

# GUIDELINES FOR STORING FLOWER BULBS

THIS TEMPERATURE STORAGE CHART HAS BEEN DRAWN UP FOR DRY SALES! MODIFIED PREPARATION TEMPERATURES CAN BE NECESSARY FOR PURPOSES OF FLOWER PRODUCTION IN ORDER TO TIME THE FLOWERING PERIODS.

## AUTUMN

### SPRING-FLOWERING BULBS

|  | STORAGE METHOD   | TEMPERATURE UNTIL PLANTED |
|--|--|---------------------------|
| <b>Allium</b> (large and small-flowering)  | dry and ventilated   | 23-20-17°C                |
| <b>Allium cernuum, flavum, carinatum, ursinum</b>                                  | ventilated, protect from drying out  | 9-5°C                     |
| <b>Amacrinum</b>   | dry and ventilated   | 5°C                       |
| <b>Amaryllis belladonna</b>  | dry and ventilated   | 5°C                       |
| <b>Anemone blanda</b>  | dry and ventilated, provide air circulation  | 17°C                      |
| <b>Brimeura</b><br>( <i>syn.</i> Hyacinthus amethystina)                           | dry and ventilated   | 23-20°C                   |
| <b>Camassia</b>  | dry and ventilated   | 20-17°C                   |
| <b>Chionodoxa</b>  | dry and ventilated   | 23-20-17°C                |
| <b>Colchicum</b>   | as cool as possible, deliver early   | 9-(2)°C                   |
| <b>Corydalis, cava, solida</b>   | dry and ventilated   | 9°C                       |
| <b>Crocus</b>  | dry and ventilated   | 23-20-17°C                |
| <b>Crocus</b> (autumn-flowering)   | dry and ventilated, deliver early  | 9°C                       |
| <b>Eranthis</b>  | dry and ventilated, prevent desiccation  | 9-5°C                     |
| <b>Eremurus</b>  | protect from drying out  | 17-9-5°C                  |
| <b>Erythronium dens-canis</b>  | protect from drying out  | 9-5°C                     |
| <b>Erythronium</b> (other varieties)   | susceptible to mechanical damage   | 17-9°C                    |
| <b>Fritillaria imperialis</b>  | ventilated, susceptible to mechanical damage                                       | 25-23-17°C                |
| <b>Fritillaria meleagris</b>   | protect from drying out, provide air circulation                                   | 17-9°C                    |
| <b>Fritillaria michailovskyi</b>   | protect from drying out, provide moderate air circulation                          | 17-9°C                    |
| <b>Galanthus</b>   | protect from drying out  | 17°C                      |
| <b>Hippeastrum</b> ( <i>syn.</i> Amaryllis)  | dry and ventilated, 12 wks at 13°C, then 5°C (13°C is preparation, 5°C is storage) | 13-5°C                    |
| <b>Hyacinthus</b> (prepared)   | dry and ventilated   | 30-25-20-17°C             |
| <b>Hyacinthus</b> (not prepared)   | dry and ventilated   | 25-20-17°C                |
| <b>Hyacinthoides</b><br>( <i>syn.</i> Endymion/<br><i>syn.</i> Scilla campanulata) | highly ventilated, susceptible to mechanical damage                                | 20°C                      |
| <b>Iris latifolia</b> ( <i>syn.</i> Iris anglica)                                  | dry and ventilated, control for aphids   | 20-17°C                   |
| <b>Iris hollandica</b>   | dry and ventilated   | (30)-25-20-17°C           |
| <b>Iris reticulata, danfordiae</b>   | dry and ventilated   | 23°C                      |
| <b>Ipheion uniflorum</b>   | requires plenty of air circulation; store in shallow layers                        | 20-17°C                   |
| <b>Ixiolirion</b>  | dry and ventilated   | 23-17°C                   |
| <b>Ixia</b>  | dry and ventilated   | 25-23°C                   |
| <b>Leucojum aestivum</b>   | dry and ventilated   | 20-17°C                   |
| <b>Leucojum vernum</b>   | protect from drying out  | 9-5°C                     |
| <b>Muscari</b>   | dry and ventilated   | 23-20°C                   |
| <b>Narcis</b>  | dry and ventilated   | 20-17°C                   |
| <b>Ornithogalum</b> (large-flowering), e.g. <b>saundersiae, arabicum</b>           | dry and ventilated   | 25-23°C                   |
| <b>Ornithogalum</b> (small-flowering)  | dry and ventilated   | 20-17°C                   |
| <b>Oxalis adenophylla</b>  | dry and ventilated   | 20-17°C                   |
| <b>Puschkinia</b>  | dry and ventilated   | 23-20-17°C                |
| <b>Scilla siberica</b>   | dry and ventilated   | 25-23-20°C                |
| <b>Scilla peruviana</b>  | dry and ventilated   | 23°C                      |
| <b>Sparaxis</b>  | dry and ventilated   | 25-23°C                   |
| <b>Tulipa</b>  | dry and ventilated   | 23-20-17°C                |
| <b>Triteleia</b> ( <i>syn.</i> Brodiaea)   | dry and ventilated   | 23°C                      |

### GENERAL REMARKS

- Storage temperatures apply to properly dried, clean products.
- For the forcing sector and for different planting and flowering periods, modified temperature treatments may be necessary.
- It may be important to ask the supplier about previously applied storage temperatures.
- A decreasing series of temperatures means that the highest temperature should be applied at the beginning of the storage period and that the lower temperatures should be applied towards planting time.
- For spring-flowering bulbs, we assume a storage period lasting to planting time (no later than mid-December and, in any case, before freezing winter temperatures set in.
- If we mention protecting from desiccation, it would be advisable to use a filling material, and this should be added to the packaging in any case.
- 'Dry and ventilated' means to use ventilated packaging.
- Pay special attention to aphid control.



## SPRING

### SUMMER-FLOWERING BULBS

|   | STORAGE METHOD  | TEMPERATURE UNTIL PLANTED |
|---|---|---------------------------|
| <b>Anemone coronaria</b>  | dry and ventilated, constant temperature  | 17-15°C                   |
| <b>Begonia</b>  | protect from drying out, provide air circulation                                  | 9-5°C                     |
| <b>Canna</b>  | protect from drying out, no air circulation                                       | 12-8°C                    |
| <b>Crocsmia</b> ( <i>syn.</i> Montbretia)                             | protect from drying out   | 5-2°C                     |
| <b>Cyclamen</b>   | protect from drying out   | 9°C                       |
| <b>Dahlia</b>   | keep from compacting, avoid draughts, no air circulation                          | 9-7°C                     |
| <b>Eremurus</b>   | protect from drying out   | 9°C                       |
| <b>Eucomis</b>  | dry and ventilated  | 13-9°C                    |
| <b>Freesia</b>  | airy, RH 80%  | 25°C                      |
| <b>Galtonia candicans</b>   | dry and ventilated  | 20-17-13°C                |
| <b>Gladiolus</b>  | dry and ventilated  | 17-9-5°C                  |
| <b>Gladiolus callianthus 'Murielae'</b><br>( <i>syn.</i> Acidanthera) | dry and ventilated  | 20°C                      |
| <b>Gloriosa rothschildiana</b>  | protect from drying out   | 20-17°C                   |
| <b>Hippeastrum</b> ( <i>syn.</i> Amaryllis)                           | dry and ventilated  | 5°C                       |
| <b>Hymenocallis</b> ( <i>syn.</i> Ismene)                             | dry and ventilated  | 25-23-17°C                |
| <b>Iris hollandica</b>  | dry and ventilated  | 30-17°C                   |
| <b>Ixia</b>   | dry and ventilated, RH 70-80%   | 25-23°C                   |
| <b>Liatris</b>  | if to be stored longer than 3 mo., freeze at -2°C                                 | 2-0°C                     |
| <b>Lilium</b>   | if to be stored longer than 3 mo., freeze at -2°C                                 | 2-0°C                     |
| <b>Nerine</b>   | dry and ventilated  | 9°C                       |
| <b>Ornithogalum thyrsoides, dubium</b>                                | dry with a highly ventilated container  | 30-25°C                   |
| <b>Oxalis deppei, regnelli, triangularis</b>                          | dry and ventilated  | 5-3°C                     |
| <b>Ranunculus</b>   | dry and ventilated, constant temperature  | 17-15°C                   |
| <b>Sauromatum venosum</b><br>( <i>syn.</i> Arum cornutum)             | dry and ventilated, store frost-free  | 5-2°C                     |
| <b>Sparaxis</b>   | dry and ventilated, RH RV 70-80%  | 25-23°C                   |
| <b>Sprekelia formosissima</b>   | dry and ventilated, 6 wks at 20°C, then 9°C (20°C is preparation, 9°C is storage) | 20-9°C                    |
| <b>Tigridia pavonia</b>   | dry and ventilated  | 5-2°C                     |
| <b>Tritonia</b>   | dry and ventilated  | 25-23°C                   |
| <b>Triteleia</b> ( <i>syn.</i> Brodiaea)                              | dry and ventilated, RH 70-80%   | 25-23°C                   |
| <b>Zantedeschia aethiopica</b>  | provide a little air circulation  | 13-7°C                    |
| <b>Zantedeschia</b> (other varieites)                                 | dry and ventilated  | 13-9°C                    |
| <b>Zephyranthes</b>   | dry and ventilated  | 20°C                      |

R.H. = Relative Humidity

The International Flower Bulb Centre accepts no liability whatsoever for the consequences that result from the use of this information.

