

Pinto Bean Response to Tank Mixtures with Proline Fungicide, Carrington, 2009

Greg Endres and Paul Hendrickson

A conventional-till, dryland field trial was conducted in cooperation with Bayer CropScience at the NDSU Carrington Research Extension Center to examine the response of pinto bean to tank mixtures with Proline fungicide. Experimental design was a randomized complete block with four replications. 'Lariat' was planted at about 80,000 seeds/A in 30-inch rows on May 22. Best management practices were used for dry bean production in the trial. First flower occurred on July 22. Plant protection treatments were applied at R2-3 plant stages with no foliar disease present on July 27 using a hand-boom sprayer with 8001 flat fan nozzles delivering 17 gpa at 35 psi. Plants were hand pulled and seed harvested with a plot combine on October 12.

Visual evaluations of crop phytotoxicity were made on August 3, 12, and 24, and September 8 with no noted plant injury (data not shown). Seed yield with Proline was similar to the untreated check (table). Respective herbicide and insecticide treatments without and with Proline each resulted in similar yield. Test weight was similar among all treatments.

Table. Pinto Bean Response to Tank Mixtures with Proline Fungicide.			
Treatment ¹			
Tank mixture	Rate	Yield	Test weight
	fl oz/A	bu/A	lb/bu
untreated check	x	3374.0	60.5
Proline + NIS	5.7	3541.4	60.5
Basagran + COC	24 + 16	2747.0	60.2
Basagran + Proline + COC	24 + 5.7 + 16	2607.2	60.3
Reflex + NIS	12	2690.5	60.7
Reflex + Proline + COC	12 + 5.7 + 16	2636.8	59.6
Rezult B + Rezult G + MSO	12.8 + 12.8 + 20	2281.1	60.5
Rezult B + Rezult G + Proline + MSO	12.8 + 12.8 + 5.7 + 20	2741.3	59.9
Asana	8	2621.0	60.6
Asana + Proline + NIS	8 + 5.7	2823.3	59.9
mean		2806.4	60.3
C.V. (%)		15.9	1.1
LSD (0.05)		648.3	NS
¹ NIS = Activator 90 at 0.25%.			