

PLANT Common Name (Genus species Auth.)	Nut. ^z	pH ^y	Propagation			Vegetative			Flower Initiation/Dev.			Fruit/Seed Dev.			Comments
			Light ^x	Photo-period Hrs / Day	Temp. (°C) Lt / Dark	Light ^x	Photo-period Hrs / Day	Temp. (°C) Lt / Dark	Light ^x	Photo-period Hrs / Day	Temp. (°C) Lt / Dark	Light ^x	Photo-period Hrs / Day	Temp. (°C) Lt / Dark	
African Violet <i>Saintpaulia ionantha</i> H. Wendl	M	N	V	12	23 / 23	L	12	23 / 23	L	12	23 / 23				Leaf-petiole cuttings.
Ageratum <i>Ageratum houstonianum</i> Mill.	M	N	M	12-20	25 / 20	M	12-20	25 / 20	M	12-20	25 / 20				
Alfalfa <i>Medicago sativa</i> L.	M	N	M	12-20	25 / 20	M	12-20	22 / 22	M	>16	25 / 25	M	>16	25 / 25	Little flowering if photoperiod <12; High requirement for K & Mg.
Alstroemeria (Peruvian Lily) <i>Alstroemeria</i> sp. L.	H	N	M	>12	25 / 20	M	>12	20 / 20	M	>12	20 / 15				Division of rhizomes. For continuous flowering, temp. must be < 13 C.
Annual Bluegrass <i>Poa annua</i> L.	L	N	M	12-20	23 / 23	M	12-20	20 / 20	M	12-20	20 / 20	M	12-20		
Apple <i>Malus domestica</i> Borkh.	M	N				H	12-20	25 / 20	H	12-20	25 / 20	H	12-20	25 / 20	Break bud dormancy: 2000 to 2500 hrs at 4 C
Arabidopsis <i>Arabidopsis thaliana</i> L. Heynh	M	N	L	8	24 / 24	L	8	20 / 20	L	16	20 / 20	L	>16	20 / 20	Light inhibits germination.
Avocado <i>Persea americana</i> Mill.	M	N				M	12-20	25 / 20	M	12-20	20 / 15	M	12-20	25 / 20	Water stress induces flowering.
Azalea <i>Rhododendron</i> spp.	M	L	L	>14	25 / 23	M	>14	25 / 20	M	10	25 / 25				5-cm cuttings, 2500 ppm IBA. 5C for six weeks required for flower development after initiation
Barley <i>Hordeum vulgare</i> L.	M	N	M	12	23 / 18	M	12	23 / 18	M	16-24	23 / 18	M	16-24	23 / 18	

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Bean <i>Phaseolus vulgaris</i> L.	M	N	M	12-20	22 / 22	M	12-20	22 / 22	M	12-20	22 / 18	M	12-20	25 / 20	Low night temperature for pollination and fruit set.
Blueberry, Highbush <i>Vaccinium corymbosum</i> L.	M	L				H	14	25 / 20	H	12-20	20 / 15	H	12-20	20 / 13	Break bud dormancy: 800 to 2500 hrs at 7.5 C. Initiate flower buds: < 12 hr photo period in fall for 50 days.
Blueberry, Rabbit-eye <i>Vaccinium ashei</i> Reade	L	L	H	12-20	25 / 20	H	14	25 / 20	H	12-20	25 / 20	H	12-20	25 / 20	Break bud dormancy: 300 to 800 hrs at 7 C. Flower bud initiation: < 12 hr photo period for 50 days in late fall.
Bramble <i>Rubus</i> spp.	L	N				M	12-20	25 / 20	M	12-20	25 / 20	M	12	25 / 20	Break bud dormancy: 750 to 2000 hrs at 4 C.
Cabbage <i>Brassica oleraceae</i> var. <i>capitata</i> L.	M	N	M	12-20	25 / 25	M	12-14	20 / 15	H	12-14	8 / 8	M	12-20	20 / 15	
Cactus, Thanksgiving <i>Schlumbergera truncata</i> (Haw.) Moran	M	N	M	>14	23 / 23	M	>14	25 / 18	M	<12	20 / 18				Commonly termed Christmas cactus. Single stem section cuttings.
Calceolaria (Pocketbook Plant) <i>Calceolaria herbeohybrida</i> Voss.	M	N	L	12	20 / 20	M	>18	20 / 15	M	<8 >18	20 / 15 20 / 15				Two pre-anthesis stages: 6 wks short day and cool; 4-5 wks long day.
Carnation <i>Dianthus caryophyllus</i> L.	H	N	L	>12	20 / 15	M	<12	20 / 15	M	>12	18 / 13				4 wks long day initiates buds.
Cherry <i>Prunus</i> spp.	M	N				H	12-20	25 / 20	H	12-20	25 / 20	H	12-20	25 / 20	Break bud dormancy: 750 to 2000 hrs at 4 C.
Chrysanthemum <i>Dendranthema grandiflorum</i> (Ramato) Kitam	H	N	L	16	23 / 23	M	16	25 / 18	M	10	25 / 15				5 cm cuttings with 2500 ppm IBA.

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Cineraria <i>Senecio cruentus</i> (Masson ex. L'Her.) D.C.	M	N	M	12	20 / 20	M	12	20 / 20	M	>12	20 / 13				In post-anthesis stage, do not allow to wilt.
Citrus <i>Citrus spp.</i>	M	N	M	12-20	28 / 23	H	12-20	28 / 23	H	12-20	28 / 23	H	12-20	28 / 23	Water stress induces flowering.
Cocklebur <i>Xanthium strumarium</i> L.	M	N	M	16	25 / 25	M	16-20	25 / 20	M	8	25 / 20	M	8	25 / 20	
Corn <i>Zea mays</i> L.	H	N	M	14	28 / 23	M-H	12-20	28 / 23	M-H	12-14	28 / 23	H	14	28 / 23	
Cosmos <i>Cosmos bipinnatus</i> Cav.	L	N	M	16	23 / 23	M	16	25 / 20	M	8	25 / 20				
Cotton <i>Gossypium hirsutum</i> L.	M	N	M	12-20	28 / 28	M	12-20	28 / 28	M	12	30 / 25	M	12-20	30 / 25	Most cultivars will flower under any photoperiod. Some cultivars require short days for flower initiation.
Cucumber <i>Cucumis sativus</i> L.	M	N	M	12-20	25 / 25	M	16	25 / 25	M	12-20	25 / 25	M	12-20	25 / 25	
Cyclamen <i>Cyclamen pesicum</i> Mill.	M	N	D	0	16 / 16	M	12	20 / 20	M	12	20 / 20				High temp. inhibits germination. In post-anthesis stage; do not allow to wilt.
Easter Lily <i>Lilium longiflorum</i> Thunb. var. <i>eximium</i> (Courtois) Baker	H	N				M	12	20 / 20	M	12	20 / 20				Bulbs cooled at 5 C for 6 weeks induces flowering.
Fuchsia <i>Fuchsia X hybrida</i> Hort. ex Vilm.	M	N	L	<12	23 / 23	M	<12	20 / 20	M	16	20 / 20				5-cm cuttings with 2500 ppm IBA.

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Geranium <i>Pelargonium spp.</i>	M	N	M	12-20	25 / 20	M	12-20	25 / 20	M	12-20	25 / 20				
Gerbera (Transvaal Daisy) <i>Gerbera jamesonii</i> Bolus ex Hook f.	H	N	L	>12	25 / 20	M	>12	25 / 18	M	>12	25 / 18				Seeds should not dry out.
Gloxinia <i>Sinningia speciosa</i> (Lodd.) Hiern	M	N	L	>12	20 / 20	M	>12	25 / 20	M	>12	25 / 20				Seeds uncovered on top of media.
Grape <i>Vitis spp.</i>	M	N	H	12-20	25 / 20	H	12-20	25 / 20	H	12-20	25 / 20	M	12-20	25 / 20	Break bud dormancy: 750 to 3000 hrs at 4 C.
Henbane <i>Hyocymus niger</i> L.	L	N	M	8	25 / 25	M	8	23 / 23	M	16	23 / 20				
Hydrangea <i>Hydrangea macrophylla</i> (Thunb.) Ser.	M	L,N	M	>14	23 / 23	M	>14	25 / 18	M	<14	25 / 15				5-cm cuttings with 2500 ppm IBA. Blue: pH<5.5. Pink: pH>6.5. 5 C for 6 wks required for flower development after initiation
Kalanchoe <i>Kalanchoe blossfeldiana</i> Poelln.	H	N	M	>14	23 / 23	M	>14	23 / 20	M	10	23 / 120				Seed or 5-7 cm cuttings.
Lambsquarters <i>Chenopodium album</i> L.	M	N	M	>14	25 / 20	M	>14	25 / 20	M	<12	25 / 20	M	<12	25 / 20	
Lettuce <i>Lactuca sativa</i> L.	M	N	L-M	12-20	25 / 20	M	12-20	25 / 20	M	12-20	25 / 20	M	12-20	25 / 20	Tip burn at high light, and high RH. 17 mol m ⁻² day ⁻¹ of PPF suggested.
Liatris (Gayfeather) <i>Liatris spp.</i>	H	N	L	>12	23 / 23	M	>12 Forcing	25 / 15	M	>12	25 / 15				Seed or division of corms. 2 C for 5 wks before forcing period.

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Marigold <i>Tagetes erecta</i> L.	M	N	M	12-20	25 / 20	M	12-20	25 / 20	M	12-20	25 / 20				
Oats <i>Avena sativa</i> L.	M	N	M	12-20	25 / 20	M	12-20	25 / 20	M	16-24	25 / 20	M	12-20		
Olive <i>Olea europaea</i> L.	M	N				H	14	23 / 18	H	12-20	12 / 12	H	12-20	23 / 18	Flower bud initiation: 750 to 2500 hrs at 12 C during early spring.
Pea <i>Pisum sativum</i> L.	M	N	M	12-20	23 / 23	M	12-20	23 / 23	M	12-20	20 / 15	M	12-20	23 / 18	Desirable at anthesis to reduce maximum temperature to 22C.
Peach <i>Prunus persica</i> (L.) Batsch	M	N				H	12-20	25 / 20	H	12-20	25 / 20	H	12-20	25 / 20	Break bud dormancy: 250 to 2000 hrs at 4 C
Peanut <i>Arachis hypogaea</i> L.	M	N	D	N/A	25 / 25	M	12-20	25 / 25	>M	12-20	30 / 23	>M	12-20	30 / 23	Plants flower under most photoperiods. Short days may increase harvest index.
Pear <i>Pyrus communis</i> L.	M	N				H	12-20	25 / 20	H	12-20	25 / 20	H	12-20	25 / 20	Break bud dormancy: 750 to 2500 hrs at 4 C
Pepper <i>Capsicum annuum</i> (L.) var. annuum	M	N	M	12-20	25 / 20	M	12-20	25 / 20	M	12-20	25 / 20	M	12-20	25 / 20	
Perilla <i>Perilla frutescens</i> (L.) Britt	L	N	M	16	25 / 25	M	16	20 / 20	M	8	20 / 20	M	8	20 / 20	
Petunia <i>Petunia x hybrida</i> Vilm.	M	N	M	12-20	25 / 20	M	12-20	25 / 20	M	16-20	25 / 20				

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Pharbitis <i>Pharbitis Nil</i> (L.) Roth	L	N	L	16	25 / 25	M	16	25 / 25	M	8	30 / 30				
Pigweed <i>Amaranthus</i> spp.	M	N	M	>16	25 / 20	M	>16	25 / 20	M	8	25 / 20				
Poinsettia <i>Euphorbia pulcherrima</i> Willd. ex Klotzch	H	N	L	>14	25 / 20	M	>14	25 / 20	M	10	25 / 18				5-cm cuttings with 2500 ppm IBA.
Potato, Sweet <i>Ipomea batatas</i> (L.) Lam.	M	N	M	12-20	25 / 25	L	<14	25 / 25	M	>14	25 / 25	M	>14	25 / 25	Requirements are for storage root formation Higher N levels favor vegetative growth; requires high K.
Potato, White <i>Solanum tuberosum</i> L.	M	N	M	12-20	23 / 18	M	12-20	23 / 18	M	12-20	23 / 18	M	12-20	23 / 18	Requirements are for tuberization. Long days with low PPF delays tuberization. pH<6.0.
Rice <i>Oryza sativa</i> L.	M	N	M	12-20	30 / 20	>M	12-20	30 / 20	>M	12-20	30 / 20	>M	12	30 / 20	Short day crop; critical daylength for flowering varies with cultivar.
Rose <i>Rosa mult. flora</i> Thunb.	H	N	L	12	23 / 23	M	12	23 / 18	M	12	23 / 18				5-cm cuttings with 2500 ppm IBA.
Ryegrass <i>Lolium multiflorum</i> Lam.	M	N	M	12-20	23 / 18	M	12-20	20 / 15	M	16	23 / 18				
Salvia <i>Salvia splendens</i> Sellow ex Schultes	L	N	M	24	23 / 23	M	12	25 / 20	M	12	25 / 20				
Scrophularia <i>Scrophularia marilandica</i> L.	L	N	L	8	20 / 13	M	8	20 / 20	M	16	20 / 20				

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Silene <i>Silene armeria</i> L.	L	N	D	N/A	25 / 25	M	8	20 / 20	M	16	20 / 20				
Sinapsis <i>Sinapsis alba</i> L.	L	N	M	12-20	25 / 25	M	12-20	20 / 20	M	8	20 / 20				
Snapdragon <i>Antirrhinum majus</i> L.	H	N	M	>12	23 / 23	M	>12	25 / 15	M	>12	20 / 13				Sow seed on top of moist media. Facultative long day for flowering.
Soybean <i>Glycine max</i> (L.) Merr	M	N	M	12	28 / 23	M	12-20	28 / 23	M	12-20	28 / 23	M	12	28 / 23	Short day crop; critical daylength for flowering varies with cultivar
Spinach <i>Spinacia oleracea</i> L.	M	N	M	12	20 / 20	M	12	20 / 20	M	>15	25 / 25	M	>15	25 / 25	Elevated temperatures encourage earlier flowering.
Strawberry <i>Fragaria x ananassa</i> Duch.	M	N	M	12-20	18 / 18	M	12-20	20 / 15	M	<12	20 / 15	M	12-20	20 / 15	For day neutral cultivars only: exposing crowns to 4-6 wks at 4 C will stimulate flowering.
Tobacco <i>Nicotiana tabacum</i> L.	M	N	M	12-20	25 / 20	M	12-20	25 / 20	M	12-20	25 / 20	M	12-20	25 / 20	
Tomato <i>Lycopersicon esculentum</i>	M	N	M	12-20	25 / 20	H	12-20	25 / 20	H	12-20	25 / 20	H	12-20	25 / 20	Requires high K and Ca. High nutrition may induce fruit set.
Wheat <i>Triticum aestivum</i> L.	M	N	M	12-20	25 / 20	M	12-20	20 / 15	M	12-20	23 / 18	H	12-20	23 / 18	Winter wheat requires cold treatment (vernalization) for floral induction. Long photoperiod decreases time to flowering.

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