

Raker Germination Recommendations

For 128 cell trays



Species	Plug age (weeks)	Overstart %	SPC	Germ Temp (F)	Cover
Abutilon	6	30-55	1	72-76	Yes
Achillea filipendulina	8	12	3	72-76	No
Achillea millefolium	8	12	3	72-76	No
Acinos alpinus	8	27	3	72-76	No
Acmella oleracea (Spilanthes)	8	12	1	72-76	No
Agastache foeniculum	7	12	2	72-76	No
Agastache rupestris	7	12	2	72-76	No
Ageratum	6	10-30	2	72-76	No
Alcea rosea	4	10-100	2	72-76	Yes
Alchemilla mollis	10	20	3	76-80	No
Alternanthera dentata	7	15-40	1	72-76	No
Alyssum montanum	8	10-20	4	72-76	No
Ammi majus	7	12	4	72-76	No
Ammobium alatum	5	12	2	72-76	No
Anacyclus depressus	8	12	3	72-76	No
Anchusa capensis	7	40	2	72-76	Yes
Anemanthele lessoniana	9	12	1	76-80	No
Anemone sylvestris	12	17	2	Cool Chamber	Yes
Angelonia	9	10-50	1	72-76	No
Aquilegia alpina	9	12	3	72-76	Yes
Aquilegia canadensis	11	12	2	72-76	Yes
Aquilegia flabellata	9	10-100	2	72-76	Yes
Aquilegia vulgaris	9	10-100	3	72-76	Yes
Aquilegia x hybrida	9	12-40	3	72-76	Yes
Arabis blepharophylla	8	12	4	72-76	No
Arabis caucasica	8	10-50	4	72-76	No
Arenaria montana	8	10-80	5	Cool Chamber	No
Armeria maritima	10	10-50	3	Cool Chamber	No
Armeria pseudarmeria	7	12	3	Cool Chamber	No
Armeria x hybrida	10	67	3	Cool Chamber	No
Artemisia annua	6	12	4	72-76	No
Artemisia dracunculus (Russian Tarragon)	6	12	6	72-76	No
Aruncus dioicus	13	10-25	3	Cool Chamber	No
Asclepias curassavica	8	10-50	2	72-76	Yes
Asclepias incarnata	8	10-70	2	72-76	Yes
Asclepias tuberosa	8	25-100	2	72-76	Yes
Asparagus densiflorus myersii	15	150	1	72-76	Yes
Asparagus sprengeri	15	64	1	72-76	Yes
Aster alpinus	8	12	3	72-76	No
Aster tongolensis	8	22	3	72-76	No
Astilbe arendsii	11	10-20	3	Warm Chamber	No

Species	Plug age (weeks)	Overstart %	SPC	Germ Temp (F)	Cover
<i>Astilbe chinensis</i> v. <i>pumila</i>	10	17	5	Warm Chamber	No
<i>Aubrieta</i> x <i>hybrida</i>	8	10-50	4	72-76	No
<i>Aurinia saxatilis</i> (<i>Alyssum</i>)	8	10-60	4	72-76	No
<i>Bacopa</i> (<i>Sutera</i>)	8	12	1	72-76	No
<i>Baptisia australis</i>	9	25-120	1	Cool Chamber	No
Basil	4	12	4	72-76	No
<i>Begonia boliviensis</i>	8	27	1	76-80	No
<i>Begonia fibrous</i>	8	12-17	2	76-80	No
<i>Begonia tuberosus</i>	10	10-100	2	76-80	No
<i>Begonia</i> x <i>hybrida</i>	8	12-17	2	76-80	No
<i>Bellis perennis</i>	7	12-30	2	64-68	No
<i>Bergenia cordifolia</i>	10	12	3	Warm Chamber	No
<i>Bracteantha bracteata</i>	6	100	2	72-76	No
<i>Briza media</i>	8	12	2	72-76	No
Broccoli	5	12	1	72-76	Yes
<i>Browallia</i>	9	12	5	72-76	No
<i>Buddleia Davidii</i>	10	17	4	72-76	No
Cabbage, flowering	4	12	1	64-68	Yes
<i>Calendula officinalis</i>	5	12	2	72-76	Yes
<i>Callirhoe Involucrata</i>	6	50	2	72-76	Yes
<i>Campanula carpatica</i>	12	12-30	5	76-80	No
<i>Campanula cochlearifolia</i>	11	10-30	1	76-80	No
<i>Campanula glomerata</i>	9	10-20	5	76-80	No
<i>Campanula persicifolia</i>	11	20-70	5	76-80	No
<i>Campanula rotundifolia</i>	9	10-50	5	76-80	No
Caraway	7	37	4	72-76	Yes
<i>Carex buchananii</i>	9	17	2	76-80	No
<i>Carex comans</i>	9	17	2	76-80	No
<i>Carex comans</i> v. <i>stricta</i>	9	17	2	76-80	No
<i>Carex flagellifera</i>	9	17	2	76-80	No
<i>Catananche caerulea</i>	9	17	2	72-76	Yes
<i>Catharanthus</i> (<i>Vinca</i>)	8	12	2	72-76	Yes
<i>Celosia cristata</i>	6	10-30	2	72-76	Yes
<i>Celosia plumosa</i>	6	10-30	2	72-76	Yes
<i>Celosia spicata</i>	6	12	2	72-76	Yes
<i>Centaurea cyanus</i>	6	25	3	72-76	Yes
<i>Centaurea dealbata</i>	8	100	2	72-76	Yes
<i>Centaurea montana</i>	7	136	2	72-76	Yes
<i>Centranthus ruber</i>	8	15-40	3	Cool Chamber	No
<i>Cerastium tomentosum</i>	8	18	4	72-76	Yes
<i>Cerithe major</i>	5	25	2	76-80	Yes
<i>Chaenorrhinum origanifolium</i>	8	30	2	72-76	No
Chamomile German	6	17	4	72-76	No
Chamomile Roman	6	12	4	72-76	No
<i>Chasmanthium latifolium</i>	9	42	2	72-76	No

Species	Plug age (weeks)	Overstart %	SPC	Germ Temp (F)	Cover
Chives (<i>Allium schoenoprasum</i>)	7	12	6	72-76	No
Chives Garlic (<i>Allium tuberosum</i>)	7	12	6	72-76	Yes
Cilantro	5	12	3	72-76	Yes
<i>Cineraria cruentus</i>	7	20-50	1.2	76-80	No
<i>Clematis integrifolia</i>	12	72	2	72-76	No
<i>Clematis tangutica</i>	7	22	2	72-76	No
Cleome	7	10-60	3	64-68	Yes
Coleus	7	10-20	1	72-76	No
<i>Coreopsis auriculata</i>	9	32	3	Warm Chamber	No
<i>Coreopsis grandiflora</i>	9	20-50	3	Warm Chamber	No
Coriander	5	12	3	72-76	Yes
<i>Coronilla varia</i>	7	22	2	Cool Chamber	Yes
<i>Cortaderia selloana</i>	8	12	4	72-76	No
<i>Corynephorus canescens</i>	8	12	2	72-76	No
<i>Cosmos bipinnatus</i>	4	12	2	64-68	Yes
<i>Cosmos sulfureus</i>	4	12	2	64-68	Yes
<i>Cyperus alternifolia</i>	8	12	2	76-80	No
<i>Cyperus papyrus</i>	10	17	3	76-80	No
Dahlberg daisy	6	7	4	76-80	No
Dahlia	4	40	1.5	72-76	Yes
<i>Delphinium belladonna</i>	8	15-30	2.5	Cool Chamber	Yes
<i>Delphinium elatum</i>	8	20-75	1	Cool Chamber	Yes
<i>Delphinium grandiflorum</i>	8	10-50	3	Cool Chamber	Yes
<i>Delphinium nudicaule</i>	10	37	3	Cool Chamber	Yes
<i>Dianthus barbatus</i>	8	12	2	72-76	No
<i>Dianthus caryophyllus</i>	8	15-60	2	72-76	No
<i>Dianthus chinensis</i>	7	10-30	1	72-76	No
<i>Dianthus deltoides</i>	8	12	3	72-76	No
<i>Dianthus gratianopolitanus</i>	8	12	2	72-76	No
<i>Dianthus Interspecific</i>	7	10-30	1	72-76	No
<i>Dianthus plumarius</i>	8	10-50	1-2	72-76	No
Diascia	7	15-30	1	72-76	No
<i>Dichondra argentea</i>	8	17	1	72-76	Yes
<i>Dichondra repens</i>	8	12	1	72-76	Yes
<i>Digitalis grandiflora</i>	8	12	4	72-76	No
<i>Digitalis mertonensis</i>	8	25	4	72-76	No
<i>Digitalis purpurea</i>	7	10-20	4	72-76	No
<i>Digitalis thapsi</i>	8	12	4	72-76	No
Dill	5	12	4	72-76	No
<i>Doronicum orientale</i>	8	20-30	3	Warm Chamber	No
Dusty miller	7	10-25	2	72-76	No
<i>Echinacea paradoxa</i>	8	22	2	72-76	Yes
<i>Echinacea purpurea</i>	8	10-50	2	72-76	Yes
<i>Echinacea tennesseensis</i>	8	27	1	72-76	Yes

Species	Plug age (weeks)	Overstart %	SPC	Germ Temp (F)	Cover
Echinacea x hybrida	8	12	2	72-76	Yes
Echinops bannaticus	8	22	2	72-76	Yes
Echinops ritro	8	93	2	72-76	Yes
Echinops sphaerocephalus	8	12	2	72-76	Yes
Eggplant	6	10-30	1	72-76	Yes
Eragrostis elliotii	6	12	1	72-76	No
Erianthus ravennae	8	12	2	72-76	No
Eryngium planum	7	30-100	2	72-76	No
Erysimum allionii	6	12	2	72-76	Yes
Erysimum suffruticosum	7	12	3	72-76	No
Eucalyptus cinerea	8	12	2	72-76	Yes
Euphorbia characias spp. wolfenii	8	12	2	72-76	Yes
Euphorbia myrsinites	8	12	3	72-76	Yes
Euphorbia polychroma	8	17	3	72-76	Yes
Fennel vulgare	5	10-40	4	72-76	No
Festuca ovina	8	12	3	72-76	No
Fragaria vesca	9	37	1	72-76	No
Gaillardia aristata	8	37	2	72-76	Yes
Gaillardia grandiflora	8	10-50	2	72-76	Yes
Gazania	6	10-12	2	72-76	Yes
Gerbera	7	15-50	1	76-80	No
Geum chilense	8	10-25	2	72-76	No
Geum coccineum	9	20-50	3	72-76	No
Gomphrena	6	10-30	2	72-76	No
Gypsophila fastigata	7	35	4	72-76	No
Gypsophila muralis	7	7	1	72-76	No
Gypsophila paniculata	8	12	4	72-76	No
Gypsophila repens	8	10-15	4	72-76	No
Helenium amarum	6	12	1	72-76	No
Helenium autumnale	8	25-40	2	72-76	No
Helenium hoopesii	11	12	2	72-76	No
Helichrysum petiolare	8	21	1	72-76	No
Heliopsis helianthoides	7	105	2	72-76	Yes
Heliotrope	7	60-100	2	72-76	No
Heuchera	10	20-150	5	Warm Chamber	No
Hibiscus acetosella	5	10-100	1	72-76	Yes
Hibiscus moscheutos	5	42	1	72-76	Yes
Hypericum calycinum	11	100	3	Warm Chamber	No
Hypoestes	6	10-30	2	72-76	Yes
Iberis sempervirens	8	31	4	Cool Chamber	No
Impatiens New Guinea	8	30-65	1	Warm Chamber	Yes
Impatiens wallerana	6	10-30	1.2	72-76	No
Isolepis cernuus	10	16	1	76-80	No
Juncus effusus ssp. spiralis	10	12	MP	76-80	No

Species	Plug age (weeks)	Overstart %	SPC	Germ Temp (F)	Cover
Juncus Inflexus	10	30	1	76-80	No
Juncus pallidus	10	12	1	76-80	No
Juncus tenuis	10	12	1	76-80	No
Kale	4	10-30	1	64-68	Yes
Kale, flowering	4	10-25	1	64-68	Yes
Kniphofia hirsuta	10	22	2	72-76	Yes
Kniphofia uvaria	10	25-30	2	72-76	Yes
Koeleria glauca	9	12	1	72-76	No
Lathyrus latifolia	6	12	2	64-68	Yes
Lavandula angustifolia	11	12	3	Cool Chamber	No
Lavandula stoechas	11	12	2	Cool Chamber	No
Lemon Balm (Melissa officinalis)	6	12	5	72-76	No
Leontopodium alpinum	10	12	4	76-80	No
Leucanthemum superbum	8	10-50	3	72-76	No
Liatris spicata	10	10-15	4	72-76	Yes
Limonium latifolium	10	20	3	72-76	No
Limonium perezii	10	12	3	72-76	No
Limonium tartaricum	10	18	3	72-76	Yes
Linum perenne	8	12	4	72-76	No
Lisianthus	10	25-40	1	76-80	No
Lobelia cardinalis	11	27	5	Warm Chamber	No
Lobelia erinus	8	12	1	72-76	No
Lobelia siphilitica	10	12	5	72-76	No
Lobelia speciosa	10	15-30	3	76-80	No
Lunaria annua	7	12	2	72-76	Yes
Lupinus polyphyllus	5	10-50	2	72-76	Yes
Lychnis coronaria	8	12	3	72-76	No
Lychnis shalcedonica	7	12	3	72-76	No
Lychnis x arkwrightii	8	12	3	72-76	No
Malva sylvestris	6	75-150	2	72-76	Yes
Marigold American	5	10-35	1.2	64-68	Yes
Marigold French	4	10-30	1.2	64-68	Yes
Marjoram Sweet	6	12	4	72-76	No
Melampodium	5	10-50	2	72-76	Yes
Milium effusum	9	20	1	72-76	No
Millet, ornamental	4	25-40	1	72-76	Yes
Mimulus	6	12	2	72-76	No
Monarda citriodora	7	14	4	72-76	No
Monarda didyma	7	10-20	3	72-76	No
Myosotis sylvatica	7	10-80	3	72-76	No
Nemesia	8	10-20	1	72-76	No
Nepeta mussinii	6	17	3	72-76	No
Nicotiana	6	10-30	2	72-76	No
Nierembergia	8	12	5	72-76	No
Oenothera fruticosa	9	37	3	Cool Chamber	No

Species	Plug age (weeks)	Overstart %	SPC	Germ Temp (F)	Cover
<i>Oenothera missouriensis</i>	9	17	3	72-76	No
<i>Oregano vulgare</i>	7	45	6	72-76	No
<i>Oregano</i> , Greek (<i>O. heracleoticum</i>)	7	12	6	72-76	No
Ornamental pepper	5	10-20	1.5	72-76	Yes
<i>Osteospermum</i>	7	20-30	1.1	72-76	Yes
Pansy	7	5-30	3	Cool Chamber	Yes
<i>Papaver alpinum</i>	10	82	2	Cool Chamber	No
<i>Papaver nudicaule</i>	9	15-70	2	Cool Chamber	No
<i>Papaver orientale</i>	10	20-100	2	64-68	No
Parsley Curled	7	20-30	4	76-80	Yes
<i>Pelargonium</i> , diploid	7	10-30	1.2	72-76	Yes
<i>Pelargonium</i> , ivy	7	10-40	1.2	72-76	Yes
<i>Pennisetum alopecuroides</i>	8	12	2	72-76	Yes
<i>Penstemon barbatus</i>	7	10-35	4	72-76	No
<i>Penstemon digitalis</i>	8	12	4	76-80	No
<i>Penstemon Smallii</i>	9	12	3	76-80	No
<i>Penstemon x mexicali</i>	7	10-40	4	76-80	No
Pentas	9	20-60	1	76-80	No
Pepper, Bell	7	10-15	1	72-76	Yes
Pepper, Hot	7	10-50	1	72-76	Yes
Peppermint sp.	8	22	6	72-76	No
<i>Petunia grandiflora</i>	7	10-30	2	72-76	No
<i>Petunia hedgiflora</i>	7	10-40	1	72-76	No
<i>Petunia milliflora</i>	7	15-40	1	72-76	No
<i>Petunia multiflora</i>	7	10-50	1	72-76	No
<i>Phlox drummondii</i>	7	12	2	72-76	Yes
<i>Physalis alkekengii</i>	7	12	3	72-76	No
<i>Physostegia virginiana</i>	9	35-40	4	72-76	No
<i>Platycodon grandiflorus</i>	8	10-30	2	72-76	No
<i>Plectranthus argenteus</i>	5	10-30	1	76-80	No
<i>Polemonium boreale</i>	9	25	3	72-76	No
<i>Polemonium caeruleum</i>	9	27	3	72-76	No
<i>Polemonium viscosum</i>	9	37	3	72-76	No
<i>Porphyrocoma pohliana</i>	7	38	1	76-80	Yes
Portulaca	7	12	1-4	72-76	No
<i>Potentilla fragiformis megalantha</i>	9	12	3	72-76	No
<i>Potentilla nepalensis</i>	8	12	3	72-76	No
<i>Potentilla neumanniana</i>	8	51	3	72-76	No
<i>Primula acaulis</i>	10	20-100	1	Cool Chamber	No
<i>Primula capitata</i>	10	32	2	64-68	No
<i>Primula denticulata</i>	11	32	2	Cool Chamber	No
<i>Primula malacoides</i>	10	22	2	Cool Chamber	No
<i>Primula obconica</i>	10	12	2	64-68	No
<i>Primula polyanthus</i>	10	10-30	2	Cool Chamber	No
<i>Primula vialii</i>	12	22	3	Cool Chamber	No
<i>Prunella grandiflora</i>	8	17	2	72-76	No

Species	Plug age (weeks)	Overstart %	SPC	Germ Temp (F)	Cover
<i>Pulsatilla vulgaris</i>	12	10-50	2	Cool Chamber	Yes
<i>Ranunculus</i>	14	30-75	1.5	Cool Chamber	No
<i>Rudbeckia fulgida</i> var. <i>fulgida</i>	9	102	3	Warm Chamber	No
<i>Rudbeckia fulgida</i> var. <i>sullivantii</i>	9	10	2	76-80	No
<i>Rudbeckia hirta</i>	7	15-130	3	72-76	No
<i>Rudbeckia triloba</i>	9	20	3	Warm Chamber	No
<i>Ruellia brittoniana</i>	7	12	1	72-76	No
<i>Rumex sanguineus</i> ssp. <i>sanguineus</i>	8	12	2	72-76	No
<i>Sagina subulata</i>	8	12	5	76-80	No
<i>Salvia argentea</i>	6	12	2	72-76	No
<i>Salvia coccinea</i>	6	12	2	72-76	Yes
<i>Salvia farinacea</i>	6	10-20	2	72-76	Yes
<i>Salvia horminum</i>	6	12	2	72-76	Yes
<i>Salvia nemorosa</i>	9	10-20	3	72-76	No
<i>Salvia officinalis</i> (Culinary Sage)	6	17	3	72-76	Yes
<i>Salvia splendens</i>	6	12	2	72-76	Yes
<i>Salvia x sylvestris</i>	9	15-70	3	72-76	No
<i>Santolina chamaecyparissus</i>	10	12	3	72-76	No
<i>Sanvitalia procumbens</i>	7	12	3	72-76	No
<i>Saponaria ocymoides</i>	8	30	4	Cool Chamber	No
Savory Summer	7	12	6	72-76	No
<i>Saxifraga arendsii</i>	13	10-20	5	Warm Chamber	No
<i>Scabiosa atropurpurea</i>	7	50	2	72-76	Yes
<i>Scabiosa Caucasica</i>	7	10-50	2	72-76	Yes
<i>Scabiosa Japonica</i> v. <i>alpina</i>	7	25-40	2	72-76	Yes
<i>Sedum acre</i>	9	12	5	72-76	No
<i>Sedum forsterianum</i>	13	17	4	72-76	No
<i>Sedum oreganum</i>	9	17	4	72-76	No
<i>Sedum spurium</i>	10	10-15	5	72-76	No
<i>Sempervivum</i>	13	12	4	Cool Chamber	No
<i>Sidalcea x hybrida</i>	8	27	2	Cool Chamber	No
<i>Silene Schafta</i> sp.	8	83	3	72-76	No
Snapdragon	6	10-20	2	72-76	No
<i>Solidago canadensis</i>	9	57	3	72-76	No
<i>Sorghastrum nutans</i>	8	102	2	72-76	Yes
Spearmint	8	12	6	72-76	No
<i>Stachys byzantina</i>	6	32	3	Warm Chamber	No
<i>Stevia rebaudiana</i>	8	12	2	72-76	No
<i>Stipa lessingiana</i>	9	12	1	76-80	No
<i>Stipa tenuissima</i>	10	12	1	76-80	No
Stock (<i>Matthiola</i>)	6	12	2	72-76	Yes
Strawberry (<i>Fragaria</i>)	9	25-50	1	72-76	No
Swiss Chard	4	12	2	72-76	Yes

Species	Plug age (weeks)	Overstart %	SPC	Germ Temp (F)	Cover
Talinum paniculatum	8	20	1	72-76	No
Tanacetum coccineum	9	10-30	3	72-76	No
Tanacetum niveum	8	12	3	72-76	No
Tanacetum parthenium	7	10-90	4	72-76	No
Tecoma stans	8	45	1	72-76	Yes
Thalictrum aquilegifolium	10	42	3	76-80	Yes
Thalictrum rochebrunianum	10	50	3	76-80	Yes
Thymus serpyllum	8	12	4	72-76	No
Thymus vulgaris	8	15	6	72-76	No
Tithonia rotundifolia	5	12	2	72-76	Yes
Tomatillo	6	15	1.2	72-76	Yes
Tomato	5	10-30	1.3	72-76	Yes
Torenia	6	12	2	72-76	No
Trachelium caeruleum	10	27	1	76-80	No
Trollius	9	27	2	72-76	No
Verbascum phoeniceum	7	12	2	72-76	No
Verbascum x hybrida	7	37	1	72-76	No
Verbena	7	10-20	2	72-76	Yes
Verbena rigida	8	100	3	72-76	Yes
Verbena speciosa	7	22	2	72-76	Yes
Veronica porphyriana	8	12	4	72-76	No
Veronica repens	7	12	3	72-76	No
Veronica spicata	7	12	3	72-76	No
Veronica subsessilis	9	12	2	72-76	No
Viola cornuta	7	5-10	3	Cool Chamber	Yes
Viola tricolor	7	10	3	Cool Chamber	Yes
Zinnia elegans	4	10-25	1.5	64-68	Yes
Zinnia Interspecific	5	10-30	1.5	64-68	Yes