Effect of Select and Assure II application timing on dry pea yield

The objective of this study was to evaluate the effect of Select and Assure II application timing on dry pea yield. The Select label states that crop injury can result if applied during flowering. This study was initiated due to complaints in 2015 concerning fully formed pods that contained no seeds (i.e., empty pods). In this study, Select and Assure II were applied to 4-inch peas, 3 days before flowering, early flower, and 2-3 days after early flower.

We conducted this study in 2016 and did not observe empty pods or any effect on yield with any application timing. We repeated this study in 2017 and did observe many empty pods and a severe yield reduction with late applications. Pods and yield were affected slightly with Select applied 3 days before flowering, but were affected severely when applied at early flower or later. Assure II caused only a slight effect on pods and yield. This study shows that it is important to apply a grass herbicide well before flowering.

Title. Effect of graminicide application timing on dry pea yield. (1734)								
			Injury			Test wt.	Yield	Protein
Treatment ^a	Rate	Timing ^b	Jul-2	Jul-12	Jul-27			
			%			lb/bu	lb/A	%
Untreated			0	0	0	66.0	1859	25.9
Select	6 oz	4-inch	0	0	0	66.4	2474	24.7
Assure II	8 oz	4-inch	0	0	0	66.3	2038	25.6
Select	6 oz	3 DBF	4	7	3	65.8	1930	27.1
Assure II	8 oz	3 DBF	0	0	2	66.3	1996	24.9
Select	6 oz	Early flower	7	15	14	65.9	1140	29.4
Assure II	8 oz	Early flower	0	0	2	66.0	2006	24.8
Select	6 oz	EF+2-3 days	1	20	22	66.5	942	29.6
Assure II	8 oz	EF+2-3 days	0	6	2	66.0	1880	24.6
LSD (0.05)			1.2	1.5	3.4	NS	765.0	2.0
CV			47.9	16.6	40.3	0.5	24.5	4.5
^a All treatments applied with COC (1.25 pt)								
^b DBF=days before flowering; EF=early flower								