



Top 50 Acid-Tolerant Plants for Pollinators

Garden plants you can grow in the UK in acidic soil
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



What are Acid-tolerant Plants?



All soil has a natural pH factor which determines the type of plants that can be grown in it. Most garden soils are neutral (pH 6.5-7) and are suitable for most plants; as long as other requirements are met. A small area of Britain has alkaline soil (pH 7.5-8) but the majority of areas that do not have neutral soil have mild to strongly acidic soils with a pH of between 5 and 6. These areas are often in the uplands such as the Brecon Beacons or near to heathland. In areas of moderate to strongly acidic soil, and soil may have to be partially neutralised in order to plant a wide variety of plants. If this is not possible, or you are particularly interested in growing plants that favour acidic soil, this list should cover you.

How do I know if a plant is acid-tolerant?



NB: many Hydrangea macrophylla cultivars turn blue in acidic soil! ←



Determining whether or not a plant is acid-tolerant from its appearance is nigh-on impossible. However, there are particular families to look out for. This list can definitely be used as an initial guide but there are lots of possible plants out there. When making soil more acidic or growing with acidic soil, you might add ericaceous compost. Ericaceous means acidic but comes from the heather flower (Erica). All plants in the Ericaceae family are acid-tolerant, most are acid-loving, so this is a great place to begin. Moorlands are acidic which can be shown by the wildflowers being predominately heather. Many shrubs are acid-tolerant such as members of the Hydrangea family, Magnolia family and Viburnum family. The Currant family, Grossulariaceae, is also acid-tolerant so these are a must if you are looking to grow edibles. Finally, there are only a few herbaceous plants that are acid-tolerant but try the poppy family, buttercup family and daisy family. Make sure to research each plant beforehand to be sure!

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

Ceanothus thyrsiflorus

Common English Name

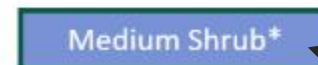
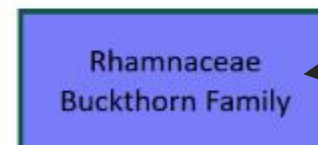
Blueblossom Californian-Lilac

Photograph of the plant in flower



Insect groups known to favour the nectar of this plant

Useful knowledge or warnings about the plant

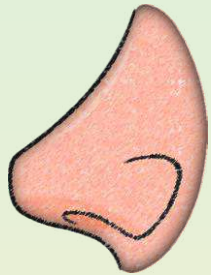


* This plant will not survive below -10°C night temperatures, protect from very harsh winter nights
°C. thyrsiflorus var. repens is a climbing version. 9
Other cultivars are generally more shrub-like in habit.

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



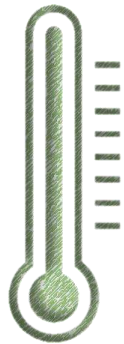
Sap may cause irritation (Wash hands after touching or avoid touching)

Temperature

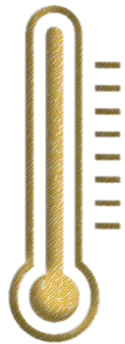
Some of the plants listed in our Top 200 are not fully hardy in all or some parts of the United Kingdom.

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

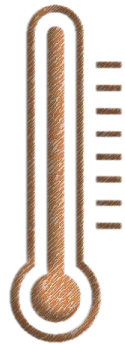
Plants with a coloured thermometer symbol are hardy to varying degrees as follows:



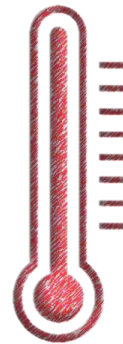
Almost Hardy
(H4)



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

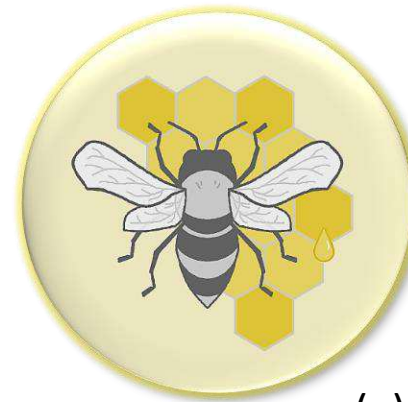
Pollinators

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.

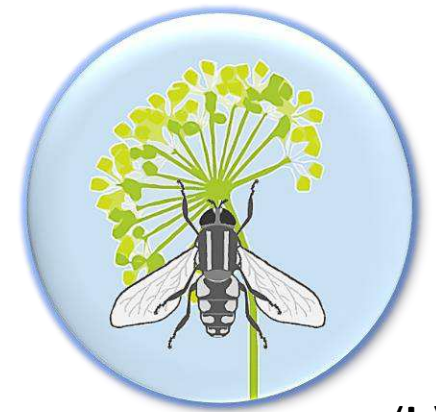
It should be noted that all bee and hoverfly data is ours but lepidoptera data is taken from Butterfly Conservation.

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)



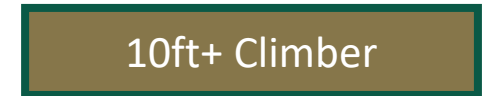
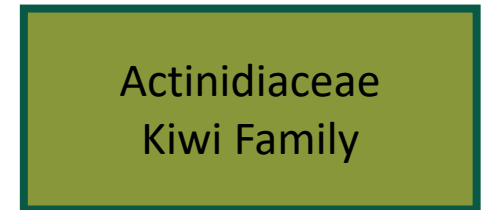
(f)

Actinidia chinensis

Golden Kiwi



Photograph from Flickr (CC) Manuel M. V. & Ting Chen (Flower)



Andromeda polifolia

Bog-rosemary



Photograph from Flickr (CC) Kerry Woods



N. America & Eurasia

'Compacta'
'Macrophylla'



Mid Spring
- Early Summer

Ericaceae
Heather Family

Small Shrub

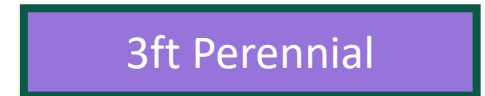
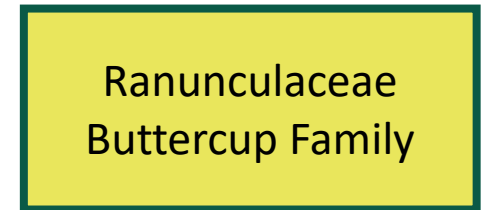
Acidic Marsh

Anemone hupehensis var. *japonica*

Japanese Anemone



Photograph from Flickr (CC) Sen Ito



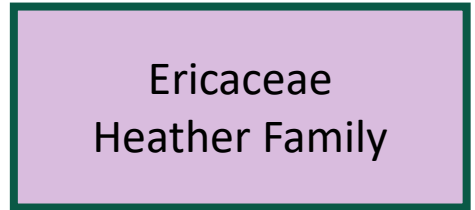
Arbutus unedo Strawberry Tree



Photograph from Wikipedia (CC) Umberto Ferrando, Markus Nolf (fruit)



'Atlantic'
f. rubra



Berberis darwinii

Darwin's Barberry



- Species -
x media

(Hybrid with *B. empetrifolia*)



Spring 

Berberidaceae
Barberry Family

Medium Shrub

Calluna vulgaris

Common Heather



Photograph from Flickr (CC) Andreas Rockstein

'Dark Beauty'
'Spring Cream'



Early Summer
- Early Autumn

Ericaceae
Heather Family

Small Subshrub

Camellia japonica

Japanese Camellia



'Hagoromo'
'Pink Perfection*'

RHS AWARD OF GARDEN MERIT

Spring

Theaceae
Tea Family

Medium Shrub

* Fully double flowered cultivars are not good for pollinating insects so try to buy single flowers (see photo) when possible.

Ceanothus arboreus

Island Californian-Lilac



'Autumnal Blue'
'Trewithen Blue'



Mid Spring
- Early Summer

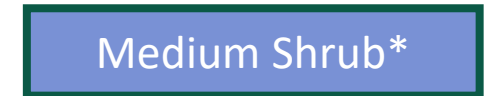
Rhamnaceae
Buckthorn Family

Small Tree

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

Ceanothus thyrsiflorus

Blueblossom Californian-Lilac



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

**C. thyrsiflorus* var. *repens* is a climbing version. 9
Other cultivars are generally more shrub-like in habit.

Cornus canadensis

Creeping Dogwood



Photograph from Flickr (CC) Kerry Woods



None

Late Spring
- Early Summer

Cornaceae
Dogwood Family

1ft Perennial

Cornus sanguinea

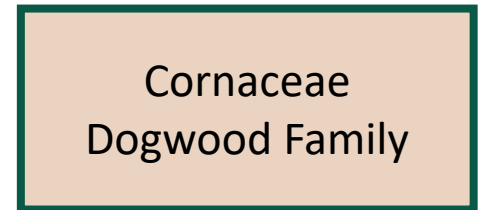
Common Dogwood



Photograph from Flickr (CC) Andreas Rockstein



'Magic Flame'
'Anny's Winter Orange'



Daboecia cantabrica

St. Dabeoc's Heather



Early Summer
- Mid Autumn

Ericaceae
Heather Family

Small Subshrub

Enkianthus perulatus

Dodan-tsutsuji



Photograph from Flickr (CC) Ume 4



- Species -



Spring 

Ericaceae
Heather Family

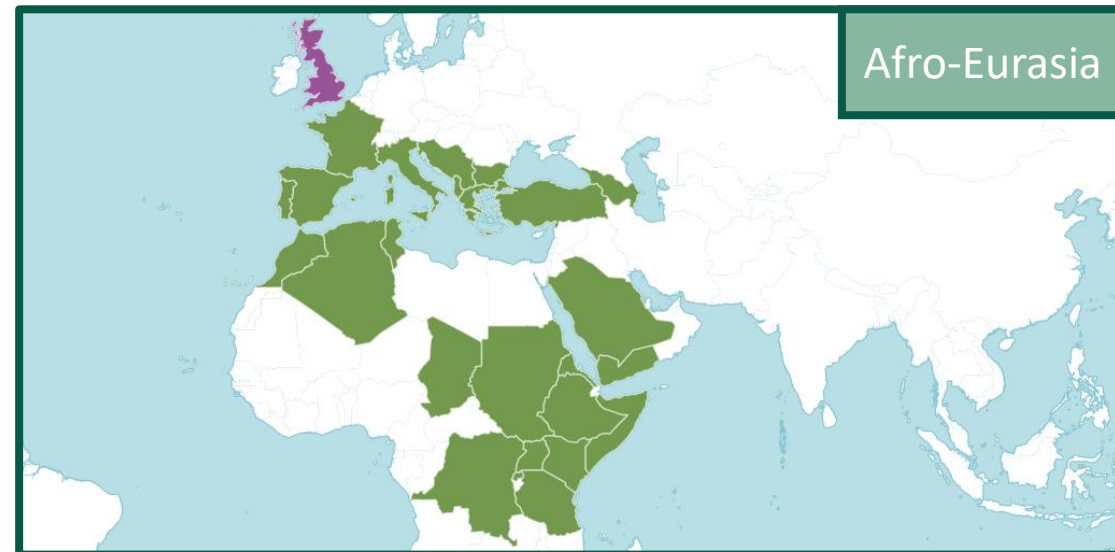
Medium Shrub

Erica arborea

Tree Heather



Photograph from Flickr (CC) Tim Waters



var. alpina
'Estrella Gold'



Spring 

Ericaceae
Heather Family

Medium Shrub

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

Erica carnea

Winter Heather



‘Eva’ ‘Vivellii’
‘Winter Snow’



Mid Winter
- Early Spring

Ericaceae
Heather Family

Small Subshrub

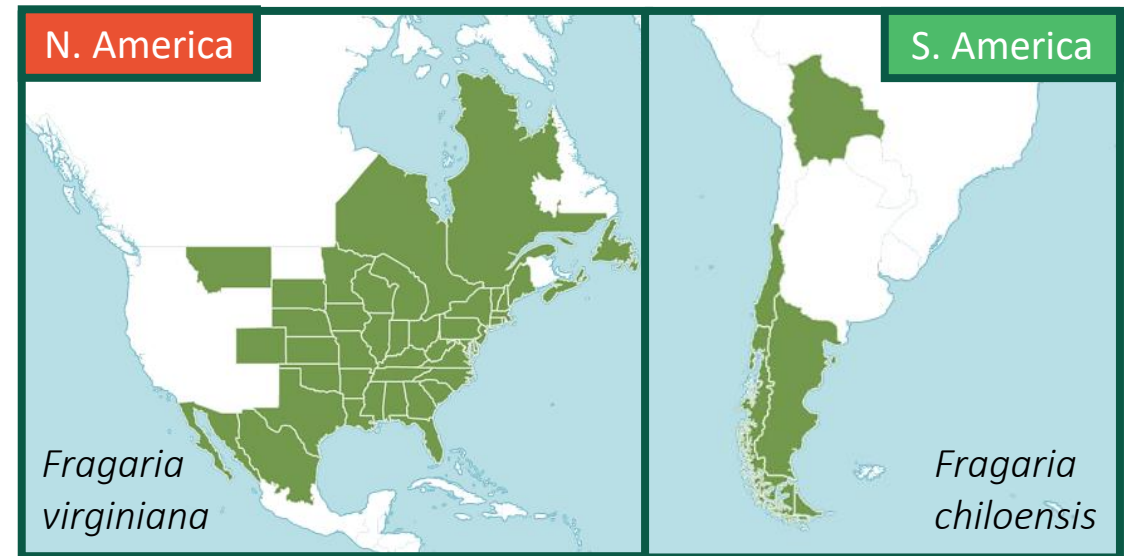
Fragaria x ananassa

Garden Strawberry

Fragaria virginiana x *Fragaria chiloensis*



Photograph from Flickr (CC) Maja Damat



'Cambridge Fav.'

'Rhapsody'

RHS AWARD OF GARDEN MERIT

Spring 🌱

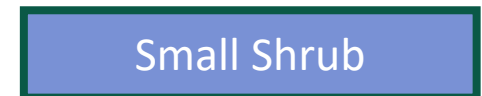
Summer ☀️ (Berries)

Rosaceae
Rose Family

2ft Trailing Annual

Grevillea rosmarinifolia

Rosemary-leaved Grevillea



Hamamelis mollis

Chinese Witch-hazel



Photograph from Flickr (CC) Wendy Cutler



'Jermyns Gold'
'Wisley Supreme'



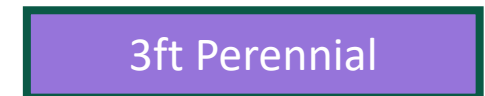
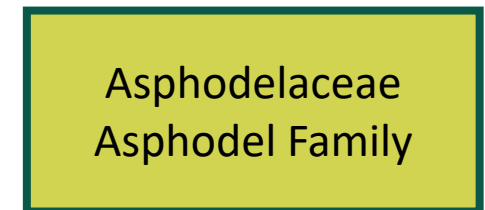
Mid Winter
- Early Spring

Hamamelidaceae
Witch-hazel Family

Large Shrub

Hemerocallis fulva

Orange Daylily



Hydrangea aspera

Rough-leaved Hydrangea



'Anthony Bullivant'
'Peter Chappell'

RHS AWARD OF GARDEN MERIT

Midsummer
- Early Autumn

Hydrangeaceae
Hydrangea Family

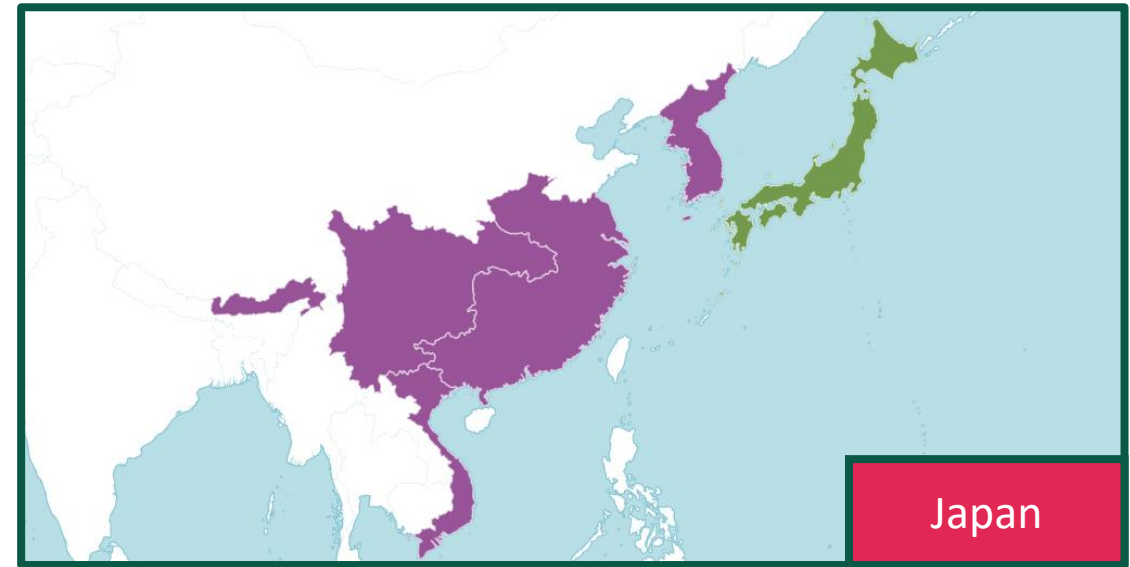
Medium Shrub

Hydrangea macrophylla

Large-leaf Hydrangea



Photograph from Flickr (CC) CyprusPictures



'Hanabi' 'Zorro'
'Quadricolour'



Summer ☀

Hydrangeaceae
Hydrangea Family

Medium Shrub

Hydrangea quercifolia

Oak-leaved Hydrangea



Photograph from Flickr (CC) J Biochemist



'Snow Queen'
'Snowflake'



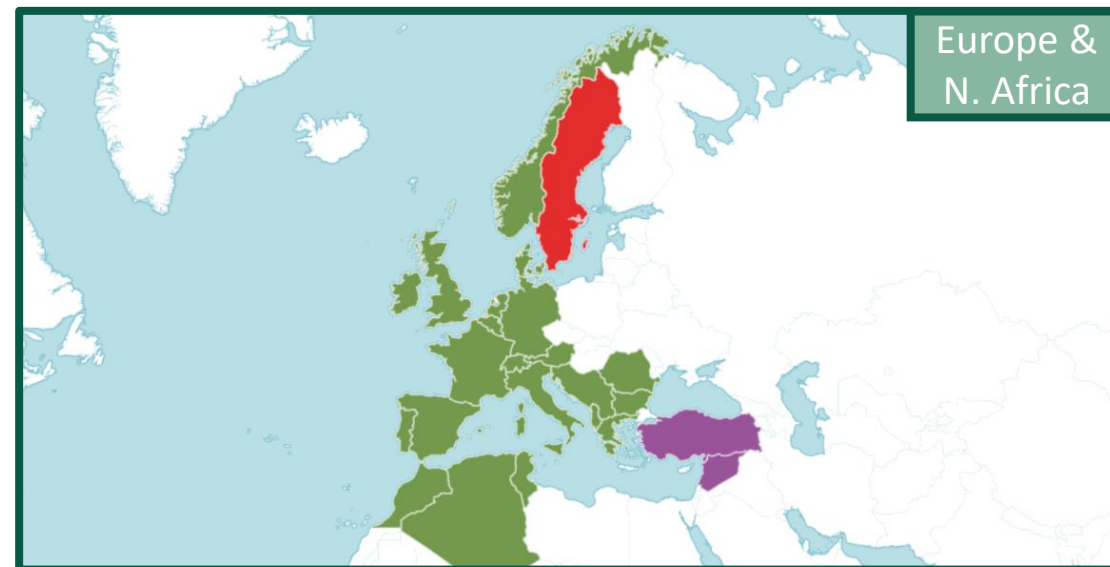
Summer ☀

Hydrangeaceae
Hydrangea Family

Medium Shrub

Ilex aquifolium

European Holly



Photograph from Flickr (CC) Randi Haasken, Bjorn S (Flowers)

'Amber' 'Argentea'
'Golden Queen'

The logo for the RHS Award of Garden Merit, featuring a green trophy cup inside a circular border with the text "RHS AWARD OF GARDEN MERIT" and a registered trademark symbol. To the right is a stylized white tree icon.

Spring

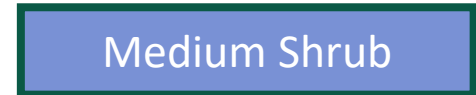
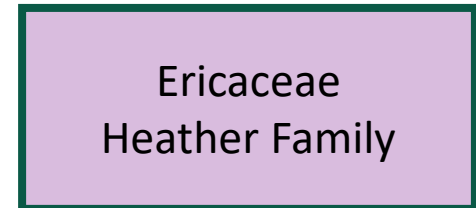
A/W (Berries)

Aquifoliaceae
Holly Family

Medium Tree

Kalmia latifolia

Mountain-laurel



Lamprocapnos spectabilis

Bleeding Heart



Photograph from Flickr (CC) Mark Wordy



- Species -
'Alba' 'Valentine'

Mid Spring
- Early Summer

Papaveraceae
Poppy Family

2ft Perennial

Magnolia acuminata

Blue Magnolia, Cucumber tree



Related Hybrids:

‘Elizabeth’
‘Gold Star’*

RHS AWARD OF GARDEN MERIT

Spring

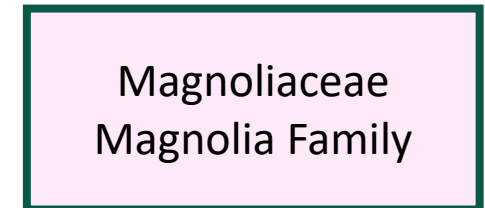
Magnoliaceae
Magnolia Family

Medium Tree

*The species can vary between very blue (such as cultivar ‘Blue Opal’) or very yellow (such as the hybrids listed).

Magnolia campbellii

Campbell's Magnolia

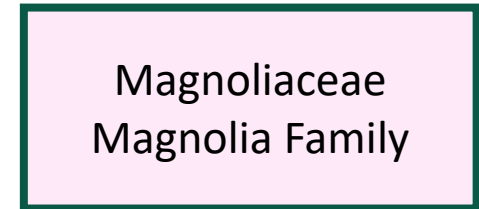
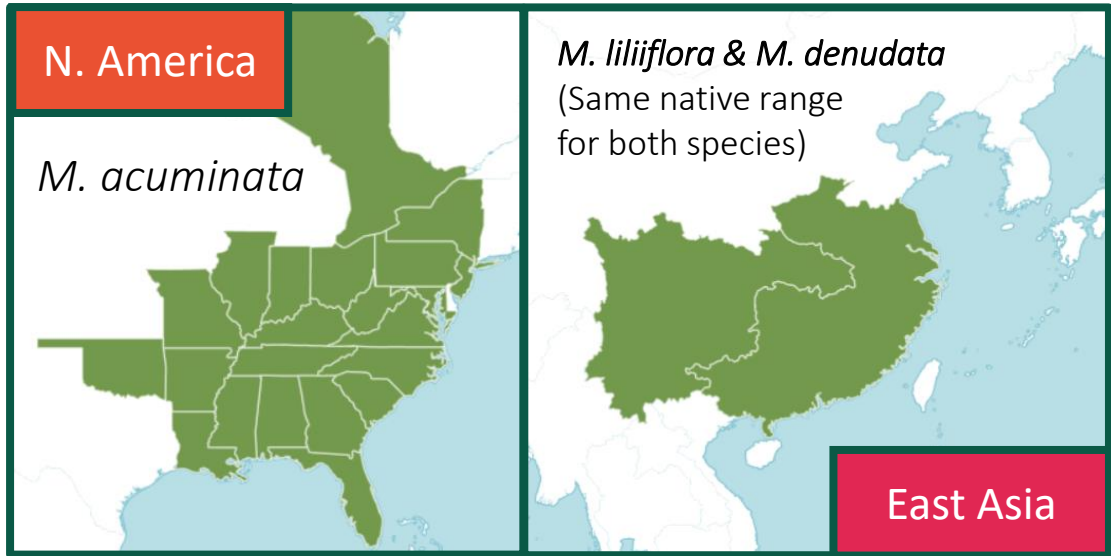


* This plant may not survive below -10°C night temperatures, protect from very harsh winter nights

Magnolia x spoelbergii

Belgian Yellow Magnolia

Complex Backcrossed Hybrid between three species, mainly *M. acuminata*

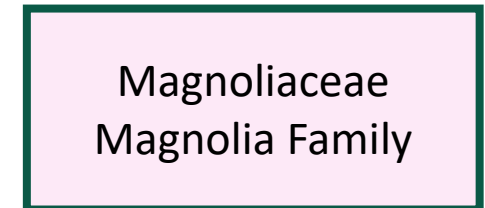


Magnolia stellata

Star Magnolia



Photograph from Flickr (CC) Ting Chen



Mahonia aquifolium

Oregon Grape



'Apollo'

Spring 

Berberidaceae
Barberry Family

Medium Shrub



Malus floribunda

Japanese Crab Apple



- Species -



Spring 

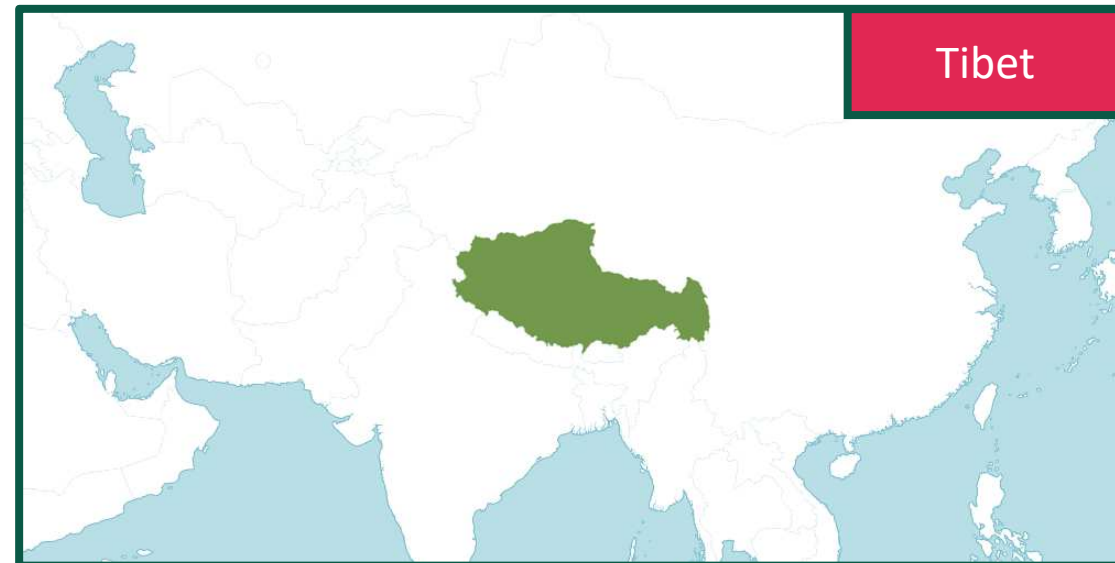
Autumn  (Fruits)

Rosaceae
Rose Family

Small Tree

Meconopsis betonicifolia

Himalayan Blue Poppy *Syn. M. baileyi*



Photograph from Flickr (CC) Tim Waters

- Species -
'Mop Head'



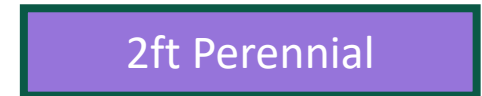
Summer ☀

Papaveraceae
Poppy Family

3ft Perennial

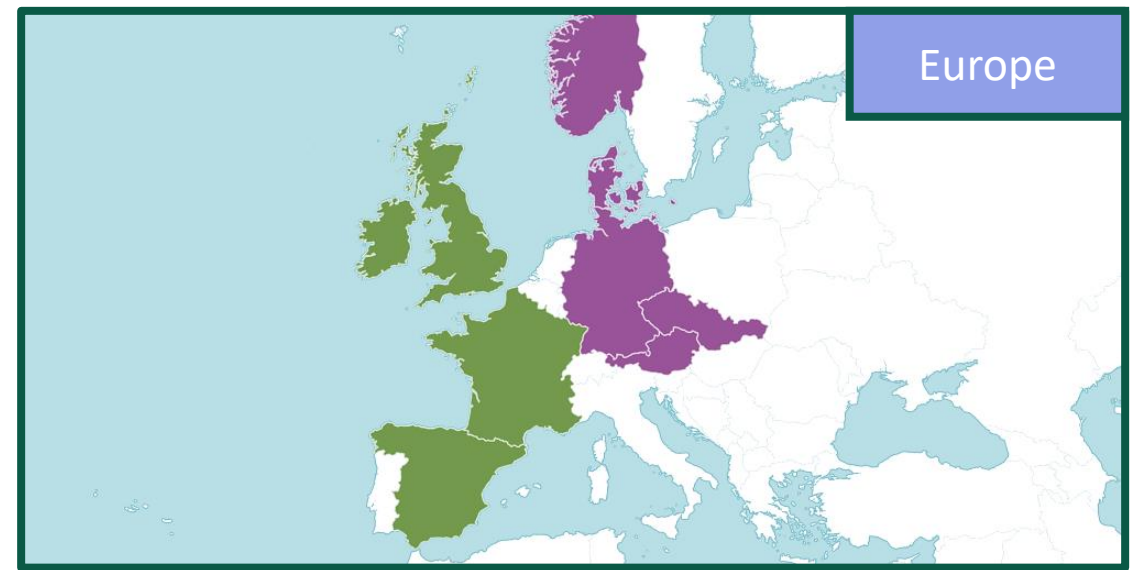
Meconopsis punicea

Sichuan Red Poppy



Papaver cambricum

Welsh Poppy



Photograph from Flickr (CC) Jill Catley



None

Mid Spring
- Early Autumn

Papaveraceae
Poppy Family

2ft Perennial


Pieris japonica

Japanese Andromeda Bush



'Blush' 'Purity'
'Mountain Fire'



Spring 

Ericaceae
Heather Family

Small Shrub

Rheum palmatum

Ornamental Rhubarb



'Bowles Crimson'
'Savill'



Summer ☀

Polygonaceae
Knotweed Family

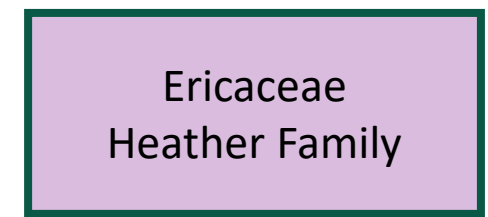
6ft Large Perennial

Rhododendron hippophaeoides

Sichuan Blue Rhododendron

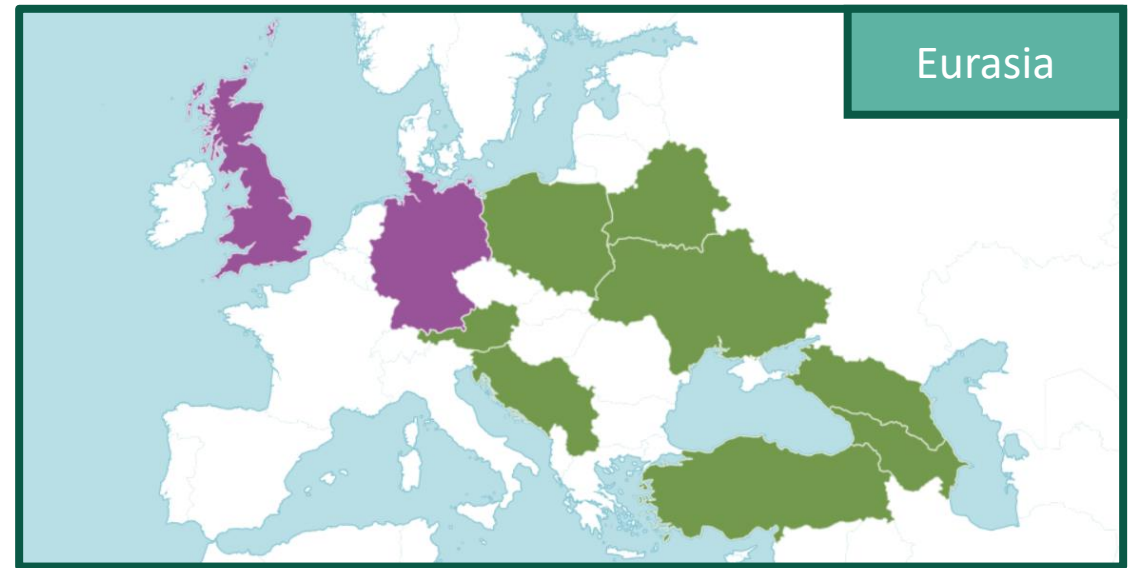


Photograph from Flickr (CC) Plant Image Library



Rhododendron luteum

Yellow Azalea



- Species -

(Possibly mildly invasive so AGM tentatively removed recently)



Spring 

Ericaceae
Heather Family

Large Shrub

Rhododendron vaseyi

Pinkshell Azalea



- Species -



Mid Spring
- Early Summer

Ericaceae
Heather Family

Medium Shrub

Rhododendron yakushimanum

Yakushima Rhododendron



Photograph from Flickr (CC) A Qiao



'Koichiro Wada'
'Hachmann's Polaris'



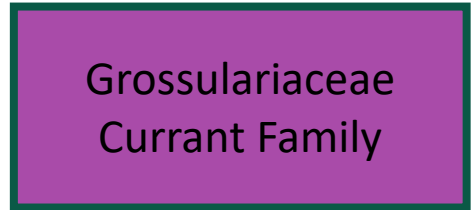
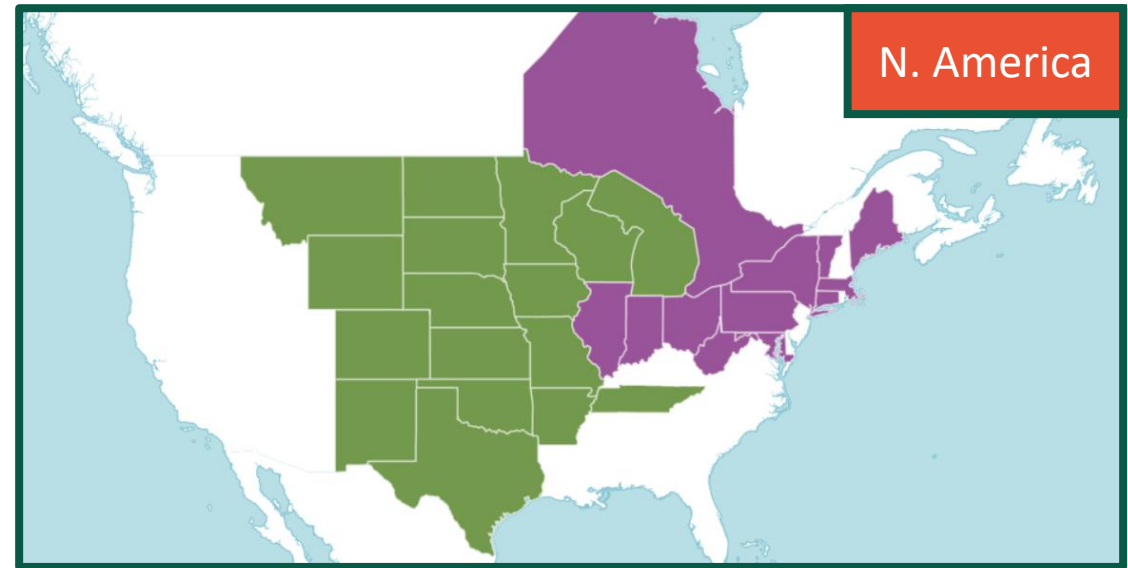
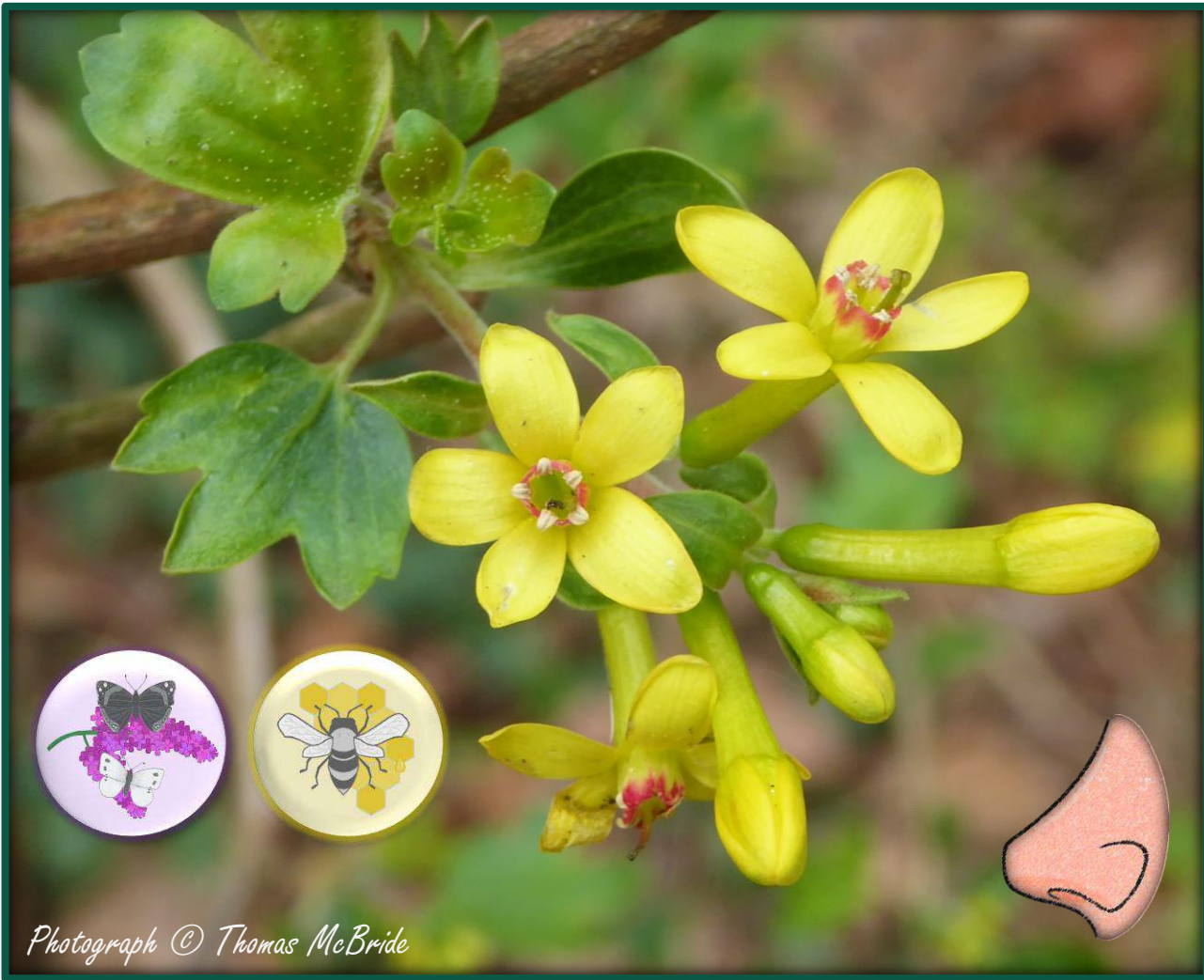
Spring 

Ericaceae
Heather Family

Medium Shrub

Ribes odoratum

Scented Golden Currant



Ribes sanguineum

Red-flowered Currant



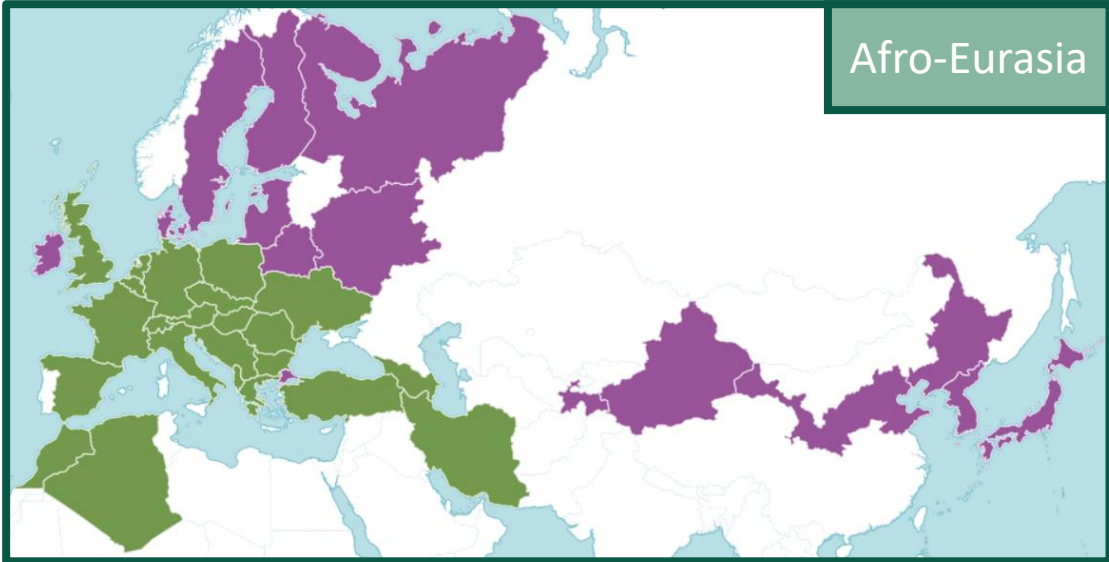
Mid Spring
- Early Summer

Grossulariaceae
Currant Family

Medium Shrub

Ribes uva-crispa

European Gooseberry



Photographs from Flickr (CC) Kev Wheeler (Fruit), Peter Stenzel (Flowers)



- Species -

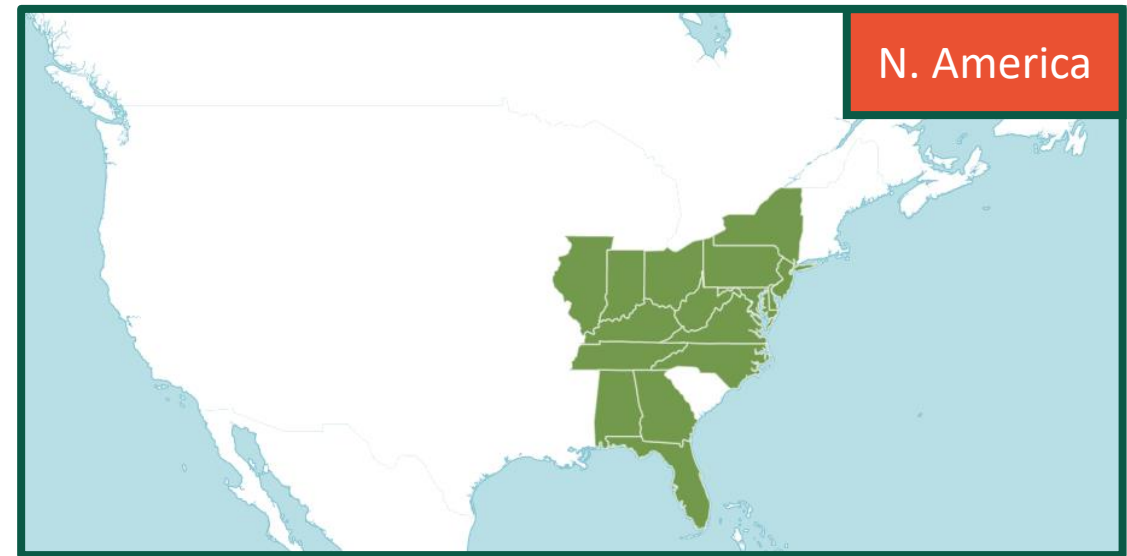
Mid Spring
- Early Summer

Grossulariaceae
Currant Family

Small Shrub

Rudbeckia fulgida

Orange Coneflower



var. deamii
'Goldsturm'



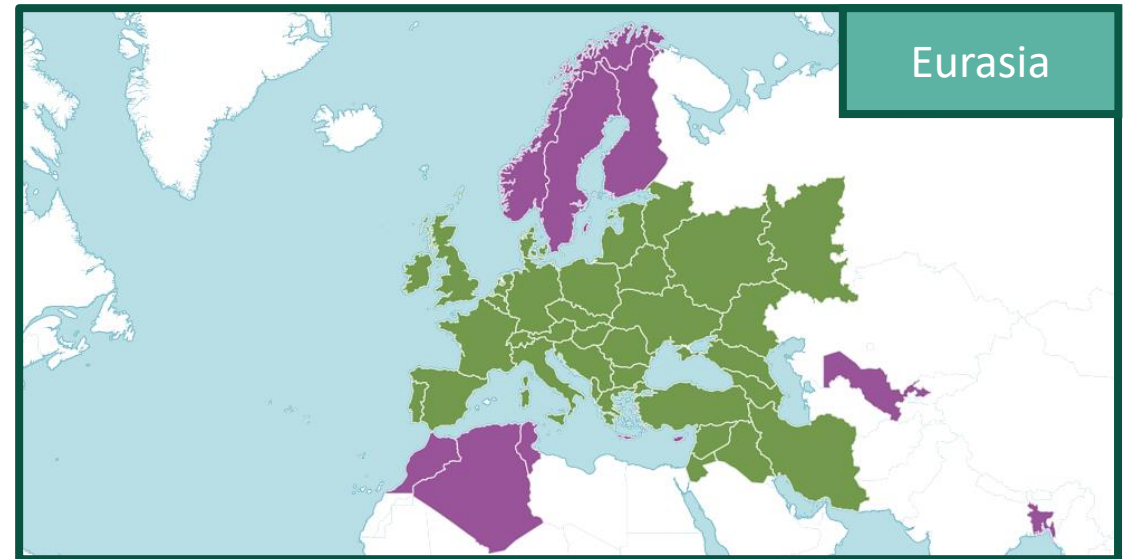
Late Summer
- Mid Autumn

Asteraceae
Daisy Family

2ft Perennial

Sambucus nigra

Common Elder



Photograph from Flickr (CC) Andreas Rockstein



Late Spring
- Midsummer

Adoxaceae
Moschatel Family

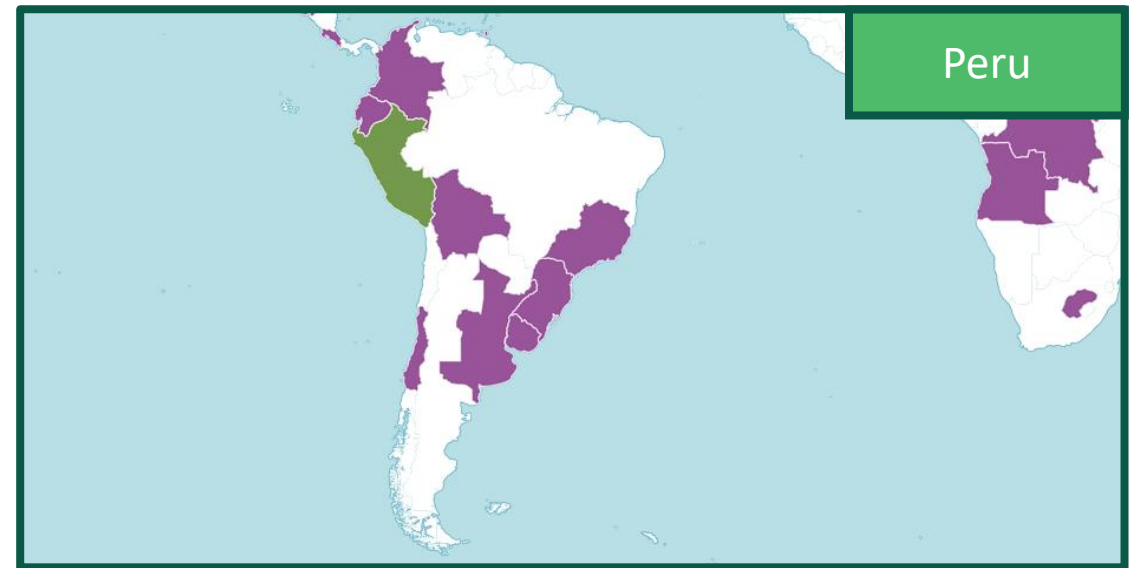
Small Tree

Tropaeolum majus

Garden Nasturtium



Photograph from Flickr (CC) Mayank Sharma



'Alaska series'
'Whirlybird series'



Midsummer
- Early Autumn

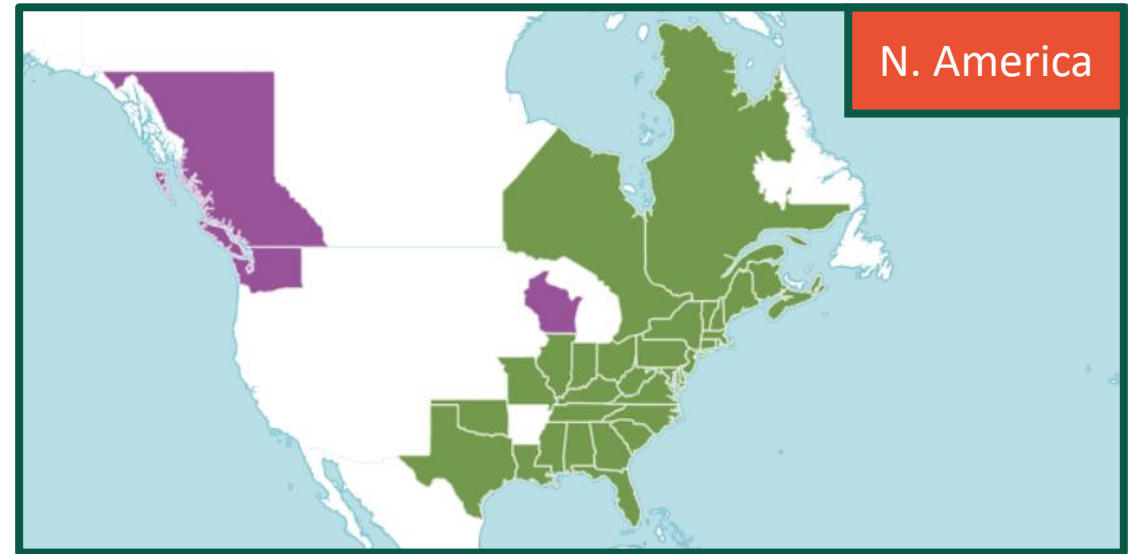
Tropaeolaceae
Nasturtium Family

1ft Trailing Annual

* This plant will not survive below -5°C night temperatures

Vaccinium corymbosum

Garden Blueberry



'Duke'
'Spartan'

Late Spring 

Summer  (Berries)

Ericaceae
Heather Family

Medium Shrub

Vaccinium cylindraceum

Azores Blueberry



Midsummer
- Early Autumn

Ericaceae
Heather Family

Medium Shrub

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

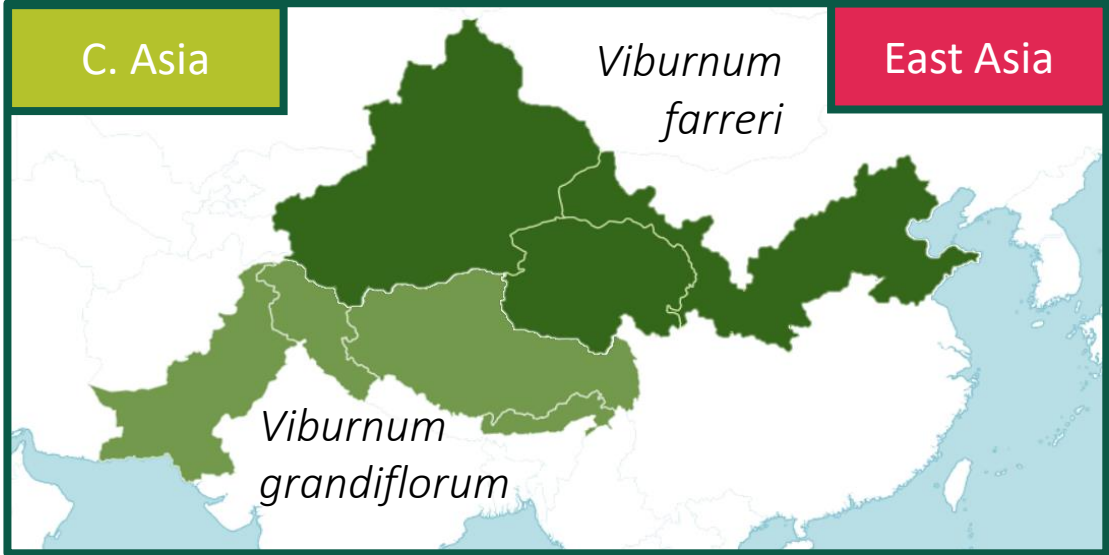
Viburnum x bodnantense

Bodnant Viburnum

Viburnum farreri x *Viburnum grandiflorum*



Photograph from Flickr (CC) Peter Stenzel



'Charles Lamont'
'Dawn' 'Deben'



Mid Autumn
- Early Spring

Adoxaceae
Moschatel Family

Large Shrub

Viburnum opulus

Guelder-rose



Photograph from Flickr (CC) Fred F

'Compactum' 'Rosea'
'Xanthocarpum'



Late Spring
- Midsummer

Adoxaceae
Moschatel Family

Large Shrub