

perennials forcing guide

FORCING GUIDE FOR FIRST YEAR FLOWERING PERENNIALS FOR 2 MAJOR DATES IN NORTH AMERICA* (QUICK ANNUAL CYCLE)																				
GENUS	SPECIES	SERIES/VARIETY	USDA HARDINESS ZONE	FORCING FOR SPRING (WEEK 19)							FORCING FOR FALL (WEEK 36)						PLUGS PER POT			
				IDEAL SOWING WEEK	PLUG SIZE	PLUG BULKED UNDER NATURAL SD OR <=12 HR GROW WEEKS	SUPPLEMENTAL LD (14 HR OR NJ) REQUIRED AFTER TRANSPLANT**	FINISH UNDER PROPER DAYLENGTH (H) AND ADT (J) GROW WEEKS	FINISH ADT (°F/°C)	IDEAL SOWING WEEK	PLUG SIZE	PLUG SD BULKING REQUIRED	PLUG GROW WEEKS	FINISH UNDER NATURAL LD AND ADT 72-75°F/22-24°C GROW WEEKS	1 QT	1 GAL	2 GAL	3 GAL (FALL)		
ARMERIA	<i>pseudarmeria</i>	Ballerina	7-9	49	288	7	No	15	60/16	-	-	-	-	-	1	3	-	-		
CAMPANULA	<i>carpatica</i>	Rapido	3-9	48-49	288	10	Yes	12-13	65/18	-	-	-	-	-	1	3-5	-	-		
COREOPSIS	<i>grandiflora</i>	Early Sunrise	4-9	49-50	128	8	Yes	12-13	68/20	-	-	-	-	-	1	1-3	3-5	-		
COREOPSIS	<i>grandiflora</i>	Sun Up	4-9	1-2	128	8	No	9-11	68/20	-	-	-	-	-	1	1-3	3-5	-		
COREOPSIS	<i>grandiflora</i>	Sunfire	4-9	51-52	128	8	Yes	10-12	68/20	22	128	No	6-7	7	1	1-3	3-5	4-6		
COREOPSIS	<i>grandiflora</i>	SunKiss	4-9	51-52	128	8	Yes	10-11	68/20	22	128	No	6-7	7	1	1-3	3-5	4-6		
DELPHINIUM	<i>elatum</i>	Guardian	4-7	51-52	288	6-7	No	14	65/18	-	-	-	-	-	1	1	3	-		
DELPHINIUM	<i>belladonna</i>	Blue Donna	5-9	51-52	288	6-8	No	13	65/18	-	-	-	-	-	1	1	3	-		
DELPHINIUM	<i>grandiflorum</i>	Diamonds Blue	4-9	51-52	288	7	No	14	65/18	-	-	-	-	-	1	1-3	3	-		
DIANTHUS	<i>barbatus interspecific</i>	Rockin' Red	4-9	1-2	288	5	No	13	60/16	22	288	No	5	8	1	3	3	4		
DIANTHUS	<i>barbatus</i>	Dash	6	1-2	288	5	No	13	60/16	22	288	No	5	8-9	1	1	3	4		
DIANTHUS	<i>barbatus</i>	Sweet	6	1-2	288	5	No	13	60/16	-	-	-	-	-	1	1	3	-		
DIANTHUS	<i>barbatus interspecific</i>	Dynasty	6	1-2	288	5	No	13	60/16	24	288	No	5	6	1	1	3	4		
DIANTHUS	<i>barbatus interspecific</i>	Jolt	7	1-2	288	5	No	13	68/20	19-20	288	No	5	9-10	1	1	3	4		
DIANTHUS	<i>chinensis x barbatus</i>	Corona	5	3-4	288	5	No	11	60/16	-	-	-	-	-	1	3	-	-		
DIGITALIS	<i>purpurea</i>	Dalmatian	5-9	52-1	128	7	Yes	12-13	60/16	-	-	-	-	-	-	1	2-3	-		
ECHINACEA	<i>hybrida</i>	Cheyenne Spirit	4-10	45-46	288 to 72+	13-15 weeks; SD from 2 to 7 true leaves	Yes	12	68/20	14-16	288 to 72+	Yes	11 weeks; SD from 2 to 7 true leaves	8-9	1	1	3	4		
ECHINACEA	<i>purpurea</i>	PowWow	4-10	45-46	288 to 72+	13-15 weeks; SD from 2 to 7 true leaves	Yes	12	68/20	14-16	288 to 72+	Yes	11 weeks; SD from 2 to 7 true leaves	8-9	1	1	3	4		
GAILLARDIA	<i>grandiflora</i>	Mesa Bright Bicolor	5-10	52-1	128	7	Yes	12	68/20	21	288	No	5	8-9	1	1	2	3		
GAILLARDIA	<i>grandiflora</i>	Mesa Yellow	5-10	52-1	128	7	Yes	12	68/20	19	288	No	5	10-11	1	1	2	3		
GAILLARDIA	<i>grandiflora</i>	Mesa Peach	5-10	52-1	128	7	Yes	12	68/20	-	-	-	-	-	1	1	2	3		
GAILLARDIA	<i>grandiflora</i>	Mesa Red	5-10	52-1	128	7	Yes	12	68/20	21	288	No	5	8-9	1	1	2	3		
GAURA	<i>lindeheimeri</i>	Sparkle White	5b-9	2-3	128	8	Yes	8	68/20	22	288	No	4	7-8	1	1	3	4		
HEUCHERA	<i>micrantha</i>	Palace Purple	4-7	47-48	288	10-11	No	11-12	60/16	15-16	128	No	8	10-11	1	3	4	5		
HEUCHERA	<i>hybrida</i>	Melting Fire	5-8	46-47	288	10-11	No	13-14	60/16	12-14	128	No	9-11	12-13	1	3	4	5		
HIBISCUS	<i>moscheutos</i>	Luna	5-9	-	-	-	-	-	-	21	128	No	4	9-10	1	1	1	1		
LAVANDULA	<i>angustifolia</i>	Ellagance Purple & Pink	5-8	46-47	128	9	Yes	10-11	60/16 Needs high light in South regions	-	-	-	-	-	1	3	-	-		
LAVANDULA	<i>angustifolia</i>	Lavance Deep Purple	5-8	-	-	-	-	-	-	20	128	No	6	8-9	1	3	4	5		
LAVANDULA	<i>stoechas</i>	Bandera	7-10	46-47	288	7	No	12-14	60/16	-	-	-	-	-	1	2	-	-		
LOBELIA	<i>speciosa</i>	Starship	6-10	45-46	288 to 72+	13-15 weeks; 10-hour SD bulk to 10 leaves	Yes	11-12	68/20	14-16	288	Yes	9-10 weeks; 10-hour SD to 6 true leaves	10-11	1	1	3	4		
ORIGANUM	<i>hybrida</i>	Kirigami	5b-9	52-1	128	6-7	Yes	11-13	68/20	19-20	128	No	5	10-11	1	1	3	-		
PENSTEMON	<i>mexicali</i>	Carillo	5-7	52-1	128	7-8	Yes	10-11	65/18	-	-	-	-	-	1	2-3	3-5	-		
PEROVSKIA	<i>atriplicifolia</i>	Blue Steel	4-9	48-49	128	6-8	No	10-14	65/18 Needs low RH and high light in South regions	19-20	128	No	6-7	9-10	1	3	4	5		
RUDBECKIA	<i>fulgida</i>	Goldsturm	3-9	-	-	-	-	-	-	8-9	288 to 50+	Yes	14 weeks; SD from 2 to 10 true leaves	12-13	-	1	1	3		
SALVIA	<i>nemorosa</i>	New Dimension	4-8	1-2	128	7	Yes	10-11	65/18	-	-	-	-	-	1	3	5	-		
SALVIA	<i>patens</i>	Patio	8-10	1-2	128	7	Yes	10-11	65/18	-	-	-	-	-	1	3	5	-		
SCABIOSA	<i>columbaria</i>	Blue Note	5-9	49-51	128	8-9	No	12-14	60/16	-	-	-	-	-	1	3	-	-		
SCABIOSA	<i>japonica</i>	Pink Diamonds	5-9	49-51	128	8-9	No	12-14	60/16	-	-	-	-	-	1	3	-	-		
VERBENA	<i>bonariensis</i>	Buenos Aires	7-9	-	-	-	-	-	-	18-19	128	No	8	10-11	-	1	2	3		
VERBENA	<i>rigida</i>	Santos Purple	7-11	49-50	128	8	No	13-14	65/18 Needs high light in South regions	19-20	128	No	8	9-11	1	1	2	3		

SD = Short Day (12 hours or shorter, except Lobelia is 10 hours)

LD = Long Day

ADT = Average Daily Temperature

* Schedule indicated is based on Midwest Region of the United States trial data and may change based on your local/regional climate.

Please trial to re-confirm finish crop times before beginning commercial production.

** If yes, supplemental long day lighting should start after transplanting until visible bud or visible knot stage.