these electron micrographs taken at 5000x magnification. In fact, ChampION⁺⁺, on average, provides 27 times more particles than Kocide 3000, resulting in much more uniform coverage.

COPPER BENEFITS FOR DRY BEANS

"Copper-based bactericides have effectively reduced populations of pathogenic pseudomonads on bean foliage and reduced the spread of these pathogens in infected crops...Applying copper protectants early in the season (June or July) every 7 to 10 days during cool moist weather can decrease establishment of bacterial pathogens. To ensure complete coverage, copper products should be applied with at least 5 gallons of water per acre. When pathogens have become established and disease symptoms are evident, copper sprays can help reduce their spread to healthy foliage and pods."

Dr. Howard F Schwartz, Dept. of Bioagricultural Sciences & Pest Mgmt., Colorado State University – Fort Collins, CO

EPA REG. NO. 55146-115	GROUP NO. M	SIGNAL WORD caution	CHEM. FAMILY inorganic
FORMULATION water-dispersible granule	ACTIVE INGR. copper hydroxide (46.1%)	METALLIC COPPER EQUIV. 30%	
PACKAGE SIZE 10 x 4 lb, 4 x 10 lb, 1 x 30 lb	REI 48 hours , 24 hours (greenhouse uses)	RESTRICTED no	
LABELING	brown spot, bacterial blight (halo and common), downy mildew: for protective sprays, apply first application when plants are six inches high. Apply on 7 to 14 day schedule depending on local conditions. Use 0.5 to 1.25 lbs per acre depending on disease severity.		



[nufarm.com/uscrop](https://www.nufarm.com/uscrop)

*Non-public health bacteria. For specific application rates, directions, mixing instructions and precautions, read the product label. Please visit www.nufarm.com/uscrop to download a full label.

©2020 Nufarm. Important: Always read and follow label instructions. ChampION⁺⁺™ is a trademark of Nufarm. Kocide® is a trademark of DuPont™. OMRI Listed® is a trademark of Organic Materials Review Institute. 16-AG-0015-B