

YEAR/PROJECT: 1991/758 CANOLA FERTILIZER TRIAL

PERSONNEL: Leader - Leon Welty
 Research Specialist - Louise Prestbye
 In cooperation with Dr. Grant Jackson, CARC, Moccasin

'Westar' spring canola, treated with Vita Vax, was seeded at 7 lbs/a on 4/24/91. Previous to seeding, soil samples were taken from random locations in each replication at 0-6", 6-12", 12-24" and 24-48". Ten fertilizer treatments were applied in an RCB design with 4 replications. The treatments were (N-P-K-S): 0-0-0-0, 50-60-0-0, 100-60-0-0, 150-60-0-0, 100-30-0-0, 100-90-0-0, 100-0-0-0, 0-60-0-0, 100-60-50-0, 100-60-0-20. Mature heights varied from 44 inches (0-0-0-0 and 0-60-0-0) to 52 inches (150-60-0-0, 100-60-50-0 and 100-60-0-20). On 8/5/91, all plants from each plot were cut and bundled and thrashed when dry. The one treatment with S produced significantly higher yield than any combination of the other 3 nutrients. Positive responses were observed in treatments with at least 50 lbs N/a and at least 60 lbs P/a. The addition of 50 lbs K/a showed no significant yield increase. This data suggests that optimum yield response in canola can be obtained with a 50-60-0-20 fertilizer treatment. No treatment differed significantly in % oil from the 0-0-0-0 check.

CANOLA FERTILIZER TRIAL - KALISPELL - 1991

TRT	N	P	K	S	HEIGHT	YIELD	OIL	
	lbs/a				inches	lbs/a	%	
1	0	0	0	0	44.3	1477	45.8	
2	50	60	0	0	49.5	1821	46.2	
3	100	60	0	0	48.8	1725	45.4	
4	150	60	0	0	51.5	1729	43.1	
5	100	30	0	0	48.3	1495	44.0	
6	100	90	0	0	51.1	1693	45.2	
7	100	0	0	0	48.3	1544	43.3	
8	0	60	0	0	44.0	1506	46.5	
9	100	60	50	0	51.8	1740	43.8	
10	100	60	0	20	52.0	2086	47.4	
					LSD(0.05)	3.8	237	2.9
					P-VALUE	0.00	0.00	0.05
					CV(s/mean)	5.4	9.7	4.4

Seeding date: 4/24/91
 Seeding rate: 7 lbs/a
 Variety: 'Westar' (Fungicide: Vita Vax)
 Fertilized: 4/18/91
 Maturity date: 8/5/91