

| Kind of seed  | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata          | Temp°C                                 | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference          |
|---|--------------------------------|--|-------------------------|--|------------------------|------------------------|--|----------------------|--------------------|
| <i>Abronia umbellata</i><br>Pink sand verbena                 |                                |  | S                       | 20-30                                  | 10                     | 28                     |  |                      | 1                  |
| <i>Abronia umbellata</i><br>ssp. <i>breviflora</i>            |                                |  | TB<br>S<br>(sand)       | 20-30                                  | 7                      | 14                     | Prechill 3 weeks at 4°C. Seeds must be removed from fruit.   |                      | 70                 |
| <i>Abrus precatorius</i><br>Rosary pea                        |                                |  | S                       | 20-30                                  | 5                      | 20                     |  |                      | 1                  |
| <i>Abutilon hybridum</i><br>Chinese lantern                   |                                | 10/                                    | BP<br>TP,BP             | 20<br>20-30,20                         | 5<br>5                 | 20<br>27               |  |                      | 1<br>1             |
| <i>Abutilon theophrasti</i><br>Butter-print                   |                                |  | B                       | 35                                     | 4                      | 7                      | 2°-5°C for 2 days or ½-1 min. in boiling water   |                      | 3                  |
| <i>Acamptopappus</i><br><i>sphaerocephalus</i><br>Goldhead    | 1,015                          |  | TB                      | 20                                     | 5                      | 14                     | Prechill (5°C) for fresh and dormant seed.   |                      | 26                 |
| <i>Acanthus mollis</i><br>Artist's acanthus                   |                                |  | BP                      | 20                                     | 7                      | 21                     |  |                      | 1                  |
| <i>Achillea filipendulina</i><br>Yarrow, fern-leaf            | 8933                           | 0.5/                                   | TP<br>TP<br>TP<br>TP,BP | 20,20-30<br>20-30<br>20-30<br>20-30,20 | 7<br>5<br>7<br>5       | 14<br>15<br>14<br>14   | Light<br>Light   |                      | 6<br>1<br>4<br>2   |
| <i>Achnatherum coronatum</i><br>(syn. <i>Stipa coronata</i> ) | 276                            |  | TCT                     | 15-25                                  | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26                 |
| <i>Achnatherum speciosum</i><br>(syn. <i>Stipa speciosa</i> ) | 326                            |  | TCT                     | 15-25                                  | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26                 |
| <i>Achnatherum splendens</i>                                  | 869                            |  | TB                      | 15-25                                  | 7                      | 14                     | Light, KNO <sub>3</sub> , Prechill at 4°C for 7 days.  |                      | 71                 |
| <i>Achras zapota</i><br>Manilkara zapota                      | 2 <sup>1</sup>                 |  | S                       | 20-30 <sup>2</sup>                     |                        | 29                     | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature                                       |                      | 64                 |
| <i>Aconitum napellus</i><br>Monkshood                         | 446<br>352                     | 6/60                                   | B<br><br>TP             | 20<br><br>21<br>20                     | 7<br><br>4             | 14<br><br>10<br>21     | Requires cold treatment<br>Prechill 3 weeks at 2°-4°C  |                      | 6<br>8<br>54<br>2A |
| <i>Adonis aestivalis</i><br>Pheasant's-eye                    |                                |  | BP<br>BP                | 10<br>10,20-30                         | 14<br>7                | 42<br>35               | Prechill   |                      | 1<br>2A            |

| Kind of seed  | Approx. # seeds per gram | Min. Wt. in grams purity/ nox | Sub-strata              | Temp°C                                       | First count days  | Final count days     | Additional Directions   | See Sec. 4.2 and 4.9 | Reference                      |
|---|--------------------------|-------------------------------|-------------------------|--|-------------------|----------------------|---|----------------------|--------------------------------|
| <i>Aeluropus litoralis</i>                              | 2487                     |                               | TB                      | 20-30  |                   |                      | Light, KNO <sub>3</sub>   |                      | 71                             |
| <i>Agastache foeniculum</i><br>Anise hyssop             | 2174                     | 1.1/11                        | TB                      | 20-30  | 7                 | 16                   | KNO <sub>3</sub>  |                      | 72                             |
| <i>Agastache rugosa</i><br>Korean mint                  | 2658                     | 0.9/9                         | TB                      | 20-30  | 8                 | 16                   | KNO <sub>3</sub>  |                      | 72                             |
| <i>Agastache urticifolia</i><br>Nettleleaf giant hyssop |                          |                               | P(a)<br>P(a)            | 15<br>20                                     |                   |                      | Light<br>Dark   |                      | 8<br>8                         |
| <i>Agave spp.</i><br>Century plant                      |                          |                               | TP                      | 20-30  | 14                | 35                   | Light   |                      | 1                              |
| <i>Agoseris glauca</i>                                  | 813                      | 3.08                          | TB                      | 15-25  | 7                 | 28                   | Light, prechill at 3°-5°C.  |                      | 73                             |
| <i>Agoseris grandiflora</i><br>Large-flowered agoseris  |                          |                               | P(a)                    | 15,20  |                   |                      | Dark  |                      | 8                              |
| <i>Agrimonia odorata</i><br>Agrimony "Topaz"            | 26                       | 100/1000                      | HLH<br>RE               | 20   | 7                 | 35                   | Soak seed at 20°C in H <sub>2</sub> O overnight.<br>(Also TZ if dormant).   |                      | 72                             |
| <i>Agropyron dasystachyum</i><br>Wheatgrass, thickspike |                          | 8/15/150                      | TP<br>P<br>P<br>B<br>TB | 20-30,15-25<br>20-30<br>15-20<br>20<br>20-30 | 7<br>35<br>5<br>5 | 21<br>21<br>14<br>14 | Prechill, KNO <sub>3</sub><br>KNO <sub>3</sub> ; prechill 5 days<br>Light; prechill 7 days<br>Prechill 3 days<br>Light, KNO <sub>3</sub> ; prechill 5 days at 5°C |                      | 2<br>21<br>10<br>11<br>5<br>67 |
| <i>Agropyron fragile</i><br>"Siberian wheat grass"      | 324                      |                               | TB                      | 15-25  | 5                 | 14                   | Light, KNO <sub>3</sub> 0.2%, Prechill at 5°C for 7 days.   |                      | 71                             |
| <i>Agropyron michnoi</i><br>Wheatgrass, transbaikal     | 356                      |                               |                         |  |                   |                      | Use method for <u>A. cristatum</u> in the AOSA rules  |                      | 67                             |
| <i>Agropyron mongolicum</i>                             | 396                      |                               | TB                      | 15-25  | 5                 | 14                   | Light, KNO <sub>3</sub> 0.2%, Prechill at 5°C for 7 days.   |                      | 71                             |
| <i>Agropyron pungans</i><br>Wheatgrass, stiffleaf       |                          |                               | P                       | 20-30  | 4                 | 10                   | Light   |                      | 12                             |
| <i>Agropyron repens</i><br>Quackgrass                   | 270                      |                               | P<br>TP                 | 15-30<br>20-30,15-25                         | 5<br>7            | 14<br>21             | <br>Prechill, KNO <sub>3</sub>  |                      | 67<br>3<br>2                   |
| <i>Agropyron riparium</i><br>Wheatgrass, streambank     | 343                      |                               | P<br>B<br>TP            | 20-30<br>20-30<br>20-30,15-25                | 5<br>5<br>7       | 14<br>14<br>21       | Light; prechill 5 days<br>Prechill 5 days at 5°C<br>Prechill, KNO <sub>3</sub>  |                      | 67<br>57,58,59<br>5<br>2       |

| Kind of seed  | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference   |    |
|---|--------------------------------|--|----------------|--------|------------------------|------------------------|--|----------------------|-------------|----|
| <i>Agropyron scabrifolium</i>                                 |                                |  | TB             | 15-25  | 5                      | 14                     | Light, KNO <sub>3</sub> 0.2%, Prechill at 5°C for 7 days, try first count at 10 days, germs slower than <i>Agropyron cristatum</i> . |                      | 71          |    |
| <i>Agropyron semicostatum</i><br>Wheatgrass, drooping         | 130                            |  | P              | 20     | 5                      | 10                     | 0.2% KNO <sub>3</sub><br>Light<br>Dark   |                      | 12          |    |
|   |                                |  | P              | 15-30  |                        |                        |  |                      | 13          |    |
|   |                                |  | P              | 15     |                        |                        |  |                      | 13          |    |
|   |                                |  |                |        |                        |                        |  |                      | 67          |    |
| <i>Agropyron sibericum</i><br>Wheatgrass, siberian            | 341                            |  | P              | 15-25  | 7                      | 10                     | KNO <sub>3</sub> , Prechill<br>Light, 0.2% KNO <sub>3</sub>  |                      | 27          |    |
|   | 374                            |  |                |        |                        |                        |  |                      | 67          |    |
| <i>Agropyron subsecundum</i><br>Wheatgrass, bearded           | 257                            |  |                |        |                        |                        | Use method for <i>A. trachycaulum</i> in the AOSA rules  |                      | 67<br>57,58 |    |
| <i>Agrostemma githago</i><br>Corn cockle                      | 185                            | 14/140                                 | B              | 20     | 4                      | 5                      | KNO <sub>3</sub> , Prechill at 5°C for 9 days.   |                      | 9           |    |
|   |                                |  | TB             | 15     |                        |                        |  |                      | 14          |    |
| <i>Agrostemma githago cu.</i><br><i>Milas</i><br>Corn cockle  |                                |  | TP             | 20-30  | 4                      | 14                     | Light; prechill 5-7 days at 10°C   |                      | 1           |    |
| <i>Agrostis diegoensis</i><br>(syn. <i>Agrostis pallens</i> ) | 8,929                          |  | TCT            | 15-25  | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.  |                      | 26          |    |
| <i>Agrostis exarata</i><br>Spike bentgrass                    | 12,373                         |  | TCT            | 15-25  | 5                      | 21                     | Prechill (5°C) and GA <sub>3</sub> (400 ppm) for fresh and dormant seed.   |                      | 26          |    |
| <i>Agrostis nebulosa</i><br>Cloud grass                       |                                |  | TP             | 10-30  | 5                      | 15                     | KNO <sub>3</sub> ; prechill 5-7 days   |                      | 1           |    |
|   |                                |  | P              | 20-30  |                        |                        |  |                      | 7           | 21 |
| <i>Agrotriticum spp.</i><br>Agrotriticum                      |                                | 100/50                                 | T              | 15     | 4                      | 7                      | Old seed; for fresh seed, prechill at 5°C and test at 20°C   |                      | 21          |    |
|   |                                | 0                                      | T              | 15     |                        |                        |  |                      | 7           | 5  |
|   |                                | 100/50                                 |                |        |                        |                        |  |                      |             |    |
|   |                                | 0                                      |                |        |                        |                        |  |                      |             |    |
| <i>Aira capillaria</i>  |                                |  | TP             | 10-30  | 5                      | 15                     | Light  |                      | 1           |    |
| <i>Aira spp.</i><br>Hairgrass                                 |                                | 0.5/5                                  | P,TB           | 20-30  | 0                      | 21                     | Light  |                      | 5           |    |
| <i>Alchemilla mollis</i><br>Lady's Mantle – Thriller          | 1640                           | 1.5/<br>15                             | TB<br>(Moist)  | 20     | 7                      | 21<br>(30)             | Use KNO <sub>3</sub> on ½ test.  |                      | 72          |    |
| <i>Alchemilla vulgaris</i><br>Lady's Mantle                   | 1640                           | 1.5/<br>15                             | TB<br>(Moist)  | 20     | 7                      | 21                     | KNO <sub>3</sub> , Prechill at 5°C for 10 days,<br>GA <sub>3</sub> , Prechill at 5°C for 10 days<br>(500 – 1000 ppm).                |                      | 72          |    |
| <i>Alchemilla xanthochlora</i>                                | 1640                           | 1.5/                                   | TB             | 20     | 7                      | 21                     | KNO <sub>3</sub> , Prechill at 5°C for 10 days,  |                      | 72          |    |

| Kind of seed   | Approx. # seeds per gram | Min. Wt. in grams purity/ nox | Sub-strata | Temp°C            | First count days | Final count days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference      |
|--|--------------------------|-------------------------------|------------|-------------------|------------------|------------------|--|----------------------|----------------|
| Lady's Mantle  |                          | 15                            | (Moist)    |                   |                  |                  | GA <sub>3</sub> , Prechill at 5°C for 10 days (500 – 1000 ppm).                            |                      |                |
| <i>Allenrolfea occidentalis</i><br>Iodine bush                             | 8,959                    |                               | TB         | 20                | 5                | 21               | Prechill (5°C) for fresh and dormant seed.   |                      | 26             |
| <i>Allium ampeloprasum</i><br>"elephant garlic"                            | 550                      |                               | TB         | 20                | 14               | 30 +/-           | Light, Prechill at 13°C for 15 days, alternate temp 10/20°C, may take longer than 30 days. |                      | 71             |
| <i>Allium ampeloprasum var porrum</i>                                      |                          |                               | TB         | 20                | 14               | 30 +/-           | Light, Prechill at 13°C for 15 days, may take longer than 30 days.                         |                      | 71             |
| <i>Allium fistulosum</i><br>"bunching onion"                               | 354                      |                               | TB         | 20                | 12               |                  | Light, Prechill, dormancy breaking 20/33°C, may take longer than 30 days.                  |                      | 71             |
| <i>Allium ledebourianum</i>  | 614                      |                               | TB         | 15<br>20<br>25    | 50               |                  | Light, may take longer than 30 days.<br>Very hard seeded.                                  |                      | 71             |
| <i>Allium praecox</i><br>Wild onion  | 411                      |                               | T          | 15                | 5-7              | 28               | Prechill 5°C for 5 days for fresh and dormant seed.  |                      | 26             |
| <i>Allium scorodoprasum</i><br>"Spanish garlic"                            | 769                      |                               | TB         | 20                |                  |                  | Light, Pretreat with 5% bleach solution, may take longer than 30 days.                     |                      | 71             |
| <i>Allium tuberosum</i><br>Chinese Leek/Garlic Chives<br>"Oriental garlic" | 228<br>236               | 11/<br>100                    | T<br>TB    | 20<br>20          | 6<br>14          | 14               | 15°C for 3 days.<br>Light, may take longer than 30 days.                                   |                      | 72<br>71       |
| <i>Aloe spp.</i><br>Aloe   |                          |                               | T<br>TB    | 20<br>15<br>20-25 | 5                | 16<br>21<br>30   |  |                      | 14<br>15<br>63 |
| <i>Alonsoa warcewiczii</i><br>Mask flower                                  |                          |                               | TP         | 20-30             | 5                | 20               | Light  |                      | 1              |
| <i>Alopecurus alpinus</i><br>Foxtail, alpine                               |                          |                               | P          | 20-30             | 7                | 14               | Light, 0.2%; KNO <sub>3</sub>  |                      | 11             |
| <i>Alstroemeria aurantiaca</i><br>Lily-of-the-Incas                        |                          |                               | BP         | 20                | 7                | 28               | Prechill 2 months at 5°C   |                      | 1              |
| <i>Alstroemeria chilensis</i><br>Lily-of-Peru                              | 56                       |                               |            | 15                |                  | 56               |  |                      | 1              |
| <i>Althaea officinale</i><br>Marshmallow "Erfurter"                        | 400                      | 6.25/<br>62                   | TB         | 20-30             | 7                | 21               | Hard seed  |                      | 72             |
| <i>Amaranthus hybridus</i><br>Pigweed, green                               |                          |                               | P(a)<br>TP | 20-30<br>20-30,20 | 4                | 14               | Dark, then light; prechill 3 weeks at 3°C<br>Prechill, KNO <sub>3</sub>                    |                      | 7<br>2         |
| <i>Amaranthus retroflexus</i>  |                          |                               | P(a)       | 20-30             |                  |                  | Dark   |                      | 7              |

| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C         | First<br>count<br>days | Final<br>count<br>days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference |
|--|--------------------------------|--|----------------|----------------|------------------------|------------------------|---|----------------------|-----------|
| Pigweed, redroot   |                                |  | TB             | 35             | 3                      | 10                     | Light   |                      | 3         |
| <i>Amblyopyrum muticum</i>   | 350                            |  | TB             | 15-25          | 7                      | 14                     | Light, KNO <sub>3</sub> , Prechill at 4°C for 7 days.   |                      | 71        |
| <i>Ambrosia artemisiifolia</i><br>Ragweed  |                                |  | P(a)           | 20-30          |                        |                        | Dark  |                      | 7         |
| <i>Amelanchier spp.</i><br>Serviceberry  |                                | 5/50                                   | B              | 20-30          | 0                      | 21                     | Light; prechill 3 weeks at 5°C  |                      | 5         |
| <i>Amelanchier utahensis</i><br>Desert Serviceberry                              | 63                             | 40/                                    | B              | 10-30<br>10-30 | 7                      | 21<br>15               | Light, prechill 45 days at 3°-5°C<br>Light; prechill 45 days at 3°-5°C  |                      | 68<br>17  |
| <i>Ammi majus</i><br>White Dill, Bishops<br>Flower, Queen Anne's Lace            | 1343                           | 2/<br>20                               | TB             | 20             | 7                      | 21                     |   |                      | 72        |
| <i>Ammobium alatum</i><br>Winged everlasting                                     |                                | 1/                                     | BP<br>TB,BP    | 20<br>20-30,20 | 5<br>5                 | 15<br>14               |   |                      | 1<br>2    |
| <i>Ammophila spp.</i><br>A.M. Beachgrass   |                                | 5/50                                   | B              | 20-30          | 0                      | 21                     | Light, KNO <sub>3</sub>   |                      | 5         |
| <i>Amorpha californica</i><br>False indigo                                       | 92                             |  | T              | 20-30          | 5                      | 21                     | Prechill (5°C) for fresh and dormant seed.<br>Hard seed – scarification.  |                      | 26        |
| <i>Amorpha canescens</i>   | 421                            |  | B              | 20-30.20       | 7                      | 21                     | Scarify with sandpaper  |                      | 68        |
|  |                                |  | S              | 20-30          |                        | 14                     | Hard seeds  |                      | 16        |
|  | 651                            |  | S              | 20-30          | 15                     | 40                     |   |                      | 36        |
| <i>Amorpha fruticosa</i><br>Indigobush   | 169                            |  | S              | 20-30          | 15                     | 20                     |   |                      | 36        |
|  |                                |  |                | 20-30          | 7                      | 10                     | Remove pod  |                      | 56        |
|  | 150                            | 15/                                    |                | 20-30          | 7                      | 10                     | Soak in water at 80-90°C for 10 min., prechill 90-120 days  |                      | 108       |
| <i>Amorpha spp.</i><br>Leadplant   |                                | 5/50                                   | FB             | 20             | 3                      | 7                      | Dark  |                      | 5         |
| <i>Amsinckia intermedia</i><br>Fiddleneck  |                                |  | P(a)           | 20             |                        |                        | Dark  |                      | 7         |
| <i>Amsinckia menziesii</i><br><i>var. intermedia</i><br>Fiddleneck               | 378                            |  | TB             | 20             | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26        |
| <i>Anagallis monelli</i><br>Pimpernal  |                                |  | TP             | 15             | 7                      | 21                     | KNO <sub>3</sub>  |                      | 1         |
| <i>Andropogon annulatus</i><br>( <i>Dicanthium annulatum</i> )<br>Bluestem, diaz |                                |  | P              | 30             | 5                      | 14                     | Tropical origin   |                      | 58,61     |
| <i>Andropogon barbinodis</i>   |                                | 2/20                                   | P              | 20-30          | 5                      | 21                     | KNO <sub>3</sub> ; prechill 14 days   |                      | 21        |

| Kind of seed  | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C             | First<br>count<br>days | Final<br>count<br>days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference |
|---|--------------------------------|--|----------------|--------------------|------------------------|------------------------|---|----------------------|-----------|
| Cane beardgrass                                       |                                |  | P              | 20-30              | 7                      | 21                     | Light   |                      | 12        |
| <i>Andropogon caucasicus</i><br>Bluestem, caucasian   | 2356                           |  | P              | 20-30              | 5                      | 21                     | KNO <sub>3</sub> ; prechill 14 days   |                      | 67        |
|   |                                | 1/10                                   | P              | 20-30              | 5                      | 21                     | Light, transfer to 20°C after 7 days if mold is a problem   |                      | 21        |
|   |                                | 1/10                                   | TB             | 20-30              | 7                      | 21                     | Light, KNO <sub>3</sub> ; prechill 2 weeks at 5°C   |                      | 19        |
| <i>Andropogon intermedius</i><br>Bluestem, Australian |                                |  | P              | 20-30              | 7                      | 21                     | Light, 0.2% KNO <sub>3</sub>  |                      | 5         |
| <i>Andropogon littoralis</i><br>Bluestem, seacoast    |                                |  | P              | 20-30              | 7                      | 28                     | Light, 0.2% KNO <sub>3</sub> ; prechill 14 days   |                      | 12        |
| <i>Andropogon nodosus</i><br>Angleton grass           |                                |  | P              | 20-30              | 7                      | 21                     | Light, 0.2% KNO <sub>3</sub>  |                      | 60        |
| <i>Andropogon perforatus</i><br>Bluestem, pinhole     |                                |  | P              | 20-30              | 5                      | 14                     | Light, 0.2% KNO <sub>3</sub>  |                      | 19        |
| <i>Andropogon saccharoides</i><br>Silver beardgrass   |                                |  | P              | 20-30              | 7                      | 35                     | Light, 0.2% KNO <sub>3</sub>  |                      | 12        |
| <i>Anemone coronaria</i><br>Wind flower               |                                | 3/                                     | TP             | 20,15              | 7                      | 28                     | Prechill  |                      | 2         |
|   | 1410                           | 3/                                     | BP             | 15                 | 7                      | 28                     |   |                      | 1         |
| <i>Anemone pulsatilla</i><br>Pasque-flower            |                                |  | TP             | 15                 | 7                      | 28                     | Light   |                      | 65        |
| <i>Anemopsis californica</i><br>Yerba mansa           | 2,971                          |  | TCT            | 20-35              | 5-<br>7                | 35                     | Light; prechill with GA <sub>3</sub> (400 ppm) 5°C for 5 days for fresh and dormant seed.   |                      | 1         |
| <i>Angelica archangelica</i><br>Angelica              |                                | 10/                                    | TP,BP          | 20,30              | 7                      | 28                     | Light, prechill   |                      | 2         |
| <i>Anisacanthus wrightii</i><br>Anisacanthus, Wrights |                                | 10/100                                 | T              | 20-30              | 5                      | 21                     |   |                      | 21        |
| <i>Annona muricata</i><br>Soursop                     | 2 <sup>1</sup>                 |  | S              | 25-30 <sup>2</sup> | 26                     | 46                     | Light 24 hours; heat treatment of 40°C for 5 days<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature |                      | 64        |
| <i>Anthemis cotula</i><br>May weed                    |                                |  | P(a)           | 20-30              |                        |                        | Light   |                      | 7         |
| <i>Antirrhinum multiflorum</i><br>Sticky snapdragon   | 5,650                          |  | TB             | 20-30              | 5                      | 12                     | Prechill (5°C) and GA <sub>3</sub> (400 ppm) for fresh and dormant seed.  |                      | 26        |
| <i>Aquilegia caerulea</i><br>Columbine                |                                | 2/20                                   | P,TB           | 20-30              | 14                     | 30                     | Light   |                      | 5         |

| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C               | First<br>count<br>days | Final<br>count<br>days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference     |
|--|--------------------------------|--|----------------|----------------------|------------------------|------------------------|---|----------------------|---------------|
| <i>Arabis blepharophylla</i><br>Rockcress  |                                | 2/                                     | TP<br>TP       | 20-30,15<br>15       | 5<br>5                 | 21<br>21               | Prechill, KNO <sub>3</sub><br>Light   |                      | 2<br>1        |
| <i>Arabis glabra</i><br>Tower mustard  |                                |  | TB             | 20-30                |                        | 14                     | Light   |                      | 9             |
| <i>Arabis holboellii</i><br>Rockcress, Holbuell                                    |                                |  | P(a)           | 15                   |                        |                        | Dark; prechill 1 week at 3°C  |                      | 7             |
| <i>Arctium minus</i><br>Smaller burdock  |                                |  | P(a)           | 20-30                |                        |                        | Light   |                      | 7             |
| <i>Arenaria serpyllifolia</i><br>Thyme-leaved sandwort                             |                                |  | P(a)           | 15                   |                        |                        | Light   |                      | 7             |
| <i>Argemone grandiflora</i><br>Prickly poppy                                       |                                |  | BP             | 10                   | 14                     | 42                     |   |                      | 1             |
| <i>Arisaema triphyllum</i><br>Jack-in-the-pulpit                                   | 34                             | 3                                      | TB             | 15-25<br>20          | 7                      | 28<br>28               | Light; prechill 60days<br>Light   |                      | 20A<br>6      |
| <i>Aristida adscensionis</i>   | 1,323                          |  | TCT            | 15-25                | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.   |                      | 26            |
| <i>Aristida hamulosa</i><br>(syn. <i>Aristida ternipes</i> v.<br><i>hamulosa</i> ) | 693                            |  | TCT            | 15-25                | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.   |                      | 26            |
| <i>Aristida purpurea</i>   | 731                            |  | TCT            | 15-25                | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.   |                      | 26            |
| <i>Aristida</i> spp.<br>Three awn  |                                | 2/20                                   | B              | 20-30                | 0                      | 21                     | Light; prechill 1 week  |                      | 5             |
| <i>Arnica chamissonis</i><br>var. <i>foliosa</i><br>Arnica                         | 2269                           | 1/<br>10                               | TB             | 20-30                | 5                      | 14                     | Prechill at 5°C for 5 to 7 days.  |                      | 72            |
| <i>Arnica fulgens</i><br>Orange arnica   |                                |  | P(a)           | 20                   |                        |                        | Dark  |                      | 7             |
| <i>Arnica montana</i><br>Arnica  | 876                            | 3/                                     | TP<br>TP       | 15<br>20-30          | 7<br>5                 | 21<br>14               | Light<br>Light; prechill 5-7 days   |                      | 6<br>1        |
| <i>Artemisia californica</i>   | 15,128                         |  | TB             | 20                   | 5                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26            |
| <i>Artemisia filifolia</i><br>Sand sage  |                                | 0.25/2.<br>5<br>0.5/5                  | P<br>P<br>P,B  | 15-25<br>20<br>15-25 | 7<br>7<br>7            | 28<br>14<br>28         | Light, KNO <sub>3</sub><br>New seed may be firm<br>Light; prechill 10 days  |                      | 21<br>16<br>5 |
| <i>Artemisia pycnocephala</i>  | 6,153                          |  | TB             | 20                   | 5                      | 14                     | Prechill (5°C) for fresh and dormant seed.  |                      | 26            |

| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C                  | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference     |
|--|--------------------------------|--|----------------|-------------------------|------------------------|------------------------|--|----------------------|---------------|
| Coastal Sagewort   |                                |  |                |                         |                        |                        |  |                      |               |
| <i>Artemisia suksdorf</i><br>Suksdorf sagebrush                                |                                |  | P(a)           | 20-30                   |                        |                        | Dark   |                      | 7             |
| <i>Artemisia vulgaris</i><br>Mugwort   | 10,115                         | 0.25/<br>2.5                           | TB             | 20-30                   | 4-<br>7                | 21                     | GA <sub>3</sub>  |                      | 72            |
| <i>Artocarpus heterophyllus</i>  | 0.14 <sup>1</sup>              |  | S              | 25-30 <sup>2</sup>      | 18                     | 21                     | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature           |                      | 64            |
| <i>Asarina scandens</i>  | 2764                           | 0.9/<br>9                              | TB             | 20-30                   | 14                     | 21                     | 20°C   |                      | 72            |
| <i>Asarum canadense</i><br>Wild ginger   |                                |  |                | 20                      |                        | 14                     | 3 months at 20°C, then prechill 3 months at 5°C  |                      | 22            |
| <i>Asclepias curassavica</i><br>Bloodflower                                    | 542<br>542                     | 5/<br>5/                               | B<br>B<br>BP   | 10-30<br>15-25<br>20-30 | 7<br>7<br>7            | 14<br>28<br>21         | Prechill 21 days at 5°C<br>Prechill 7 days at 5°C  |                      | 6<br>6<br>1   |
| <i>Asclepias incarnata</i><br>Milkweed, swamp                                  |                                |  |                | 20-30                   |                        | 14                     | Light; prechill 5 days   |                      | 20A           |
| <i>Asclepias syriaca</i><br>Milkweed   |                                |  | BT<br>B        | 20-30<br>10-30<br>15-25 | <br>7<br>7             | 30<br>14<br>28         | Light; prechill 30 days<br>Prechill 21 days at 5°C<br>Prechill 7 days at 5°C                             |                      | 20m<br>6<br>6 |
| <i>Asperula orientalis</i><br>Woodruff   |                                |  | BP             | 10                      | 7                      | 21                     |  |                      | 1             |
| <i>Aster bigelovii</i><br>Purple aster   |                                | 3/30                                   | TB             | 15<br>20-30             | <br>7                  | 21<br>28               | Light, KNO <sub>3</sub>  |                      | 16<br>5       |
| <i>Aster canescens</i><br>Hoary aster  |                                |  | P(a)<br>P(a)   | 15<br>20                |                        |                        | Light<br>Dark  |                      | 7             |
| <i>Aster curtus</i>  |                                |  | TB             | 15-25                   | 7                      | 14                     | Scarify or prechill for 8 weeks at 4°C.  |                      | 70            |
| <i>Aster subcoeruleus</i><br>Michaelmas daisy<br>(syn. <i>A. tongolensis</i> ) |                                |  | PP             | 15                      | 7                      | 14                     | Light  |                      | 14            |
| <i>Astilbe x arendsii</i>  | 19,231                         | 0.13<br>1.3                            | TB<br>RE       | 20-30<br>25             | 7                      | 21                     | Difficult germ 14 – 21 days<br>Keep soil very wet; move soil test under lights when<br>starting to germ. |                      | 72            |
| <i>Astragalus australis</i><br>var. <i>olympicus</i>                           |                                |  | TB             | 20                      | 7                      | 14                     | Scarify seeds  |                      | 70            |



| Kind of seed                                    | Approx. # seeds per gram | Min. Wt. in grams purity/ nox | Sub-strata | Temp°C    | First count days | Final count days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference |
|---|--------------------------|-------------------------------|------------|-----------|------------------|------------------|--|----------------------|-----------|
| <i>Astragalus filipes</i> Basalt milk-vetch     | 268                      | 9.4                           | TB         | 15-25; 20 | 4                | 21               | Hard seeds: see sec. 4.9k(6) scarify hard seed.  |                      | 73        |
| <i>Astragalus pomonensis</i>                    | 362                      |                               | T          | 20        | 7                | 21               | Cut cotyledons of swollen and hard seed, chill for 16 hours.   |                      | 26        |
| <i>Astragalus tribuloides</i>                   | 967                      |                               | TB         | 15-25     | 7                | 21               | Light.   |                      | 71        |
| <i>Astrebla lappacea</i> Curly mitchellgrass    |                          |                               | P          | 20-30     | 7                | 21               | Light, 0.2% KNO <sub>3</sub>   |                      | 24        |
| <i>Atriplex canescens</i> Four wing             |                          | 20/200                        | P          | 20        | 7                | 14               | Dewing and soak for 2 hrs. in 3 liters tap H <sub>2</sub> O. Rinse in 3 liters distilled H <sub>2</sub> O. Remove excess H <sub>2</sub> O and air dry 7 days. Prechill 7 days. |                      | 21        |
|   |                          |                               | B          | 15-25     |                  | 21               |  |                      | 16        |
|   |                          | 25/225                        | B          | 15        | 5                | 28               |  |                      | Dark      |
| <i>Atriplex confertifolia</i> Shadscale         |                          | 25/225                        | B          | 15        | 5                | 28               | Dark   |                      | 5         |
| <i>Atriplex hortensis</i> Garden orach          |                          |                               | P(a)       | 20        |                  |                  | Dark   |                      | 7         |
|   |                          |                               | BP         | 10        | 7                | 35               |  |                      | 1         |
| <i>Atriplex hymenelytra</i> Desert holly        |                          | 2/20                          | B          | 15        | 5                | 28               | Dark   |                      | 5         |
| <i>Atriplex lentiformis</i> Big saltbrush       | 1116                     |                               | TB         | 20        | 5                | 21               | Prechill at 5°C for 5 days. Deep dormancy – Cut into center of seed (pierce), GA <sub>3</sub> , chill at 5°C for 16 hours.   |                      | 26        |
| <i>Atriplex nuttallii</i> Nuttal                |                          | 2/20                          | B          | 15        | 5                | 28               | Dark   |                      | 5         |
| <i>Atriplex polycarpa</i> cattle saltbush       | 1,322                    |                               | TB         | 15        | 5-7              | 21               | Light; prechill 5°C for 5 days for fresh and dormant seed.   |                      | 26        |
| <i>Atriplex semibaccata</i> Australian saltbush | 259                      |                               | TB         | 15        | 5-7              | 21               | Light; prechill 5°C for 5 days for fresh and dormant seed.   |                      | 26        |
| <i>Atriplex sp.</i> Indian                      |                          | 10/100                        |            |           |                  |                  |  |                      | 21        |
| <i>Atriplex sp.</i> Mat                         |                          | 25/225                        | B          | 15        | 5                | 28               | Dark   |                      | 5         |
| <i>Aubrieta gracilis</i> Aubrieta               |                          |                               | BP         | 10        | 7                | 21               |  |                      | 1         |
| <i>Australopyrum retrofractum</i>               | 234                      |                               | TB         | 15-25     | 7                | 14               | Light, KNO <sub>3</sub> .  |                      | 71        |
| <i>Avena fatua</i> Oat, wild                    |                          |                               | P          | 20        | 7                | 14               | To determine live seed, deglume  |                      | 25        |

| Kind of seed  | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp <sup>o</sup> C | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference |
|---|--------------------------------|--|----------------|---------------------|------------------------|------------------------|--|----------------------|-----------|
| <i>Avena sterilis</i><br>Oat, animated  |                                |  | T              | 20                  |                        | 10                     | KNO <sub>3</sub>   |                      | 16        |
|   |                                |  | P              | 20                  | 5                      | 10                     | KNO <sub>3</sub>   |                      | 4         |
|   |                                |  | T              | 20                  |                        | 10                     |  |                      | 26        |
| <i>Averrhoa carambola</i><br>Carambola  |                                |  | S              | 25-30 <sup>1</sup>  | 24                     | 36                     | Light 24 hours<br><sup>1</sup> Ambient room temperature  |                      | 64        |
| <i>Baccaurea motleyana</i>  | 4 <sup>1</sup>                 |  | S              | 25-30 <sup>2</sup>  |                        | 35                     | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature                       |                      | 64        |
| <i>Baccharis pilularis</i><br>Chaparral broom, Coyote<br>bush                   | 22,235                         |  | TB             | 20                  | 5                      | 14                     | Prechill (5°C) for fresh and dormant seed.   |                      | 26        |
| <i>Baccharis salicifolia</i> syn.<br><i>B. glutinosa</i><br>Mule fat            | 28,326                         |  | TB             | 20                  | 5-<br>7                | 21                     | Light.   |                      | 26        |
| <i>Baccharis sarothroides</i><br>Broom baccharis                                | 12,636                         |  | TB             | 20                  | 5-<br>7                | 21                     | Light; prechill 5°C for 5 days for fresh and dormant seed.   |                      | 26        |
| <i>Baptisia australis</i><br>Indigo, blue false                                 |                                |  | T              | 20-30               | 14                     | 30                     |  |                      | 26        |
|   |                                |  | TB             | 20-30               |                        | 28                     |  |                      | 28        |
|   | 71                             | 35/                                    | B              | 35,20-30            | 7                      | 28                     | Hard seed, acid scarify H <sub>2</sub> SO <sub>4</sub> 10 minutes  |                      | 6         |
| <i>Barbarea orthoceras</i><br>Erectpod wintercress                              |                                |  | P(a)           | 20                  |                        |                        | Dark; prechill 2-4 weeks at 3°C  |                      | 7         |
| <i>Barbarea vulgaris</i><br>Yellow rocket<br>Bitter wintercress<br>Winter cress |                                |  | B              | 20-30               |                        | 10                     | Light for fresh seed   |                      | 9         |
|   |                                |  | B              | 15-30               | 7                      | 10                     | Light  |                      | 3         |
|   |                                |  |                | 20-30               | 6                      | 10                     | Light  |                      | 20a       |
| <i>Beaucarnea recurvata</i><br>Elephant-foot tree                               | 34                             | 73/                                    | B              | 20-30               | 7                      | 28                     | Soak 24 hours  |                      | 6         |
|   |                                |  | T              | 20-30               | 7                      | 21                     | Soak 24 hours  |                      | 14        |
|   |                                |  | P              | 20-30               |                        | 28                     |  |                      | 26        |
| <i>Bebbia juncea</i><br>Sweetbush   | 2,163                          |  | TB             | 20                  | 5-<br>7                | 21                     | Light.   |                      | 26        |
| <i>Belamcanda chinensis</i><br>Blackberry Lily                                  | 45                             | 55/<br>500                             | RE             | 20<br>20-30         | 21                     | 28<br>35               | 1. Seed intact, no soak, RE, 30 day Prechill at 5°C, then<br>20-30.<br>2. Remove pericarp, soak 24 hours, RE at 20°. |                      | 72        |
|   |                                |  |                |                     |                        |                        |  |                      |           |
| <i>Berteroa incana</i><br>Hoary alyssum   |                                |  | B              | 20                  |                        | 10                     | KNO <sub>3</sub>   |                      | 9         |
| <i>Besseya rubra</i>  |                                |  | P(a)           | 15                  |                        |                        | Dark   |                      | 7         |

| Kind of seed  | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C             | First<br>count<br>days | Final<br>count<br>days | Additional Directions                                    | See Sec. 4.2 and 4.9 | Reference   |    |
|---|--------------------------------|--|----------------|--------------------|------------------------|------------------------|--|----------------------|-------------|----|
| Kitten-tails  |                                |  |                |                    |                        |                        |  |                      |             |    |
| <i>Bixa orellano</i>  |                                |  | S,TP           | 25-30 <sup>1</sup> | 16                     | 23                     | Light 24 hours<br><sup>1</sup> ambient room temperature  |                      | 64          |    |
| <i>Bloomeria crocea</i><br>Common goldenstar  | 614                            |  | T              | 15                 | 5                      | 21                     | Prechill (5°C) for fresh and dormant seed.               |                      | 26          |    |
| <i>Bothriochloa barbinodis</i>  | 874                            |  | TCT            | 15-25              | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.            |                      | 26          |    |
| <i>Bouteloua erpoda</i><br>Gramma, black  | 2934                           |  | P              | 20-30              | 7                      | 28                     | Light, 0.2% KNO <sub>3</sub> ; if unsatisfactory, try GA |                      | 29,30<br>67 |    |
| <i>Bouteloua giliformis</i><br>Gramma, slender  |                                |  | P              | 20-35              | 7                      | 28                     | Light, 0.2% KNO <sub>3</sub>                             |                      | 29          |    |
| <i>Bouteloua hirsuta</i><br>Gramma, hairy   | 2154                           |  | P              | 20-30              | 7                      | 14                     | Light, 0.2% KNO <sub>3</sub>                             |                      | 12<br>67    |    |
| <i>Bouteloua rothrockii</i><br>Gramma, rothrock   | 9000                           |  | P              | 20-30              | 7                      | 28                     | Light, 0.2% KNO <sub>3</sub>                             |                      | 67<br>29    |    |
| <i>Brassia actinophylla</i><br>( <i>Schefflera actinophylla</i> )<br>Australian umbrella tree | 167                            | 15/                                    | TP             | 20-30              | 7                      | 28                     | Light  |                      | 1           |    |
|   |                                |  | B              | 20-30              | 7                      | 28                     | Light  |                      | 6           |    |
|   |                                |  |                | 20-30              |                        | 35                     |  |                      |             | 18 |
|   |                                |  | P              | 20                 | 7                      | 28                     | Light  |                      | 14          |    |
|   |                                |  | P              | 20                 |                        | 28                     |  |                      |             | 28 |
|   |                                |  | TB             | 20,20-30           |                        | 28                     |  |                      |             | 15 |
|   |                                |  | P              | 20-30              | 14                     | 28                     |  | 26                   |             |    |
| <i>Brassica kaber</i><br>Wild mustard, Charlock<br>(syn. <i>Sinapis arvensis</i> )            |                                |  | B              | 15-30              | 3                      | 10                     | Light; prechill 5 days at 2°-10°C                        |                      | 3           |    |
|   |                                |  | B              | 20-30              |                        | 10                     |  |                      | 9           |    |
| <i>Brickellia californica</i><br>Brickellbush   | 4,628                          |  | TB             | 20                 | 5-<br>7                | 21                     | Light.   |                      | 26          |    |
| <i>Briza maxima</i><br>Quaking grass, big   | 253                            | 10/                                    | TP             | 20-30              | 5                      | 14                     | Light; prechill 5-7 days at 10°C                         |                      | 1           |    |
|   |                                |  | P              | 20-30              |                        | 21                     | Light; prechill  |                      | 26          |    |
|   |                                |  | P              | 20-30              | 2                      | 8                      |  |                      | 4           |    |
|   |                                |  | P,TB           | 20-30              | 7                      | 21                     | KNO <sub>3</sub> for fresh seed                          |                      | 16          |    |
|   |                                |  | TB             | 20-30              | 7                      | 21                     | Light  |                      | 6           |    |
|   |                                |  | P              | 20                 |                        | 16                     |  |                      | 28          |    |
|   |                                |  | P              | 20-30              |                        | 14                     | Light  |                      | 14          |    |
|   |                                |  | P,TB           | 20-30              |                        | 28                     | Light  |                      | 32          |    |
|   |                                |  | RT             | 20-25              |                        |                        | Light  |                      | 33          |    |
|   |                                | 10/                                    | TP             | 20-30              | 4                      | 21                     | Light  | 2                    |             |    |

| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C                | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference |
|--|--------------------------------|--|----------------|-----------------------|------------------------|------------------------|--|----------------------|-----------|
|  |                                |  |                |                       |                        | 14                     |  |                      | 63        |
| <i>Briza minor (minima)</i><br>Quaking grass, little   |                                |  | TP             | 20-30                 | 7                      | 21                     | Prechill 5-7 days at 10°C  |                      | 1         |
| <i>Bromus arizonicus</i>   | 194                            |  | TB             | 15-25                 | 7                      | 14                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.  |                      | 26        |
| <i>Bromus beibersteinii</i><br>Brome, meadow   |                                |  | P              | 20-30                 | 7                      | 14                     | Light  |                      | 57        |
| <i>Bromus brevis</i><br>Brome, pampean   |                                |  | B              | 20-30                 | 7                      | 21                     | Prechill 7 days  |                      | 31        |
| <i>Bromus carinatus</i><br>Brome, California   |                                | 20/                                    | TP             | 20-30,15-25,<br>10-30 | 7                      | 14                     | Prechill, KNO <sub>3</sub>   |                      | 2         |
|  | 172                            |  | P              |                       | 6                      | 14                     | Light  |                      | 57,58,59  |
|  |                                |  | TB             | 15-25                 | 7                      | 14                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26        |
| <i>Bromus carinatus</i> var.<br><i>maritimus</i> (syn. <i>Bromus</i><br><i>maritimus</i> )           | 145                            |  | TB             | 15-25                 | 7                      | 14                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26        |
| <i>Bromus erectus</i><br>Brome, meadow   | 156                            |  | P              | 20-30                 | 7                      | 14                     | Light  |                      | 67<br>12  |
| <i>Bromus hordeaceus</i> (syn.<br><i>Bromus mollis</i> ) soft chess                                  | 549                            |  | TB             | 20-30                 | 7                      | 14                     | Light, GA <sub>3</sub> . Prechill at 5°C for 5 days.   |                      | 26        |
| <i>Bromus rubens</i><br>Red brome  | 522                            |  | TB             | 20                    | 7                      | 14                     | Light, GA <sub>3</sub> . Prechill at 5°C for 5 days.   |                      | 26        |
| <i>Bromus secaulinus</i><br>Little Sea Oats<br>(syn. <i>Bromus wildenowii</i><br><i>secaulinus</i> ) | 103                            | 25/<br>250                             | TB             | 20-30                 | 7                      | 14                     |  |                      | 72        |
| <i>Bromus stamineus</i><br>Brome, harlan   |                                |  | P              | 20-30                 | 6                      | 14                     | Light  |                      | 34        |
| <i>Bromus tomentellus</i><br>Brome, Russian  |                                |  | P              | 20-30                 | 7                      | 24                     | Light  |                      | 11        |
| <i>Bupleurum griffithii</i>  | 396                            | 6.3/<br>63                             | TB             | 15-25                 | 7                      | 21                     | KNO <sub>3</sub> , Prechill at 5°C for 7 days<br>Extend test.  |                      | 72        |
| <i>Caesalpinia gilliesii</i><br>Bird-of-Paradise   | 8                              | 330/                                   | TB             | 20-30                 | 7                      | 28                     |  |                      | 6         |
|  |                                |  | BP             | 20-30                 | 7                      | 28                     |  |                      | 1         |

| Kind of seed   | Approx. # seeds per gram | Min. Wt. in grams purity/ nox | Sub-strata | Temp°C | First count days | Final count days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference |
|--|--------------------------|-------------------------------|------------|--------|------------------|------------------|---|----------------------|-----------|
| <i>Cakile maritima</i><br>Sea rocket                               | 36                       |                               | T          | 20     | 7                | 21               | Prechill at 5°C for 5 days. Deep dormancy – TZ is recommended at end of test.   |                      | 26        |
| <i>Calamovilfa gigantea</i><br>Reedgrass, giant                    | 193                      |                               | P          | 20-30  | 7                | 21               | Light   |                      | 67<br>12  |
| <i>Calamovilfa longifolia</i><br>Reedgrass, prairie sand           | 602                      | 2/20                          | P          | 20-30  | 7                | 28               | Light   |                      | 67        |
|  |                          |                               | P          | 20-30  | 7                | 21               |   |                      | 21        |
| <i>Calamovilfa sp.</i><br>Reedgrass, prairie sand                  |                          | 2/20                          | P          | 20-30  | 7                | 28               | Light   |                      | 21        |
|  |                          |                               | TB         | 20-30  | 7                | 28               | Light   |                      | 5         |
| <i>Calandrinia ciliata</i><br>( <i>C. caulescens</i> )<br>Redmaids |                          |                               | BP         | 10     | 5                | 10               |   |                      | 1         |
|  |                          |                               |            | 5,10   |                  | 21               |   |                      | 35        |
| <i>Calandrinia ciliate</i> (on list)                               | 2,440                    |                               | TB         | 15     | 7                | 21               | Light, GA <sub>3</sub> , Prechill at 5°C for 5 days. Deep dormancy – TZ is recommended at end of test.  |                      | 26        |
| <i>Calandrinia umbellata</i><br>Red maids                          |                          |                               | BP         | 10     | 5                | 15               |   |                      | 1         |
| <i>Calluna vulgaris</i><br>Scotch heather                          | 35639                    | 0.25/                         | TP         | 20-30  | 7                | 28               | Light   |                      | 6         |
|  |                          |                               | P          | 20     | 4                | 28               |   |                      | 16        |
| <i>Calochortus splendens</i>                                       | 700                      |                               | TC         | 20     | 7                | 21               | Light, prechill at 5°C for 5 days.<br>Deep dormancy – cut through cotyledons, GA <sub>3</sub> (400 ppm) and chill at 5°C for 16 hours.                  |                      | 26        |
| <i>Calochortus weedii</i>  | 870                      |                               | TC         | 20     | 7                | 21               | Light, prechill at 5°C for 5 days.<br>Deep dormancy – cut through cotyledons, GA <sub>3</sub> (400 ppm) and chill at 5°C for 16 hours.                  |                      | 26        |
| <i>Camelina microcarpa</i><br>Small seeded false flax              |                          |                               | B          | 20-30  |                  | 14               | KNO <sub>3</sub> ; prechill 2 weeks plus KNO <sub>3</sub>   |                      | 9         |
|  |                          |                               | P(a)       | 15,20  |                  |                  |   |                      | 7         |
| <i>Camissonia bistorta</i>   | 14,187                   |                               | TB         | 20     | 7                | 21               | Light, GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – cut through cotyledons GA <sub>3</sub> (400 ppm) and chill at 5°C for 16 hours. |                      | 26        |
| <i>Camissonia californica</i><br>California Sun Cup                | 4,002                    |                               | TB         | 20     | 7                | 21               | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours.                   |                      | 26        |
| <i>Camissonia cheiranthifolia</i><br>Beach evening-primrose        | 6,596                    |                               | TB         | 20     | 7                | 21               | Light, GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – cut through cotyledons GA <sub>3</sub> (400 ppm) and chill at 5°C for 16 hours. |                      | 26        |

| Kind of seed  | Approx. # seeds per gram | Min. Wt. in grams purity/ nox | Sub-strata  | Temp°C                  | First count days | Final count days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference                |
|---|--------------------------|-------------------------------|-------------|-------------------------|------------------|------------------|---|----------------------|--------------------------|
| <i>Camissonia pallida</i><br>(syn. <i>Oenothera pallida</i> ) | 1,399                    |                               | TB          | 20                      | 7                | 21               | Light, GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – cut through cotyledons GA <sub>3</sub> (400 ppm) and chill at 5°C for 16 hours. |                      | 26                       |
| <i>Campanula glomerata</i>                                    | 1053                     | 0.24/<br>2.4                  | RE<br>(top) | 20<br>20-30             | 6                | 21               | alba germs better at 20°C light.  |                      | 72                       |
| <i>Campanula poscharskyana</i><br>Bellflower                  |                          |                               | B<br>P      | 15<br>15<br>20-30       | 7<br>7           | 28<br>28<br>14   | Light<br>Light  |                      | 6<br>14<br>63            |
| <i>Campsis radicans</i><br>Trumpet creeper                    | 261                      | 10/                           | B           | 20-30<br>20-30<br>20-30 | 7                | 30<br>21         | Prechill 60 days at 5°-10°C<br><br>Prechill 1 month at 5°C  |                      | 36<br>6<br>18            |
| <i>Canna generalis</i><br>Canna                               | 4                        |                               |             | 20,25                   |                  | 56               | Soak seeds, sow on surface of soil with bottom heat   |                      | 8                        |
| <i>Canna indica</i><br>Indian shot                            | 4<br><br>4               | 718/<br><br>500/              | S,BP<br>T   | 20,20-30<br>20-30       | 7<br>14          | 21<br>21         | Clip, soak seeds<br>Presoak hot water on clip<br><br>Scarify and soak in warm water 48 hours  |                      | 6<br>1<br>26<br>65<br>63 |
| <i>Canna spp.</i><br>Canna                                    |                          |                               | RT          | 20-30                   | 5                | 20               | Before testing, cut into seed coat  |                      | 1                        |
| <i>Capsella bursa-pastoris</i><br>Shepherds purse             |                          |                               | P(a)<br>B   | 20-30<br>20-30          |                  | 21               | Dark<br>KNO <sub>3</sub> ; prechill 2 weeks plus KNO <sub>3</sub>   |                      | 7<br>9                   |
| <i>Capsicum frutescens</i><br>Tobasco                         |                          |                               | TP          | 20-30                   | 7                | 21               | Light, KNO <sub>3</sub>   |                      | 1                        |
| <i>Cardaria draba</i><br>Whitetop                             |                          |                               | P(a)        | 15,20-30                |                  |                  | Light   |                      | 7                        |
| <i>Cardaria pubescens</i><br>Hairy whitetop                   |                          |                               | P(a)        | 20-30                   |                  |                  | Light   |                      | 7                        |
| <i>Cardionema ramosissimum</i>                                | 1,272                    |                               | TB          | 20                      | 7                | 21               | Light, prechill at 5°C for 5 days.<br>Deep dormancy – cut through cotyledons, GA <sub>3</sub> (400 ppm) and chill at 5°C for 16 hours.                  |                      | 26                       |
| <i>Carex barbarae</i>   | 946                      |                               | TCT         | 20-35                   | 7                | 21               | Light. Dormant – TZ   |                      | 26                       |
| <i>Carex obnupta</i><br>Slough sedge                          | 1,203                    |                               | TCT         | 20-35                   | 5                | 21               | Prechill not recommended  |                      | 26                       |
| <i>Carex spissa</i>   | 825                      |                               | TB          | 20                      | 7                | 21               | Light. Dormant – TZ.  |                      | 26                       |
| <i>Carpobrotus edulis</i>                                     | 2,428                    |                               | TB          | 20                      | 7                | 21               | Prechill at 5°C for 5 days.   |                      | 26                       |

| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C         | First<br>count<br>days | Final<br>count<br>days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference |
|--|--------------------------------|--|----------------|----------------|------------------------|------------------------|---|----------------------|-----------|
|  |                                |  |                |                |                        |                        | Deep dormancy – cut through cotyledons GA <sub>3</sub> (400 ppm) and chill at 5°C for 16 hours.                                       |                      |           |
| <i>Cassia covesii</i>  | 216                            |  | T              | 20             | 7                      | 28                     | Dormant – cut through cotyledons, GA <sub>3</sub> (400 ppm) chill at 5°C for 16 hours.  |                      | 26        |
| <i>Cassia fasciculata</i><br>Partridge pea                           |                                | 5/50                                   | FT<br>B        | 20-30<br>20-30 | 7<br>18                | 14<br>21               | Hard seeds  |                      | 21<br>16  |
| <i>Cassia spp.</i><br>Prairie Senna                                  |                                | 10/100                                 | FT             | 20-30          | 5                      | 14                     |   |                      | 21        |
| <i>Castilleja chromosa</i>   |                                |  | P              | 15             |                        | 14                     | KNO <sub>3</sub>  |                      | 4         |
| <i>Castilleja densiflora</i>   | 13,871                         |  | TB             | 15             | 7                      | 21                     | Light, GA <sub>3</sub> .<br>Deep dormancy – cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours.                      |                      | 26        |
| <i>Castilleja exserta</i><br>(syn. <i>Orthocarpus purpurascens</i> ) | 14,090                         |  | TB             | 20 or 15       | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26        |
| <i>Castilleja foliolosa</i>  | 10,156                         |  | TB             | 15             | 7                      | 21                     | Light, GA <sub>3</sub> .<br>Deep dormancy – cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours.                      |                      | 26        |
| <i>Castilleja indivisa</i>   | 19,448                         |  | TB             | 15             | 7                      | 21                     | Light, GA <sub>3</sub> .<br>Deep dormancy – cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours.                      |                      | 26        |
| <i>Castilleja integra</i>  |                                |  | P              | 15             |                        | 14                     | KNO <sub>3</sub>  |                      | 4         |
| <i>Castilleja latifolia</i>  |                                |  | P              | 15             |                        | 14                     | KNO <sub>3</sub>  |                      | 4         |
| <i>Castilleja miniata</i>  |                                |  | P              | 15             |                        | 14                     | KNO <sub>3</sub>  |                      | 4         |
| <i>Castilleja spp.</i>   |                                | 0.5/5                                  | P,TB           | 15<br>15-25    | 7<br>5                 | 28<br>21               | Prechill 28 days, check for dormancy<br>Light; prechill 2 weeks   |                      | 16<br>5   |
| <i>Catananche caerulea</i><br>Cupid's Dart                           | 294                            | 10/100                                 | BP<br>BP       | 20<br>20       | 5<br>5                 | 20<br>20               |   |                      | 1<br>6    |
| <i>Caulophyllum thalictroides</i><br>Blue cohosh                     |                                |  |                | 15-30          |                        |                        | 3 months at 15°-30°C, then prechill 9 months at 10°C  |                      | 22        |
| <i>Ceanothus cordulatus</i>  | 375                            |  | T              | 20             | 7                      | 21                     | Light, GA <sub>3</sub> , prechill at 5°C for 5 days.<br>Deep dormancy – TZ is recommended at end of test.                             |                      | 26        |
| <i>Ceanothus crassifolius</i>  | 109                            |  | T              | 20             | 7                      | 21                     | Light, GA <sub>3</sub> , prechill at 5°C for 5 days.<br>Deep dormancy – TZ is recommended at end of test.                             |                      | 26        |
| <i>Ceanothus cuneatus</i>  | 100                            |  | T              | 20             | 7                      | 21                     | Light, GA <sub>3</sub> , prechill at 5°C for 5 days.<br>Deep dormancy - TZ is recommended at end of test.                             |                      | 26        |

| Kind of seed   | Approx. # seeds per gram | Min. Wt. in grams purity/ nox | Sub-strata   | Temp°C               | First count days | Final count days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference      |
|--|--------------------------|-------------------------------|--------------|----------------------|------------------|------------------|--|----------------------|----------------|
| <i>Ceanothus impressus</i>                           | 210                      |                               | T            | 20-30                | 7                | 21               | Light, GA <sub>3</sub> , prechill at 5°C for 5 days.<br>Deep dormancy – TZ is recommended at end of test.                        |                      | 26             |
| <i>Ceanothus integerrimus</i><br>Deerbrush ceanothus | 154                      |                               | S<br>TB      | 20-30<br>20-30       |                  | 20<br>10         | 60 minutes hot water soak at 100°C<br>30 minutes acid treatment, prechill 2 months at 3°-5°C                                     |                      | 17a            |
| <i>Ceanothus integerrimus</i> (on list)<br>Deerbrush | 158                      |                               | T            | 20                   | 7                | 21               | Light, GA <sub>3</sub> , prechill at 5°C for 5 days.<br>Deep dormancy – TZ is recommended at end of test.                        |                      | 26             |
| <i>Ceanothus leucodermis</i>                         | 142                      |                               | T            | 20                   | 7                | 21               | Light, GA <sub>3</sub> , prechill at 5°C for 5 days.<br>Deep dormancy – TZ is recommended at end of test.                        |                      | 26             |
| <i>Ceanothus megacarpus</i>                          | 52                       |                               | T            | 20                   | 7                | 21               | Light, GA <sub>3</sub> , prechill at 5°C for 5 days.<br>Deep dormancy – TZ is recommended at end of test.                        |                      | 26             |
| <i>Ceanothus prostratus</i><br>squaw carpet          | 82                       |                               | T            | 20                   | 7                | 21               | Light, GA <sub>3</sub> , prechill at 5°C for 5 days.<br>Deep dormancy – TZ is recommended at end of test.                        |                      | 26             |
| <i>Ceanothus ramulosus</i>                           | 156                      |                               | T            | 20                   | 7                | 21               | Light, GA <sub>3</sub> , prechill at 5°C for 5 days.<br>Deep dormancy – TZ is recommended at end of test.                        |                      | 26             |
| <i>Ceanothus sanguineus</i><br>Redstem ceanothus     | 286<br>305               |                               | S<br>TB      | 20-30<br>20-30       |                  | 12<br>10         | 1 hour acid treatment<br>1 hour acid treatment, prechill 2 months at 3°-5°C  |                      | 36<br>17a<br>6 |
| <i>Ceanothus spinosus</i>                            | 108                      |                               | T            | 20                   | 7                | 21               | Light, GA <sub>3</sub> , prechill at 5°C for 5 days.<br>Deep dormancy – TZ is recommended at end of test.                        |                      | 26             |
| <i>Ceanothus tomentosus</i>                          | 227                      |                               | T            | 20                   | 7                | 21               | Light, GA <sub>3</sub> , prechill at 5°C for 5 days.<br>Deep dormancy – TZ is recommended at end of test.                        |                      | 26             |
| <i>Ceanothus velutinus</i><br>Snowbrush ceanothus    | 207                      |                               | S<br>TB      | 20-30<br>20-30       |                  | 30<br>10         | 5 min. hot H <sub>2</sub> O soak at 100°C, prechill 3 months at 3°-5°C<br>30 minutes acid treatment, prechill 2 months at 3°-5°C |                      | 36<br>17a      |
| <i>Ceanothus verrucosus</i>                          | 163                      |                               | T            | 20                   | 7                | 21               | Light, GA <sub>3</sub> , prechill at 5°C for 5 days.<br>Deep dormancy – TZ is recommended at end of test.                        |                      | 26             |
| <i>Centaurea diffusa</i><br>Diffused knapweed        |                          |                               | P(a)<br>P(a) | 20<br>20-30          |                  |                  |  |                      | 7              |
| <i>Centaurea montana</i><br>Mountain bluet           |                          | 10/                           | TP,BP        | 20-30,20,15<br>12-33 | 4<br>5           | 21<br>20         | Light; prechill<br>Light   |                      | 2<br>1         |
| <i>Centaurea moschata</i><br>Sweet sultan            |                          |                               | PP           | 15<br>12-33          | 5<br>3           | 16<br>20         | Light<br>Light   |                      | 14<br>1        |
| <i>Centaurea nigra</i><br>Knapweed, black            |                          |                               |              | 20-30                | 3                | 10               | Light  |                      | 20a            |
| <i>Centaurea repens</i><br>Russian knapweed          |                          |                               | P(a)         | 20-30                |                  |                  | Light  |                      | 7              |



| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C         | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference |
|--|--------------------------------|--|----------------|----------------|------------------------|------------------------|--|----------------------|-----------|
| <i>Centaurea solstitialis</i><br>Yellow star thistle           |                                |  | P(a)           | 20             |                        |                        | Dark   |                      | 7         |
| <i>Cerastium biebersteinii</i><br>Mouse-ear chickweed          |                                |  | BP             | 15             | 5                      | 15                     |  |                      | 1         |
| <i>Cerastium siculum</i><br>(cannot identify sp.)<br>Chickweed |                                |  | P{(a)          | 20             |                        |                        | Dark   |                      | 7         |
| <i>Cerastium vulgatum</i><br>Mouse-ear chickweed               |                                |  | B              | 20-30          |                        | 7                      | KNO <sub>3</sub> ; prechill plus KNO <sub>3</sub> for fresh seed |                      | 9<br>7    |
| <i>Chaenactis artemisiifolia</i><br>Pinchusion                 | 2,239                          |  | TB             | 20             | 5                      | 21                     | Prechill (5°C) for fresh and dormant seed                        |                      | 26        |
| <i>Chaenactis douglasii</i><br>Dusty maiden                    |                                |  | P(a)           | 20             |                        |                        | Dark   |                      | 7         |
| <i>Chamaedorea elegans</i><br>Palm, parlor                     | 8                              | 250/                                   | TB<br>T        | 20-30<br>25    | 7<br>7                 | 28<br>28               | Soak seeds 24 hours  |                      | 6<br>14   |
| <i>Charieis heterophylla</i>                                   |                                |  | BP             | 20             | 5                      | 20                     |  |                      | 1         |
| <i>Chasmanthium latifolium</i><br>Wild oats                    |                                |  | TP             | 20-30          | 7                      | 28                     | Light, KNO <sub>3</sub> ; prechill 5-7 days at 10°C              |                      | 1         |
| <i>Chelidonium majus</i><br><i>Celandine</i>                   |                                | 1/                                     | TP             | 20-30<br>20-30 | 7                      | 28                     | Prechill<br>Light; prechill 5 days                               |                      | 20<br>20  |
| <i>Chelone glabra</i><br>Turtlehead                            |                                |  |                | 15-25          | 30                     |                        | Light; prechill 60 days  |                      | 20a       |
| <i>Chenopodium album</i><br>Lambsquarters                      |                                |  | B<br>P(a)      | 20-30<br>20-30 | 6                      | 14                     | Light<br>Dark  |                      | 3<br>7    |
| <i>Chenopodium capitatum</i><br>Strawberry blite               |                                |  | TP             | 20-30          | 4                      | 14                     | Light; prechill 5-7 days at 10°C                                 |                      | 1         |
| <i>Chenopodium<br/>gigantospermum</i><br>Lambsquarters         |                                |  | P(a)           | 20-30          |                        |                        | Light  |                      | 7         |
| <i>Chenopodium spp.</i><br>Lambsquarters                       |                                | 2/20<br>2/20                           | TB<br>TB       | 15-30<br>20-30 | 3<br>3                 | 14<br>14               | Light, KNO <sub>3</sub><br>Light, KNO <sub>3</sub>               |                      | 5<br>5    |
| <i>Chilopsis linearis</i><br>Desert Willow                     |                                |  | B              | 20-30          |                        | 35                     | Needs good moisture supply                                       |                      | 16        |
| <i>Chloris cucullata</i><br>Windmillgrass, hooded              |                                |  | P              | 20-30          | 7                      | 21                     | Light  |                      | 12        |
| <i>Chorispora tenella</i>                                      |                                |  | P(a)           | 20             |                        |                        | Dark   |                      | 7         |

| Kind of seed                      | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C   | First<br>count<br>days | Final<br>count<br>days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference |
|-----------------------------------|--------------------------------|--|----------------|----------|------------------------|------------------------|---|----------------------|-----------|
| Blue mustard                      |                                |  |                |          |                        |                        |   |                      |           |
| <i>Chrysanthemum indicus</i>      |                                |  | TP             | 20-30    | 4                      | 21                     | Light   |                      | 1         |
| <i>Chrysanthemum leucanthemum</i> | 4540                           | 5/                                     | P(a)           | 20-30,15 |                        |                        | TZ<br>Light   |                      | 68<br>7   |
| Oxeye daisy                       | 1506                           | 2/                                     | TB             | 20       | 4                      | 14                     | Light   |                      | 1         |
|                                   |                                |  | TB             | 15,20-30 | 7                      | 21                     | Light   |                      | 6         |
|                                   |                                |  | P              | 15       | 5                      | 10                     |   |                      | 4         |
|                                   |                                |  | TP,YP          | 20-30    | 7                      | 21                     | Light; prechill   |                      | 2         |
| <i>Chrysanthemum segetum</i>      |                                | 8/                                     | TP,BP          | 20-30,15 | 4                      | 21                     | Prechill  |                      | 2         |
| Corn marigold                     |                                |  | TP             | 15       | 7                      | 14                     | Light   |                      | 1         |
| <i>Chrysopsis villosa</i>         |                                |  |                | 15       | 7                      | 28                     | Light; may have dormancy  |                      | 16        |
| Aster, hairy golden               |                                |  |                |          |                        |                        |   |                      |           |
| <i>Cineraria erfuet</i>           | 498949                         | 0.25/                                  | B              | 20       | 7                      | 14                     |   |                      | 6         |
| Dusty miller                      |                                |  |                |          |                        |                        |   |                      |           |
| <i>Cirsium arvense</i>            |                                |  | P(a)           | 20-30    |                        |                        | Light   |                      | 7         |
| Canada thistle                    |                                |  |                |          |                        |                        |   |                      |           |
| <i>Cirsium scariosum</i>          | 1,764                          |  | TB             | 20-30    | 5                      | 21                     | Prechill (5°C) for fresh and dormant seed.                              |                      | 26        |
| Elk thistle                       |                                |  |                |          |                        |                        |   |                      |           |
| <i>Cirsium undulatum</i>          |                                |  | P(a)           | 20-30    |                        |                        | Light   |                      | 7         |
| Wavy-leaf                         |                                |  |                |          |                        |                        |   |                      |           |
| <i>Cirsium vulgare</i>            |                                |  | P(a)           | 20-30    |                        |                        |   |                      | 7         |
| Bull thistle                      |                                |  |                | 15-25    |                        | 10                     | Light (optional)  |                      | 20o       |
|                                   |                                |  |                | 20-30    |                        | 10                     | Light (optional)  |                      | 20o       |
|                                   |                                |  |                | 20       |                        | 10                     | Light (optional)  |                      | 20o       |
| <i>Cissus antarctica</i>          |                                |  | P              | 15       | 7                      | 28                     | Light   |                      | 14        |
| Kangaroo vine                     |                                |  |                |          |                        |                        |   |                      |           |
| <i>Clarkia bottae</i>             | 4,990                          |  | TB             | 15       | 5                      | 21                     | Prechill (5°C) and GA <sub>3</sub> (400 ppm) for fresh and dormant seed |                      | 26        |
| Punchbowl godetia                 |                                |  |                |          |                        |                        |   |                      |           |
| <i>Claytonia perfoliata</i>       | 3,464                          |  | TB             | 15       | 5-7                    | 21                     | Light; prechill 5°C for 5 days for fresh and dormant seed.              |                      | 26        |
| Miner's lettuce                   |                                |  |                |          |                        |                        |   |                      |           |
| <i>Clematis ligusticifolia</i>    | 904                            |  | TB             | 20       | 5                      | 21                     | Prechill (5°C) for fresh and dormant seed.                              |                      | 26        |
| Clematis, Yerba de Chivato        |                                |  |                |          |                        |                        |   |                      |           |
| <i>Cnicus benedictus</i>          |                                |  | BP             | 20-30    | 7                      | 21                     |   |                      | 1         |
| Blessed thistle                   |                                | 75/                                    | TP,BP,<br>S    | 20-30    | 7                      | 21                     | Prechill  |                      | 2         |
| <i>Cochlearia officinalis</i>     |                                |  | TP             | 20-30    | 7                      | 28                     |   |                      | 1         |

| Kind of seed  | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata          | Temp°C                                    | First<br>count<br>days | Final<br>count<br>days     | Additional Directions   | See Sec. 4.2 and 4.9 | Reference                 |
|---|--------------------------------|--|-------------------------|---|------------------------|----------------------------|---|----------------------|---------------------------|
| Scurvy grass  |                                |  |                         |   |                        |                            |   |                      |                           |
| <i>Convallaria majalis</i><br>Lily-of-the-valley        |                                |  |                         | 20  |                        |                            | No light, 3 months at 5°C, then 2 months at 20°C, then 3-5 months at 5°C, then germinate at 20°C  |                      | 23                        |
| <i>Convolvulus arvensis</i><br>Field bindweed           |                                |  | TB,TB                   | 20-30                                     | 4                      | 7                          | 1 hour H <sub>2</sub> SO <sub>4</sub>   |                      | 3                         |
| <i>Convolvulus tricolor</i><br>Dwarf morning-glory      |                                | 20/                                    | TP,BP<br>BP             | 20-30,20<br>20-30                         | 4<br>3                 | 14<br>14                   | Pierce seed, chip or file off fragment of the testa   |                      | 2<br>1                    |
| <i>Cordyline indivisa</i><br>Blue dracaena              | 269                            | 10/                                    | TB                      | 20-30                                     | 7                      | 28                         | Light; prechill 5-7 days at 10°C  |                      | 6                         |
|   |                                |  | TB                      | 20-30                                     | 7                      | 28                         |   | 1                    |                           |
|   |                                | 10/                                    | TB                      | 20-30                                     | 7                      | 35                         |   | 2a                   |                           |
| <i>Coreopsis calliopsidea</i>                           | 879                            |  | RT                      | 15  | 7                      | 21                         | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours.                             |                      | 26                        |
| <i>Coreopsis maritima</i><br>Sea dahlia                 |                                | 5/                                     | TP,BP<br>TP             | 20-30,20<br>10-30<br>20                   | 4<br>5<br>5-7          | 14<br>25<br>14             | Light, prechill, KNO <sub>3</sub><br>Light<br>Prechill 5°C for 5 days for fresh and dormant seed.   |                      | 2<br>1<br>26              |
| <i>Corispermum hyssopifolium</i><br>Hyssopleaf tickseed |                                |  | P(a)                    | 20-30                                     |                        |                            | Dark; prechill 2 weeks at 3°C   |                      | 7                         |
| <i>Cortaderia selloana</i><br>Pampas grass              |                                |  | TP<br>P<br>TB<br>P<br>P | 20-30<br>20-30<br>20-30<br>15-25<br>20-30 | 7<br>6<br>7<br>4<br>4  | 28<br>14<br>14<br>35<br>35 | Light<br>Light<br>Light   |                      | 2a<br>4<br>16<br>26<br>26 |
| <i>Corydalis lutea</i><br>Corydalis                     |                                |  | TP                      | 20-30                                     | 7                      | 28                         | Light   |                      | 1                         |
| <i>Cotula barbata</i>                                   |                                |  | BP                      | 20  | 4                      | 10                         |   |                      | 1                         |
| <i>Cowania stansburiana</i><br>Stansbury cliffrose      | 141<br>140<br>175              | 18/<br>10/                             | TB<br>TB                | 10-30<br>0-30<br>10-25,10-30,<br>13       |                        | 28<br>90<br>14             | Prechill 1 month at 3°-5°C, then 10°-30°C 10 days<br>Prechill 30 days at 3°-5°C, may soak in water 48 hours, then 30 minute soak in H <sub>2</sub> O <sub>2</sub> |                      | 6<br>17a<br>36<br>68      |
| <i>Crepis capillaris</i><br>Smooth hawkweed             |                                |  | P(a)<br>P(a)            | 20-30<br>15                               |                        |                            | Light<br>Light  |                      | 7<br>7                    |
| <i>Crepis rubra</i>                                     |                                |  | TP                      | 20-30                                     | 3                      | 10                         | Light   |                      | 1                         |
| <i>Cryptantha intermedia</i>                            | 3,140                          |  | TB                      | 20  | 7                      | 21                         | GA <sub>3</sub> , Prechill at 5°C for 5 days.   |                      | 26                        |

| Kind of seed   | Approx. # seeds per gram | Min. Wt. in grams purity/ nox | Sub-strata                          | Temp°C   | First count days                | Final count days                       | Additional Directions   | See Sec. 4.2 and 4.9 | Reference                           |
|--|--------------------------|-------------------------------|-------------------------------------|--|---------------------------------|--|---|----------------------|-------------------------------------|
|  |                          |                               |                                     |  |                                 |  | Deep dormancy – Cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours.  |                      |                                     |
| <i>Cryptantha muricata</i>                           | 1,501                    |                               | TB                                  | 20   | 7                               | 21                                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26                                  |
| <i>Cryptantha torreyana</i><br>Cryptantha            |                          |                               | P(a)                                | 20-30  |                                 |  | Dark; prechill 4 weeks at 3°C   |                      | 7                                   |
| <i>Cucurbita foetidissima</i><br>Calabazilla         | 22                       |                               | RT                                  | 20-30  | 4-5                             | 7 or 10                                | Prechill 5°C for 5 days for fresh and dormant seed.   |                      | 26                                  |
| <i>Cuphea ignea</i><br>Cigar flower                  |                          |                               | TB<br>B<br>TP<br>P<br>TB<br>P<br>TP | 20-30<br>20,20-30<br>20-30<br>20<br>20-30<br>20-30<br>20-30,20 | 7<br>7<br>7<br>4<br>7<br>4<br>4 | 21<br>14<br>21<br>14<br>21<br>21<br>21 | Light<br>Prechill 3 days<br>Light   |                      | 15<br>6<br>1<br>37<br>14<br>26<br>2 |
| <i>Cuphea lanceolata</i>                             |                          |                               | TP                                  | 20-30  | 4                               | 12                                     | Light; prechill 5-7 days  |                      | 1                                   |
| <i>Cyperus alternifolius</i><br>Umbrella sedge       |                          |                               | TP<br>P                             | 10-30<br>20-30   | 7                               | 28                                     | Light; prechill 5-7 days<br>Continue until no further response, needs good moisture supply  |                      | 1<br>16                             |
| <i>Cyperus eragrostis</i><br>Nutsedge                | 8,705                    |                               | TCT                                 | 20-35  | 5                               | 21                                     | Prechill (5°C) for fresh and dormant seed.  |                      | 26                                  |
| <i>Cyphomandra betacea</i><br>Tree Tomato            |                          |                               | TP                                  | 25-30 <sup>1</sup>   | 14                              | 20                                     | Light 24 hours; prechill 1 day at 5°C<br><sup>1</sup> Ambient room temperature  |                      | 64                                  |
| <i>Dalea purpurea</i><br>Purple prairie clover       | 652                      | 4/40<br>4/                    |                                     | 20,20-30<br>20,20-30<br>20-30,15-25                            | 7<br>7<br>7                     | 21<br>14<br>21                         | Scarify seed 30 minutes<br>KNO <sub>3</sub> , prechill 10 days; soak in H <sub>2</sub> SO <sub>4</sub> 15 minutes                     |                      | 6<br>68                             |
| <i>Danthonia californica</i><br>Oatgrass, California |                          |                               | P                                   | 20-25  | 7                               | 28                                     | Light; prechill 7 weeks   |                      | 38,39                               |
| <i>Danthonia parryi</i><br>Oatgrass, parry           |                          |                               | P                                   | 20-30  | 7                               | ?                                      |   |                      | 40,11                               |
| <i>Datura metel</i><br>Trumpet flower                |                          | 25/                           | TP,BP<br>P                          | 20-30,20<br>20-30  | 5<br>14                         | 21<br>30                               | Prechill, scratch hard seeds<br>Poison  |                      | 2<br>16                             |
| <i>Datura stramonium</i><br>Jimsonweed               |                          | 25/                           | TP,BP<br>BP                         | 20-30,20<br>20-30  | 5<br>7                          | 21<br>28                               | Prechill, scratch hard seeds  |                      | 2<br>1                              |

| Kind of seed  | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C         | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference    |
|---|--------------------------------|--|----------------|----------------|------------------------|------------------------|--|----------------------|--------------|
|   |                                |  | P(a)           | 20-30          |                        |                        | Dark   |                      | 7            |
|   |                                |  | B              | 20-30          |                        | 16                     |  |                      | 9            |
| <i>Daucus carota</i><br>Wild carrot                                   |                                |  | S              | 15-30          | 9                      | 21                     | Light  |                      | 3            |
| <i>Deschampsia cespitosa</i><br>Hairgrass, tufted                     | 2,932                          |  | P              | 10-25          | 7                      | 16                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.  |                      | 41           |
|   |                                |  | TCT            | 15-25          | 7                      | 21                     |  |                      | 26           |
| <i>Deschampsia cespitosa</i><br><i>ssp. holciformis</i>               | 2,932                          |  | TCT            | 15-25          | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26           |
| <i>Deschampsia elongata</i>   | 8,621                          |  | TCT            | 15-25          | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26           |
| <i>Descurainia pinnata</i><br><i>Tansy mustard</i>                    |                                |  | P(a)           | 20-30          |                        |                        | Dark   |                      | 7            |
|   |                                |  | P(a)           | 20             |                        |                        | Dark   |                      | 7            |
| <i>Desmanthus illinoensis</i><br>Illinois bundleflower                |                                | 10/100                                 | P              | 20-30          | 5                      | 21                     |  |                      | 21           |
|   |                                |  | B              | 20-30          | 7                      | 14                     | Hard seed  |                      | 16           |
| <i>Desmanthus virgatus</i><br>Prostrate bundleflower                  |                                | 5/50                                   | P              | 20-30          | 5                      | 21                     |  |                      | 21           |
| <i>Diascia barberae</i><br>Twinspur                                   |                                |  | TP             | 15             | 4                      | 10                     | Light  |                      | 1            |
| <i>Dicentra chrysantha</i><br>Golden Ear-drops                        | 1,110                          |  | TB             | 15             | 5                      | 21                     | Prechill (5°C) for fresh and dormant seed.   |                      | 26           |
| <i>Dicentra eximia</i><br>Wild bleeding heart                         | 489                            | 5/                                     |                |                |                        |                        | TZ   |                      | 6<br>16      |
| <i>Dicentra spectabilis</i><br>Bleeding-heart                         | 193<br>211                     | 13/                                    | TP             | 20-30          | 7                      | 28                     | GA <sub>3</sub><br>Seed must be frozen<br>TZ   |                      | 6<br>8<br>16 |
| <i>Dichanthium annulatum</i><br>Diaz Bluestem var Kleberg             |                                | 1/10                                   | P              | 20-30          | 5                      | 21                     | KNO <sub>3</sub> ; prechill 14 days  |                      | 21           |
| <i>Dichanthium aristatum</i><br><i>Angelton Bluestem</i> var<br>Gordo |                                | 2/20<br>2/20                           | P<br>P         | 20-30<br>20-30 | 5<br>5                 | 21<br>21               | KNO <sub>3</sub> ; prechill 14 days<br>KNO <sub>3</sub> ; prechill 14 days   |                      | 21<br>21     |
| <i>Dichanthium papillosum</i><br>Medio Bluestem                       |                                | 1/10                                   | P              | 20-30          | 5                      | 21                     | KNO <sub>3</sub> ; prechill 14 days  |                      | 21           |

| Kind of seed  | Approx. # seeds per gram | Min. Wt. in grams purity/ nox | Sub-strata | Temp°C             | First count days | Final count days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference |
|---|--------------------------|-------------------------------|------------|--------------------|------------------|------------------|---|----------------------|-----------|
| <i>Dichanthium spp.</i><br>Old World Bluestem                   |                          | 1/10                          | P          | 20-30              | 5                | 21               | KNO <sub>3</sub> ; prechill 14 days   |                      | 21        |
| <i>Dichelostemma capitatum</i><br>( <i>Brodiaea pulchella</i> ) | 1,388                    |                               | RT         | 15                 | 7                | 21               | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut seed, soak in GA <sub>3</sub> to prepare, for determining dormancy by TZ (rudimentary embryo). |                      | 26        |
| <i>Dioclea reflexa</i><br>Sea purse                             |                          |                               |            |                    |                  | 30               | Scarify seed coat with file or notch, soak 24 hours or until imbibed  |                      | 42        |
| <i>Diplotaxis spp.</i><br>Wall rocket, Wild Arugula             |                          | 1/10                          | TB         | 20-30              | 5                | 12               |   |                      | 26        |
| <i>Dipsacus fullonum</i><br>Common teasel                       |                          |                               | P          | 20                 | 6                | 14               |   |                      | 16        |
| <i>Dizygotheca elegantissima</i><br>False aralia                | 320                      | 6/<br>8/                      | TB,BP      | 20-30              | 7                | 28               | Light<br>Light<br>Light   |                      | 2         |
|   |                          |                               | P          | 20-30              | 21               | 40               |   |                      | 26        |
|   |                          |                               | TB         | 20                 |                  | 21               |   |                      | 15        |
|   |                          |                               | B          | 20-30              | 7                | 40               |   |                      | 6         |
|   |                          |                               | TB         | 20-30              | 7                | 28               |   |                      | 14        |
|   |                          |                               |            | 20-30              | 7                | 28               |   | 18                   |           |
| <i>Doronicum cordatum</i><br>Leopards-bane                      | 633                      | 1.75/<br>17.5                 | B          | 20                 | 7                | 21               |   |                      | 6         |
|   |                          |                               |            | 20                 |                  | 16               |   |                      | 1         |
|   |                          |                               |            | 20-25              | 14               | 21               |   |                      | 8         |
| <i>Dracaena draco</i><br>Dragon tree                            | 4                        | 1000/                         | BP         | 20-30              | 7                | 28               | Soak 12 hours at 20°C<br>Soak 4 hours<br>Light, KNO <sub>3</sub><br>Soak 24 hours   |                      | 2a        |
|   |                          |                               |            | 20-30              |                  | 35               |   |                      | 18        |
|   |                          |                               | P          | 15                 | 7                | 28               |   |                      | 14        |
|   |                          |                               | B          | 20-30              | 7                | 60               |   |                      | 6         |
|   |                          |                               | TB         | 20-30              |                  | 28               |   |                      | 15        |
|   |                          |                               | P,TB       | 20-30              | 15               | 30               |   |                      | 16        |
|   |                          |                               | T          | 20                 | 10               | 28               |   |                      | 18        |
| <i>Dracocephalum moldavica</i><br>Dragon head                   |                          |                               | TB         | 20                 | 4                | 12               |   | 1                    |           |
| <i>Dracopis amplexicaulis</i><br>Clasping coneflower            | 1871                     | 2/                            |            | 20                 | 3                | 14               |   |                      | 6         |
|   |                          |                               |            |                    |                  |                  |   |                      |           |
| <i>Drosanthemum floribundum</i>                                 | 48                       |                               | TB         | 20                 | 5-<br>7          | 21               | Light; prechill 5°C for 5 days for fresh and dormant seed.  |                      | 26        |
| <i>Dryobalanops aromatica</i>                                   | 0.2 <sup>1</sup>         |                               | S,PB       | 25-30 <sup>2</sup> |                  | 10               | Light 24 hours<br><sup>1</sup> freshly harvested seed   |                      | 64        |

| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp <sup>o</sup> C | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference |
|--|--------------------------------|--|----------------|---------------------|------------------------|------------------------|--|----------------------|-----------|
|  |                                |  |                |                     |                        |                        | <sup>2</sup> ambient room temperature  |                      |           |
| <i>Duchesnea indica</i><br>Indian strawberry                   |                                |  | TP             | 20-30               | 7                      | 28                     | Light  |                      | 1         |
| <i>Duranta repens</i>  |                                |  | TP             | 25-30 <sup>1</sup>  | 31                     | 42                     | Light 24 hours<br><sup>1</sup> ambient room temperature  |                      | 64        |
| <i>Durio zibethinus</i>  | 0.07 <sup>1</sup>              |  | S              | 25-30 <sup>2</sup>  | 20                     | 35                     | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature                                       |                      | 64        |
| <i>Dyssodia tenuiloba</i><br>Dahlberg daisy                    |                                |  | TB<br>P        | 20,20-30<br>20      | 7<br>7                 | 21<br>21               | Light<br>Light   |                      | 6<br>14   |
| <i>Eccremocarpus acaber</i><br>Glory flower                    |                                |  | TB             | 20                  | 10                     | 25                     | Dark   |                      | 1         |
| <i>Echeveria sp.</i><br>Hen-and chickens                       |                                |  |                | 20                  |                        | 14                     |  |                      | 18        |
| <i>Echinodorus berteroi</i><br>burhead                         | 3,620                          |  | TB             | 20                  | 5                      | 21                     | Prechill (5°C) for dormant seed.   |                      | 26        |
| <i>Echium lycopsis</i><br>Vipers bug gloss                     |                                |  | TB             | 20                  | 4                      | 12                     |  |                      | 1         |
| <i>Elaeis guineensis</i>                                       | 0.2                            |  | PB             | 25-30 <sup>1</sup>  | 28                     | 42                     | Light 24 hours<br><sup>1</sup> ambient room temperature  |                      | 64        |
| <i>Eleocharis macrostachya</i><br>Spikerush                    | 2,373                          |  | TCT            | 20-35               | 5                      | 21                     | Prechill not recommended   |                      | 26        |
| <i>Elymus condensatus</i><br>Wildrye, mammoth                  | 365                            |  | P              | 20-30               | 7                      | 21                     | Light  |                      | 67<br>12  |
| <i>Elymus condensatus</i><br>(syn. <i>Leymus condensatus</i> ) | 417                            | Blow<br>#17                            | TCT            | 15-25               | 7                      | 21                     | Prechill at 5°C for 5 days.  |                      | 26        |
| <i>Elymus glaucus</i><br>Wildrye, blue                         | 301                            |  | B              | 20-30               | 7                      | 28                     |  |                      | 67<br>11  |
| <i>Elymus glaucus</i>  | 259                            |  | TCT            | 15-25               | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26        |
| <i>Elymus multisetus</i><br>(syn. <i>Sitanion jubatum</i> )    | 253                            |  | TB             | 20                  | 7                      | 14                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26        |
| <i>Elymus sabulosus</i><br>Wildrye, Russian dune               |                                |  | T              | 20-30               | 7                      | 28                     |  |                      | 11        |

| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C         | First<br>count<br>days | Final<br>count<br>days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference |
|--|--------------------------------|--|----------------|----------------|------------------------|------------------------|---|----------------------|-----------|
| <i>Elymus salinus</i><br>Wildrye, salina                       |                                |  | P              | 20-30          | 7                      | 28                     | Light   |                      | 12        |
| <i>Elymus triticoides</i><br>Wildrye, beardless                | 112                            |  | P              | 20-30          | 7                      | 35                     | Light, 0.2% KNO <sub>3</sub>  |                      | 67<br>12  |
| <i>Elymus triticoides</i><br>(syn. <i>Leymus triticoides</i> ) | 366                            | Blow~17                                | TCT            | 15-25          | 7                      | 21                     | Prechill at 5°C for 5 days.   |                      | 26        |
| <i>Emilia javanica</i><br>Tassel flower                        |                                |  | TP             | 10-30          | 5                      | 14                     | Light   |                      | 1         |
| <i>Encelia actoni</i><br>syn. <i>E. virginensis</i>            | 570                            |  | TB             | 20             | 5                      | 14                     | Light; prechill 5°C for 5 days for fresh and dormant seed.  |                      | 26        |
| <i>Encelia californica</i>                                     | 756                            |  | TB             | 20             | 5                      | 14                     | Light; prechill 5°C for 5 days for fresh and dormant seed.  |                      | 26        |
| <i>Encelia farinosa</i>  | 1,120                          |  | TB             | 20             | 6                      | 14                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26        |
| <i>Engelmannia pinnatifida</i><br>Englemann daisy              |                                | 10/100                                 | P <sup>1</sup> | 20-30          | 5                      | 10                     | KNO <sub>3</sub> ; prechill 14 days<br><sup>1</sup> kimpak  |                      | 21        |
| <i>Enneapogon desvauxii</i><br>Papusgrass, spike               |                                |  | P              | 20-30          | 7                      | 21                     | Light, 0.2% KNO <sub>3</sub>  |                      | 12        |
| <i>Entada gigas</i><br>Sea heart                               |                                |  |                |                |                        | 30                     | Scarify seed coat with file or notch, soak 24 hours or until imbibed  |                      | 42        |
| <i>Ephedra sp.</i><br>Green or Nevada ephedra                  | 58                             | 55/<br>15/150                          | TB             | 20<br>20-30    | 7<br>3                 | 21                     | Soak 24 hours in H <sub>2</sub> O at 30°C then rechill 21 days at 3°-5°C<br>Light; prechill 7 days                                    |                      | 68<br>5   |
| <i>Epigaea repens</i><br>Mayflower                             |                                |  |                | 15-25          |                        | 60                     | Light; prechill 30 days at 5°C  |                      | 20h       |
| <i>Epigaea repens</i><br>Trailing arbutus                      |                                |  | B              | 15-25,20,30    |                        | 68                     | Light; prechill 1 month at 5°-8°C   |                      | 20h       |
| <i>Epilobium angustifolium</i><br>Fireweed                     |                                |  | P              | 20             | 7                      | 21                     | Light   |                      | 16        |
| <i>Epilobium canum</i><br>California fuchsia                   | 2,044                          |  | TB             | 20             | 5                      | 21                     | Prechill (5°C) for fresh and dormant seed.  |                      | 26        |
| <i>Epilobium ciliatum</i><br>Fireweed                          | 37,078                         |  | TB             | 20             | 5-<br>7                | 21                     | Light.  |                      | 26        |
| <i>Eragrostis intermedia</i><br>Lovegrass, plains              |                                | 0.5/5                                  | P<br>P         | 20-35<br>20-35 | 7<br>7                 | 28<br>28               | KNO <sub>3</sub> ; prechill 7 days<br>Light, 0.2% KNO <sub>3</sub>  |                      | 21<br>12  |
| <i>Eragrostis atherstonei</i>                                  |                                |  | P              | 20-35          | 7                      | 21                     | Light, 0.2% KNO <sub>3</sub> ; prechill 14 days   |                      | 12        |



| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata            | Temp°C                        | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference                      |
|--|--------------------------------|--|---------------------------|-------------------------------|------------------------|------------------------|--|----------------------|--------------------------------|
| Lovegrass, Atherstone  |                                |  |                           |                               |                        |                        |  |                      |                                |
| <i>Eragrostis chloromelas</i><br>Lovegrass, Boer   | 6423                           |  | P<br>P,TB                 | 20-35<br>20-30                | 7<br>5                 | 14<br>14               | Light, 0.2% KNO <sub>3</sub><br>Light, KNO <sub>3</sub> ; prechill 7 days  |                      | 67<br>12,43<br>21              |
| <i>Eragrostis curvula</i><br><i>cv. Renner</i><br>Lovegrass, weeping                       | 3216                           | 1/<br>1/10                             | TP<br>P,TB                | 20-35,15-30<br>20-35          | 6<br>5                 | 10<br>14               | KNO <sub>3</sub> , prechill<br>Light, KNO <sub>3</sub> ; prechill  |                      | 2<br>21<br>67                  |
| <i>Eragrostis erosa</i><br>Lovegrass, chihaahua  |                                |  | P                         | 20-35                         | 7                      | 28                     |  |                      | 12                             |
| <i>Eragrostis lehmanniana</i><br>Lovegrass, lehmann  | 9331                           |  | P<br>P,TB,K<br>P,B<br>P.B | 17<br>20-30<br>20-30<br>20-30 | 7<br>7<br>5<br>5       | 28<br>28<br>28<br>14   | 0.2% KNO <sub>3</sub><br>Light, KNO <sub>3</sub> ; preheat 24 hours at 35°C. or prechill 5 days<br>at 10°C<br>Light<br>Prechill 4 weeks  |                      | 67<br>12,29,43<br>21<br>5<br>5 |
| <i>Eragrostis pilifera</i><br>Sandhill lovegrass   |                                | 1/10                                   | P                         | 20-30                         | 5                      | 14                     | KNO <sub>3</sub>   |                      | 21                             |
| <i>Eragrostis superba</i><br>Lovegrass, Wilman's   |                                | 2/20                                   | P<br>P                    | 20-30<br>20-30                | 5<br>7                 | 14<br>21               | KNO <sub>3</sub> ; prechill 7 days<br>Light  |                      | 21<br>12                       |
| <i>Erechtites hieraciifolia</i><br>Pilewort  |                                |  |                           | 20-30                         | 4                      | 14                     | Prechill 60 days   |                      | 20a                            |
| <i>Eremocarpus setigerus</i><br>(syn. <i>Croton setigerus</i> )                            | 187                            |  | T                         | 20                            | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through cotyledons, GA <sub>3</sub> , chill at<br>5°C for 16 hours. |                      | 26                             |
| <i>Ericameria palmeri</i><br>Palmer's Goldenbush   | 4,098                          |  | TB                        | 20                            | 5                      | 21                     | Prechill (5°C) for fresh and dormant seed.   |                      | 26                             |
| <i>Ericameria pinifolia</i><br>(syn. <i>Haplopappus</i><br><i>pinifolia</i> )<br>Pine-bush | 1,967                          |  | TB                        | 20                            | 5                      | 21                     | Prechill (5°C) for fresh and dormant seed.   |                      | 26                             |
| <i>Erigeron decumbens</i>  |                                |  | TB                        | 15-25                         | 7                      | 14                     | Prechill for 12 weeks. Low germination may be due to<br>unfilled or inviable seeds.  |                      | 70                             |
| <i>Erigeron sp.</i><br>Fleabane  |                                |  | P(a)                      | 20-30                         |                        |                        | Light  |                      | 7                              |
| <i>Eriogonum compositum</i>  |                                |  | P(a)                      | 20                            |                        |                        | Dark   |                      | 7                              |

| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp <sup>o</sup> C | First<br>count<br>days | Final<br>count<br>days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference |
|--|--------------------------------|--|----------------|---------------------|------------------------|------------------------|---|----------------------|-----------|
| Northern Eriogonum   |                                |  | P(a)           | 15                  |                        |                        | Light   |                      |           |
| <i>Eriogonum elatum</i><br>Silver Eriogonum                    |                                |  | P(a)           | 20-30               |                        |                        | Dark  |                      | 7         |
| <i>Eriogonum fasciculatum</i>                                  | 1,060                          |  | TB             | 20                  | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours.   |                      | 26        |
| <i>Eriogonum gracile</i><br>Wild buckwheat                     | 6,207                          |  | TB             | 20                  | 5-<br>7                | 21                     | Light; prechill 5°C for 5 days for fresh and dormant seed.  |                      | 26        |
| <i>Eriogonum latifolium</i><br>Coast buckwheat                 | 1,114                          |  | TB             | 20                  | 5                      | 21                     | Prechill (5°C) for fresh and dormant seed.  |                      | 26        |
| <i>Eriogonum stellatum</i><br>Longray Eriogonum                |                                |  | P(a)           | 20-30               |                        |                        | Dark  |                      | 7         |
| <i>Eriogonum umbellatum</i><br>Sulfur flower                   | 407                            |  | TB             | 20                  | 5                      | 21                     | Prechill (5°C) for fresh and dormant seed.  |                      | 26        |
| <i>Eriogonum umbellatum</i><br>Sulphur                         | 457                            | 5.47                                   | TB             | 15-25               | 7                      | 28                     | Light, prechill at 3°-5°C.  |                      | 73        |
| <i>Eriophyllum confertiflorum</i>                              | 7,575                          |  | TB             | 20                  | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deeper dormancy – Cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26        |
| <i>Eriophyllum lanatum</i><br>Oregon sunshine                  |                                |  | P(a)<br>P(a)   | 20-30<br>20         |                        |                        | Dark<br>Dark  |                      | 7         |
| <i>Eriophyllum staechadifolium</i><br>Seaside Woolly sunflower | 5,138                          |  | TB             | 20                  | 5                      | 14                     | Light; prechill 5°C for 5 days for fresh and dormant seed.  |                      | 26        |
| <i>Erysimum cheiranthoides</i><br>Wormseed mustard             |                                |  | B              | 20-30               |                        | 7                      | KNO <sub>3</sub>  |                      | 9         |
| <i>Eschscholzia lemmonii</i><br>Lemmon's poppy                 | 1,768                          |  | TB             | 15                  | 5                      | 10                     | GA <sub>3</sub> (400 ppm) or KNO <sub>3</sub> (2000 ppm) for fresh and dormant seed.  |                      | 26        |
| <i>Eucrypta chrysanthemifolia</i><br>Eucrypta                  | 2,703                          |  | TB             | 20                  | 5                      | 21                     | Prechill (5°C) and GA <sub>3</sub> (400 ppm) for fresh and dormant seed.  |                      | 26        |
| <i>Eugenia jambos</i>  | 0.3 <sup>1</sup>               |  | S              | 25-30 <sup>2</sup>  |                        | 22                     | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature  |                      | 64        |
| <i>Eupatorium perfoliatum</i><br>Common boneset                |                                |  |                | 20-30               | 8                      | 14                     | Light   |                      | 20a       |
| <i>Euphorbia cyparissias</i>                                   |                                |  |                | 15-25               |                        |                        | Light, KNO <sub>3</sub> ; prechill 21 days at 5°C   |                      | 20n       |

| Kind of seed  | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata                        | Temp°C   | First<br>count<br>days | Final<br>count<br>days                   | Additional Directions  | See Sec. 4.2 and 4.9 | Reference                           |
|---|--------------------------------|--|---------------------------------------|--|------------------------|--|--|----------------------|-------------------------------------|
| Cypress spurge<br><i>Euphoria longan</i>  | 0.7 <sup>1</sup>               |  | S                                     | 25-30 <sup>2</sup>                                 |                        | 17                                       | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature                                       |                      | 64                                  |
| <i>Eurotia lantana</i><br>Winterfat   |                                | 15/150<br>5/50                         | P<br>TB                               | 20-30<br>15-30                                     |                        | 21<br>5<br>21                            | Light, KNO <sub>3</sub>  |                      | 21<br>5                             |
| <i>Euthamia occidentalis</i> (syn.<br><i>Solidago occidentalis</i> )<br>Western Goldenrod | 13,159                         |  | TB                                    | 20   |                        | 5<br>21                                  | Prechill (5°C) for fresh and dormant seed.   |                      | 26                                  |
| <i>Fallugia paradoxa</i><br>Apache-plume  | 1100                           | 1/                                     |                                       | 20,22<br>20  |                        | 7<br>7<br>14<br>21                       | Prechill 30 days at 3°-5°C<br>Dark   |                      | 68<br>16                            |
| <i>Fatsia japonica</i><br>Japanese fatsia   | 194                            | 15/<br>13/130                          | TP<br>TP<br>B<br>TB                   | 20,20-30<br>20-30<br>20<br>20-30                   |                        | 7<br>7<br>28<br>28<br>28<br>7<br>28      | Light; prechill 5-7 days   |                      | 2<br>6<br>44<br>1                   |
| <i>Felicia bergerana</i><br>King fisher daisy   |                                |  | TP                                    | 20   |                        | 5<br>20                                  | Light  |                      | 1                                   |
| <i>Ferocactus covelli</i><br>Barrel cactus  |                                |  | PP                                    | 20-30  |                        | 7<br>21                                  | Light  |                      | 14                                  |
| <i>Festuca arizonica</i><br>Fescue, Arizona   |                                |  | P                                     | 15-25  |                        | 7<br>21                                  |  |                      | 62                                  |
| <i>Festuca californica</i>  | 428                            |  | TCT                                   | 15-25  |                        | 7<br>21                                  | Cut through endosperm, GA <sub>3</sub> and chill at 5°C for 16 hours.  |                      | 26                                  |
| <i>Festuca idahoensis</i><br>Fescue, Idaho  |                                |  | P<br>TCT                              | 15-25<br>15-25                                     |                        | 7<br>7<br>21<br>21                       | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 57,58<br>26                         |
| <i>Festuca occidentalis</i>   | 874                            |  | TCT                                   | 15-25  |                        | 7<br>21                                  | ---  |                      | 26                                  |
| <i>Frageria vesca</i> cv. Alpine<br>Woodland strawberry                                   | 3174<br>2442                   | 1/<br>1/10                             | TB<br>P,TB<br>TP<br>P<br>PB<br>P<br>P | 20-30,20<br>20<br>20-30<br>20<br>20<br>20-30<br>20 |                        | 7<br>7<br>7<br>14<br>14<br>28<br>7<br>35 | Light<br>Light<br><br><br><br><br>KNO <sub>3</sub>   |                      | 6<br>16<br>2<br>4<br>32<br>14<br>15 |
| <i>Frankenia salina</i>   | 5,500                          |  | TB                                    | 20   |                        | 5<br>21                                  | Prechill (5°C) for fresh and dormant seed.   |                      | 26                                  |

| Kind of seed  | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C             | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference    |
|---|--------------------------------|--|----------------|--------------------|------------------------|------------------------|--|----------------------|--------------|
| (syn. <i>F. grandifolia</i> )<br>Alkali heath                 |                                |  |                |                    |                        |                        |  |                      |              |
| <i>Franseria acanthicarpa</i><br>Sand bur                     |                                |  | P(a)           | 20-30              |                        |                        | Dark   |                      | 7            |
| <i>Freesia refracta</i><br>Freesia                            |                                | 25/                                    | TP,BP<br>BP    | 20,15<br>15        | 7<br>7                 | 35<br>35               | Pierce seed, chip or file off fragment of testa, prechill<br>Light                             |                      | 2<br>1       |
| <i>Galeopsis segetum</i><br>Hemp nettle                       |                                |  | TP             | 15                 | 7                      | 21                     | Light  |                      | 1            |
| <i>Galium boreale</i><br>Northern bedstraw                    |                                |  | P(a)           | 20-30              |                        |                        | Light; prechill 4 weeks at 3°C   |                      | 7            |
| <i>Galium odoratam</i><br>Woodruff                            | 151                            | 17/                                    | BP             | 10                 | 7                      | 21                     | TZ   |                      | 6<br>1<br>16 |
| <i>Gamolepis tagetes</i>                                      |                                |  | TP             | 20-30              | 5                      | 14                     | Light  |                      | 1            |
| <i>Garcinia mangostana</i><br>Mangosteen                      | 1.25 <sup>1</sup>              |  | S              | 25-30 <sup>2</sup> |                        | 28                     | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature |                      | 64           |
| <i>Gaultheria procumbens</i><br>Wintergreen                   | 7870                           | 0.5/                                   | P<br>B         | 20-30<br>20-30     | 7                      | 60                     | Continue until no further response, prechill 21-28 days  |                      | 16<br>6      |
| <i>Gaultheria shallon</i><br>Shallon                          | 5915                           | 0.5/                                   | P<br>B         | 20-30<br>20        | 7                      | 60                     | Continue until no further response, prechill 21-28 days  |                      | 16<br>6      |
| <i>Gaura lindheimeri</i>                                      |                                |  | TP             | 20-30              | 7                      | 21                     | Light  |                      | 1            |
| <i>Gentiana acaulis</i><br>Stemless gentian                   |                                |  | TP             | 10/30              | 7                      | 35                     | Light; GA <sub>3</sub><br>TZ   |                      | 1<br>16      |
|   |                                | 0.7/                                   | TP             | 20-30,20           | 7                      | 28                     | Prechill   |                      | 2            |
| <i>Gerardia pedicularia</i><br>False foxglove                 |                                |  |                | 15-25              | 10                     | 28                     | Light  |                      | 20a          |
| <i>Geum aleppicum</i><br>Var. <i>strictum</i><br>Yellow avens |                                |  |                | 15-25              | 14                     | 28                     | Light  |                      | 20a          |
| <i>Geum rivale</i><br>Purple avens                            |                                |  |                | 15-25<br>20-30     |                        | 90<br>90               | Prechilling not necessary<br>Prechilling not necessary   |                      | 20a<br>20a   |
| <i>Gnaphalium californicum</i><br>Green Everlasting           | 60,221                         |  | TB             | 15-25              | 5                      | 21                     | Prechill (5°C) for fresh and dormant seed.   |                      | 26           |
| <i>Gnaphalium canescens</i>                                   | 33,495                         |  | TB             | 15-25              | 5-                     | 21                     | Light; prechill 5°C for 5 days for fresh and dormant seed.                                     |                      | 26           |

| Kind of seed  | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C                  | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference    |
|---|--------------------------------|--|----------------|-------------------------|------------------------|------------------------|--|----------------------|--------------|
| Cudweed   |                                |  |                |                         | 7                      |                        |  |                      |              |
| <i>Gnaphalium leontopodium</i>  |                                |  | TP             | 20-30                   | 5                      | 14                     | Light  |                      | 1            |
| <i>Gnaphalium microcephalum</i><br>Cudweed  |                                |  | P(a)           | 15                      |                        |                        | Light  |                      | 7            |
| <i>Grindelia camporum</i><br>Gumplant   | 571                            |  | TB             | 15-25                   | 5                      | 21                     | Prechill not recommended.                                      |                      | 26           |
| <i>Grindelia nana</i><br>Low gumweed  |                                |  | P(a)           | 15-25                   |                        |                        | Light; prechill 4 weeks at 3°C                                 |                      | 7            |
| <i>Grindelia squarrosa</i><br>Curlycup gumweed  |                                |  | P(a)           | 15                      |                        |                        | Light  |                      | 7            |
| <i>Gutierrezia bracteata</i><br>(syn. <i>G. californica</i> )                             | 7,633                          |  | TB             | 20                      | 7                      | 14                     | Prechill did not help.   |                      | 26           |
| <i>Gutierrezia sarothrae</i><br>Snakeweed   | 1666                           | 2/<br>1/10                             | TB             | 20-30<br>20-30          | 3<br>7                 | 7<br>28                | Light, KNO <sub>3</sub>  |                      | 68<br>5      |
| <i>Gynerium sagittatum</i><br>Uva grass   | 1666                           | 2/                                     | B<br>B         | 20-30<br>15-25<br>20-30 | 3                      | 7                      |  |                      | 68<br>6<br>6 |
| <i>Gypsophila muralis</i>   |                                |  |                | 15                      |                        | 8                      |  |                      | 45           |
| <i>Hamamelis virginiana</i><br>Witch hazel  |                                |  | TB<br>BP<br>S  | 25<br>20-30<br>20-30    |                        | 7<br>28<br>60          | Embryo excision<br>60 days at 20°-30°C, then 90 days at 3°-5°C |                      | 6<br>1<br>36 |
| <i>Hazardia squarrosa</i> syn.<br><i>Haplopappus squarrosus</i><br>Saw-toothed goldenbush | 1,269                          |  | TB             | 20                      | 5-<br>7                | 21                     | Light; prechill 5°C for 5 days for fresh and dormant seed.     |                      | 26           |
| <i>Hedysarum coronarium</i><br>French honeysuckle   |                                |  | TP             | 20-30                   | 7                      | 21                     |  |                      | 1            |
| <i>Helianthella douglasii</i><br>Douglas helianthella                                     |                                |  | P(a)<br>P(a)   | 15<br>20-30             |                        |                        | Light<br>Dark  |                      | 7            |
| <i>Helianthemum mutabile</i>  |                                |  | TP             | 20-30                   | 3                      | 21                     | Scarify with sandpaper   |                      | 1            |
|   | 766                            | 3/                                     | TP             | 20-30                   | 7                      | 28                     | Scarify with sandpaper   |                      | 6            |
| <i>Helianthemum scoparium</i><br>Common rush-rose   | 2,251                          |  | TB             | 20-30                   | 5                      | 21                     | Prechill (5°C) for fresh and dormant seed.                     |                      | 26           |
| <i>Helianthemum</i> sp.<br>Sun rose   |                                |  | P              | 15                      | 7                      | 21                     | Light; firm seed present                                       |                      | 14           |
| <i>Helianthus cucumerifolius</i>  |                                |  | TP             | 20-30                   | 4                      | 21                     | Light  |                      | 1            |

| Kind of seed  | Approx. # seeds per gram | Min. Wt. in grams purity/ nox | Sub-strata  | Temp°C             | First count days | Final count days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference     |
|---|--------------------------|-------------------------------|-------------|--------------------|------------------|------------------|---|----------------------|---------------|
| Cucumber-leaf sunflower                                       |                          |                               |             |                    |                  |                  |   |                      |               |
| <i>Helianthus maximiliani</i><br>Maximilian sunflower         | 418                      | 6/60<br>10/100                | T,TB<br>T   | 20-30<br>20-30     |                  | 7<br>3<br>7      |   |                      | 6<br>21<br>68 |
| <i>Heliophila longifolia</i>                                  |                          | 6/                            | BP          | 20-30,15           | 7                | 14               |   |                      | 1             |
| <i>Hemerocallis</i> sp.<br>Daylily                            | 33                       | 76/                           | B<br>P<br>T | 20<br>20<br>20     | 7<br>7<br>7      | 21<br>21<br>28   | Prechill 21 days at 5°C<br>Light; prechill 21 days  |                      | 6<br>28<br>14 |
| <i>Hemizonia fasciculata</i><br>(syn. <i>H. ramosissima</i> ) | 2,610                    |                               | TB          | 20                 | 7                | 21               | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26            |
| <i>Hevea brasiliensis</i>                                     | 7 <sup>1</sup>           |                               | S           | 25-30 <sup>2</sup> | 14               | 21               | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature  |                      | 64            |
| <i>Hibiscus sabdariffa</i>                                    |                          |                               | S,TP        | 25-30 <sup>1</sup> | 13               | 16               | Light 24 hours<br><sup>1</sup> ambient room temperature   |                      | 64            |
| <i>Hibiscus trionum</i><br>Shoo-fly                           |                          | 10/                           | B<br>TP,BP  | 20-30<br>20-30     | 3<br>4           | 7<br>21          | 20 minutes H <sub>2</sub> SO <sub>4</sub>   |                      | 3<br>2        |
| <i>Hieracium aurantiacum</i><br>Orange hawkweed               |                          |                               |             | 20                 |                  | 21               |   |                      | 20j           |
| <i>Hieracium piloselle</i><br>Mouse ear hawkweed              |                          |                               | TB          | 20,20-30           |                  | 10               |   |                      | 17            |
| <i>Hieracium scabrum</i><br>Devils paint brush                |                          |                               |             | 15-25<br>20-30     |                  | 55<br>55         |   |                      | 20a<br>20a    |
| <i>Hilaria belangeri</i><br>Curly mesquite                    | 591                      | 5/50                          | P,B         | 20-35              | 7                | 21               | Light, KNO <sub>3</sub>   |                      | 67<br>21      |
| <i>Hilaria mutica</i><br>Tobosa                               | 587                      |                               | P           | 20-30              | 7                | 14               | Light   |                      | 67<br>12      |
| <i>Hilaria rigida</i><br>Galleta, big                         | 73                       |                               | P           | 20-30              | 7                | 14               | Light   |                      | 67<br>12      |
| <i>Hilaria rigida</i><br>(syn. <i>Pleuraphis rigidus</i> )    | 266                      |                               | TCT         | 20                 | 7                | 14<br>21         | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours.  |                      | 26            |
| <i>Hippeastrum vittatum</i><br>Amaryllis                      |                          |                               | BP          | 20-30              | 7                | 28               |   |                      | 1             |
| <i>Hordeum brachyantherum</i>                                 | 254                      |                               | TB          | 20                 | 7                | 14               | GA <sub>3</sub> , Prechill at 5°C for 5 days.   |                      | 26            |

| Kind of seed   | Approx. # seeds per gram | Min. Wt. in grams purity/ nox | Substrata     | Temp°C                                  | First count days | Final count days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference       |
|--|--------------------------|-------------------------------|---------------|---|------------------|------------------|--|----------------------|-----------------|
| (syn. <i>H. californicum</i> )                         |                          |                               |               |   |                  |                  | Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours.  |                      |                 |
| <i>Hordeum bulbosum</i><br>Barley, bulbous             | 110                      |                               | B             | 20                                      | 7                | 14               | Prechill 5 days  |                      | 67<br>11        |
| <i>Hordeum depressum</i>                               | 352                      |                               | TB            | 20                                      | 7                | 14               | Light, GA <sub>3</sub> . Prechill at 5°C for 5 days.<br>Deep dormancy – cut through endosperm, GA <sub>3</sub> (400 ppm), chill at 5°C for 16 hours. |                      | 26              |
| <i>Hordeum jubatum</i><br>Squirreltail grass           |                          |                               | TP<br>BP      | 20-30<br>20                             | 4<br>4           | 14<br>7          | Light<br>Prechill, KNO <sub>3</sub> , GA <sub>3</sub>  |                      | 1<br>2          |
| <i>Hordeum jubatum</i> (on list)<br>Squirreltail grass | 438                      |                               | TB            | 20                                      | 7                | 14               | GA <sub>3</sub> , prechill at 5°C for 5 days.  |                      | 26              |
| <i>Horkelia congesta</i><br><i>ssp. congesta</i>       |                          |                               | TB            | 15-25                                   | 7                | 14               | Prechill (stratify) for 12 weeks. Low germination due to unfilled or inviable seeds.   |                      | 70              |
| <i>Hosta spp.</i><br>Plantain lily                     | 267                      | 6/20                          | B             | 15                                      | 7                | 40               |  |                      | 6               |
| <i>Hyparrhenia hirta</i><br>Jaraguagrass               | 1350                     |                               | P             | 20                                      | 7                | 28               | Prechill 4 weeks   |                      | 67<br>46        |
| <i>Hypericum calycinum</i><br>Rose of Sharon           |                          |                               | TP            | 10-30                                   | 7                | 21               | Light<br>TZ  |                      | 1<br>16         |
|  | 1663                     | 2/                            | TB            | 15-25,20-30                             | 7                | 28               | Light, KNO <sub>3</sub>  |                      | 6               |
| <i>Hypericum perforatum</i><br>Common St. Johnswort    |                          | 0.03/                         | TP<br>TB<br>B | 20-30,20<br>20-30<br>20,15-25,<br>20-30 | 4<br>12<br>7     | 21<br>21<br>14   | Light; new seed<br>Older seed  |                      | 2<br>20b<br>20b |
|  | 8048                     | 0.25/                         | TB            | 15-25,20-30<br>10-30                    | 7<br>7           | 28<br>21         | Light, KNO <sub>3</sub>  |                      | 6<br>1          |
| <i>Hypericum punctatum</i><br>Spotted St. Johnswort    |                          |                               |               | 20-30                                   | 10               | 21               | Light  |                      | 20a             |
| <i>Hypericum spp.</i>                                  |                          |                               | P             | 15-30                                   | 7                | 28               | Light; soak for 4 hours in GA <sub>3</sub>   |                      | 14              |
| <i>Hypochoeris radicata</i><br>False dandelion         |                          |                               | P(a)<br>TP    | 20-30<br>15                             |                  | 14               | Dark<br>Light  |                      | 7<br>1          |
| <i>Incarvillea delavayi</i>                            |                          |                               | BP            | 20                                      | 5                | 15               |  |                      | 1               |
| <i>Indigofera leptosepala</i><br>Western indigo        |                          | 5/50                          | FP            | 20                                      | 5                | 21               |  |                      | 21              |
| <i>Inula helenium</i><br>Elecompane                    |                          | 4/                            | TP<br>TP      | 20-30,20<br>20-30                       | 7<br>7           | 28<br>28         | Light  |                      | 2<br>1          |

| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C             | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference |
|--|--------------------------------|--|----------------|--------------------|------------------------|------------------------|--|----------------------|-----------|
| <i>Ionopsidium acaule</i><br>Diamond flower                    |                                |  | BP             | 20                 |                        | 47                     |  |                      | 1         |
| <i>Ipomopsis elegans</i>                                       |                                |  | TP             | 15                 | 5                      | 15                     | Light  |                      | 1         |
| <i>Ipomopsis rubra</i><br>Standing cypress                     | 25987                          | 3/30                                   | B              | 15,20              | 7                      | 28                     | Light  |                      | 6         |
|  |                                |  |                | 20-30              |                        | 21                     |  |                      | 18        |
|  |                                |  | PP             | 20,20-30           |                        | 14                     | Light  |                      | 28        |
|  |                                |  | P              | 20                 | 7                      | 14                     |  |                      | 4         |
|  |                                |  | P,TB           | 15                 | 7                      | 28                     | Dormant seed   |                      | 16        |
| <i>Iris missouriensis</i><br>Western blueflag                  |                                | 5/50                                   | TB             | 15-25              | 5                      | 21                     | Light; prechill 3 weeks  |                      | 5         |
|  |                                |  |                |                    |                        |                        | TZ   |                      | 16        |
|  |                                |  |                |                    |                        |                        | TZ   |                      | 4         |
| <i>Isocoma menziesii</i><br>(syn. <i>Haplopappus venetus</i> ) | 2,129                          |  | TB             | 20                 | 5                      | 21                     | Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through cotyledons , GA <sub>3</sub> , chill at 5°C for 16 hours.                                       |                      | 26        |
| <i>Iva xanthifolia</i><br>Marsh elder                          |                                |  | P(a)           | 15                 |                        |                        | Light  |                      | 7         |
| <i>Ixora javanica</i>  | 14 <sup>1</sup>                |  | S              | 25-30 <sup>2</sup> | 34                     | 42                     | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature   |                      | 64        |
| <i>Jacaranda mimosifolia</i><br>Jacaranda                      | 63                             | 40/                                    | P              | 20-30              | 7                      | 21                     |  |                      | 6         |
|  |                                |  | P              | 20-30              | 7                      | 21                     |  |                      | 16        |
|  |                                |  | P              | 20-30              | 7                      | 21                     |  |                      | 4         |
|  |                                |  | BP             | 20                 | 5                      | 15                     |  |                      | 1         |
| <i>Juncus bufonius</i><br>Toad rush                            | 60,675                         |  | TCT            | 15                 | 5-<br>7                | 21                     | Light; GA <sub>3</sub> (400 ppm) for fresh and dormant seed.   |                      | 26        |
| <i>Keckiella antirrhinoides</i>                                | 5,798                          |  | TB             | 15                 | 7                      | 21                     | Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through cotyledons , GA <sub>3</sub> , chill at 5°C for 16 hours.                                       |                      | 26        |
| <i>Koeleria cristata</i><br>Junegrass                          |                                |  | P              | 20-30              | 7                      | 14                     | Light, 0.2% KNO <sub>3</sub>   |                      | 12        |
| <i>Koeleria macrantha</i><br>Junegrass                         | 2,978                          |  | TB             | 20-30              | 7                      | 14                     | Light, GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – cut through cotyledons GA <sub>3</sub> (400 ppm)<br>and chill at 5°C for 16 hours. |                      | 26        |
| <i>Lactuca biennis</i><br>Blue lettuce                         |                                |  | TB             | 15-25              | 7                      | 10                     | Light, KNO <sub>3</sub>  |                      | 20I       |
|  |                                |  | TB             | 20-30              | 7                      | 10                     | Light, KNO <sub>3</sub>  |                      | 20I       |
|  |                                |  | P(a)           | 20-30              |                        |                        |  |                      | 7         |



| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata             | Temp°C                                    | First<br>count<br>days | Final<br>count<br>days   | Additional Directions   | See Sec. 4.2 and 4.9 | Reference               |
|--|--------------------------------|--|----------------------------|---|------------------------|--------------------------|---|----------------------|-------------------------|
| <i>Lactuca serriola</i><br>Prickly lettuce                                     |                                |  | P(a)<br>P(a)               | 20<br>15                                  |                        |                          | Dark<br>Light   |                      | 7                       |
| <i>Lagerstroemia indica</i><br>Crape myrtle                                    | 2592                           | 65/50                                  | TP<br>B<br>TB              | 20-30<br>20-30<br>20-30                   | 7<br>7<br>7            | 21<br>21<br>21           | Light   |                      | 1<br>6<br>14            |
| <i>Lagurus ovatus</i><br>Hare's-tailgrass                                      |                                |  | TP<br>B<br>P<br>TB,P<br>TB | 10-30<br>15-25<br>20-30<br>20-30<br>20-30 | 7<br><br>5<br>7<br>5   | 21<br><br>10<br>10<br>14 | Light<br><br>Light  |                      | 1<br>6<br>4<br>16<br>2a |
| <i>Lamarokia aurea</i><br>Goldentop  |                                |  | TP                         | 20-30                                     | 7                      | 21                       | Light; prechill 5-7 days at 10°C  |                      | 1                       |
| <i>Lapsana communis</i><br>Nipplewort  |                                |  | P(a)                       | 20-30<br>20-30                            | 4                      | 7                        | Dark  |                      | 20a<br>7                |
| <i>Lasthenia californica</i><br>(syn. <i>L. chrysostoma</i> )                  | 7,779                          |  | TB                         | 20  | 7                      | 14                       | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26                      |
| <i>Lasthenia glabrata</i><br>Goldfields  | 4,484                          |  | TB                         | 20  | 7                      | 14                       | Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours.                   |                      | 26                      |
| <i>Lavandula angustifolia</i><br>(syn. <i>L. latifolia</i> , <i>L. spica</i> ) | 5704                           | 0.5/                                   | TP                         | 15  | 7                      | 21                       | Light, GA <sub>3</sub>  |                      | 6<br>1                  |
| <i>Legousia speculum-veneris</i><br>Venus'-looking-glass                       |                                | 1/                                     | TP<br>TP,BP                | 10-30<br>20-30,20                         | 7<br>4                 | 21<br>21                 | Light<br>Light; prechill  |                      | 1<br>2                  |
| <i>Lemaireocereus thunberi</i><br>Organ pipe cactus                            |                                |  | PP                         | 20-30                                     | 6                      | 18                       | Light   |                      | 14                      |
| <i>Leontodon autumnalis</i><br>Fall-dandelion                                  |                                |  | TP                         | 20-30<br>20-30                            | 7<br>4                 | 14<br>21                 | Light<br>Light; prechill 5-7 days at 10°C   |                      | 20a<br>1                |
| <i>Lepidium campestre</i><br>Field peppercress                                 |                                |  | TS<br>B                    | 20-30<br>15,15-30                         | 4                      | 10<br>10                 | Light<br>KNO <sub>3</sub>   |                      | 3<br>9                  |
| <i>Lepidium perfoliatum</i><br>Clasping-leaved<br>peppergrass                  |                                |  | P(a)                       | 15,20                                     |                        |                          | Dark  |                      | 7                       |
| <i>Lepidium virginicum</i><br>Virginia peppergrass                             |                                |  | TB                         | 20-30                                     |                        | 14                       | Light, KNO <sub>3</sub>   |                      | 9                       |
| <i>Lepidospartum squamatum</i>   | 1,061                          |  | TB                         | 20  | 5                      | 14                       | Light.  |                      | 26                      |

| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C | First<br>count<br>days | Final<br>count<br>days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference |
|--|--------------------------------|--|----------------|--------|------------------------|------------------------|---|----------------------|-----------|
| Scale-broom  |                                |  |                |        |                        |                        |   |                      |           |
| <i>Leptochloa dubia</i><br>Green sprangletop   |                                |  | P              | 15-25  | 7                      | 21                     | Light; alt. Prechill 5 days at 10°C and test at 15°-30°C, or<br>prechill 7 days at 10°C |                      | 12        |
|  |                                | 2/20                                   | P,TB,K         | 20-30  | 7                      | 21                     | Light, KNO <sub>3</sub>   |                      | 21        |
|  |                                | 2/20                                   | P,TB           | 20-30  | 5                      | 21                     | Light, KNO <sub>3</sub>   |                      | 5         |
|  |                                |  | B,TB           | 20-30  | 7                      | 14                     | Light, KNO <sub>3</sub> ; may be dormant  |                      | 16        |
| <i>Lessingia filaginifolia</i><br>(syn. <i>Corethrogyne</i><br><i>filaginifolia</i> )  | 2,619                          |  | TB             | 20     | 7                      | 21                     | Prechill at 5°C for 5 days.   |                      | 26        |
| <i>Leucaena retusa</i><br>Leadtrees, littleleaf  |                                | 50/500                                 | FT             | 30     | 7                      | 14                     | KNO <sub>3</sub>  |                      | 21        |
| <i>Leymus condensatus</i><br>Giant wildrye   | 413                            |  | TCT            | 15-25  | 5-<br>7                | 21                     | Light.  |                      | 26        |
| <i>Liatris pycnostachya</i><br>Thickspike gayfeather                                   | 434<br>321                     | 6/<br>8/                               | TB             | 20-30  | 7                      | 28                     | Light   |                      | 68        |
|  |                                |  | TP             | 20-30  | 7                      | 28                     |   |                      | 6         |
|  |                                |  |                | 20-30  | 7                      | 28                     |   |                      | 1         |
|  |                                |  | B              | 20-30  | 5                      | 28                     |   |                      | 2         |
| <i>Liatris spicata</i>   |                                | 8/                                     | TP             | 20-30  | 5                      | 28                     | Light   |                      | 2         |
|  |                                |  | P              | 20-30  |                        | 14                     |   |                      | 4         |
|  |                                |  | TP             | 20-30  | 7                      | 28                     |   |                      | 1         |
|  | 280                            | 10/                                    | TP             | 20     | 7                      | 21                     |   |                      | 6         |
| <i>Lilium candidum</i><br>Madonna lily   |                                |  | TP             | 20     | 7                      | 28                     | Light   |                      | 1         |
| <i>Limnanthes douglasii</i><br>Meadow foam   |                                |  | TP             | 15     | 7                      | 28                     | Light   |                      | 1         |
| <i>Limonium bellidifolium</i><br>(syn. <i>L. reficulatum</i> )<br>( <i>L. caspia</i> ) |                                | 5/                                     | TP,BP          | 15,10  | 5                      | 21                     | Soak in water 24 hours  |                      | 2         |
|  |                                |  | T              | 15     | 7                      | 21                     | Light   |                      | 14        |
|  |                                |  | TB             | 20     | 5                      | 20                     |   |                      | 1         |
| <i>Limonium latifolium</i><br>Wideleaf sea lavender                                    |                                |  | HT             | 15     | 6                      | 18                     | Soak in water 24 hours  |                      | 14        |
|  |                                |  | TB             | 20     | 5                      | 20                     |   |                      | 1         |
|  |                                | 5/                                     | BP,TP          | 15,10  | 5                      | 21                     |   |                      | 2         |
| <i>Limonium perezii</i>  |                                |  |                | 15     | 7                      | 21                     | Light   |                      | 14        |
| <i>Limonium tartaricum</i><br>Tatarian sea lavender                                    |                                |  | HT             | 15     | 6                      | 18                     |   |                      | 14        |
|  |                                |  | TB             | 20     | 5                      | 20                     |   |                      | 1         |
| <i>Goniolimon tartaricum</i>   |                                |  | BP,TP          | 15,10  | 7                      | 21                     |   |                      | 2         |

| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C                     | First<br>count<br>days | Final<br>count<br>days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference     |
|--|--------------------------------|--|----------------|----------------------------|------------------------|------------------------|---|----------------------|---------------|
| <i>Linaria candensis</i><br>Old-field toadflax                               |                                |  |                | 15-25                      |                        | 14                     | Light; prechill at 3°-5°C   |                      | 20a           |
| <i>Linaria genistifolis subsp.</i><br><i>Dalmatica</i><br>Dalmation toadflax |                                |  | P(a)<br>P(a)   | 20-30<br>20                |                        |                        | Dark; prechill 1 week at 3°C<br>Dark; prechill 1 week at 3°C  |                      | 7             |
| <i>Linaria vulgaris</i><br>Butter-and-eggs                                   |                                | 0.2/                                   | TP<br>P(a)     | 15,10<br>20-30<br>15-25    | 4                      | 21<br>10               | Prechill<br>Dark<br>Light   |                      | 2<br>7<br>20a |
| <i>Linum lewissii</i><br>Lewis flax  |                                |  |                | 20-30                      | 7                      | 14                     |   |                      | 56            |
| <i>Litchi chinesi</i><br>Leechee   |                                |  | S              | 25-30 <sup>1</sup>         |                        | 16                     | Light 24 hours<br><sup>1</sup> ambient room temperature   |                      | 64            |
| <i>Lithops spp.</i><br>Living stones   | 16359                          | 0.25/                                  | TB<br>TB<br>TB | 20<br>20<br>20-30          | 7<br>7<br>7            | 21<br>21<br>21         | Light<br>Light  |                      | 6<br>14<br>2a |
| <i>Lithospermum arvense</i><br>Field gromwell                                |                                |  | P(a)           | 20-30                      |                        |                        |   |                      | 7             |
| <i>Lithospermum ruderales</i><br>Cat's tooth                                 |                                |  | P(a)           | 15,20                      |                        |                        | Dark; prechill 4 weeks at 3°C   |                      | 7             |
| <i>Livistona chinensis</i><br>Chinese san palm                               | 1 <sup>1</sup>                 |  | S<br>S         | 25-30 <sup>2</sup><br>30   | 38<br>10               | 51<br>70               | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature<br>Soak in water 30°C 48 hours, mixture of sand and peat |                      | 64<br>2a      |
| <i>Lobelia cardinalis</i><br>Cardinal fower                                  | 17325                          | 0.01/<br>0.25/                         | TP<br>TP<br>TB | 20-30<br>20-30,20<br>20-30 | 7<br>7<br>7            | 21<br>21<br>21         | Light; prechill 5-7 days<br>Light, KNO <sub>3</sub> ; prechill<br>Light, KNO <sub>3</sub> ; GA <sub>3</sub> 500 ppm on dormant seed                     |                      | 1<br>2<br>6   |
| <i>Lomatium bradshawii</i>   |                                |  | TB             | 15-25                      | 7                      | 14                     | Prechill for 12 weeks at 4°C.   |                      | 70            |
| <i>Lomatium dissectum</i>  | 55                             | 45                                     | TB             | 15-25                      | 7                      | 28                     | Freshly collected seed require 28 -63 days prechill at 3°-5°C. Older seed may germinate during prechill.  |                      | 73            |
| <i>Lomatium grayi</i><br>Lomatium  |                                |  | P(a)           | 15                         |                        |                        | Dark  |                      | 7             |
| <i>Lomatium grayi</i>  | 67                             | 37                                     | TB             | 15-25                      | 7                      | 28                     | Freshly collected seed require 28 -63 days prechill at 3°-5°C. Older seed may germinate during prechill.  |                      | 73            |
| <i>Lomatium macrophyllum</i>   |                                |  | P(a)           | 15                         |                        |                        | Dark  |                      | 7             |

| Kind of seed  | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C    | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference |
|---|--------------------------------|--|----------------|-----------|------------------------|------------------------|--|----------------------|-----------|
| Large-leaved lomatium   |                                |  |                |           |                        |                        |  |                      |           |
| <i>Lomatium triternatum</i>   | 210                            | 12                                     | TB             | 15-25     | 7                      | 28                     | Freshly collected seed require 28 -63 days prechill at 3°-5°C. Older seed may germinate during prechill.   |                      | 73        |
| <i>Lonas annua</i>  |                                |  | TP             | 10-30     | 5                      | 12                     | Light  |                      | 1         |
| Yellow ageratum   |                                | 0.6/                                   | TP             | 20-30     | 4                      | 14                     |  |                      | 2         |
| <i>Lotus heermannii</i><br>Heermann's Lotus                           | 664                            |  | T              | 20        | 5                      | 21                     | Prechill (5°C) for fresh and dormant seed.   |                      | 26        |
| <i>Lotus scoparius</i><br>Deerweed<br>California broom                | 399                            |  | T              | 20        | 7                      | 21                     | (note: pure seed unit = pod)<br>Prechill at 5°C for 5 days.<br>Deep dormancy – cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours.                |                      | 26        |
| <i>Lotus strigosus</i>  | 867                            |  | T              | 20        | 7                      | 21                     | Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through cotyledons, chill at 5°C for 16 hours or cut through cotyledons, GA <sub>3</sub> , at 5°C for 16 hours. |                      | 26        |
| <i>Lotus unifoliolatus</i><br>(syn. <i>L. purshianus</i> )            | 274                            |  | T              | 20        | 7                      | 21                     | Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through cotyledons, chill at 5°C for 16 hours or cut through cotyledons, GA <sub>3</sub> , at 5°C for 16 hours. |                      | 26        |
| <i>Lupinus bicolor</i>  | 221                            |  | T              | 20        | 5                      | 18                     | Prechill at 5°C for 5 days. Deep dormancy – Cut through cotyledons and chill at 5°C.   |                      | 26        |
| <i>Lupinus microcarpus</i> var.<br><i>Microcarpus</i><br>Chick lupine | 63                             |  | T              | 20        | 6                      | 18                     | hard seed.<br>Prechill at 5°C for 5 days.<br>Deep dormancy – cut through cotyledon end, chill at 5°C for 16 hours.   |                      | 26        |
| <i>Lupinus nanus</i><br>Sky-blue-and-white lupine                     | 123                            |  | T              | 20-30; 20 | 6                      | 18                     | Hard seed.<br>Prechill at 5°C for 5 days.<br>Deep dormancy – cut through cotyledon end, chill at 5°C for 16 hours.   |                      | 26        |
| <i>Lupinus sparsiflorus</i><br>Coulter's Lupine                       | 275                            |  | T              | 20        | 6                      | 18                     | hard seed.<br>Prechill at 5°C for 5 days.<br>Deep dormancy – cut through cotyledon end, chill at 5°C for 16 hours.   |                      | 26        |
| <i>Lupinus succulentus</i>  | 37                             |  | T              | 20        | 5                      | 18                     | Prechill at 5°C for 5 days. Deep dormancy – Cut through cotyledons and chill at 5°C.   |                      | 26        |

| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C                  | First<br>count<br>days | Final<br>count<br>days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference    |
|--|--------------------------------|--|----------------|-------------------------|------------------------|------------------------|---|----------------------|--------------|
| <i>Lupinus sulphureus</i><br>ssp. <i>kincaidii</i>       |                                |  | TB             | 15-25                   | 7                      | 14                     | Scarify then prechill 4 weeks at 4°C.   |                      | 70           |
| <i>Lupinus truncatus</i>                                 | 102                            |  | T              | 20/30                   | 6                      | 18                     | Hard seed.<br>Prechill at 5°C for 5 days.<br>Deep dormancy – cut through cotyledon end, chill at 5°C<br>16 hours.               |                      | 26           |
| <i>Lychnis x haageana</i><br>Campion                     |                                |  | B<br>P<br>TB   | 20-30<br>20-30<br>20-30 | 7<br>14<br>5           | 14<br>14<br>15         | Light   |                      | 6<br>28<br>1 |
| <i>Lycurus phleoides</i><br>Wolftail                     |                                |  | P              | 20-30                   | 7                      | 21                     | Light   |                      | 12           |
| <i>Lynchnis alba</i><br>White cockle                     |                                |  | B              | 20-30                   |                        | 7                      | KNO <sub>3</sub>  |                      | 9            |
| <i>Lynchnis coeli-rosa</i><br>Rose-of-heaven             |                                |  | TP             | 20-30                   | 4                      | 14                     | Light; prechill 5-7 days at 10°C  |                      | 1            |
| <i>Lysimachia ciliata</i><br>Fringed loosestrife         |                                |  |                | 20-30                   |                        | 85                     | Light   |                      | 20a          |
| <i>Lysimachia punctata</i><br>Garden loosestrife         |                                |  | TP             | 20-30                   | 7                      | 21                     | Light; prechill 5-7 days at 10°C  |                      | 1            |
| <i>Lysimachia quadrifolia</i><br>Whorled loosestrife     |                                |  |                | 20-30                   |                        | 85                     | Light   |                      | 20a          |
| <i>Machaeranthera bigelovii</i><br>Purple aster          |                                | 3/30                                   | TB             | 15<br>20-30             | 7                      | 21<br>28               | Light, KNO <sub>3</sub>   |                      | 16<br>5      |
| <i>Macleaya cordata</i><br>Plume poppy                   |                                |  | TP             | 10-30                   | 7                      | 28                     | Light   |                      | 1            |
| <i>Madia elegans</i>                                     | 573                            |  | TB             | 20                      | 7                      | 21                     | Light, Prechill at 5°C for 5 days.  |                      | 26           |
| <i>Madia exigua</i><br>Little tarweed                    |                                |  | P(a)           | 15                      |                        |                        | Dark  |                      | 7            |
| <i>Madia sativa</i><br>Chilean tarwed                    |                                |  | P(a)           | 15                      |                        |                        | Dark  |                      | 7            |
| <i>Malacothamnus</i><br>fasciculatus<br>Chaparral Mallow | 874                            |  | TB             | 20                      | 7                      | 21                     | Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through cotyledons, GA <sub>3</sub> , chill at<br>5°C for 16 hours.          |                      | 26           |
| <i>Malacothrix saxatilis</i>                             | 5,714                          |  | TB             | 20                      | 7                      | 21                     | Light, prechill at 5°C for 5 days.<br>Deep dormancy – cut through cotyledons, GA <sub>3</sub> and chill at<br>5°C for 16 hours. |                      | 26           |

| Kind of seed  | Approx. # seeds per gram | Min. Wt. in grams purity/ nox | Sub-strata | Temp°C             | First count days | Final count days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference |
|---|--------------------------|-------------------------------|------------|--------------------|------------------|------------------|--|----------------------|-----------|
| <i>Malope trifida</i>   |                          |                               | BP         | 20                 | 4                | 14               |  |                      | 1         |
| <i>Malva moschata</i><br>Musk mallow                              | 679                      | 5/                            | TB         | 20                 | 5                | 25               |  |                      | 68        |
|   |                          | 6/                            | TB         | 20-30              | 7                | 28               | For unscarified sed (hard seed)<br>15 minutes H <sub>2</sub> SO <sub>4</sub> scarification   |                      | 1         |
|   | 382                      | 6/                            | TB         | 15,20,20-30        | 7                | 21               |  |                      | 6         |
| <i>Mangifera indica</i><br>Mango                                  |                          |                               | S          | 25-30 <sup>1</sup> | 14               | 28               | Light 24 hours<br><sup>1</sup> ambient room temperature  |                      | 64        |
| <i>Marrubium vulgare</i><br>Hoarhound                             | 1039                     | 3/                            | TB         | 20-30              | 7                | 21               | Light  |                      | 6         |
|   |                          |                               | B          | 20-30              |                  |                  |  |                      | 7         |
|   |                          |                               | TB         | 20-30              | 5                | 20               | Light; prechill 5-7 days at 10°C   |                      | 1         |
|   |                          |                               | B          | 20-30              | 14               | 21               | Light appeared to inhibit germination  |                      | 47        |
|   |                          | 2/                            | TP         | 20-30              | 5                | 21               | Prechill   |                      | 2         |
| <i>Meconopsis cambrica</i><br>Welch poppy                         |                          |                               | BP         | 20                 | 7                | 28               |  |                      | 1         |
| <i>Melica californica</i><br>California melic                     | 679                      | Blow ~#13                     | TCT        | 15-25              | 7                | 21               | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26        |
| <i>Melica imperfecta</i><br>California melic                      |                          |                               | P          | 10                 |                  |                  | Light  |                      | 34,31     |
|   |                          |                               | P          | 10-20              |                  |                  | Light  |                      | 34,31     |
| <i>Melica imperfecta</i>  | 1,020                    | Blow ~#15                     | TCT        | 15-25              | 7                | 21               | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26        |
| <i>Menodora longiflora</i><br>Showy mendora                       |                          | 10/100                        | T          | 20-30              | 5                | 21               |  |                      | 21        |
| <i>Mentzelia lindleyi</i><br>Blazing star                         |                          |                               | BP         | 15                 | 5                | 15               |  |                      | 1         |
|   |                          |                               | P          | 15                 |                  | 8                |  |                      | 16        |
| <i>Mimulus aurantiacus</i><br>(syn. <i>Diplacus aurantiacus</i> ) | 27,600                   |                               | TB         | 15                 | 7                | 21               | Light, GA <sub>3</sub> .   |                      | 26        |
| <i>Mimulus cardinalis</i>   | 57,873                   |                               | TB         | 20                 | 7                | 21               | Light, GA <sub>3</sub>   |                      | 26        |
| <i>Mimulus clevelandii</i>  | 23,937                   |                               | TB         | 15                 | 7                | 21               | Light, GA <sub>3</sub>   |                      | 26        |
| <i>Mimulus guttatus</i><br>Monkey flower                          |                          |                               | P(a)       | 20-30              |                  |                  |  |                      | 7         |
| <i>Mimulus guttatus</i>   | 128,57                   |                               | TB         | 15                 | 7                | 21               | Light, GA <sub>3</sub>   |                      | 26        |

| Kind of seed<br>(on list)   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata    | Temp°C                  | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference         |
|---|--------------------------------|--|-------------------|-------------------------|------------------------|------------------------|--|----------------------|-------------------|
| (on list)   | 5                              |  |                   |                         |                        |                        |  |                      |                   |
| <i>Mimulus longiflorus</i> (syn.<br><i>Diplacus longiflorus</i> ) | 25,211                         |  | TB                | 15                      | 7                      | 21                     | Light, GA <sub>3</sub>   |                      | 26                |
| <i>Mimulus puniceus</i><br>(syn. <i>Diplacus aurantiacus</i> )    | 29,621                         |  | TB                | 15                      | 7                      | 21                     | Light, GA <sub>3</sub>   |                      | 26                |
| <i>Mimulus ringens</i><br>Square stemmed monkey<br>flower         |                                |  |                   | 15-25                   |                        | 30                     | Light; prechill 60 days  |                      | 20a               |
| <i>Mimulus elengi</i>   | 30 <sup>1</sup>                |  | S                 | 25-30 <sup>2</sup>      |                        | 66                     | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature                                       |                      | 64                |
| <i>Mimulus lobata</i>   |                                |  | BP                | 20-30                   | 3                      | 20                     |  |                      | 1                 |
| <i>Momordica balsamina</i><br>Balsam apple                        |                                |  | BP                | 20-0                    | 5                      | 15                     |  |                      | 1                 |
| <i>Momordica charantia</i><br>Balsam pear                         |                                |  | BP                | 20-30                   | 5                      | 15                     |  |                      | 1                 |
| <i>Monarda</i> spp.<br>Wild bergamot                              |                                |  |                   | 20-30                   |                        | 21                     |  |                      | 18                |
| <i>Mucuna</i> spp.<br>Sea-bean                                    |                                |  |                   |                         |                        | 30                     | Scarify seedcoat with file or notch, soak 24 hours or until imbibed  |                      | 42                |
| <i>Muhlenbergia montana</i><br>Muhly, mountain                    |                                |  | P                 | 20                      |                        |                        | Light, 0.2% KNO <sub>3</sub>   |                      | 11                |
| <i>Muhlenbergia porteri</i><br>Muhly, bush                        | 493                            | 1/10                                   | P                 | 20-35                   | 7                      | 14                     | Light, 0.2% KNO <sub>3</sub>   |                      | 67<br>21<br>29,34 |
| <i>Muhlenbergia rigens</i>  | 5,319                          | Blow~#8                                | TCT               | 15-25                   | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26                |
| <i>Muhlenbergia wrightii</i><br>Spike muhly                       |                                | 1/10<br>0.25/2.2<br>5                  | P<br>P,TB<br>P,TB | 20-35<br>20-30<br>20-30 | 7<br>5<br>5            | 21<br>21<br>21         | Light; prechill 21 days<br>Light, KNO <sub>3</sub> ; prechill 5 days at 10°<br>Light, KNO <sub>3</sub> ; prechill 5 days at 5°C      |                      | 12<br>21<br>5     |
| <i>Murraya exotica</i>  | 25 <sup>1</sup>                | 100/                                   | S                 | 25-30 <sup>2</sup>      | 10                     | 18                     | Light 24 hours<br><sup>1</sup> freshly harvested seed  |                      | 64                |

| Kind of seed  | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C                           | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference          |
|---|--------------------------------|--|----------------|----------------------------------|------------------------|------------------------|--|----------------------|--------------------|
|   |                                |  |                |                                  |                        |                        | <sup>2</sup> ambient room temperature  |                      |                    |
| <i>Myosotis stricta</i><br>Forget-me-not                            |                                |  | P(a)           | 15                               |                        |                        | Light  |                      | 7                  |
| <i>Myosotis sylvatica</i><br>Garden forget-me-not                   |                                | 2/                                     | TP,BP<br>BP    | 20-30,20,15<br>10                | 5<br>7                 | 21<br>28               | Light, prechill  |                      | 2<br>1             |
| <i>Myristica fragrans</i><br>Nutmeg                                 | 0.14 <sup>1</sup>              |  | S              | 25-30 <sup>2</sup>               |                        | 18                     | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature                                       |                      | 64                 |
| <i>Nassella cernua</i><br>(syn. <i>Stipa cernua</i> )               | 480                            |  | TCT            | 15-25                            | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26                 |
| <i>Nassella lepida</i><br>(syn. <i>Stipa lepida</i> )               | 1,163                          | Blow<br>~#11                           | TCT            | 15-25                            | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26                 |
| <i>Nassella pulchra</i><br>(syn. <i>Stipa pulchra</i> )             | 212                            |  | TCT            | 15-25                            | 7                      | 21                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26                 |
| <i>Nepeta mussini</i><br>( <i>Nepeta x faassenii</i> )              | 1485                           | 2/                                     | TB<br>TB<br>TB | 20<br>20-30<br>20-30             | 7<br>7<br>5            | 21<br>21<br>20         | Light<br>Light<br>Light; prechill 5-7 days at 10°  |                      | 6<br>14<br>1       |
| <i>Nephelium lappaceum</i>  | 0.3 <sup>1</sup>               |  | S              | 25-30 <sup>2</sup>               | 10                     | 14                     | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature                                       |                      | 64                 |
| <i>Nephelium malaiense</i><br>Logan                                 | 21 <sup>1</sup>                |  | S              | 25-30 <sup>2</sup>               |                        | 16                     | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature                                       |                      | 64                 |
| <i>Nicandra physalodes</i><br>cv. <i>violaceae</i><br>Apple-of-peru |                                |  | TP             | 20-30                            | 5                      | 15                     |  |                      | 1                  |
| <i>Nolana paradoxa</i>  |                                |  | BP             | 20-30                            | 4                      | 12                     |  |                      | 1                  |
| <i>Oenantha sarmentosa</i><br>Water parsley                         |                                |  | P(a)           | 20-30                            |                        |                        | Dark   |                      | 7                  |
| <i>Oenothera arfillicola</i><br>Primrose                            |                                |  | P<br>B<br>PB   | 20-30<br>20-30<br>20-30<br>20-30 | 6<br>7                 | 12<br>21<br>28<br>28   | KNO <sub>3</sub> (new seed)  |                      | 4<br>15<br>6<br>32 |
|   | 2268                           | 1/                                     |                |                                  |                        |                        |  |                      |                    |



| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C   | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference |
|--|--------------------------------|--|----------------|----------|------------------------|------------------------|--|----------------------|-----------|
|  |                                |  | P,TB           | 20-30    | 7                      | 12                     | Prechill for fresh seed                                      |                      | 16        |
|  |                                |  |                | 20-30    |                        | 33                     |  |                      | 18        |
|  |                                |  |                | 20-30    |                        | 14                     |  |                      | 48        |
| <i>Oenothera cheiranthifolia</i><br>Beach primrose                       | 5310                           | 0.5/                                   | TB             | 20       | 7                      | 21                     | Light  |                      | 6         |
| <i>Oenothera erythrosepaia</i><br>Evening primrose                       | 2772                           | 1/                                     | TB             | 20-30    | 7                      | 14                     | Light  |                      | 6         |
|  |                                |  | TP             | 20-30    | 4                      | 14                     |  | 1                    |           |
|  |                                |  |                | 20-30    |                        | 14                     |  | 48                   |           |
|  |                                |  | P              | 20-30    | 3                      | 12                     |  | 16                   |           |
| <i>Oenothera fruticosa</i><br>Sundrops                                   | 250                            | 10/                                    | TB             | 20-30    | 7                      | 14                     | Light<br>Dark<br>Dark  |                      | 6         |
|  |                                |  | TP             | 20-30    | 4                      | 14                     |  | 1                    |           |
|  |                                |  | P              | 20-30    | 6                      | 12                     |  | 4                    |           |
|  |                                |  | P              | 20-30    | 3                      | 12                     |  | 16                   |           |
| <i>Oenothera hookeri</i> syn. <i>O. elata</i><br>Hooker evening-primrose | 2,551                          |  | TCT            | 20-30    | 5-<br>7                | 21                     | Light; prechill 5°C for 5 days for fresh and dormant seed.   |                      | 26        |
| <i>Oenothera lamarckiana</i><br>Lamarck evening-primrose                 | 2,546                          |  | TB             | 20       | 5-<br>7                | 21                     | Light; GA <sub>3</sub> (400 ppm) for fresh and dormant seed. |                      | 26        |
| <i>Oenothera missouriensis</i>   | 188                            | 10/<br>13/130                          | TP,BP          | 20-30,20 | 4                      | 21                     | KNO <sub>3</sub><br><br>Dark<br>Light                        |                      | 2         |
|  |                                |  | B              | 15,20    | 7                      | 21                     |  | 6                    |           |
|  |                                |  | P              | 20-30    | 6                      | 12                     |  | 4                    |           |
|  |                                |  | P              | 20-30    | 3                      | 12                     |  | 49                   |           |
|  |                                |  | TP             | 20-30    | 7                      | 21                     |  | 1                    |           |
| <i>Oenothera speciosa</i><br>Showy evening-primrose                      | 7,436                          |  | TB             | 20       | 5-<br>7                | 21                     | Light.   |                      | 26        |
| <i>Omphalodes linifolia</i><br>Navelwort                                 |                                |  | BP             | 20-30    | 7                      | 21                     |  |                      | 1         |
| <i>Onopordum acanthium</i>   |                                |  | BP             | 20-30    | 7                      | 28                     |  |                      | 1         |
| <i>Orthocarpus barbatus</i><br>Owl clover                                |                                |  | P(a)           |          |                        |                        | Prechill 4 weeks at 3°C, then 20°-30°C with light            |                      | 7         |
| <i>Orthocarpus tenuifolius</i><br>Owl clover                             |                                |  | P(a)           |          |                        |                        | Prechill 4 weeks at 3°C, then 20°-30°C with light            |                      | 7         |
| <i>Oxalis corniculata</i><br>Creeping oxalis                             |                                |  | TP             | 10-30    | 7                      | 28                     | Light  |                      | 1         |
| <i>Pachycereus pectin-aboriginum</i>                                     |                                |  | PP             | 20-30    | 6                      | 18                     | Light  |                      | 14        |

| Kind of seed                                     | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata           | Temp°C                                    | First<br>count<br>days   | Final<br>count<br>days     | Additional Directions  | See Sec. 4.2 and 4.9 | Reference                                   |
|--|--------------------------------|--|--------------------------|---|--------------------------|----------------------------|--|----------------------|---|
| Native's comb cactus                             |                                |  |                          |   |                          |                            |  |                      |   |
| <i>Panicum coloratum</i><br>Kleingrass           |                                | 2/<br>2/20                             | TP<br>P,TB,K<br>P        | 20-35<br>20-30<br>15-25                   | 7<br>7<br>7              | 28<br>21<br>28             | Light, KNO <sub>3</sub> ; prechill 7 days at 10°C<br>Light   |                      | 2<br>21<br>12                               |
| <i>Panicum obtusum</i><br>Vine mesquite          | 314                            | 10/100                                 | P<br>TB                  | 20-35<br>20-30                            | 7<br>5                   | 28<br>21                   | Light, 0.2% KNO <sub>3</sub><br>Light, KNO <sub>3</sub>  |                      | 67<br>29<br>51                              |
| <i>Panicum plenum</i>                            |                                |  | P                        | 15-35                                     | 10                       | 28                         | Light, 0.2% KNO <sub>3</sub> (use method for <i>P. maximum</i> )   |                      | ??  |
| <i>Panicum stafpianum</i>                        |                                |  | P                        | 15-25                                     | 7                        | 28                         | Light  |                      | 12  |
| <i>Papaver alpinum</i>                           |                                | 0.5/                                   | P<br>P<br>TB<br>BP       | 20<br>15<br>15,10<br>15,10                |                          | 21<br>21<br>4<br>7         | Prechill 5 days plus KNO <sub>3</sub><br>Light, KNO <sub>3</sub><br>Prechill 5 days at 5°C plus KNO <sub>3</sub> |                      | 28<br>6<br>2<br>1                           |
| <i>Papaver somniferum</i><br>Opium poppy         | 5319                           | 0.5/                                   | BP                       | 10,15                                     | 6                        | 12                         | KNO <sub>3</sub>   |                      | 6<br>1                                      |
| <i>Pappaphorum murconulatum</i><br>Pappusgrass   |                                |  | P                        | 20-30                                     | 7                        | 21                         | Light, 0.2% KNO <sub>3</sub>   |                      | 12  |
| <i>Paronia lasiopetala</i><br>Wrights pavonia    |                                | 10/100                                 | FT                       | 20-30                                     | 5                        | 21                         | Light; prechill 14 days  |                      | 21  |
| <i>Parthenium argentatum</i><br>Guayule          | 1356                           | 2/20                                   | B<br>FB<br>P             | 20<br>20-30<br>20<br>20                   | 7<br>10<br>10            | 10<br>14<br>14<br>15       | Embryo excision  |                      | 6<br>32<br>26<br>63                         |
| <i>Parthenocissus tricuspidata</i>               |                                |  | BP                       | 20  | 14                       | 35                         | Prechill 2 months  |                      | 1   |
| <i>Passiflora caerulea</i><br>Blue passionflower | 113                            | 22/                                    | TB<br>TP<br>S<br>T<br>TB | 20-30<br>20-30<br>20-30<br>20-30<br>20-30 | 7<br>10<br>14<br>14<br>7 | 30<br>49<br>42<br>50<br>28 | Light<br>TZ<br>Light<br>Light<br>Hand seeds  |                      | 6<br>1<br>2a<br>26<br>16<br>20a<br>20a<br>4 |
| <i>Pennisetum ciliare</i><br>Buffelgrass         |                                |  | P                        | 20-30                                     | 7                        | 28                         | Light; prechill 7 days   |                      | 21  |
| <i>Pennisetum setaceum</i>                       |                                |  | TP                       | 20-30                                     | 7                        | 21                         | Prechill   |                      | 2a  |

| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C             | First<br>count<br>days | Final<br>count<br>days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference                |           |           |
|--|--------------------------------|--|----------------|--------------------|------------------------|------------------------|---|----------------------|--------------------------|-----------|-----------|
| Fountain grass   |                                |  | B              | 10-30              | 7                      |                        | Light; prechill 5-7 days at 10°C  |                      | 6                        |           |           |
|  |                                |  | P              | 20-30              | 7                      | 21                     |   |                      | 14                       |           |           |
|  |                                |  | TP             | 10-30              | 5                      | 15                     |   |                      | 1                        |           |           |
|  |                                |  | TB             | 20-30              |                        | 14                     |   |                      | 15                       |           |           |
|  |                                |  | B              | 20-30              | 3                      | 10                     |   |                      | 16                       |           |           |
|  |                                |  | P              | 20-30              | 14                     | 21                     |   |                      | 26                       |           |           |
| <i>Pennisetum villosum</i><br>Feathertop               |                                |  | B              | 10-30              | 7                      |                        |   |                      | 6                        |           |           |
| <i>Penstemon acuminatus</i>                            | 1169                           | 2.1                                    |                |                    |                        |                        | Germ data not available at this time.   |                      | 73                       |           |           |
| <i>Penstemon deustus</i>                               | 6977                           | 0.36                                   |                |                    |                        |                        | Germ data not available at this time.   |                      | 73                       |           |           |
| <i>Penstemon grandiflorus</i><br>Beard-tongue          |                                |  | B              | 20-30              | 7                      | 28                     | Dormant seed, prechill 21-28 days   |                      | 16                       |           |           |
|  |                                |  |                | 15,20,20-30        |                        |                        |   |                      | 6                        |           |           |
| <i>Penstemon procerus</i><br>Little flower penstemon   |                                |  | P(a)           | 15                 |                        |                        | Light   |                      | 7                        |           |           |
|  |                                |  | P(a)           | 20-30              |                        |                        |   |                      |                          |           |           |
|  |                                |  | P(a)           | 20                 |                        |                        |   |                      |                          |           |           |
| <i>Penstemon speciosus</i><br>Royal penstemon          | 911                            | 2.75                                   | P(a)           | 20-30              |                        |                        | Dark; prechill 2-4 weeks at 3°C, then 20°C in the dark  |                      | 7                        |           |           |
|  |                                |  |                | 20-30              |                        |                        |   |                      | 16                       |           |           |
|  |                                |  |                |                    |                        |                        | Prechill 21-28 days   |                      | 73<br>(Purity info only) |           |           |
| <i>Penstemon spectabilis</i>                           | 1,343                          |  | TB             | 15                 | 7                      | 28                     | GA <sub>3</sub>   |                      | 26                       |           |           |
| <i>Perilla frutescens</i>                              |                                |  | BP             | 20                 | 7                      | 21                     |   |                      | 1                        |           |           |
| <i>Persea americana</i><br>Alligator pear              | 3 <sup>1</sup>                 |  | S              | 25-30 <sup>2</sup> |                        | 33                     | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature            |                      | 64                       |           |           |
|  |                                |  |                |                    |                        |                        |   |                      |                          |           |           |
| <i>Petalostemon purpureum</i><br>Purple prairie clover | 652                            | 3/30<br>4/40                           | FP             | 20                 | 4                      | 14                     | Dark  |                      | 5                        |           |           |
|  |                                |  | B              | 20                 |                        |                        |   |                      | 7                        | Hark seed | 16        |
|  |                                |  | B              | 20,20-30           |                        |                        |   |                      | 7                        | 21        | Hard seed |
| <i>Petrorhagia saxifraga</i><br>Coat flower            |                                |  | TP             | 20-30              | 3                      | 12                     | Light   |                      | 1                        |           |           |
| <i>Phacelia cicutaria</i>                              | 1,472                          |  | TB             | 15                 | 5                      | 12                     | GA <sub>3</sub> .<br>Deep dormancy – Cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26                       |           |           |
| <i>Phacelia distans</i>                                | 1,232                          |  | TB             | 15                 | 4                      | 12                     | Light, GA <sub>3</sub> .  |                      | 26                       |           |           |
| <i>Phacelia hastata</i>                                |                                |  | P(a)           | 15,20              |                        |                        | Dark  |                      | 7                        |           |           |

| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C      | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference |
|--|--------------------------------|--|----------------|-------------|------------------------|------------------------|--|----------------------|-----------|
| Silver phacelia  |                                |  |                |             |                        |                        |  |                      |           |
| <i>Phacelia heterophylla</i><br>Varileaf phacelia                          |                                |  | P(a)           | 15,20       |                        |                        | Dark   |                      | 7         |
| <i>Phacelia linearis</i><br>Threadleaf phacelia                            |                                |  | P(a)           | 20-30       |                        |                        | Dark   |                      | 7         |
| <i>Phacelia minor</i>  | 3,591                          |  | TB             | 15          | 4                      | 12                     | Light, GA <sub>3</sub> .   |                      | 26        |
| <i>Phacelia ramosissima</i>  | 1,170                          |  | TB             | 15          | 4                      | 12                     | Light, GA <sub>3</sub> .   |                      | 26        |
| <i>Phacelia spp.</i><br>Phacelia   |                                |  | P(a)           | 20          |                        |                        | Dark   |                      | 7         |
| <i>Philodendron</i><br><i>bipinnatifidum</i>                               |                                |  | TP             | 20-30       | 7                      | 28                     | Light  |                      | 1         |
| <i>Philodendron hastatum</i>   |                                |  | TP             | 20-30       | 7                      | 35                     | Light  |                      | 1         |
| <i>Philodendron selloum</i><br>Philodendron                                | 832                            | 3/30                                   | B              | 20-30       | 7                      | 28                     | Light  |                      | 6         |
|  |                                |  |                | 20-30       |                        | 35                     |  |                      | 18        |
|  |                                |  | TB             | 20-30       | 7                      | 28                     |  |                      | 14        |
|  |                                |  | TB             | 20-30       |                        | 20                     |  |                      | 15        |
|  |                                |  | TB             | 20-30       | 7                      | 28                     |  |                      | 2a        |
|  |                                |  | P              | 20-30       | 14                     | 28                     |  | 26                   |           |
| <i>Phoenix canariensis</i><br>Phoenix palm                                 |                                |  | B              | 20-30       |                        | <sup>1</sup>           | Firm seed left on fresh lots<br><sup>1</sup> 30-60 days for root emergence plus 30 days for leaf emergence |                      | 16        |
| <i>Physalis subglabrata</i><br>Taperleaf ground cherry                     |                                |  | P(a)           | 20-30       |                        |                        | Dark   |                      | 7         |
| <i>Physalis virginianum</i><br>Virginia ground cherry                      |                                |  | B              | 20-30       |                        | 12                     | KNO <sub>3</sub>   |                      | 9         |
| <i>Physostegia virginiana</i><br>Obedience                                 | 397                            | 6/60                                   | B              | 10-30,20-30 | 7                      | 28                     | Light  |                      | 6         |
|  |                                |  |                | 20-30       |                        | 28                     |  |                      | 18        |
|  |                                |  | T              | 20-30       | 15                     | 30                     |  |                      | 26        |
|  |                                |  | TP             | 10-30       | 14                     | 42                     |  |                      | 1         |
| <i>Picris hieracioides</i><br>Bitterweed                                   |                                |  | TP             | 20-30       | 4                      | 21                     | Light; prechill 5-7 days at 10°C   |                      | 1         |
| <i>Plagiobothrys fulvus</i>  | 1433                           |  | TB             | 15, 20      | 7                      | 21                     | Light; prechill with GA <sub>3</sub> (400 ppm) 5°C for 5 days.   |                      | 26        |
| <i>Plantago erecta</i>   | 616                            |  | TB             | 20          | 5                      | 10                     | Light, GA <sub>3</sub> , Prechill at 5°C for 5 days.   |                      | 26        |
| <i>Plantago insularis</i> syn. <i>P.</i><br><i>ovata</i><br>Blond plantain | 566                            |  | TB             | 20          | 5                      | 10                     | Light; GA <sub>3</sub> at 15° for fresh and dormant seed.  |                      | 26        |

| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata     | Temp°C         | First<br>count<br>days | Final<br>count<br>days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference |
|--|--------------------------------|--|--------------------|----------------|------------------------|------------------------|---|----------------------|-----------|
| <i>Plantago lanceolata</i><br>Buckhorn plantain          |                                |  | P(a)               | 20-30          |                        |                        | Dark  |                      | 7         |
| <i>Plantago major</i><br>Broad-leaved plantain           |                                |  | P(a)               | 20-30          |                        |                        | Light; prechill 1 week at 3°C   |                      | 7         |
| <i>Plantago purshii</i><br>Purshis plantain              |                                |  | P(a)<br>P(a)       | 15<br>20-30    |                        |                        | Light<br>Light  |                      | 7         |
| <i>Plantago spp.</i><br>Plantain                         |                                | 3/30                                   | TB                 | 20-30          | 4                      | 28                     | Light   |                      | 5         |
| <i>Pluchea odorata</i><br>Salt marsh fleabane            | 36,695                         |  | TB                 | 20-30          | 5                      | 21                     | Prechill (5°C) for fresh and dormant seed.  |                      | 26        |
| <i>Poa ampla</i><br>Bluegrass, big                       | 1939                           |  | P                  | 15-25          | 7                      | 28                     | Light, 0.2% KNO <sub>3</sub> ; prechill 7 days  |                      | 67<br>15  |
| <i>Poa arida</i><br>Bluegrass, plains                    |                                |  | P                  | 20-30          | 7                      | 28                     | Light   |                      | 12        |
| <i>Poa canbyi</i><br>Bluegrass, canby                    |                                |  | P                  | 20-30          | 7                      | 28                     | Light, 0.2% KNO <sub>3</sub>  |                      | 11        |
| <i>Poa epila</i><br>Bluegrass, skyline                   |                                |  | P                  | 20             | 7                      | 28                     | Light   |                      | 11        |
| <i>Poa fendleriana</i><br>Muttongrass                    |                                |  | P                  | 20-30          | 7                      | 28                     | Light, 0.2% KNO <sub>3</sub> ; prechill 14 days   |                      | 12        |
| <i>Poa juncifolia</i><br>Bluegrass, alkali               |                                |  | P                  | 20-30          |                        |                        | Light, 0.2% KNO <sub>3</sub>  |                      | 11        |
| <i>Poa scabrella</i><br>Bluegrass, pone                  |                                |  | P                  | 20             | 7                      | 28                     |   |                      | 11,34     |
| <i>Poa secunda</i><br>One-sided bluegrass                | 2,075                          |  | TCT                | 20-30          | 5                      | 21                     | Prechill (5°C) and GA <sub>3</sub> (400 ppm) for fresh and dormant seed.  |                      | 26        |
| <i>Polemonium caeruleum</i><br>Jacob's-ladder            | 990                            | 2.5/                                   | TB<br>TB           | 20-30<br>20-30 | 7<br>5                 | 21<br>21               | Light   |                      | 6<br>1    |
| <i>Polygonatum commutatum</i><br>Great Solomon seal      |                                |  |                    |                |                        |                        | 4 months at 5°C, then 2 months at 25°C  |                      | 22        |
| <i>Polygonum lapathifolium</i><br>Pale smartweed         |                                |  | TS<br>P(a)<br>P(a) | 20-30          | 14                     | 21                     | 2° to 10°-35°C in water for 10 days<br>Prechill 2 weeks at 3°C, then 15°-25°C<br>Prechill 2 weeks at 3°C, then 15°-25°C |                      | 3         |
| <i>Polygonum pensylvanicum</i><br>Pennsylvania smartweed |                                |  | TS                 | 10-30          | 24                     | 28                     | 2°-35°C in water 21 days  |                      | 3         |
| <i>Polygonum persicaria</i>                              |                                |  | TS                 | 20-30          | 17                     | 21                     | 2° to 10°-35°C in water for 14 days   |                      | 3         |

| Kind of seed  | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C             | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference |
|---|--------------------------------|--|----------------|--------------------|------------------------|------------------------|--|----------------------|-----------|
| Ladysthumb  |                                |  |                |                    |                        |                        |  |                      |           |
| <i>Polygonum punctatum</i><br>Dotted smartweed        | 403                            |  | TB             | 20-30              | 5                      | 21                     | Prechill (5°C) for fresh and dormant seed.   |                      | 26        |
| <i>Portulaca oleracea</i><br>Purslane                 |                                |  | TS             | 20-30              | 5                      | 10                     | Light  |                      | 3         |
| <i>Potentilla aserina</i><br>Silverweed cinquefoil    |                                |  | TB             | 20-30              |                        | 16                     | Light, KNO <sub>3</sub>  |                      | 17        |
| <i>Potentilla flabellifolia</i><br>Fanleaf cinquefoil |                                |  | P(a)           | 15                 |                        |                        | Dark; prechill 4 weeks at 3°C, then 20°C or 20°-30°C dark                                      |                      | 7         |
| <i>Potentilla glandulosa</i><br>Gland cinquefoil      | 3163                           | 1/                                     | P(a)           | 25                 |                        | 14                     | Prechill 1-3 weeks at 3°C, then 20°-30°C with light or 15°C with light                         |                      | 68<br>7   |
| <i>Potentilla millegrana</i><br>Cinquefoil            |                                |  | P(a)           | 15                 |                        |                        | Dark; prechill 3 weeks at 3°C, then 20°-30°C light   |                      | 7         |
| <i>Potentilla nepalensis</i>                          |                                |  | TP             | 20-30              | 7                      | 21                     | Light  |                      | 1         |
| <i>Potentilla recta</i><br>Rough fruited cinquefoil   |                                |  |                | 15-25              |                        | 21                     | Light  |                      | 20a       |
| <i>Potentilla tridentata</i><br>Wineleaf cinquefoil   |                                |  | TB             |                    |                        | 40                     | Light; prechill 1 month at 3°-5°C  |                      | 17        |
| <i>Prunella vulgaris</i><br>Heal-all                  |                                |  | P(a)           | 20-30              |                        |                        | Dark   |                      | 7         |
| <i>Psidium guijava</i><br>Guava                       | 89 <sup>1</sup>                | 28/                                    | TP             | 25-30 <sup>2</sup> |                        | 14                     | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature |                      | 64        |
| <i>Psilocarphus elatior</i><br>Wooly heads            |                                |  | P(a)           | 20-30              |                        |                        |  |                      | 7         |
| <i>Psophocarpus tetragonolobus</i><br>Winged bean     |                                |  | TP             | 25                 | 4                      | 10                     | Acid treat with dilute H <sub>2</sub> SO <sub>4</sub> 5 minutes, water rinse 5 minutes         |                      | 69        |
| <i>Puccinella distans</i><br>Weeping alkaligrass      |                                | 1/10                                   | P(a)           | 15-25              | 10                     | 28                     | Light, KNO <sub>3</sub> ; prechill 5 days at 5°C   |                      | 5         |
| <i>Puccinellia airoides</i><br>Alkaligrass, nuttal    |                                |  | P              | 20                 | 7                      | 15                     |  |                      | 11        |
| <i>Puccinellia lemmoni</i><br>Lemmoni alkaligrass     |                                | 1/10                                   | P(a)           | 15-25              | 10                     | 28                     | Light, KNO <sub>3</sub> ; prechill 4 days at 5°C   |                      | 5         |
| <i>Punica granatum</i>                                |                                |  | BP             | 20-30              | 7                      | 42                     | Soak seed 2 days   |                      | 1         |

| Kind of seed  | Approx. # seeds per gram | Min. Wt. in grams purity/ nox | Substrata | Temp°C                              | First count days | Final count days     | Additional Directions   | See Sec. 4.2 and 4.9 | Reference          |
|---|--------------------------|-------------------------------|-----------|-------------------------------------|------------------|----------------------|---|----------------------|--------------------|
| Pomegranate   |                          |                               |           |                                     |                  |                      |   |                      |                    |
| <i>Purshia glandulosa</i><br>Desert bitterbush            | 90                       | 25/                           | TB        | 5,15<br>10-30                       | 7                | 14<br>35             | Prechill 14 days at 3-5°C<br>Light  |                      | 68                 |
| <i>Pyrethrum ptarmiciflorum</i>                           |                          |                               | P         | 15                                  | 6                | 12                   | Light   |                      | 14                 |
| <i>Ranunculus californicus</i><br>California buttercup    | 503                      |                               | TB        | 15                                  | 5                | 21                   | Prechill (5°C) for fresh and dormant seed.  |                      | 26                 |
| <i>Raphanus raphanistrum</i><br>Wild radish               |                          |                               | TB        | 20-30                               |                  | 14                   | KNO <sub>3</sub>  |                      | 9                  |
| <i>Ratibida pinnata</i><br>Grayhead prairie<br>coneflower | 1128<br>1125<br>1125     | 2/<br>2/20<br>2/20            | TB<br>TB  | 15-25,25<br>15-25<br>20-30<br>20-30 | 7<br>7<br>7<br>7 | 14<br>14<br>14<br>14 | Light   |                      | 68<br>6<br>6<br>16 |
| <i>Rhamnus crocea</i><br>Spiny redberry                   | 113                      |                               | T         | 15                                  | 7                | 35                   | GA <sub>3</sub> (400 ppm) recommended for fresh and dormant seed.   |                      | 26                 |
| <i>Rhoeo spathacea</i><br>Moses-in-the-cradle             | 194                      | 13/                           | TB        | 20-30                               | 7                | 28                   |   |                      | 6                  |
| <i>Rhus integrifolia</i><br>lemonadeberry                 | 8                        |                               | T         | 20                                  | 7                | 21                   | Prechill.   |                      | 26                 |
| <i>Rhus ovata</i><br>Sugar bush                           | 28                       |                               | T         | 20                                  | 7                | 21                   | Prechill.   |                      | 26                 |
| <i>Rhus trilobata</i><br>Skunkbush sumac                  | 50                       | 50/                           | TB        | 20-30<br>20-30                      | 7                | 21<br>10             | 90 minutes in H <sub>2</sub> SO <sub>4</sub> and 30 days prechill at 3°-5°C<br>1.5 hours acid treatment, 1 month prechill at 3°-5°C |                      | 68<br>17a          |
| <i>Rhynchelytrum repens</i><br>Natatgrass, ruby grass     |                          |                               | PP        | 20-30                               | 7                | 21                   | Light   |                      | 14                 |
| <i>Rosa californica</i><br>California wild rose           | 22 seed units            |                               | T         | 20                                  | 5                | 21                   | Prechill (5°C) for fresh and dormant seed.  |                      | 26                 |
| <i>Rosa spp.</i><br>Wild rose                             |                          |                               | TB        | 20                                  | 7                | 21                   | Light<br>TZ   |                      | 14<br>16           |
| <i>Roystonea regia</i><br>Royal palm                      | 0.8 <sup>1</sup>         |                               | S         | 25-30 <sup>2</sup>                  |                  | 37                   | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature                                      |                      | 64                 |
| <i>Rumex crispus</i><br>Curly dock                        |                          |                               | B<br>P(a) | 15-30<br>20-30                      | 4                | 10                   | Light   |                      | 3<br>7             |
| <i>Rumex maritimus</i><br>Seaside dock                    |                          |                               | P(a)      | 20-30                               |                  |                      |   |                      | 7                  |
| <i>Rumex obtusifolius</i>                                 |                          |                               | P(a)      | 15                                  |                  |                      |   |                      | 7                  |

| Kind of seed                                    | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C   | First<br>count<br>days | Final<br>count<br>days | Additional Directions                                      | See Sec. 4.2 and 4.9 | Reference |
|---|--------------------------------|--|----------------|----------|------------------------|------------------------|--|----------------------|-----------|
| Bitterdock                                      |                                |  | P(a)           | 20-30    |                        |                        |  |                      |           |
| <i>Ruta graveolens</i>                          |                                |  | TP             | 10-30    | 5                      |                        | Light, prechill  |                      | 1         |
| Rue   |                                | 6/                                     | TP,BP          | 20-30,20 | 7                      | 28                     | Prechill   |                      | 2         |
|   | 554                            | 5/                                     | TB             | 10-30,20 | 7                      | 14                     | Light  |                      | 6         |
| <i>Salicornia virginica</i>                     | 7014                           |  | TB             | 20-30    | 57                     | 21                     | Light; prechill.   |                      | 26        |
| <i>Salsola kali</i>                             | 798                            | 3/                                     |                |          |                        |                        | TZ   |                      | 68        |
| Russian thistle                                 |                                | 3/30                                   | P(a)           | 20-30    | 3                      | 21                     | Light  |                      | 5         |
|   |                                |  | P((a)          | 20-30    |                        |                        | Light  |                      | 7         |
| <i>Salvia aethiopsis</i>                        |                                |  | P(a)           | 20       |                        |                        | Dark   |                      | 7         |
| African sage                                    |                                |  | P(a)           | 20-30    |                        |                        | Dark   |                      | 7         |
| <i>Salvia apiana</i>                            | 570                            | 4.5/<br>45                             | TB             | 15-30    | 7                      | 21<br>a                | Hard seeds.<br>GA <sub>3</sub> , Prechill at 5°C.          |                      | 72        |
| <i>Salvia apiana</i> (on list)                  | 665                            |  | TB             | 15-25    | 7                      | 21                     | Light, GA <sub>3</sub> , 15°C for 21 days.                 |                      | 26        |
| <i>Salvia azurea</i> var.<br><i>grandiflora</i> |                                | 5/50                                   | TB             | 20-30    | 3                      | 21                     | Light  |                      | 5         |
| Blue sage                                       | 269                            | 10/100                                 | B              | 20-30    |                        | 14                     | KNO <sub>3</sub> ; prechill new seed 7-14 days             |                      | 16        |
|   | 269                            | 10/100                                 | B              | 20-30    | 7                      | 14                     |  |                      | 6         |
|   |                                |  | B              | 15-25    | 7                      | 14                     |  |                      | 6         |
| <i>Salvia columbariae</i>                       | 945                            | 3/                                     | B              | 20,20-30 | 7                      | 14                     |  |                      | 6         |
| Chia  |                                |  |                |          |                        |                        |  |                      |           |
| <i>Salvia columbariae</i>                       | 1,326                          |  | TB             | 15-25    | 7                      | 14                     | 15°C with GA <sub>3</sub> added.                           |                      | 26        |
| <i>Salvia eremostachya</i>                      |                                |  | P              | 15-25    | 7                      | 28                     | KNO <sub>3</sub>   |                      | 21        |
| Sand sage                                       |                                |  |                |          |                        |                        |  |                      |           |
| <i>Salvia leucophylla</i>                       | 1,036                          |  | TB             | 15-25    | 5-<br>7                | 21                     | Light; GA <sub>3</sub> at 15°C for fresh and dormant seed. |                      | 26        |
| Purple sage                                     |                                |  |                |          |                        |                        |  |                      |           |
| <i>Salvia mellifera</i>                         | 1,299                          |  | TB             | 15-25    | 7                      | 21                     | Light, GA <sub>3</sub> at 15°C for 21 days.                |                      | 26        |
| <i>Salvia patens</i>                            | 51                             | 50/<br>500                             | TB             | 15-25    | 7                      | 21                     | Light  |                      | 72        |
| Gentian Sage                                    |                                |  |                |          |                        |                        | may need to start at cooler temp. or extend test 8 days.   |                      |           |
| <i>Salvia sclarea</i>                           | 227                            | 11/<br>100                             | TB             | 20-30    | 5                      | 21                     |  |                      | 72        |
| Clary Sage                                      |                                |  |                |          |                        |                        |  |                      |           |
| <i>Salvia viridis</i>                           | 523                            | 5/<br>50                               | TB             | 20-30    | 7                      | 14                     |  |                      | 72        |
| syn. <i>S. horminum</i>                         |                                |  |                |          |                        |                        |  |                      |           |
| syn. <i>S. coccinea</i>                         |                                |  |                |          |                        |                        |  |                      |           |
| <i>Sanguinaria candensis</i>                    | 112                            | 22/                                    |                |          |                        |                        |  |                      | 6         |



| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata            | Temp°C   | First<br>count<br>days | Final<br>count<br>days           | Additional Directions  | See Sec. 4.2 and 4.9 | Reference                   |
|--|--------------------------------|--|---------------------------|--|------------------------|----------------------------------|--|----------------------|-----------------------------|
| Bloodroot  |                                |  |                           |  |                        |                                  | 3 months at 5°C, then 6 months at 20°C, then 3 months at 5°C   |                      | 22                          |
| <i>Sanguisorba occidentalis</i><br>Prairie burnet    |                                |  | P(a)<br>P(a)<br>P(a)      | 15<br>20-30<br>20                                  |                        |                                  | Light<br>Light<br>Dark   |                      | 7                           |
| <i>Sanguisorba officinalis</i><br>Garden burnet      | 153                            | 16/                                    | P(a)                      | 20-30  |                        |                                  | Light  |                      | 6<br>7                      |
| <i>Santolina chamaecyparissus</i><br>Lavender cotton |                                |  | PP                        | 20   | 5                      | 15                               | Light  |                      | 14                          |
| <i>Saponaria officinalis</i><br>Bouncing bit         | 569<br>566<br>566              | 5/<br>5/50<br>5/50                     | B<br>B<br>B<br>TB<br>P(a) | 20-30<br>20-30<br>15-25<br>20-30<br>15,10<br>20-30 | 7<br>7<br>7<br>7<br>7  | 21<br>14<br>21<br>21<br>28<br>21 | Prechill 30 days<br>KNO <sub>3</sub> ; prechill plus KNO <sub>3</sub> 1 week<br>Light; prechill 30 days at 5°C<br>Light; prechill 30 days at 5°C<br>Prechill |                      | 68<br>9<br>6<br>6<br>2<br>7 |
| <i>Saponaria vaccaria</i>                            | 185                            | 14/140                                 | TB                        | 15   | 6                      | 16                               |  |                      | 72                          |
| <i>Satureja montana</i><br>Savory Winter             | 2083                           | 1/<br>10                               | TB                        | 20   | 5                      | 21                               | Test with GA <sub>3</sub> .  |                      | 72                          |
| <i>Scabiosa stellata</i><br>Scabiosa                 |                                |  | B<br>T                    | 15<br>20-30<br>15                                  |                        | 18<br>26<br>18                   | Light  |                      | 6<br>18<br>14               |
| <i>Schefflera arboricola</i><br>Schefflera           | 362                            | 13/130                                 | TP<br>TB                  | 20-30<br>20-30                                     | 7<br>7                 | 35<br>28                         | Light<br>Light   |                      | 1<br>6                      |
| <i>Schismus arabicus</i>                             |                                |  | P                         | 20-30  | 7                      | ?                                | Light  |                      | 34                          |
| <i>Schizopetalon walkeri</i>                         |                                |  | TP                        | 20-30  | 4                      | 12                               | Light  |                      | 1                           |
| <i>Scleranthus annuus</i><br>Annual knawel           |                                |  | P(a)                      | 20-30  |                        |                                  | Dark   |                      | 7                           |
| <i>Scrophularia lanceolata</i><br>Lanceleaf figwort  |                                |  | P(a)                      | 20-30  |                        |                                  | Light; prechill 3 weeks at 3°C   |                      | 7                           |
| <i>Scutellaria baicalensis</i>                       | 556                            | 5/<br>50                               | TB                        | 15-25  | 7                      | 21                               | Prechill at 5°C for 7 days.  |                      | 72                          |
| <i>Scutellaria lateriflora</i><br>Skullcap           | 2540                           | 1/<br>10                               | TB                        | 20-30  | 7                      | 21                               | Test with GA <sub>3</sub> .  |                      | 72                          |
| <i>Sedum spurium</i><br>Stonecrop                    |                                |  | P                         | 15   | 7                      | 14                               | Light  |                      | 14                          |

| Kind of seed  | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata       | Temp°C                  | First<br>count<br>days | Final<br>count<br>days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference           |
|---|--------------------------------|--|----------------------|-------------------------|------------------------|------------------------|---|----------------------|---------------------|
| <i>Senecio aureus</i><br>Golden ragwort             |                                |  |                      | 20-30                   |                        | 30                     | Prechill 45 days  |                      | 20a                 |
| <i>Senecio bicolor</i>                              |                                | 0.5/                                   | TB<br>TB             | 20-30<br>20-30,20       | 7<br>4                 | 14<br>21               | Light<br>Prechill   |                      | 20a<br>2            |
| <i>Senecio jacobaea</i><br>Tansy ragwort            |                                |  | P(a)                 | 15                      |                        |                        | Light   |                      | 7                   |
| <i>Setaria italica</i><br>Highlander                | 401                            | 6/<br>60                               | TB                   | 20-30                   | 4                      | 10                     | Not usually dormant, but retest with KNO <sub>3</sub> and prechill at 5°C.  |                      | 72                  |
| <i>Setaria leucopila</i><br>Plains bristlegrass     |                                | 5/50                                   | P,B,K                | 20-30                   | 7                      | 28                     | Light, KNO <sub>3</sub>   |                      | 21                  |
| <i>Setaria macrostachya</i><br>Plains bristlegrass  |                                | 5/50                                   | TB<br>T<br>P,B<br>P  | 15-30<br>20-30<br>10-35 | 7<br>7<br>7            | 21<br>28<br>21<br>28   | KNO <sub>3</sub> ; TZ dormant seed, ergot<br>Light, KNO <sub>3</sub><br>Light, KNO <sub>3</sub><br>Light, 0.2% KNO <sub>3</sub> |                      | 16<br>5<br>32<br>29 |
| <i>Shepherdia argentea</i><br>Silver buffaloberry   |                                |  | TB                   | 20-30                   |                        | 21                     | Light; 20-30 minutes acid treatment   |                      | 17a                 |
| <i>Shepherdia canadensis</i><br>Russet buffaloberry | 108                            | 25/                                    | TB                   | 20-30                   | 7                      | 28                     | Light, prechill 60 days at 3°-5°C, or soak in H <sub>2</sub> SO <sub>4</sub> 15-30 minutes                                      |                      | 68                  |
| <i>Shorea acuminata</i>                             | 5 <sup>1</sup>                 | 490/                                   | S,PB                 | 25-30 <sup>2</sup>      |                        | 15                     | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature                                  |                      | 64                  |
| <i>Shorea leprosula</i>                             |                                |  | S,PB                 | 25-30 <sup>1</sup>      |                        | 14                     | Light 24 hours<br><sup>1</sup> ambient room temperature   |                      | 64                  |
| <i>Silene alba</i><br>White campion                 |                                |  | P(a)                 | 20-30                   |                        |                        |   |                      | 7                   |
| <i>Silene antirrhina</i><br>Sleepy catchfly         |                                |  | B                    | 15-25<br>20-30          | 7                      | 21<br>14               | Light   |                      | 20a<br>6            |
| <i>Silene conoidea</i><br>Catchfly                  |                                |  | P(a)<br>P(a)         | 20<br>20-30             |                        |                        | Dark<br>Light   |                      | 7                   |
| <i>Silene cserei</i><br>Catchfly                    |                                |  | P(a)<br>P(a)<br>P(a) | 15<br>20<br>20-30       |                        |                        | Light<br>Dark   |                      | 7                   |
| <i>Silene dioica</i><br>Red campion                 |                                |  | TB                   | 20-30                   | 4                      | 14                     | Light; prechill 5-7 days at 10°C  |                      | 1                   |
| <i>Silene laciniata</i>                             | 1,311                          |  | TB                   | 20-30                   | 5                      | 14                     | GA <sub>3</sub> , Prechill at 5°C for 5 days.   |                      | 26                  |

| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata         | Temp°C                        | First<br>count<br>days | Final<br>count<br>days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference   |
|--|--------------------------------|--|------------------------|-------------------------------|------------------------|------------------------|---|----------------------|-------------|
|  |                                |  |                        |                               |                        |                        | Deep dormancy – Cut through cotyledons, GA <sub>3</sub> , chill at 5°C for 16 hours.            |                      |             |
| <i>Silene noctiflora</i><br>Night flowering catchfly                 |                                |  | B<br>B                 | 20-30<br>20-30                |                        | 7<br>2 7               | Light   |                      | 9<br>3      |
| <i>Silene orientalis</i><br>Catchfly                                 | 10965                          | 0.23/<br>2.3                           | TB                     | 20-30                         |                        | 7 14                   |   |                      | 72          |
| <i>Silybum marianum</i><br>Blessed thistle                           |                                | 100/50<br>0                            | BP                     | 20-30                         |                        | 5 15                   |   |                      | 21<br>1     |
| <i>Simmondsia chinensis</i><br>Jojoba                                | 2                              |  | T                      | 20                            |                        | 7 21                   |   |                      | 26          |
| <i>Simsia clab</i><br>Bush sunflower                                 |                                | 5/50                                   | T                      | 20-30                         |                        | 3 7                    | Prechill 7 days   |                      | 21          |
| <i>Sisymbrium altissimum</i><br>Jim Hill mustard<br>Tumbling mustard |                                |  | P(a)<br>P(a)<br>B<br>B | 20<br>20-30<br>20-30<br>20-30 |                        | 2 7<br>8               | Dark<br>Light<br>KNO <sub>3</sub> ; prechill 1 or 2 weeks                                       |                      | 7<br>3<br>9 |
| <i>Sisymbrium officinale</i><br>Hedge mustard                        |                                |  | P(a)<br>B<br>B         | 20-30<br>15-30<br>20-30       |                        | 4 10<br>10             | Light<br>KNO <sub>3</sub>   |                      | 3<br>9      |
| <i>Sisyrinchium bellum</i><br>California blue-eyed grass             |                                |  |                        | 15-25<br>15                   |                        | 28<br>28               | 400 ppm GA <sub>3</sub>   |                      | 16<br>16    |
| <i>Sisyrinchium bellum</i><br>Blue-eyed-grass                        | 804                            |  | TB                     | 15                            |                        | 5 21                   | Prechill not recommended. For fresh and dormant seed, extend test for up to 3 months or use TZ. |                      | 26          |
| <i>Sitanion hystrix</i><br>Bottlebrush squirreltail                  |                                | 3/30                                   | BT                     | 20-30                         |                        | 21                     | Light, KNO <sub>3</sub> ; prechill 7 days at 5°C  |                      | 5           |
| <i>Smilacina racimosa</i><br>False Solomons seal                     |                                |  |                        |                               |                        |                        | No light, 6 months at 5°C, then 3 months at 20°C, then 5 months at 10°C, then germinate at 20°C |                      | 23          |
| <i>Solanum capsicastrum</i><br>False Jerusalem cherry                |                                |  | TP                     | 20-30                         |                        | 7 35                   | Light, KNO <sub>3</sub>   |                      | 1           |
| <i>Solanum carolinense</i><br>Horse nettle                           |                                |  | B<br>S                 | 20-30<br>15-30                |                        | 14<br>10 21            | KNO <sub>3</sub>  |                      | 9<br>3      |
| <i>Solanum dulcamara</i><br>Bittersweet                              |                                |  | B<br>B                 | 15-25<br>20-30                |                        | 24<br>12               |   |                      | 20a<br>9    |
| <i>Solanum giganteum</i><br>African holly                            |                                |  | TP                     | 20-30                         |                        | 7 35                   | Light, KNO <sub>3</sub>   |                      | 1           |
| <i>Solanum marginatum</i>  |                                |  | TP                     | 20-30                         |                        | 7 35                   | Light, KNO <sub>3</sub>   |                      | 1           |

| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C      | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference |
|--|--------------------------------|--|----------------|-------------|------------------------|------------------------|--|----------------------|-----------|
| <i>Solanum nigrum</i><br>Common nightshade             |                                |  | B              | 20-30       | 7                      | 14                     |  |                      | 6         |
|  |                                |  | B              | 20-30       |                        | 12                     |  |                      | 9         |
| <i>Solanum rostratum</i><br>Buffalo bur                |                                |  | B              | 20-30       |                        | 14                     |  |                      | 9         |
| <i>Solidago canadensis</i>                             | 11965                          | 0.25/                                  | TP             | 20-30       | 7                      | 28                     | Light; prechill 5-7 days at 10°C   |                      | 1         |
|  |                                |  | B              | 15-25       | 7                      | 28                     |  |                      | 6         |
| <i>Solidago graminifolia</i><br>Lance leaved goldenrod |                                |  | B              |             | 10                     | 15                     |  |                      | 20a       |
| <i>Solidago spp.</i>                                   |                                |  |                | 20-30       |                        | 14                     | Prechill 14 days at 5°C  |                      | 18        |
|  |                                |  | P              | 20-30       | 7                      | 21                     |  |                      | 26        |
| <i>Sonchus oleraceus</i><br>Annual sowthistle          |                                |  | P(a)           | 20-30       |                        |                        |  |                      | 7         |
| <i>Sparmannia africana</i><br>African hemp             |                                |  | TP             | 20-30       | 14                     | 35                     | Light  |                      | 1         |
| <i>Spergula arvensis</i><br>Corn spurry                |                                |  | P(a)           | 20-30       |                        |                        |  |                      | 7         |
| <i>Spergularia rubra</i><br>Red sandspurry             |                                |  | P(a)           | 20-30       |                        |                        | Light  |                      | 7         |
| <i>Sphaeralcea coccinea</i><br>Scarlet globemallow     | 1495                           | 2/                                     | B              | 15-30,15,20 | 5                      | 28                     | Check for dormancy [TZ – (scarify seeds, soak overnight, remove embryo whole and place in 0.1% TZ solution) or count hard seeds or scarify the seeds and then plant as a germination test] |                      | 68        |
|  |                                |  | B              | 15-30,15,20 | 5                      | 28                     | Scarify the seeds before planting  |                      | 12        |
| <i>Spilanthes oleracea</i>                             | 12428                          | 0.2/<br>2                              | TB             | 20-30       | 4                      | 7                      |  |                      | 72        |
| <i>Spirnotina spp.</i><br>Prairie cordgrass            |                                | 3/30                                   | TB             | 20-30       | 5                      | 21                     | Light, KNO <sub>3</sub>  |                      | 21        |
| <i>Sporobolus airoides</i><br>Alkali sacaton           |                                | 1/10                                   | P,B,K          | 20-30       | 7                      | 28                     | Light, KNO <sub>3</sub>  |                      | 21        |
|  |                                |  | P              | 20-35       | 7                      | 28                     | Light, 0.2% KNO <sub>3</sub> ; prechill 14 days  |                      | 12,43     |
| <i>Sporobolus asper</i><br>Dropseed, tall              | 1105                           | 1/10                                   | P              | 15-35       | 7                      | 28                     | KNO <sub>3</sub> ; prechill 28 days  |                      | 67        |
|  |                                | 0.5/5                                  | P(a)           | 20-30,35    | 3                      | 14                     | Light, KNO <sub>3</sub> ; prechill 14 days at 5°C  |                      | 21        |
|  |                                |  | P              | 20-35       | 7                      | 28                     | Light, 0.2% KNO <sub>3</sub> ; prechill 2 weeks  |                      | 5         |
| <i>Sporobolus contractus</i>                           |                                |  | P              | 20-35       | 7                      | 28                     | Light, 0.2% KNO <sub>3</sub> ; prechill 4 weeks  |                      | 52        |

| Kind of seed                   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C      | First<br>count<br>days | Final<br>count<br>days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference |
|--------------------------------|--------------------------------|--|----------------|-------------|------------------------|------------------------|---|----------------------|-----------|
| Dropseed, spike                |                                |  |                |             |                        |                        |   |                      |           |
| <i>Sporobolus flexuosus</i>    |                                |  | P              | 20-35       | 7                      | 28                     | Light; prechill 4 weeks   |                      | 52        |
| Dropseed, mesa                 |                                | 1/10                                   | P              | 15-35       | 7                      | 28                     | KNO <sub>3</sub> ; prechill 14 days   |                      | 21        |
| <i>Sporobolus giganteus</i>    | 3787                           |  |                |             |                        |                        |   |                      | 67        |
| Dropseed, giant                |                                |  | P              | 20-35       | 7                      | 21                     | Prechill 6 weeks  |                      | 52        |
| <i>Sporobolus heterolepis</i>  |                                | 1/10                                   | P              | 20-30       | 7                      | 28                     | KNO <sub>3</sub> ; prechill 14 days   |                      | 21        |
| Dropseed, prairie              |                                |  |                |             |                        |                        |   |                      |           |
| <i>Sporobolus palchellus</i>   |                                |  | TP             | 10-30       | 5                      | 15                     |   |                      | 1         |
| Dropseed                       |                                |  |                |             |                        |                        |   |                      |           |
| <i>Sporobolus usitatus</i>     |                                |  | P              | 20-35       | 7                      | 28                     | Light, 0.2% KNO <sub>3</sub> ; prechill 4 weeks                                     |                      | 12        |
| Dropseed, creeping             |                                |  |                |             |                        |                        |   |                      |           |
| <i>Sporobolus wrightii</i>     | 4319                           |  |                |             |                        |                        |   |                      | 67        |
| Sacaton                        |                                |  | P              | 20-35       | 7                      | 28                     | Light, 0.2% KNO <sub>3</sub> ; prechill 3 weeks                                     |                      | 52        |
| <i>Stellaria graminea</i>      |                                |  |                | 15-25       |                        | 21                     | Light   |                      | 20e       |
| Common stitchwort              |                                |  |                |             |                        |                        |   |                      |           |
| <i>Stellaria media</i>         |                                |  | B              | 20-30       |                        | 7                      | KNO <sub>3</sub>  |                      | 9         |
| Common chickweed               |                                |  |                |             |                        |                        |   |                      |           |
| <i>Stenotaphrum secundatum</i> |                                | 2/20                                   | P,B,K          | 20-30       | 7                      | 28                     | KNO <sub>3</sub> ; prechill 7 days at 10°C  |                      | 21        |
| St. Augustine grass            |                                |  |                |             |                        |                        |   |                      |           |
| <i>Stevia rebaudiana</i>       | 3106                           | 0.8/<br>8                              | TB             | 20-30       | 5                      | 14                     | Prechill at 5°C for 7 days.   |                      | 72        |
| Stevia                         |                                |  |                | 20<br>15-25 |                        |                        |   |                      |           |
| <i>Stipa cernua</i>            |                                |  | P              | 15-25       | 7                      | 16                     | Light   |                      | 53        |
| Nodding stipa                  |                                |  |                |             |                        |                        |   |                      |           |
| <i>Stipa columbiana</i>        |                                |  | P              | 20-30       | 7                      | 28                     | Light; prechill 14 days   |                      | 12        |
| Columbia stipa                 |                                |  |                |             |                        |                        |   |                      |           |
| <i>Stipa comata</i>            | 253                            |  |                |             |                        |                        |   |                      | 67        |
| Needle and thread              |                                | 5/50                                   | TB             | 15-30       | 7                      | 21                     | Use method for <i>s. cernua</i> , light, KNO <sub>3</sub> ; prechill 14 days at 5°C |                      | 5         |
| <i>Stipa formicarum</i>        |                                |  | P              | 15-25       | 7                      | 14                     | Light   |                      | 12        |
| <i>Stipa leucotricha</i>       |                                | 7/70                                   | P,B,K          | 15-25       | 7                      | 21                     | Prechill 5 days at 10°C   |                      | 21        |
| Needlegrass, Texas             |                                |  | S              | 15-25       | 7                      | 28                     | With glumes: light, 0.2% KNO <sub>3</sub>   |                      | 54        |
|                                |                                |  | P              | 15-25       | 7                      | 21                     | With caryopses  |                      | 54        |
| <i>Stipa pennata</i>           |                                |  | TP             | 20-30       | 7                      | 21                     | Light   |                      | 1         |
| European feathergrass          |                                | 10/                                    | TP             | 20-30,15    | 7                      | 21                     | Light   |                      | 2a        |

| Kind of seed  | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata       | Temp°C            | First<br>count<br>days | Final<br>count<br>days | Additional Directions                             | See Sec. 4.2 and 4.9 | Reference         |
|---|--------------------------------|--|----------------------|-------------------|------------------------|------------------------|---|----------------------|-------------------|
|   |                                |  | P                    | 15                |                        | 28                     | TZ  |                      | 16<br>26          |
| <i>Stipa pulchra</i><br>Purple stipa                        |                                |  | P                    | 15-25             | 7                      | 16                     | Light   |                      | 53                |
| <i>Stipa robusta</i><br>Needlegrass                         |                                | 5/50                                   | TB                   | 15-30             | 7                      | 21                     | Light, KNO <sub>3</sub> ; prechill 14 days at 5°C |                      | 5                 |
| <i>Stipa speciosa</i><br>Desert needlegrass                 |                                |  |                      | 15                | 7                      | 14                     |   |                      | 55                |
| <i>Stipa tenuissima</i><br>Ornamental Grass<br>'Pony Tails' | 2830                           | 0.88/<br>8.8                           | TB                   | 15                | 7                      | 21                     | KNO <sub>3</sub> , Prechill at 5°C for 7 days.    |                      | 72                |
| <i>Stokesia laevis</i><br>Stokes' aster                     |                                |  | T<br>B<br>P          | 20<br>20<br>20    | 14<br>7                | 28<br>28<br>21         |   |                      | 26<br>6<br>28     |
| <i>Streptocarpus hybridus</i><br>Cape primrose              | 83155<br>26373<br>26373        | 0.25/                                  | TP                   | 20-25<br>20<br>20 | 14<br>7                | 21<br>21<br>15         | Light<br>Light                                    |                      | 6<br>8<br>1<br>66 |
| <i>Strophostyles helvola</i><br>Trailing wild bear          |                                | 100/50<br>0                            | T                    | 20-30             | 7                      | 14                     |   |                      | 21                |
| <i>Suaeda californica</i><br>California sea-blite           | 1,097                          |  | TB                   | 20                | 5                      | 21                     | Prechill (5°C) for fresh and dormant seed.        |                      | 26                |
| <i>Suaeda moquinii</i>                                      | 2,173                          |  | TB                   | 20                | 7                      | 21                     | Light.  |                      | 26                |
| <i>Suaeda taxifolia</i><br>Woolly sea-blite                 | 1,476                          |  | TB                   | 20                | 5                      | 21                     | Prechill (5°C) for fresh and dormant seed.        |                      | 26                |
| <i>Talinum paniculatum</i>                                  | 3203                           | .78/<br>7.8                            | TB                   | 20                | 7                      | 14                     | Prechill at 5°C for 14 –21 days (fresh crop).     |                      | 72                |
| <i>Tanacetum niveum</i><br>Silver Tansy<br>'Jackpot'        | 10,000                         | .25/<br>2.5                            | TB                   | 15                | 10                     | 30                     | GA <sub>3</sub> , Prechill at 5°C.                |                      | 72                |
| <i>Tanacetum parthenium</i><br>Feverfew                     | 6512                           | .4/<br>4                               | TB                   | 15                | 5                      | 21                     | KNO <sub>3</sub> .                                |                      | 72                |
| <i>Taraxacum erythrospermum</i><br>Red-seeded dandelion     |                                |  | P(a)<br>P(a)<br>P(a) | 15<br>20<br>20-30 |                        |                        | Light   |                      | 7<br>7<br>7       |

| Kind of seed   | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata  | Temp°C                  | First<br>count<br>days | Final<br>count<br>days | Additional Directions  | See Sec. 4.2 and 4.9 | Reference      |
|--|--------------------------------|--|-----------------|-------------------------|------------------------|------------------------|--|----------------------|----------------|
| <i>Tetrachne dregii</i><br>Karoo grass                             |                                |  | P               | 20-35                   | 7                      | 28                     | Light, 0.2% KNO <sub>3</sub>   |                      | 12             |
| <i>Thalictrum dioicum</i><br>Early meadow rue                      |                                |  |                 | 15-25                   |                        | 25                     | Prechill 60 days   |                      | 20a            |
| <i>Thalictrum dipterocarpum</i>                                    |                                |  | TP              | 20-30                   | 7                      | 35                     |  |                      | 1              |
| <i>Thalictrum minus</i>  |                                |  | TP              | 20-30                   | 7                      | 35                     |  |                      | 1              |
| <i>Thalictrum simplex</i>  |                                |  | TP              | 20-30                   | 7                      | 28                     | Light  |                      | 1              |
| <i>Theobroma cacao</i><br>Cacao                                    | 0.5 <sup>1</sup>               |  | S               | 25-30 <sup>2</sup>      | 14                     | 21                     | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature |                      | 64             |
| <i>Thlaspi arvense</i><br>Penny cress                              |                                |  | S<br>B<br>P(a)  | 15-30<br>20-30<br>20-30 | 4                      | 10<br>10               | Light<br>KNO <sub>3</sub><br>Light   |                      | 3<br>9<br>7    |
| <i>Thymus praecox subsp.</i><br><i>articus</i><br>Ornamental thyme |                                |  |                 | 15                      | 7                      | 21                     | TZ   |                      | 14             |
| <i>Tithonia speciosa</i><br>Mexican Sunflower                      | 155                            | 16/<br>160                             | TB              | 20-30                   | 4                      | 8                      | Count seedlings every few days, tend to decay.   |                      | 72             |
| <i>Tradescantia virginiana</i><br>Common spiderwort                | 242                            | 10/                                    | P<br>B          | 20-30<br>20-30<br>20-30 | 10<br>7                | 35<br>28<br>21         | Light  |                      | 26<br>6<br>18  |
| <i>Tragopogon spp.</i><br>Goatsbeard                               |                                |  | B               | 15                      | 5                      | 10                     |  |                      | 3              |
| <i>Tragopogon porrifolius</i><br>Oysterplant                       |                                |  | P(a)            | 20-30                   |                        |                        | Light  |                      | 7              |
| <i>Trichachne californica</i><br>Arizona cottontop                 | 1578                           | 1/10                                   | P<br>P          | 20-30<br>20-30          | 7<br>7                 | 28                     | KNO <sub>3</sub><br>Light, 0.2% KNO <sub>3</sub>   |                      | 67<br>21<br>12 |
| <i>Trifolium ciliolatum</i>  | 457                            |  | T               | 15                      | 7                      | 14                     | Hard seed.<br>Prechill at 5°C for 5 days.  |                      | 26             |
| <i>Trifolium procumbens</i><br>Irish shamrock                      | 2085                           | 1/                                     | B<br>T<br>BP,TP | 15<br>20<br>20          | 7<br>7<br>4            | 14<br>21<br>14         | Hard seeds<br>Hard seeds<br>Hard seeds   |                      | 6<br>14<br>2   |
| <i>Trifolium rubens</i><br>Clover                                  | 397                            | 6.3/<br>63                             | T               | 20                      | 4                      | 7a                     | Hard seeds   |                      | 72             |
| <i>Trigonella caerulea</i>   |                                |  | TP              | 15                      | 4                      | 14                     | Light  |                      | 1              |

| Kind of seed                                       | Approx. # seeds per gram | Min. Wt. in grams purity/ nox | Sub-strata | Temp°C             | First count days | Final count days | Additional Directions   | See Sec. 4.2 and 4.9 | Reference |
|--|--------------------------|-------------------------------|------------|--------------------|------------------|------------------|---|----------------------|-----------|
| <i>Trigonella foenum-graecum</i><br>Fenugreek      | 51<br>55                 | 45/450                        | TB         | 15,20              |                  | 7                |   |                      | 67<br>6   |
| <i>Trillium erectum</i><br>Stinking Benjamin       |                          |                               |            |                    |                  |                  | 9 mos. at 5°C, then 2 mos. at 20°C, then 3 mos. at 5°C  |                      | 22        |
| <i>Trillium grandiflorum</i><br>White trillium     | 184                      | 13/                           |            |                    |                  |                  | 3 mos. at 5°C, then 3 mos. at 20°C, then 3 mos. at 5°C  |                      | 6<br>22   |
| <i>Tripsacum dactyloides</i><br>Eastern gama-grass | 16                       | 20/250                        | P,B,K      | 20-30              | 7                | 28               | KNO <sub>3</sub> ; presoak 2 days at 15°C, prechill 21 days at 10°C   |                      | 67<br>21  |
| <i>Trollius europaeus</i><br>Globeflower           | 1331                     | 2/                            | TP         | 10-30              | 7                | 28               | Light; prechill 5-7 days at 10°C  |                      | 6<br>1    |
| <i>Typha latifolia</i><br>Common cattail           | 17,747                   |                               | TCT        | 20-35              | 5-7              | 35               | Light; prechill 5°C for 5 days for fresh and dormant seed.  |                      | 26        |
| <i>Ursinia anathoides</i>                          |                          |                               | BP         | 20                 | 5                | 20               |   |                      | 1         |
| <i>Urtica dioica</i><br>Stinging nettle            |                          |                               | B          | 15-25              | 10               | 14               | Light   |                      | 20e       |
| <i>Valeriana officinalis</i><br>Common Valerian    | 1386                     | 2/<br>20                      | TB         | 20                 | 7                | 21               | KNO <sub>3</sub> , prechill at 5°C for 7 days.  |                      | 72        |
| <i>Veitchia merrillii</i><br>Manila palm           | 0.3 <sup>1</sup>         |                               | S          | 25-30 <sup>2</sup> |                  | 57               | Light 24 hours<br><sup>1</sup> freshly harvested seed<br><sup>2</sup> ambient room temperature  |                      | 64        |
| <i>Verbascum blattaria</i><br>Moth mullein         |                          |                               | P(a)       | 20-30              |                  |                  |   |                      | 7         |
| <i>Verbascum bombyciform</i><br>Arctic Summer      | 7013                     | 0.36/<br>3.6                  | TB         | 20-30              | 7                | 21               | KNO <sub>3</sub> , Prechill at 5°C for 7 days.<br>New lots – 100 seeds, thiram, PC<br>100 seeds, thiram, KNO <sub>3</sub> and prechill 7 days<br>100 seeds water & prechill at 5°C. |                      | 72        |
| <i>Verbascum nigrum</i>                            |                          |                               | TP         | 20-30              | 7                | 21               | Light   |                      | 1         |
| <i>Verbascum olympicum</i>                         |                          |                               | TP         | 20-30              | 7                | 21               | Light   |                      | 1         |
| <i>Verbascum thapsus</i><br>Flannel mullein        |                          | 0.5/                          | TP<br>P(a) | 20-30<br>20-30     | 4                | 21               | Prechill<br>Dark  |                      | 2<br>7    |
| <i>Verbena bonariensis</i>                         | 4310                     | 0.58/<br>5.8                  | TB         | 15-30              | 7                | 28               | KNO <sub>3</sub>  |                      | 72        |
| <i>Verbena hastata</i><br>Blue vervain             |                          |                               |            | 15-25              |                  | 28               | Light; prechill 30 days   |                      | 20a       |
| <i>Verbena lasiostachys</i>                        | 3,081                    |                               | TB         | 15-25              | 7                | 18               | Light, GA <sub>3</sub> at 15°C for 21 days.   |                      | 26        |



| Kind of seed   | Approx. # seeds per gram | Min. Wt. in grams purity/ nox | Sub-strata                                    | Temp°C   | First count days                            | Final count days                                   | Additional Directions  | See Sec. 4.2 and 4.9 | Reference                                       |
|--|--------------------------|-------------------------------|---|--|---|--|--|----------------------|---|
| <i>Verbena officinalis</i><br>Vervain                  | 4100                     | 0.61/6                        | TB  | 20-30<br>15-30   | 7   | 21   | KNO <sub>3</sub>   |                      | 72  |
| <i>Verbesina dissita</i><br>Crownbeard                 | 317                      |                               | TB  | 20   | 7   | 21   | Light.   |                      | 26  |
| <i>Veronica latifolia</i>                              |                          |                               | TP  | 20-30  | 7   | 21   | Light  |                      | 1   |
| <i>Veronica longifolia</i>                             |                          |                               | TP  | 20-30  | 7   | 21   | Light  |                      | 1   |
| <i>Veronica repens</i>                                 |                          |                               | TP  | 10-30  | 7   | 28   | Light  |                      | 1   |
| <i>Viguiera multiflora</i><br>Golden-eye daisy         |                          |                               | P   | 15   | 7   | 28   | GA <sub>3</sub> for dormancy   |                      | 16  |
| <i>Viguiera stenoloba</i><br>Golden-eye, shelefox leaf |                          | 2/20                          | PT  | 20-30  | 5   | 10   | Prechill 10 days, or 5 days and test at 20°C with KNO <sub>3</sub>   |                      | 21  |
| <i>Vitex agnus-castus</i><br>Chaste Tree               | 92                       | 27/270                        | TB  | 20-30  | 7   | 28<br>35   | GA <sub>3</sub> , Prechill at 5°C for 7 days.<br>Check frequently; has multiple embryos  |                      | 72  |
| <i>Vulpia microstachys</i>                             | 874                      |                               | TCT   | 15-25  | 7   | 14   | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26  |
| <i>Vulpia myuros</i>                                   | 1,720                    |                               | TB  | 15-25  | 5   | 14   | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26  |
| <i>Vulpia octoflora</i>                                | 4,464                    |                               | TCT   | 15-25  | 7   | 14   | GA <sub>3</sub> , Prechill at 5°C for 5 days.<br>Deep dormancy – Cut through endosperm, GA <sub>3</sub> , chill at 5°C for 16 hours. |                      | 26  |
| <i>Wahlenbergia grandifolia</i>                        |                          |                               | BP  | 20-30  | 7   | 21   | Prechill 5-7 days at 10°C  |                      | 1   |
| <i>Xeranthemum annum</i><br>Immortelle                 |                          | 3/                            | TB<br>T<br>TP,BP<br>P<br>P<br>FB<br>P<br>P,TB | 20<br>20,20-30<br>20-30,20<br>20<br>20<br>20<br>20<br>20 | 3<br>7<br>4<br>5<br>5<br>42<br>7<br>7<br>10 | 14<br>14<br>14<br>16<br>16<br>42<br>14<br>14<br>15 | Days<br><br>Dormant seed in fresh lots   |                      | 1<br>26<br>2<br>14<br>28<br>32<br>4<br>16<br>63 |
| <i>Xylorhiza tortifolia</i><br>Mojave-aster            | 765                      |                               | TB  | 20   | 7   | 21   | Light.   |                      | 26  |
| <i>Yucca whipplei</i><br>Our Lord's candle             | 63                       |                               | C   | 20   | 7   | 21   |  |                      | 26  |

| Kind of seed                                 | Approx.<br># seeds<br>per gram | Min. Wt.<br>in grams<br>purity/<br>nox | Sub-<br>strata | Temp°C | First<br>count<br>days | Final<br>count<br>days | Additional Directions | See Sec. 4.2 and 4.9 | Reference |
|--|--------------------------------|--|----------------|--------|------------------------|------------------------|-----------------------|----------------------|-----------|
| <i>Zantedeschia aethiopica</i><br>Calla lily |                                |  | BP             | 20     | 7                      | 35                     |                       |                      | 1         |