BEAN (BABY LIMA); (*Phaseolus lunatus* 'M-15')
Seedling disease complex; *Rhizoctonia solani*, *Fusarium* spp., *Pythium* spp.

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Evaluation of seed treatment fungicides for the control of seedling diseases of baby lima beans, 2003.

This test was planted in a loamy sand soil at the University of Delaware Research and Education Center near Georgetown, DE. The field had a history of lima bean production and poor stands primarily from infection by *Rhizoctonia solani*. The fungicide seed treatments were applied commercially to an untreated lot of 'M-15' baby lima seed (95% germination). The T-22 Planter Box HC treatments were hand applied prior to seeding by treating a small batch of seed at the appropriate rate then counting and packaging the seed. The in-furrow Quadris treatments were made by first opening the furrow, placing the seed in the open furrow, and then spraying the product with a CO_2 powered back pack sprayer in 11.5 gal of water per acre. Experimental units were single 15 ft rows, machine planted (Monosem air planter) at the rate of 5 seeds/ft and spaced 30 in. apart. Experimental design was a randomized complete block design with five replications for each planting date. The first planting date was 11 Jun. This was an early planting and weather conditions were extremely wet and unfavorable for emergence. The second planting date was 24 Jul. Weather conditions were better but still wet and not conducive for germination and emergence. Stand counts were made 14 days after planting for both tests.

In the early planted test, stand counts were not significantly different from each other under very extreme wet conditions. In the late planted test there was little separation of treatments due to variability from adverse environmental conditions. In-furrow treatments with Quadris 2.08 SC were the best numerical treatments but not significantly different than the control. There was not good separation of treatments statistically and only trends can be interpreted from this test. No phytotoxicity was observed for any treatment.

Treatment and rate/ cwt. seed	First planting (11Jun) Stand counts (25 Jun) 14 DAP	Second planting (24 Jul) Stand counts (7 Aug) 14 DAP
Captan 2.5 fl.oz. + Allegiance FL 2.65 fl.oz. + Streptomycin 0.7 oz	24.0 NS*	30.8** c
L1269-A1 5.7 fl oz + L1243-A1 0.46 fl oz + Allegiance FL 0.75 fl oz + Streptomycin 0.7 oz	23.4	46.0 ab
L1269-A1 5.7 fl oz + L1243-A1 0.46 fl oz + Allegiance FL 0.75 fl oz + Streptomycin 0.7 oz + Yield Shield 0.1 oz	27.8	44.8 ab
Maxim 4FS 0.04 fl oz. + Apron XL 0.32 fl oz + Streptomycin 0.7 oz	27.4	42.6 abc
Maxim 4FS 0.08 fl oz. + Apron XL 0.32 fl oz + Streptomycin 0.7 oz	30.8	42.2 abc
Maxim 4FS 0.16 fl oz + Apron XL 0.32 fl oz + Streptomycin 0.7 oz	30.0	47.8 ab
Quadris 2.08 SC 0.4 fl oz/1000 ft row	35.0	50.4 a
Quadris 2.08 SC 0.6 fl oz/1000 ft row	22.4	50.2 a
T-22 Planter Box HC 2.0 oz + Maxim 4FS .08 fl oz + ApronXL 0.32 fl oz + Streptomycin 0.7 oz	29.6	47.4 ab
T-22 Planter Box HC 2.0 oz + Captan 2.5 fl.oz. + Allegiance FL 2.65 fl.oz. + Streptomycin 0.7 oz	27.0	36.2 bc
T-22 Planter Box HC 2.0 oz	28.8	41.4 abc
Control	28.8	41.2 abc

* NS = Not significant

** Means within a column followed by the same letter are not significantly different, Duncan-Waller *k*-ratio *t* test, *k*=100.