

Table S1. Mean weed stem counts (no. m⁻²) and weed biomass dry weights (kg DM m⁻²) mid- and late-season from plots of sulfonylurea-resistant camelina and canola treated with (yes) or without (no) herbicide and mean crop by time interaction (C x T) at two locations (NDSU and NW22). Fallow was not treated with herbicide.

Time	Mid-season			Late-season			Mid-season			Late-season		
Herbicide	no	yes	mean	no	yes	mean	no	yes	mean	no	yes	mean
Weed	stem count (no. m ⁻²)						biomass (kg DM m ⁻²)					
NDSU												
Camelina	54.7	31.0	42.8	56.5	25.2	40.9	0.08	0.08	0.08	0.01	0.07	0.8
Canola	9.7	13.0	11.4	17.7	14.5	16.1	0.13	0.08	0.10	0.07	0.06	0.06
fallow	177.7	.	177.7	117.7	.	117.7	0.13	.	0.13	0.46	.	0.46
LSD	.	.	NS	.	.	NS	.	.	0.08	.	.	0.08
NW22												
Camelina	35.5	70.3	52.9	21.3	56.8	35.3	0.08	0.11	0.09	0.10	0.15	0.12
Canola	97.5	54.8	76.1	62.5	63.0	62.8	0.10	0.11	0.10	0.38	0.19	0.28
Fallow	105.5	.	105.5	39.5	.	39.5	0.32	.	0.32	0.94	.	0.94
LSD	.	.	NS	.	.	NS	.	.	NS	.	.	NS

LSD (C×T) = Least significant difference (LSD, $\alpha = 0.05$) for crop x time interaction. LSD value is to compare both between means of crop for a same season or for means between seasons for a same crop

NS = not significant.

Table S2. Mean crop stem counts (no. m⁻²) and biomass dry weights (kg DM m⁻²) mid- and late-season from field plots of sulfonylurea-resistant camelina or canola treated with (yes) or without (no) sulfonylurea and mean crop by time interaction (C x T) at two locations (NDSU and NW22).

Time	Mid-season			Late-season			Mid-season			Late-season		
Herbicide	no	yes	mean	no	yes	mean	no	yes	mean	no	yes	mean
Crop	stem count (no. m ⁻²)						biomass (kg DM m ⁻²)					
NDSU												
Camelina	215.5	197.0	206.3	189.7	221.2	205.5	0.22	0.19	0.21	0.44	0.42	0.43
Canola	54.0	34.7	44.4	44.5	56.5	50.5	0.26	0.25	0.25	0.73	0.75	0.74
LSD	.	.	NS	.	.	NS	.	.	0.10	.	.	0.10
NW22												
Camelina	313.5	297.0	305.3	301.5	274.0	289.1	0.37	0.41	0.39	0.75	0.81	0.77
Canola	62.5	71.5	67.0	88.5	88.5	88.5	0.35	0.53	0.44	1.24	1.12	1.18
LSD	.	.	NS	.	.	NS	.	.	0.14	.	.	0.14

LSD = Least significant difference (LSD, $\alpha = 0.05$) for crop x time interaction. LSD value is to compare both between means of crop for a same season or for means between seasons for a same crop.

NS = not significant.

Table S3. Final seasons mean seed yield (kg ha⁻¹) from plots of sulfonylurea-resistant camelina or canola treated with (yes) or without (no) sulfonylurea herbicide and crop by herbicide interactions (C x H) at two locations (NDSU and NW22).

Time		Final harvest	
Herbicide	no	yes	mean
Crop	Seed yield (kg ha ⁻¹)		
	NDSU		
Camelina	1246.5	1172.1	1209.3
Canola	1299.2	1010.9	1155.0
LSD	.	.	NS
	NW22		
Camelina	2214.7	2412.5	2272.5
Canola	1814.0	1891.6	1852.5
LSD	.	.	NS

LSD = Least significant difference ($\alpha = 0.05$) for crop x herbicide interaction.

NS = not significant.

Table S4. Mean nutrient content of sulfonylurea-resistant camelina or canola mid- and late-season and crop by time interaction (C x T) at two locations (NDSU and NW22) for nitrogen (N), phosphorus (P), potassium (K), sulfur (S).

Time	Mid-	Late-	mean	Mid-	Late-	mean	Mid-	Late-	mean	Mid-	Late-	mean
Nutrient	N			P			K			S		
kg ha ⁻¹												
NDSU												
Camelina	61.2	76.5	68.8	9.8	10.1	9.9	51.1	55.3	53.3	10.6	11.9	11.3
Canola	69.0	128.3	98.6	13.7	18.4	16.1	82.1	133.5	10.8	11.2	25.4	18.3
LSD	NS	29.3	20.7	NS	NS	2.9	29.6	29.6	20.9	NS	5.3	3.8
NW22												
Camelina	174.0	158.9	166.3	15.5	17.2	16.3	130.2	122.5	126.3	26.2	24.0	25.1
Canola	175.1	225.4	200.2	12.7	20.7	16.7	183.6	194.4	189.0	26.0	45.8	35.9
LSD	NS	NS	NS	NS	NS	NS	NS	NS	32.1	NS	6.5	4.7

LSD = Least significant difference ($\alpha = 0.05$) for crop x time interaction.

NS = not significant.

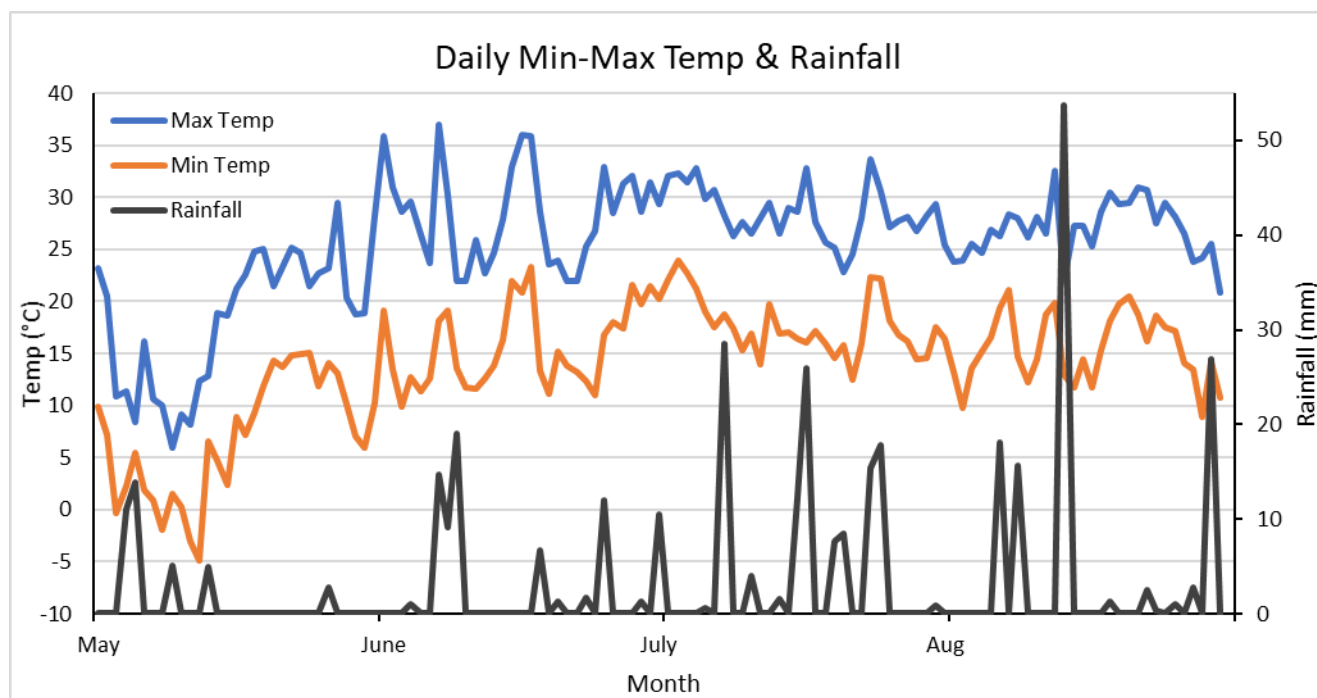


Figure S1. Daily minimum (Min) and maximum (Max) temperature (Temp °C) and precipitation (Rainfall (mm)) during the 2020 growing season (May – August) obtained from the North Dakota Agricultural Weather Network station located in Fargo, ND (<https://ndawn.ndsu.nodak.edu/station-info.html?station=23>, accessed 18 October 2022).

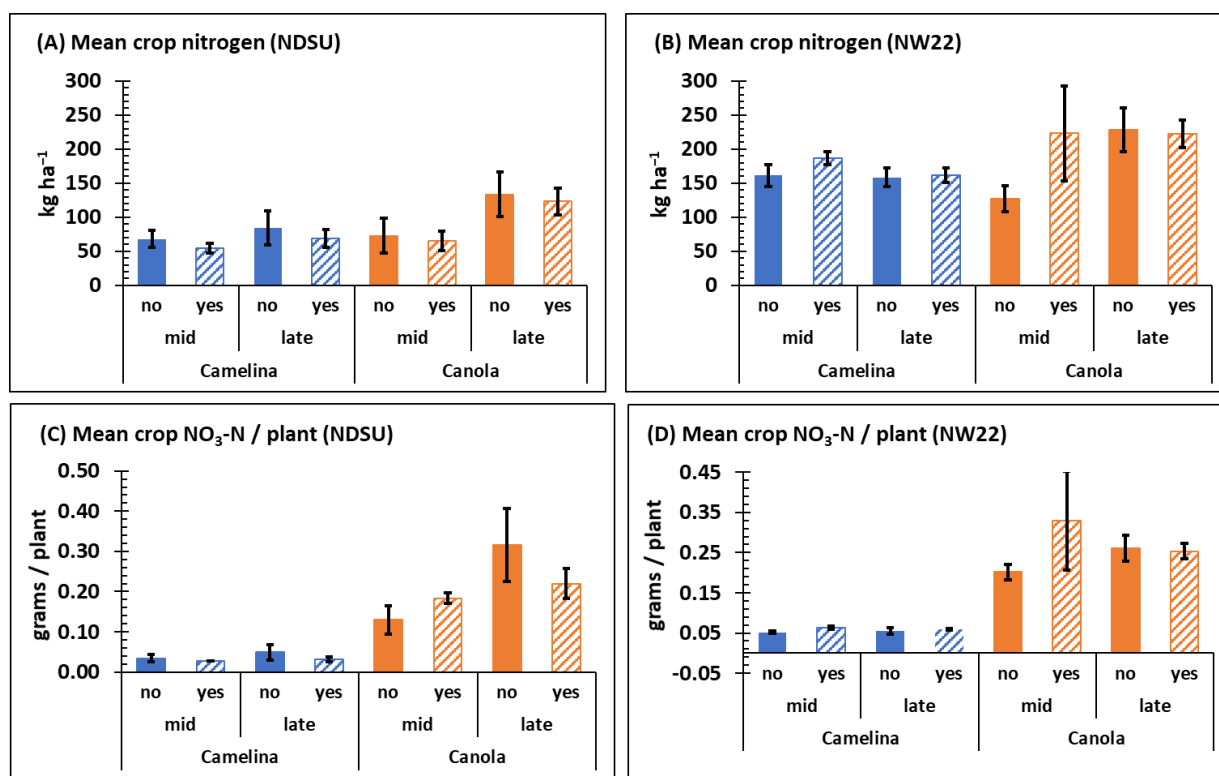


Figure S2. Nutrient content (NO₃-N) of sulfonylurea-resistant camelina and canola mid- and late-season at NDSU and NW22 treated with (yes) or without (no) sulfonylurea; Kg ha⁻¹ (A and B) and grams / plant (C and D). Error bars represent the standard error of the mean.