



PRODUCT	ACTIVE INGREDIENT	DESCRIPTION	CROPS	PEST	RATES	NOTES
	Bacillus mycoides isolate J	The first in a new class of biological disease control solutions that switches on the plant's built–in immune defenses to help fight against bacterial, viral and fungal diseases.	Fruiting Veg	Bacterial Speck	1–4.5oz/100gal	
			Onions	Bacterial Bulb Rot	1–4.5oz/100gal	
Double Nickel 55	Bacillus amyloliquefaciens strain D747 (BaD747)	A broad spectrum fungicide boasting five modes of action to control foliar and soil born bacterial and fungal diseases.	Fruiting Veg	Bacterial Speck	1–2qts/acre .5–1lb/acre	
			Leafy Veg	Bacterial Blights	1–2qts/acre .5–1lb/acre	
	Bacteriophage	A bacteriophage (virus) which attacks Erwinia amylovora on apples and pears.	Fruiting Veg	Bacterial Speck	1–2 pints/acre	
			Tomato	Tomato Speck	1–2 pints/acre	
			Peppers	Tomato & Pepper Spot	1–2 pints/acre	
	Bacteriophage	A bacteriophage product used for biological control of bacterial canker disease on tomatoes.	Tomato	Bacterial Canker Disease	1–2 pints/acre	
Kocide 3000-C	Copper Hydroxide	A trusted, proven and reliable copper hydroxide containing bioactive technology for better control of diseases at lower rates.	Fruiting Veg	Bacterial Speck	.75–1.5lbs/acre	
			Celery	Bacterial Blight	.75–1.25lbs/acre	
			Onion	Bacterial Blight	.75–1.5lbs/acre	
			Cucurbit	Angular Leaf Spot	.75–1.25lbs/acre	
			Parsley	Bacterial Blight	1.25 – 2.0 lbs/acre	
copper 29 eva	Copper octanoate	A "copper soap" that provides the efficacy of coppers with a reduced risk of russet and phytotoxicity.	Fruiting Veg	Bacterial Speck	1–2 qts/acre	
			Crucifer Crops	Bacterial Leaf Spot	1–2 qts/acre	
			Cucurbit	Angular Leaf Spot	1–2 qts/acre	
			Herbs (see label)	Bacterial Blight	1–2 qts/acre	
			Leafy Veg	Bacterial Soft Rot	1–2 qts/acre	
			Onion	Bacterial Soft Rot	1–2 qts/acre	

CERTIS Biologicals •

**DISCLAIMER:** This technical bulletin does not provide all of the necessary information needed to successfully use these products. Always read and follow the label before using these products.

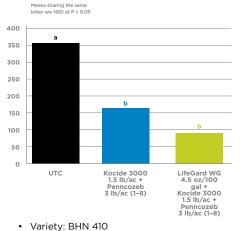
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IWollenman@CertisBio.com

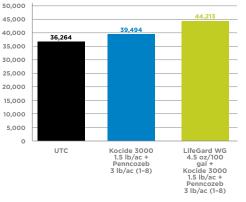
## LIFEGARD<sup>®</sup>WG BIOLOGICAL PLANT ACTIVATOR TOMATO

/incennes, IN

## Bacterial spot (Xanthomonas perforans)



Marketable yield (lbs/ac) Means were NSD at P = 0.05



80

70

60

50

40

30

20

10

0

LE GARD<sup>®</sup>WG

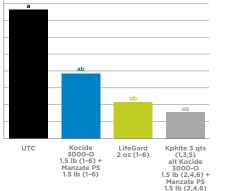
% Bulb rots (Pantoea sp.)

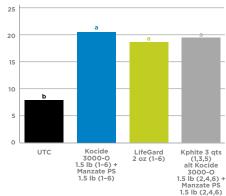
Means sharing the same letter are NSD @ P = 0.05

## ONION

Marketable yield (lbs./plot)

Means sharing the same letter are NSD @ P = 0.05

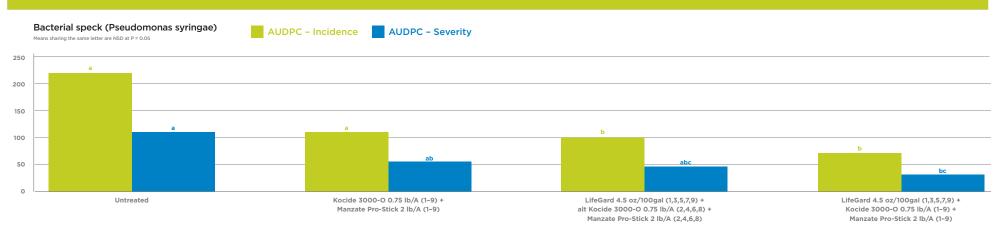




- Treatments: 6 applications on 7 day intervals.
- Apps made using backpack sprayer calibrated to deliver 60 gal/ac.
- Cooperator: B. Dutta, Univ. GA

## TOMATO var. Mt. Fresh

Cooperator - D. Egel Purdue University



• Application: 9 applications on 7 day intervals from Jul. 15th- Sep. 9th

- Plots were inoculated with diseased plants between replicates to spread infection.
- All products applied via backpack boom sprayer delivering 82 gal/ac at 55 psi.

• 8 applications made beginning 4 June - approx. weekly intervals @ 20 GPA

• Cooperator: M. McGrath, Cornell Univ.



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