



Top 50 Bulbous

Plants for Pollinators

The best plants grown from bulbs, tubers or rhizomes,
to plant to help our pollinating insects

List Curated by Thomas McBride

From research data collected and collated at the
National Botanic Garden of Wales

NB: Butterflies and Moths are not studied at the NBGW so any data on nectar plants
beneficial for them is taken from Butterfly Conservation



Introduction



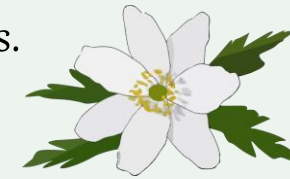
The majority of Garden Plants, excluding shrubs, are herbaceous which means they grow each year and have no lasting woody stems above ground. Bulbous plants are a subsection of herbaceous as they have significant storage organs near to the ground which remain over the plant's dormant period; providing energy and allowing for vigorous growth the following year. Due to this adaptation, bulbous plants are often (but not always) fast growing and may be earlier flowering than their herbaceous relatives.



Onion Bulb



Many bulbous plants are monocotyledonous, meaning they have one leaf sprout (cotyledon), such as onions. A few bulbous plants are dicotyledonous such as species in the Oxalidaceae and Ranunculaceae. It is important to note that, while all significant, subterranean storage organs are known as 'bulbs' in horticulture, botanists distinguish true bulbs from rhizomes, corms and tubers. True bulbs, with the exception of some Oxalis, are exclusively found in the monocots whereas Tubers and Corms tend to be Eudicots such as Dahlias and Anemones respectively. Rhizomes are found throughout many taxa.



Potato Tuber



Planting with Bulbs – Rhizome, Corm or Tuber – Does it matter?



Bulbous Plants can be some of the easiest to grow as they require little attention once they're established and will often spread over a large areas such as bluebells or grape hyacinths. The majority of bulbous plants prefer being planted only a few cm under the soil so light and air can easily penetrate.

Botanically, whether a bulb is a true bulb, rhizome, corm or tuber, is important, but it makes little difference in horticulture to how the plant is grown. However the differences are as follows:



True Bulbs have multiple fleshy scales separated by layers of epithelium tissue. These layers are essentially underground leaves. A common example of a true bulb is the onion (fig.1) which shows clear layers. The growing point of a bulb is the centre which is a modified underground stem. Key bulbous families include Liliaceae, Amaryllidaceae and some Oxalidaceae.

Fig. 1

Corms are also modified underground stems but are made from solid tissue rather than leaf-like layers. Corms, such as the crocemia (fig. 2) have nodes just like standard underground stems.

Key cormous plant families include Iridaceae, Colchicaceae, Musaceae and some Cyperaceae



Fig. 2

Planting with Bulbs – Rhizome, Corm or Tuber – Does it matter?

Fig. 3



Tubers are modified lateral roots. Unlike bulbs and corms, they will send out roots from any point of their external surface such as Sweet Potato tubers (fig. 3). Other examples include Dahlias and Anemones. Tuber, in Latin, means 'swelling' and tubers can also refer to **tuberous stems** such as potatoes and yams. These are very thick rhizomes and may produce stolons so are capable of growing both stems and roots! Stem tubers often decrease significantly in size following rapid growth of leaves.

When growing bulbous plants, remember to allow them time to photosynthesise before cutting them back or pulling up the bulbs. Early flowering species such as Daffodils require some weeks after the flowers have finished to obtain energy before they will naturally allow their foliage to die back. Pulling up too early each year will cause stunted growth or even blind (non-flowering) stems. Bulbs may produce bulblets which can be planted separately. Likewise, rhizomes and others may multiply and will do better if they are split and thinned out once in a while. This can be great for the gardener as you will have new plants.

Rhizomes, also known as rootstalks, are the final sort of 'bulb' and are the least like a true bulb. They tend to be narrower than other storage organs and are simply a partially widened underground stem. Examples include Irises (fig. 4), Alstroemeria, many grasses and also members of the ginger family (Zingiberaceae).

Fig. 4



Guide to using these pages:

Map

Maps depict the native area of the plant (in green)
They also show areas the plant is naturalised (in purple)

All maps shown are derived from 'Plants of the World Online'; courtesy of Kew Gardens

Flowering Period (this is when it is good for pollinators!)

Plant Family

Growing habit and mature size of the plant

Latin Binomial Name

Eranthis hyemalis

Common English Name

Winter Aconite

Photograph of the plant in flower



Insect groups known to favour the nectar of this plant

Useful knowledge or warnings about the plant



Mid Winter - Early Spring

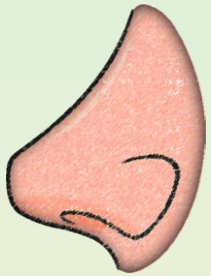
Ranunculaceae
Buttercup Family

<1ft Tuberous

RHS AGM cultivars of this species (or a related species occasionally)

Key to these Pages

Additional information on these garden plants



The flowers and/or leaves have a Pleasant scent

This plant would only be suitable for meadow-style planting



Plant is often used in traditional Herbal Remedies



The plant has edible parts that are commonly eaten or used in cooking



Warnings



Plant tissue is highly toxic if ingested



Sap may cause irritation (Wash hands after touching or avoid touching)

Temperature

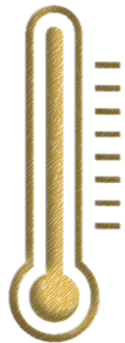
Some of the plants listed in our Top 200 are not fully hardy in all or some parts of the United Kingdom.

Plants without a thermometer symbol are fully hardy in the severest UK Winter; equating to **H5** or hardier.

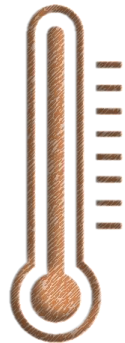
Plants with a coloured thermometer symbol are hardy to varying degrees as follows:



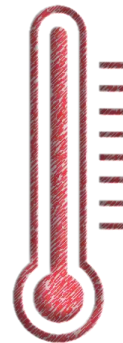
Almost Hardy
(H4)



Half-Hardy
(H3)



Not Frost Hardy
(H2)



Not Hardy
(H1)

RHS Hardiness Scale

H1a	-	Above 15°C
H1b	-	Minimum 10°C
H1c	-	Minimum 5°C
H2	-	Minimum 1°C
H3	-	Minimum -5°C
H4	-	Minimum -10°C
H5	-	Minimum -15°C

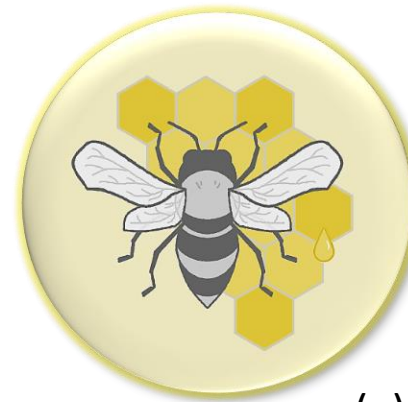
Pollinators

Our data on pollinators has been collected from studies spanning over a decade. Pollinator symbols appear when plants are proven to be good nectar plants for certain insects.

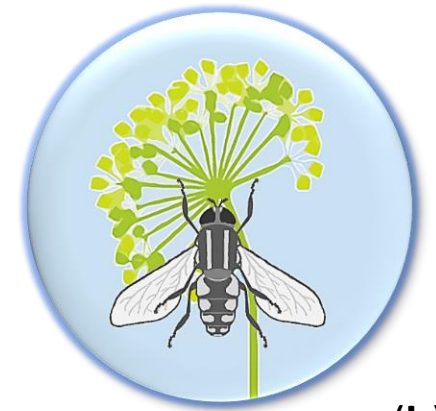
It should be noted that all bee and hoverfly data is ours but lepidoptera data is taken from Butterfly Conservation.

Our data spans a wide range of different insect species. For simplicity, these species have been condensed into six easy icons to represent them:

- | | | |
|---------------|------------------------------------|------------------|
| a) Honeybees | c) Bumblebees | e) Moths |
| b) Hoverflies | d) Butterflies
(Includes Moths) | f) Solitary Bees |



(a)



(b)



(c)



(d)



(e)



(f)

Allium caeruleum

Blue-flowered Garlic



- Species -

Summer ☀

Amaryllidaceae
Daffodil Family

3ft Bulbous



Allium hollandicum

Dutch Garlic, Persian Garlic



Photograph from Flickr (CC) Kerry Garratt

'Purple Sensation'



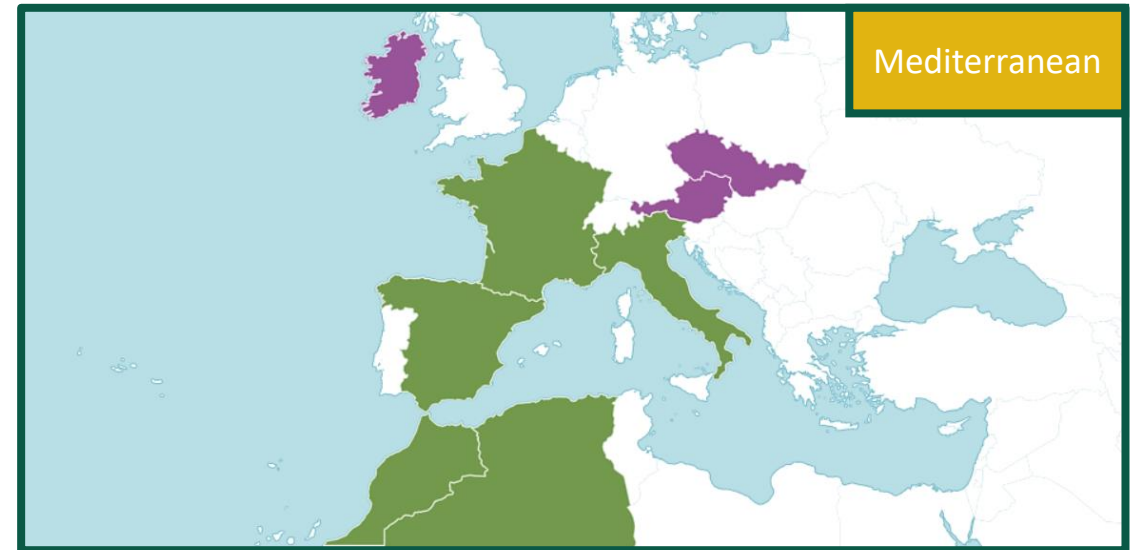
Summer ☀

Amaryllidaceae
Daffodil Family

3ft Bulbous

Allium moly

Yellow Garlic



'Jeannine'



Summer ☀

Amaryllidaceae
Daffodil Family

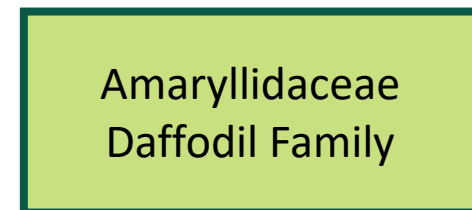
1ft Bulbous

Allium schoenoprasum

Chives



None



Allium ursinum

Wild Garlic, Ramsons



None

Spring 

Amaryllidaceae
Daffodil Family

2ft Bulbous



Alstroemeria x hybrida

Garden Peruvian-lily

Complex group of hybrids of unknown parentage



'Apollo' 'Sirius'
'Spitfire' 'Tessa'

Late Summer
- Mid Autumn

Alstroemeriaceae
Peruvian-lily Family

3ft Tuberos



Anemone blanda

Balkan Windflower



Photograph from Flickr (CC) Dean Morley



- Species -
'White Splendour'



Spring 

Ranunculaceae
Buttercup Family

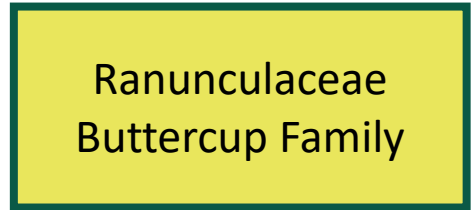
<1ft Tuberos

Anemone nemorosa

Wood Anemone

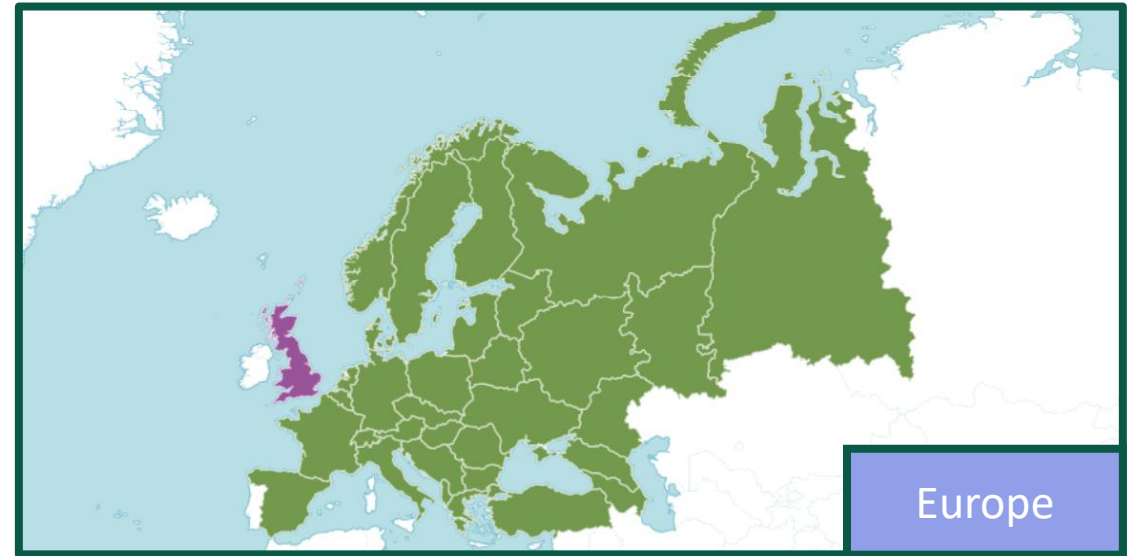


'Allenii'
'Robinsoniana'



Anemone ranunculoides

Buttercup Anemone



- Species -
'Pleniflora'



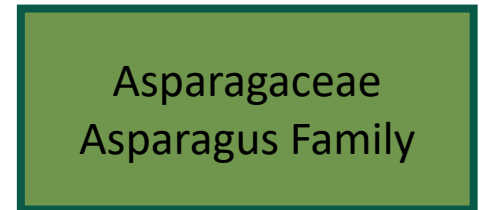
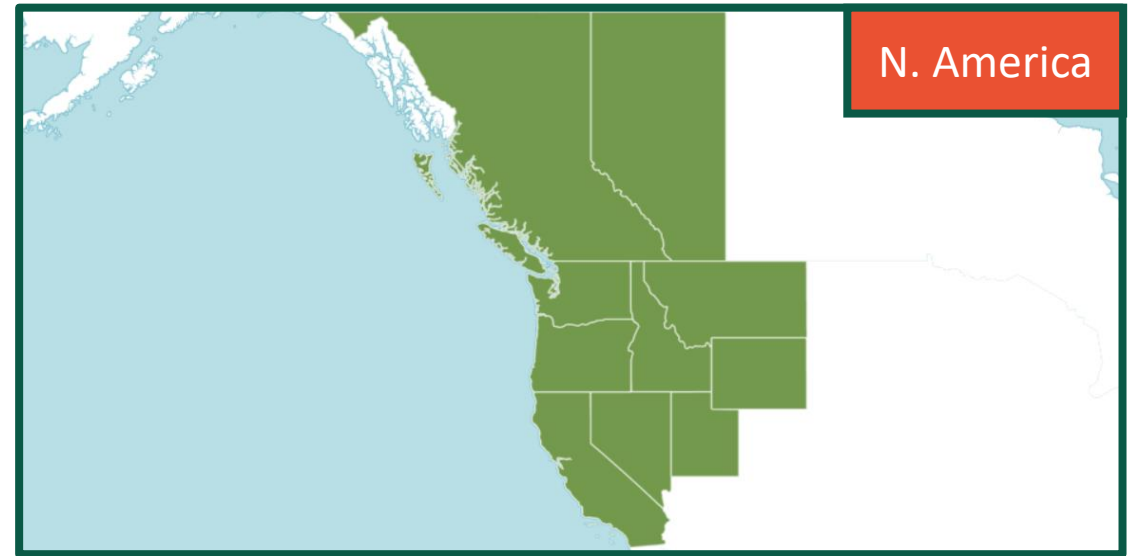
Spring 

Ranunculaceae
Buttercup Family

<1ft Tuberos

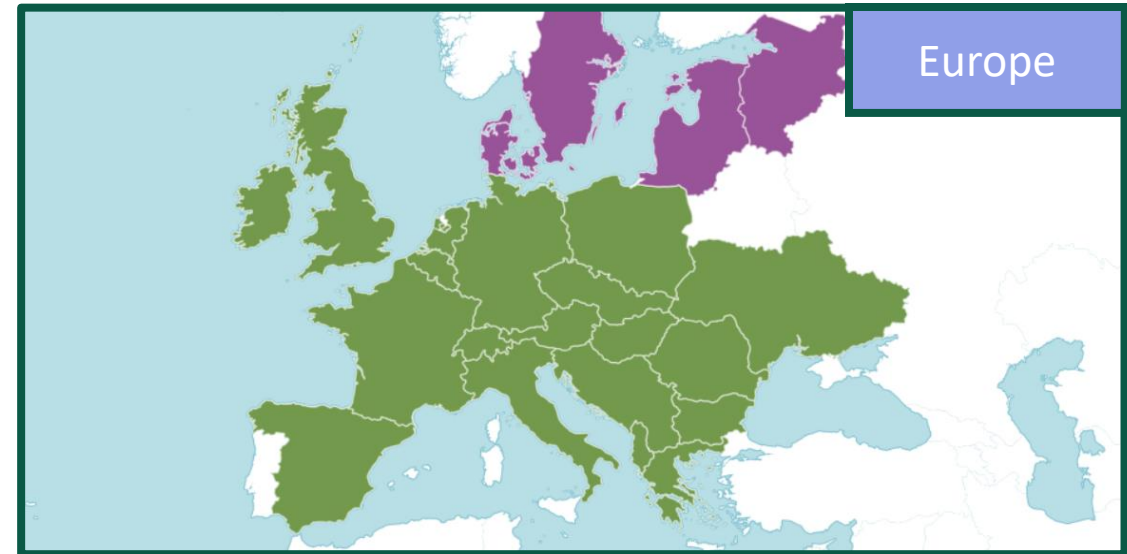
Camassia quamash

Common Camassia

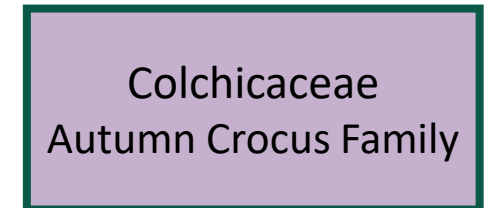


Colchicum autumnale

Autumn Crocus



Photograph from Flickr (CC) Bjorn S.



Convallaria majalis

Lily-of-the-Valley



Photograph from Flickr (CC) Todd Petit

'Fortin's Giant'
-Species-



Spring 

Asparagaceae
Asparagus Family

1ft Rhizomous

Crocus vernus

Spring Crocus



Crocus chrysanthus

Golden Crocus



'Cream Beauty'
'Goldilocks'



Late Winter
- Mid Spring

Iridaceae
Iris Family

<1ft Cormous

Cyclamen coum

Eastern Sowbread



Photograph from Flickr (CC) Bjorn S.

– Species –
Ssp. Coum



Late Winter
- Mid Spring

Primulaceae
Primrose Family

<1ft Tuberos

Dahlia coccinea

Red Dahlia



Photograph from Flickr (CC) Chipmunk_1



'Bishop of Llandaff'
'Happy Single series'



Midsummer
- Early Autumn

Asteraceae
Daisy Family

3ft Tuberos Perennial

* Will not survive a frost, only half-hardy, bring tubers indoors in winter to rest before planting in Spring

Dahlia imperialis


Tree Dahlia



Photograph from Flickr (CC) Chipmunk_1



None



Summer ☀️

Asteraceae
Daisy Family

6ft Tuberos Perennial

* This plant will struggle to survive below -5°C night temperatures so plant in a sheltered spot and wrap the stems/mulch the base during the winter period.

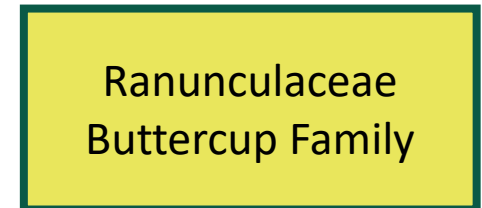
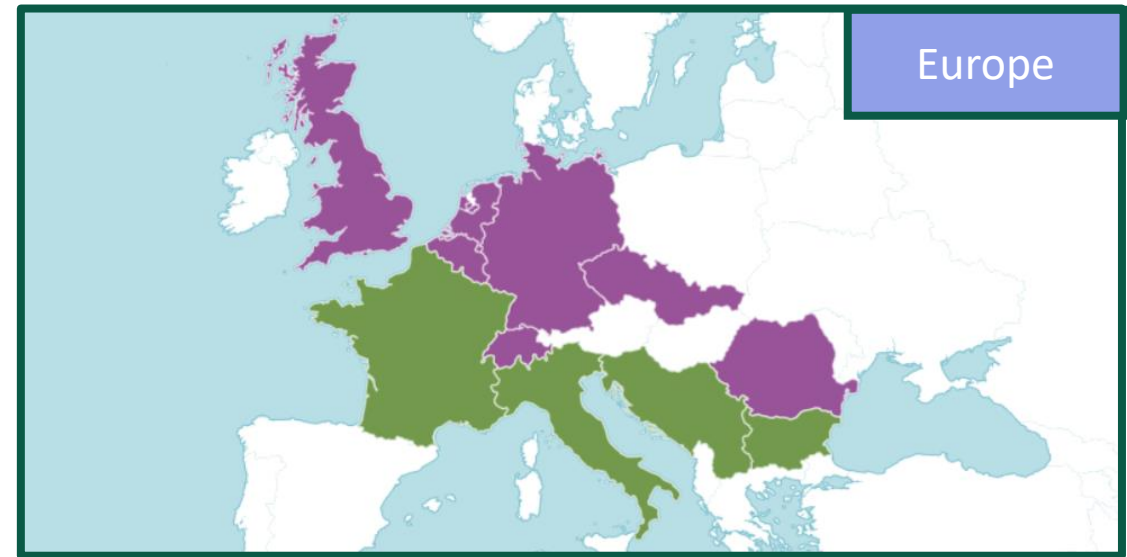
Dierama pulcherrimum

Angel's Fishing Rod



Eranthis hyemalis

Winter Aconite

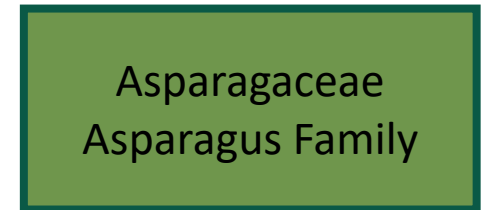


Eucomis autumnalis

Autumn Pineapple-lily



Photograph from Flickr (CC) Thistle Garden



Eucomis comosa

Common Pineapple-lily



'Sparkling
Burgundy'



Early Summer
- Early Autumn

Asparagaceae
Asparagus Family

2ft Bulbous

Fritillaria imperialis

Crown Imperial



Photograph from Flickr (CC) Emma Patsie



- Species -

'Maxima Lutea'



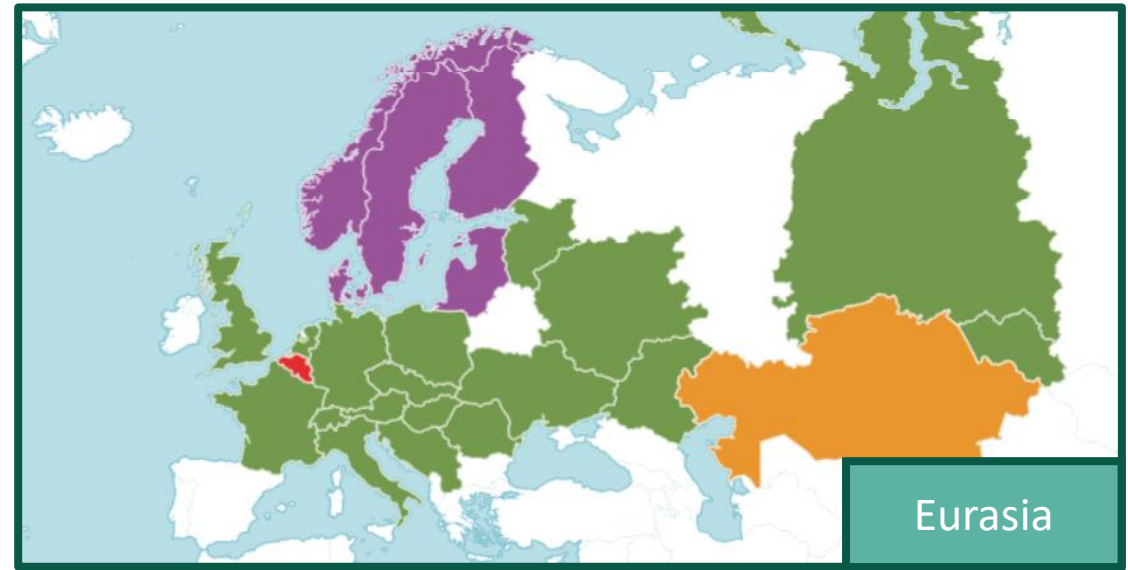
Spring 

Liliaceae
Lily Family

3ft Bulbous

Fritillaria meleagris


Snake's-head Fritillary



Photograph © Thomas McBride

- Species -
var. unicolor 'Alba'



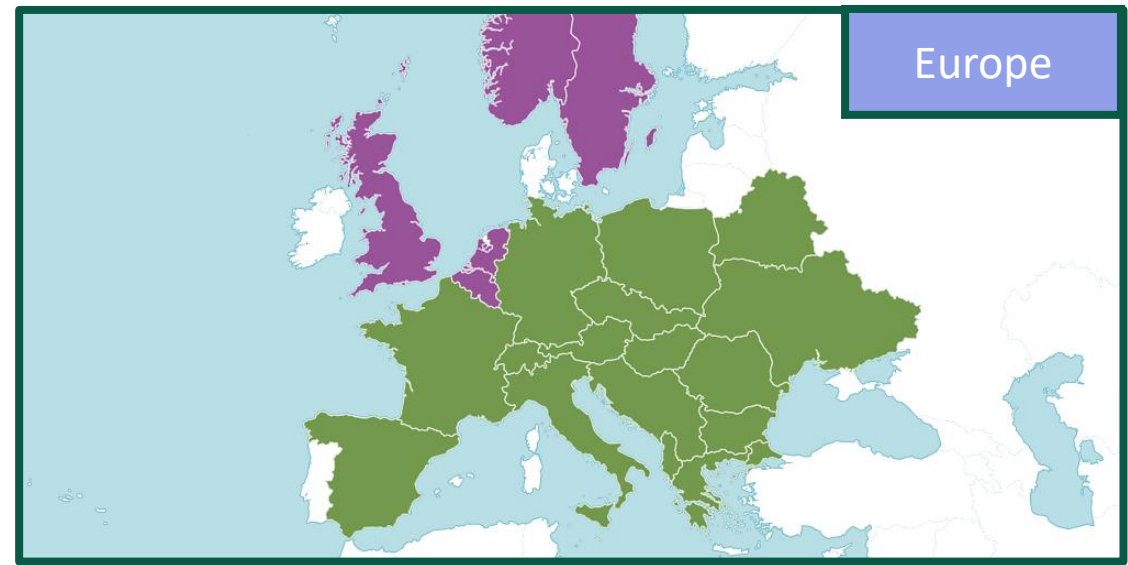
Spring 

Liliaceae
Lily Family

1ft Bulbous

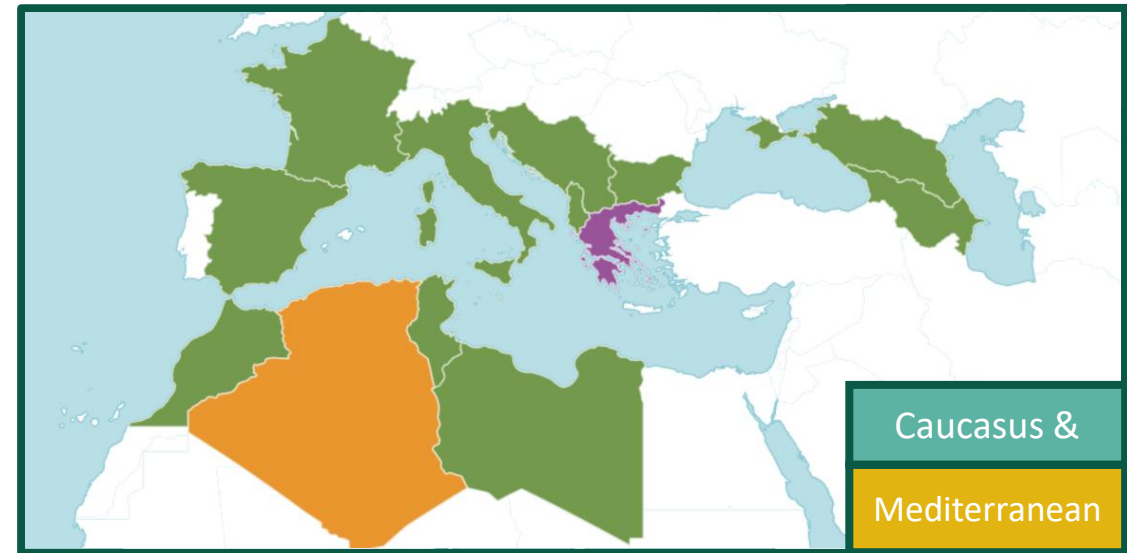
Galanthus nivalis

Common Snowdrop



Gladiolus communis

Eastern Gladiolus



Subsp.
byzantinus



Mid Spring
- Early Summer

Iridaceae
Iris Family

3ft Cormous

Hepatica nobilis

Common Liverleaf



- Species -



Spring 

Ranunculaceae
Buttercup Family

1ft Rhizomous

Hosta sieboldiana Syn. *H. fortunei*

Giant Blue Plantain-lily



Var. aureomarginata
'Frances Williams'



Summer ☀

Asparagaceae
Asparagus Family

2ft Rhizomous

Hosta ventricosa

Blue Plantain-lily



Photograph from Flickr (CC) Gary Lerude



- Species -
'Aureomarginata'



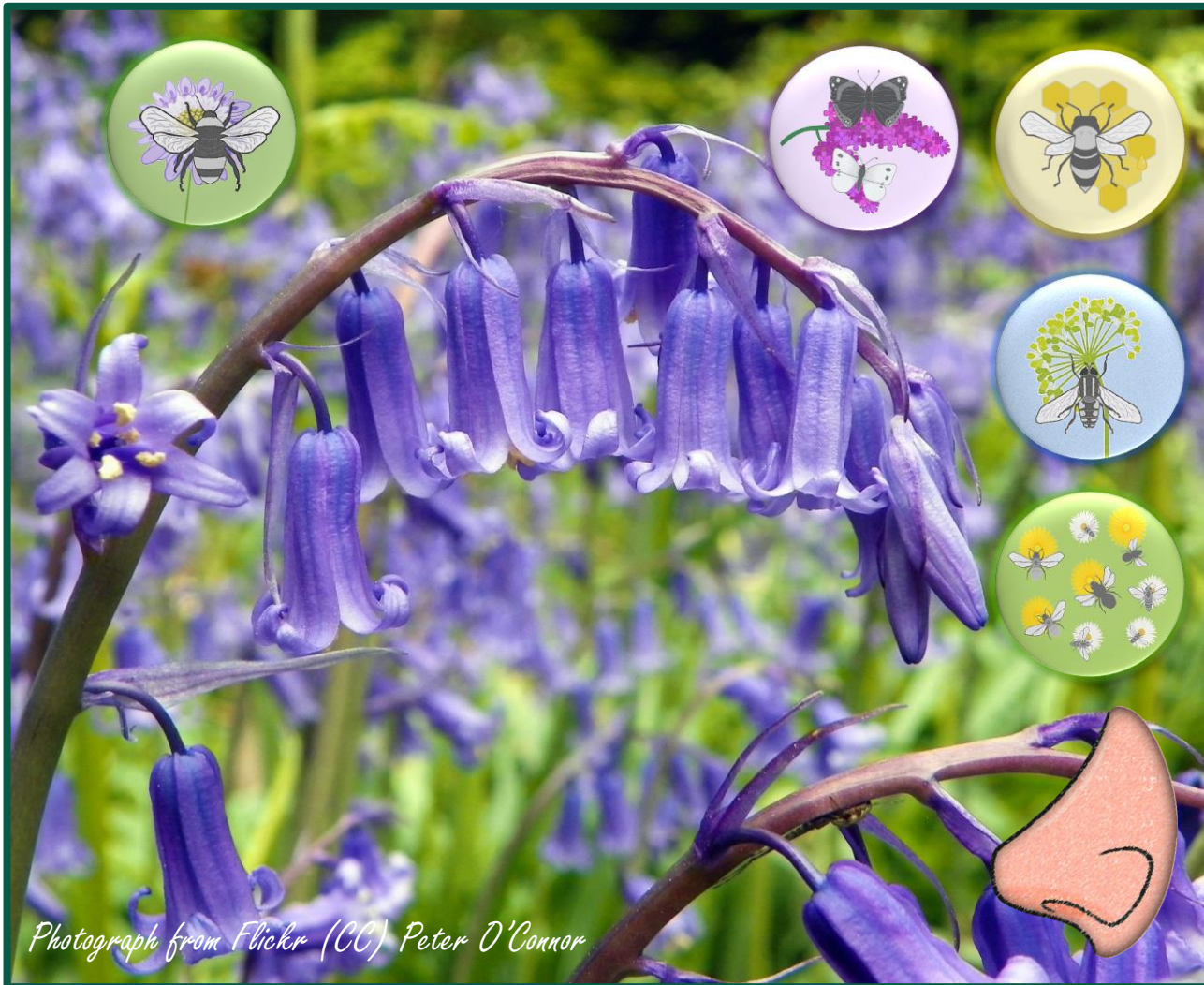
Summer ☀

Asparagaceae
Asparagus Family

2ft Perennial

Hyacinthoides non-scripta

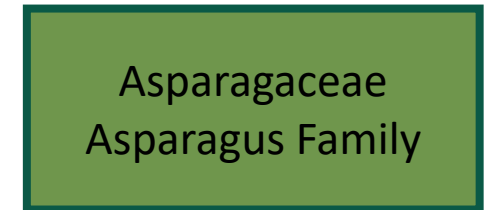
English Bluebell



Photograph from Flickr (CC) Peter O'Connor



None



Hyacinthus orientalis

Garden Hyacinth



Photograph © Thomas McBride



Middle East

'Aida' 'Anna Marie'
'Gypsy Queen'



Late Winter
- Mid Spring

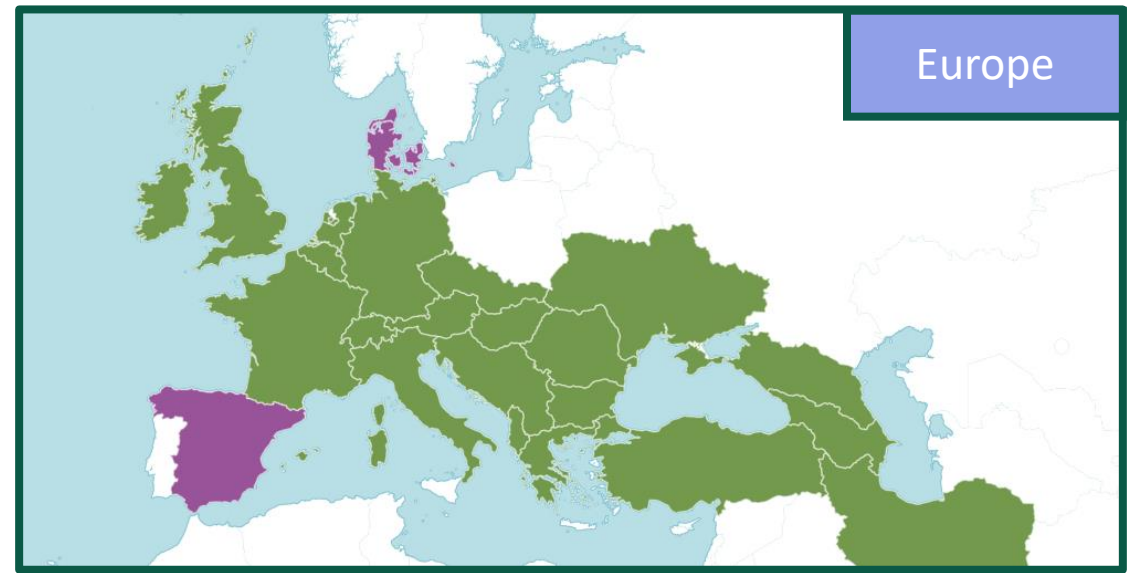
Asparagaceae
Asparagus Family

1ft Bulbous

* This plant will not survive below -10°C night temperatures, protect bulbs from very harsh winter nights

Leucojum aestivum

Summer Snowflake



Photograph from Flickr (CC) Takashi Hososhima

'Gravetye Giant'



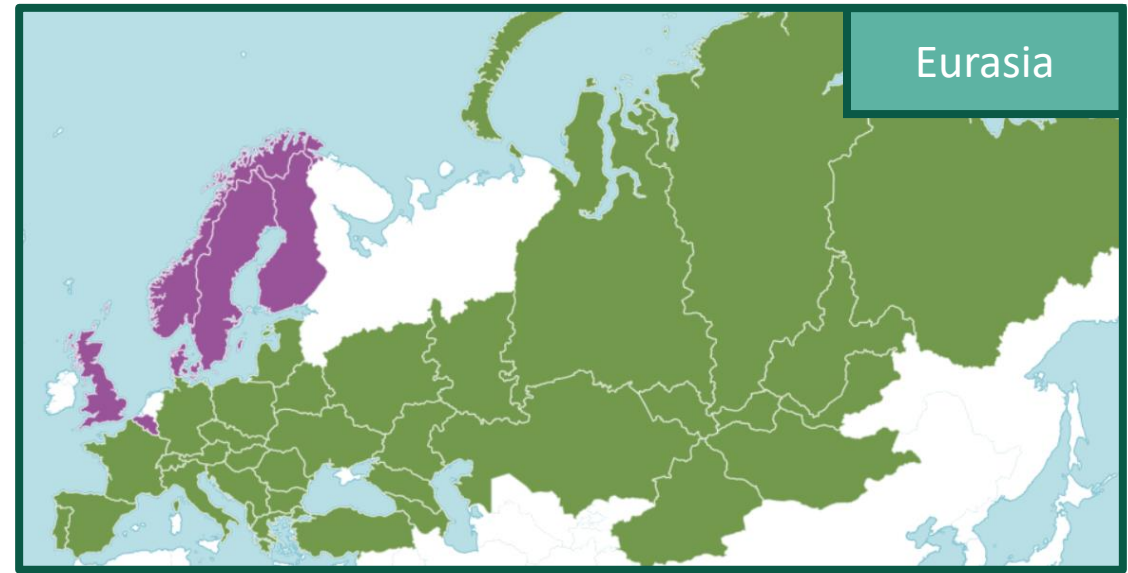
Spring 

Amaryllidaceae
Daffodil Family

1ft Bulbous

Lilium martagon

Turk's Cap Lily



- Species -



Summer ☀

Liliaceae
Lily Family

4ft Bulbous

Lilium regale

Regal Lily



- Species -



Summer ☀

Liliaceae
Lily Family

6ft Bulbous

Muscari armeniacum

Garden Grape-Hyacinth



Photograph from Flickr (CC) Yves Merck



'Christmas Pearl'
-Species-



Early Winter
- Mid Spring

Asparagaceae
Asparagus Family

1ft Bulbous

Muscari latifolium

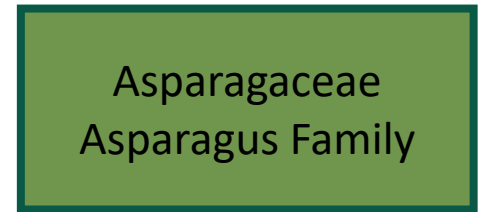
Broad-leaved Grape-Hyacinth



Photograph from Flickr (CC) Josh Egan-Wyer

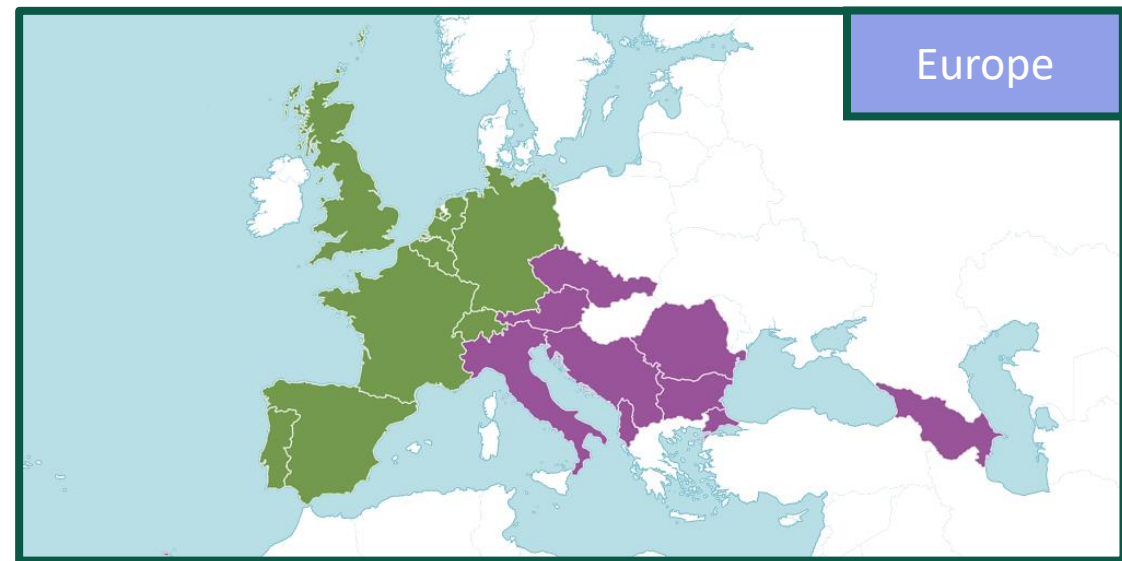


-Species-



Narcissus pseudonarcissus

Wild Daffodil, Lent-lily



Europe



Photograph from Flickr (CC) Šarunas Burdulis

Ssp. Pseudonarcissus
'Dutch Master'



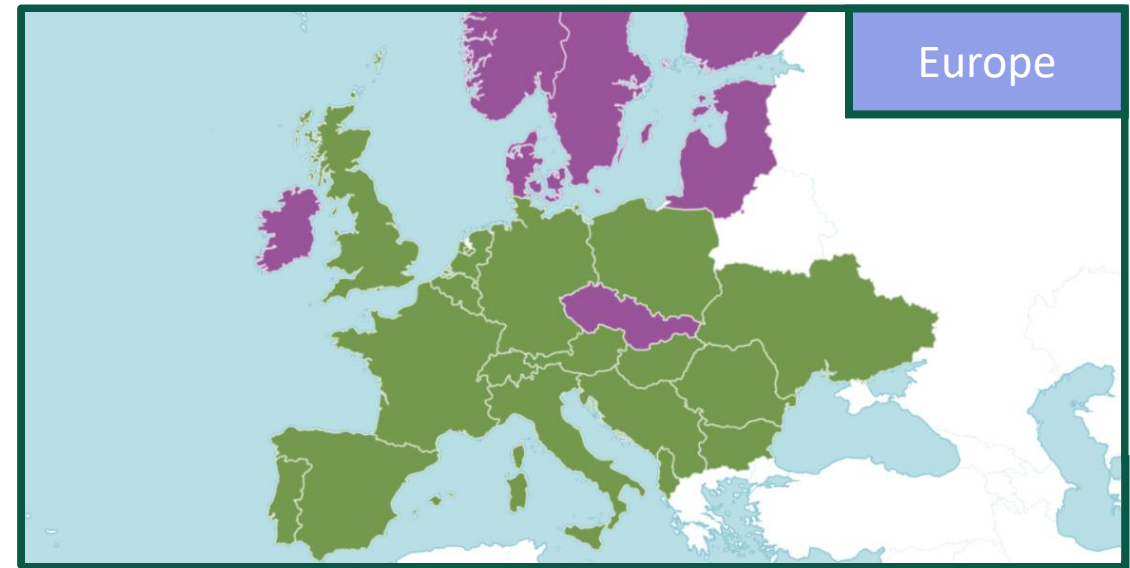
Late Winter
- Mid Spring

Amaryllidaceae
Daffodil Family

1ft Bulbous

Ornithogalum umbellatum

Garden Star-of-Bethlehem



Related Species:
O. nutans

RHS AWARD OF GARDEN MERIT

Summer ☀

Asparagaceae
Asparagus Family

1ft Bulbous

Oxalis adenophylla

Chilean Sour-clover



- Species -



Late Spring
- Early Summer

Oxalidaceae
Wood-sorrel Family

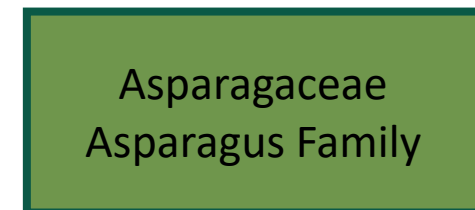
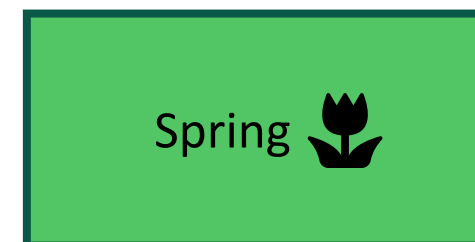
1ft Bulbous

Polygonatum multiflorum

Solomon's Seal



Photograph from Flickr (CC) Kerry Woods



Pulsatilla vulgaris

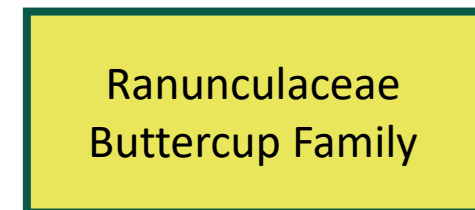
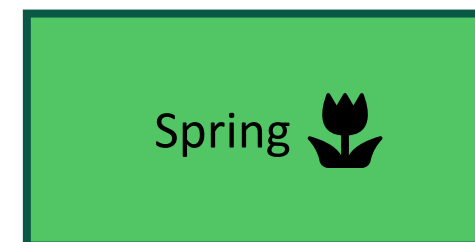
Common Pasqueflower



Photograph from Flickr (CC) Rainer Stropek



-Species-



Puschkinia scilloides

Lebanon Squill



Photograph from Flickr (CC) Ingeborg van Leeuwen



var. libanotica



Spring 

Asparagaceae
Asparagus Family

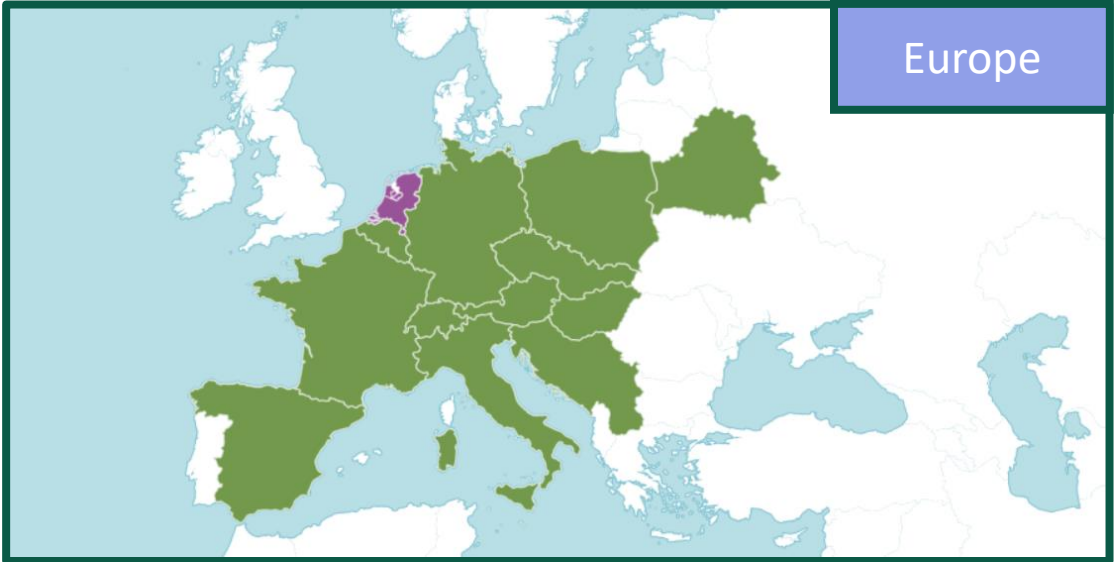
<1ft Bulbous

Scilla bifolia

Alpine Squill



Photograph from Flickr (CC) Katya Unchik



-Species-

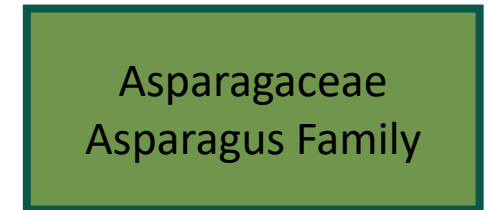
Late Winter
- Early Spring

Asparagaceae
Asparagus Family

<1ft Bulbous

Scilla peruviana

Portuguese Squill



Scilla siberica

Wood Squill



Late Winter
- Early Spring

Asparagaceae
Asparagus Family

<1ft Bulbous

Sisyrinchium bellum

Californian Blue-eyed Grass



Photograph from Flickr (CC) Cliff Hutson



Similar Species:

S. Idahoense var. *macounii* 'Album'



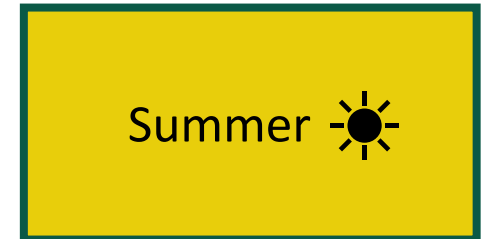
Mid Spring
- Early Summer

Iridaceae
Iris Family

2ft Rhizomous

Sisyrinchium striatum

Satin Flower



Tricyrtis formosana

Taiwanese Toad Lily



Taiwan

None

Autumn 

Liliaceae
Lily Family

3ft Rhizomous



Tulipa gesneriana

Garden Tulip



Hundreds of
Cultivars



Spring 

Liliaceae
Lily Family

2ft Bulbous

Tulipa saxatilis

Candia Tulip



'Lilac Wonder'



Spring 

Liliaceae
Lily Family

2ft Bulbous

Tulipa urumiensis

Late Tulip

