

Table 1. Average plant height, average inflorescence base height, sampling date of the greatest number of seeds and the beginning of seed shattering, accumulated growing degree days (GDD) at that sampling date, and average seed production per plant on the date with the greatest number of seeds  $\pm$  standard deviation. Data are indicated per species, year, and location. Note: The information indicated in parenthesis for cereal rye is the number of seeds per head.

Species	Year	Farm	Plant height (cm)	Inflorescence base height (cm)	Sampling date of seed shattering beginning	GDD at seed shattering beginning	Seed production plant <sup>-1</sup>
Downy brome ( <i>Bromus tectorum</i> )	2016	Pilot Rock	43	34	9 Jun 2016	2331	303 $\pm$ 229
		CBARC	105	93	16 Jun 2016	2114	516 $\pm$ 243
		Adams	93	84	17 Jun 2016	2043	430 $\pm$ 195
	2017	CBARC	102	87	7 Jul 2017	2198	199 $\pm$ 131
		Dixie	63	34	11 Jul 2017	2411	300 $\pm$ 213
		Echo	41	16	30 Jun 2017	2384	465 $\pm$ 488
	2018	Pilot Rock	64	50	1 Jun 2018	1842	361 $\pm$ 225
		CBARC	93	81	18 Jun 2018	1887	428 $\pm$ 102
		Dixie	56	39	27 Jun 2018	2422	147 $\pm$ 93
		Adams	96	87	27 Jun 2018	2035	188 $\pm$ 70
		Echo	66	34	1 Jun 2018	1900	1350 $\pm$ 949
Feral rye ( <i>Secale cereale</i> )	2016	Pilot Rock	75	69	9 Jun 2016	2331	252 $\pm$ 99 (41 $\pm$ 10)
	2017	Dixie	120	94	27 Jun 2017	2070	171 $\pm$ 202 (35 $\pm$ 10)
		Echo	120	81	23 Jun 2017	2219	935 $\pm$ 798 (49 $\pm$ 11)
	2018	Pilot Rock	127	109	1 Jun 2018	1842	111 $\pm$ 102 (47 $\pm$ 13)
		CBARC	146	127	18 Jun 2018	1887	176 $\pm$ 114 (46 $\pm$ 18)
		Dixie	115	90	27 Jun 2018	2422	252 $\pm$ 188 (45 $\pm$ 12)
		Echo	114	86	8 Jun 2018	2030	454 $\pm$ 394 (47 $\pm$ 14)
Italian ryegrass ( <i>Lolium perenne</i> ssp. <i>multiflorum</i> )	2017	Albion	133	64	11 Jul 2017	1961	1016 $\pm$ 777
		WSUCAF	135	45	11 Jul 2017	1846	632 $\pm$ 424
		Dixie	111	78	27 Jun 2017	2070	886 $\pm$ 824
	2018	Albion	-	-	11 Jul 2018	1971	1108 $\pm$ 885
		WSUCAF	-	-	2 Jul 2018	1813	597 $\pm$ 208
		Dixie	105	77	27 Jun 2018	2422	378 $\pm$ 230
Rattail fescue ( <i>Vulpia myuros</i> )	2016	Pilot Rock	27	20	9 Jun 2016	2331	695 $\pm$ 666
	2017	Dixie	32	5.8	5 Jul 2017	2255	514 $\pm$ 302
	2018	Pilot Rock	38	21	1 Jun 2018	1842	1344 $\pm$ 618
		CBARC	46	28	18 Jun 2018	1887	1252 $\pm$ 1027
Fiddleneck ( <i>Amsinckia menziesii</i> var. <i>intermedia</i> )	2016	CBARC	105	51	17 Jun 2016	2043	1757 $\pm$ 711
		Pendleton	77	33	9 Jun 2016	2485	1116 $\pm$ 758
	2018	CBARC	68	31	25 Jun 2018	2030	565 $\pm$ 454
Tumble mustard <i>Sisymbrium altissimum</i>	2016	CBARC	130	79	24 Jun 2016	2156	51816 $\pm$ 40083
		Pendleton	107	76	24 Jun 2016	2725	55323 $\pm$ 42228
	2017	Pendleton	123	83	5 Jul 2017	2782	24367 $\pm$ 17358
		Echo	90	51	23 Jun 2017	2219	25750 $\pm$ 20277
	2018	CBARC	105	75	16 Jul 2018	2459	7744 $\pm$ 5332