

Field Pea Response to Crop Inputs

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An experiment was conducted at the Carrington Research Extension Center in 2008 to evaluate field pea response to starter fertilizer treated with Avail and fungicides. Inoculated 'DS Admiral' field pea was sown April 25 in 7-inch rows at 300,000 pure live seeds/acre. An additional treatment was also included to evaluate the inoculant 'TagTeam'. Fungicide applications at bloom initiation occurred on July 1. Ten days post bloom fungicide applications occurred on July 10 to 75% bloom field peas. All fungicide treatments were applied with a CO²-pressurized, hand-boom sprayer delivering 20 gal/acre at 25 psi. The trial was harvested August 14.

Individual treatments had minimal to no impact on beginning bloom, end bloom, bloom duration, days to physiological maturity, vine length, 1000 kernel weight, test weight, and seed protein (data not shown). The high rate of 11-52-0 caused a significant reduction in plant population and seed yield (Table).

Table. Irrigated field pea response to starter fertilizer and fungides.

Trt No. ^a	Treatment ^b	Rate	Timing	Plant Population plants/a	Canopy	Harvest Index %	Plant Lodge 0-9	Seed Yield bu/a
					Ht at Harvest inch			
1	Inoculated Check		Inoculant	250368	18.5	64.4	7.0	71.2
2	11-52-0	20 lb P ² O ⁵ /a	In-row	204847	22.6	73.2	5.3	71.7
3	11-52-0 + Avail	20 lb P ² O ⁵ /a	In-row	180189	22.6	71.4	5.3	69.6
4	11-52-0	40 lb P ² O ⁵ /a	In-row	132771	23.0	70.8	4.5	59.0
5	11-52-0+ Avail	40 lb P ² O ⁵ /a	In-row	134668	23.5	78.2	4.8	52.4
6	TagTeam		Inoculant	242781	21.7	71.1	4.8	69.8
7	Proline	5 fl oz/a	Bloom initiation	271232	22.9	69.7	4.3	74.2
8	Headline	6 fl oz/a	Bloom initiation	278819	17.7	59.0	7.0	73.8
9	Proline /	5 fl oz/a	Bloom initiation /	242781	19.0	58.9	6.5	71.8
	Headline	6 fl oz/a	10 days post bloom					
10	Proline	5 fl oz/a	10 days post bloom	246575	17.5	54.3	7.3	73.5
LSD (P=0.05)				63536	1.6	9.5	1.0	7.1
CV				20.0	5.3	9.8	12.2	7.1
Mean				218503	20.9	67.1	5.7	68.7

^aTreatments 1-5 and 7-10 were inoculated with Soil Implant+.

^bProline was applied with a non-ionic surfactant (Induce) at 0.125% v/v and Headline was applied with Induce at 0.25% v/v.