

Supplementary Table S1. Efficacy of different herbicides on density and dry matter of total weeds over the control (weed free) at 40 DAS in cumin.

Treatment	Total Weeds Density (No./m ²)		Total Weed Dry Matter (g/m ²)	
	2018-19	2019-20	2018-19	2019-20
Weedy check	49.2±5.30 ^a	56.2±4.01 ^a	30.7±1.53 ^a	24.7±0.35 ^a
Pendimethalin 38.7 CS @ 750 g/ha – PE	27.3±4.73 ^b	26.4±1.64 ^b	18.3±1.16 ^b	13.8±0.89 ^b
Oxyfluorfen @ 200 g/ha – PE	20.3±4.21 ^c	23.0 ±2.05 ^b	15.5±0.87 ^c	11.0±1.17 ^c
Pendimethalin 38.7 CS 500 g/ha + Oxyfluorfen 150 g/ha @ -PE	13.3±2.52 ^d	16.9±2.42 ^c	11.7±2.3 ^d	8.0±0.93 ^d
Oxyfluorfen @ 200 g/ha 8 DAS- early POE	8.7±2.05 ^d	16.3±2.52 ^c	7.3±2.53 ^c	8.3±1.47 ^d
Pendimethalin 38.7 CS 500 g/ha + Oxyfluorfen @ 150g/ ha 8 DAS – early POE	11.3±2.52 ^d	17.7±2.16 ^c	8.7±0.58 ^c	8.9±1.51 ^d
Oxydiargyl @ 50g/ ha 20 DAS –POE	23.0±3.10 ^b	23.1±1.20 ^b	17.0±1.00 ^{bc}	13.2±1.58 ^b

Data are the average of three replicates ± SD; grouping information between mean values of obtained data was carried out by Fisher LSD method and 95% confidence ($p \leq 0.05$). Different letters point out significant differences in a column.

Supplementary Table S2. Weed control efficiency (WCE) of different herbicides over the control (Weedy check) in relation to control of total weeds (including wild onion) in cumin.

Treatment	WCE (%) of Total Weeds	
	2018-19	2019-20
Weed free	100.0	100.0
Pendimethalin 38.7 CS @ 750 g/ha – PE	40.4	44.1
Oxyfluorfen @ 200 g/ha – PE	49.5	55.5
Pendimethalin 38.7 CS 500 g/ha + Oxyfluorfen 150 g/ha @ -PE	61.9	67.6
Oxyfluorfen @ 200 g/ha 8 DAS- early POE	76.2	66.4
Pendimethalin 38.7 CS 500 g/ha + Oxyfluorfen @ 150g/ ha 8 DAS – early POE	71.7	64.0
Oxydiargyl @ 50g/ ha 20 DAS –POE	44.6	46.6