

Top 50 Medicinal Plants Plants for Pollinators



Medicinal plants to create an Apothecary-style garden to help our pollinators

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

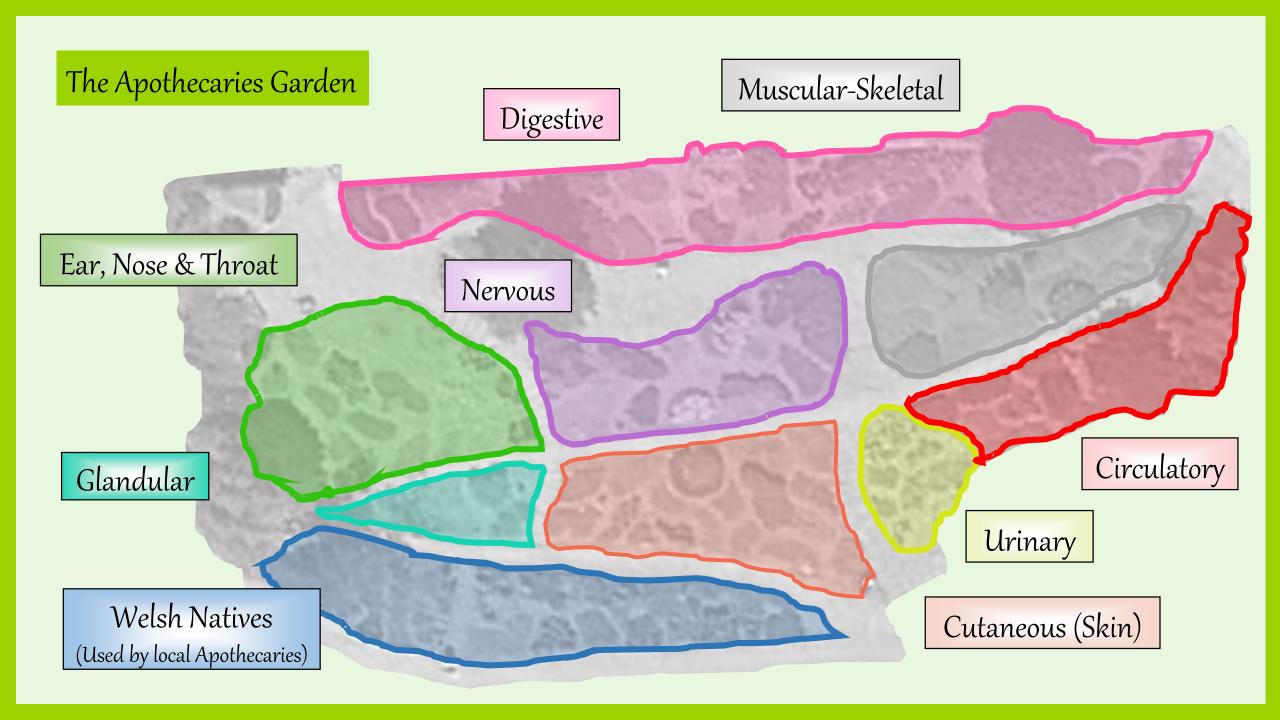
<u>Introduction</u>



At the National Botanic Garden of Wales, we feel it is important to recognise the rich history of botany and plant science we have in Wales and around the UK. One such way to display this is through a living museum of plants once used, and some still used, to treat various ailments and maintain good health. These medicinal plants can be grown together to create a physic garden or apothecaries garden; such as the one we have here. Apothecaries were herbal medicine specialists before the event of modern medicine. The apothecaries garden is split into sections depending on the usage of the plants. If you would also like to create one, you can use this model to help you. Almost all the selected plants are found in our Apothecaries Garden and many are also culinary herbs or ornamentals found elsewhere in the garden. Most of the plants used are native to or naturalised in Western Europe.







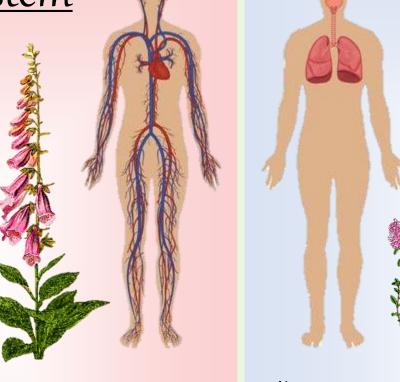
The Circulatory System

The Circulatory system comprises the Heart, blood and blood vessels; arteries, veins and capillaries. Plants used to treat this bodily system were primarily for heart conditions or associated with blood letting. Few are used in modern medicine but the active ingredient in foxglove, Digitalin, is still used in heart medicine today for its potent

affects.

Circulatory Plants included

Achillea millefolium Digitalis purpurea Laurus nobilis Lavandula angustifolia Melissa officinalis Valeriana officinalis



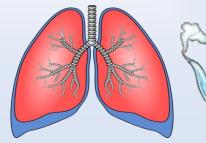
The Respiratory System

The Respiratory system comprises the Lungs, Trachea (Windpipe) and connects directly to the nose, mouth and also circulatory system.

> Plants used to treat respiratory problems were usually taken as a vapour over boiling water and breathed in; in order for their oils to travel directly into the windpipe. Herbs to treat ear, nose and throat conditions were classed separately.

Respiratory Plants included

Primula vulgaris Pulsatilla vulgaris Salvia sclarea Thymus vulgaris Verbascum nigrum Viola tricolor





The Nervous System

The nervous system comprises of the brain, spinal cord and nerves (neurons). Plants used to treat nervous conditions were usually associated with pain relief and the calming of nerves. They were often taken orally, mixed with some sort of alcohol. Many are still used today to aid in calmness such as camomile and lavender. Others are much more potent such as opium poppy; the plant by which morphine

These are powerful nervous-blockers used in pain relief.

and other opioids are derived from.

Chamaemelum nobile
Hyssopus officinalis
Lavandula angustifolia
Origanum vulgare
Papaver somniferum
Tanacetum parthenium
Valeriana officinalis

The Cutaneous System

The cutaneous system is made up of epidermis (visible skin) and dermis (the skin underlayer).

Plant-based treatments used on skin were extremely varied from soothing burns, acne & rashes to attempting to treat leprosy and measles. Today, plant-based skin treatments are as popular as ever but are much more commonly used for anti-ageing and maintaining clear, supple skin and treating acne or scars.

utaneous Plants included:

Bistorta officinalis
Borago officinalis
Calendula officinalis
Chamaemelum nobile
Hamamelis mollis
Hypericum perforatum
Malva sylvestris

Melissa officinalis Pulsatilla vulgaris Stachys palustris Tanacetum vulgare



The Urinary System

The Urinary system is made up of the Kidneys, Ureters, Bladder and Urethra; which terminates in or by the sexual organs in the groin region. Medicinal plants were regularly used as diuretics to increase urine and decrease its concentration which is still an effective way to treat infections when coupled with drinking plenty of water. Herbs for the urinary system were also used to treat bladder pain, incontinence and even wounds sustained through Achillea millefolium

childbirth and other problems relating

to the reproductive system.

A popular example of a diuretic herb is the dandelion. Due to their weed-status and ability to spread quickly however, they haven't been included in the list.



The Digestive System

The Digestive system comprises of the oesophagus, stomach, liver, gall bladder, small and large intestine and pancreas. It is responsible for the digestion of food. Many edible plants were used to treat digestive issues as they could easily be added to meals and herbal teas such as mint, lemon balm or fennel. A common digestive-aid used today is ginger but this is not easily grown in the UK. Many are still taken as dietary supplements for their natural ability to calm bowel spasms or laxative effects.

Althaea officinalis

Artemisia absinthium Hyssopus officinalis

Chaenomeles speciosa Inula helenium

Eupatorium cannabinum

Filipendula ulmaria

Foeniculum vulgare

Hamamelis mollis

Malva sylvestris

Melissa officinalis

Mentha spicata

Mentha suaveolens

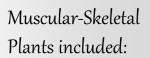
Oenothera biennis Origanum vulgare Rosmarinus officinalis Sambucus nigra Tagetes patula Tanacetum vulgare

The Muscular-Skeletal System

The muscular system, made up of muscles, tendons, joints and ligaments, allows for movement, and is directly connected to the skeletal system, which is our bones. Plants in this category were used to relieve back pain and other muscular problems, were used to aid in calcium uptake for keeping bones strong and may also have be used to quicken recovery after physical trauma such as broken bones or pulled ligaments.

> Alchemilla mollis Artemisia absinthium Calendula officinalis Eupatorium cannabinum* Filipendula ulmaria

*Eupatorium may be sometimes known as 'Boneset'



Lavandula angustifolia Origanum vulgare Rosmarinus officinalis Sambucus nigra Valeriana officinalis Viburnum opulus

The Otorhinolaryngic System

A complicated collective way to refer to ears, nose and throat, this system was probably the most widely treated with medicinal plants through history. Relieving flu and cold symptoms has always been

Some of the plants used for reliving symptoms have mucolytic properties such as mint, rosemary and also pineapple; which we cannot grow outside in the UK

Echinaceae purpurea

Hyssopus officinalis

Rosmarinus officinalis

Inula helenium

unfortunately! Others have anti-inflammatory properties which naturally relieve irritation. Some even have antibacterial

properties which can help Althaea officinalis with bacterial infections. Chamaemelum nobile

Others help relieve swollen

glands such as:

important.

Artemisia absinthium & Borago officinalis

Map

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

Guide to using these pages:

Latin Binomial
Name

Common English -

Name

Photograph of the plant

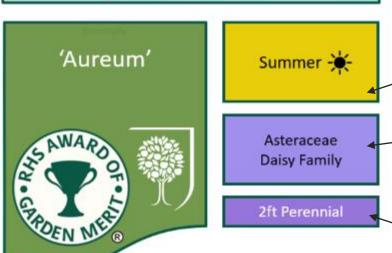
in flower

Insect groups known to favour the nectar of this plant

Tanacetum parthenium Common Feverfew



Middle East



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

Useful knowledge or warnings about the plant

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



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



This plant would

be suitable for

meadow-style

planting

Warnings



Plant tissue is highly toxic if ingested



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



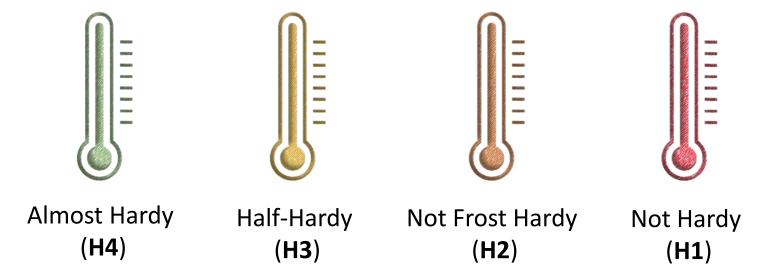
Plant is often used in traditional Herbal Remedies

<u>Temperature</u>

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:



RHS Hardiness Scale

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

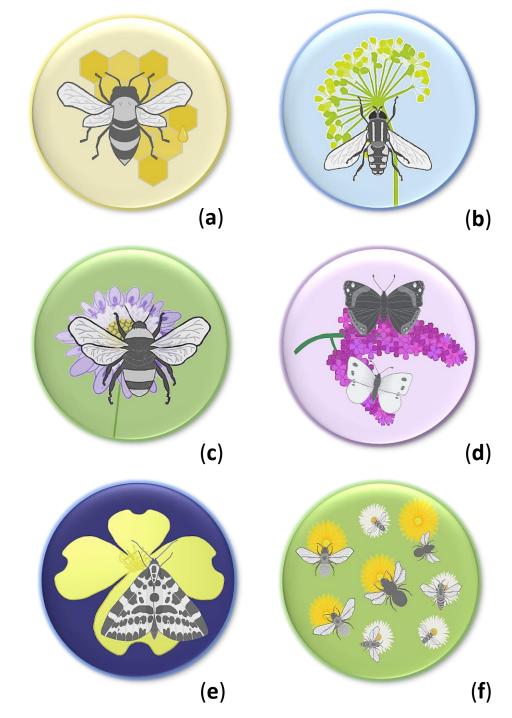
Pollinators

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:

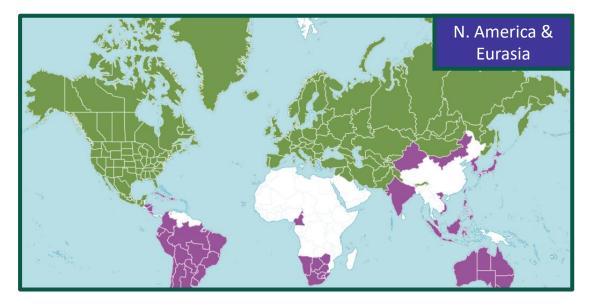
- a) Honeybees c) Bumblebees e) Moths
- b) Hoverflies d) Butterflies f) Solitary Bees
 (Includes Moths)



Achillea millefolium Common Yarrow







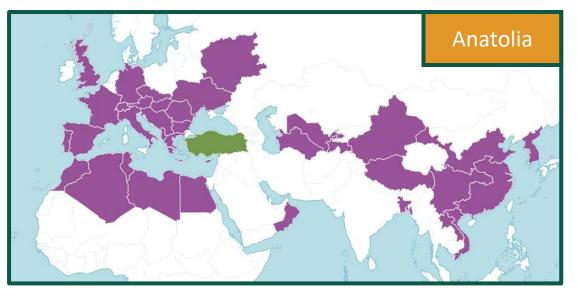
'Red Velvet'
'Lansdorferglut'

Midsummer
- Early Autumn

Asteraceae Daisy Family

*Alcea rosea*Common Hollyhock







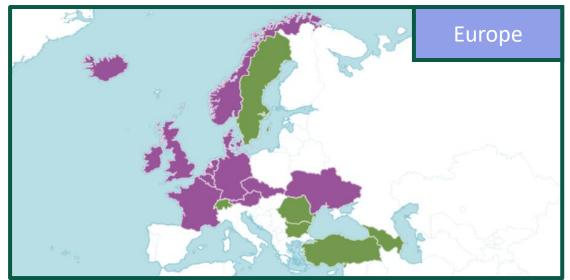


Malvaceae Mallow Family

6ft Biennial

Alchemilla mollis Garden Lady's Mantle







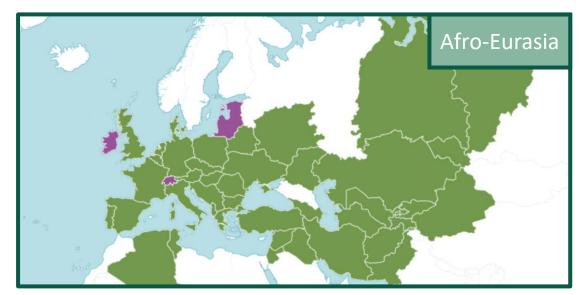
Early Summer - Early Autumn

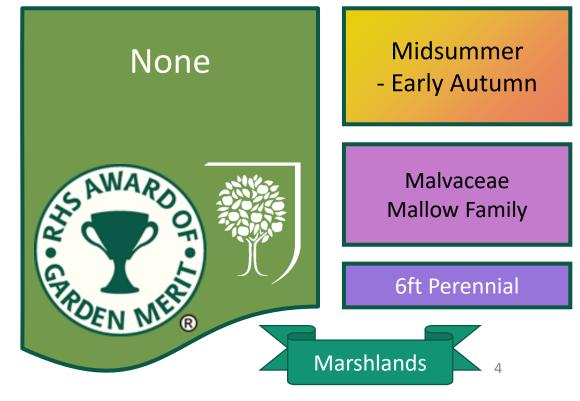
Rosaceae Rose Family

Althaea officinalis Marsh Mallow





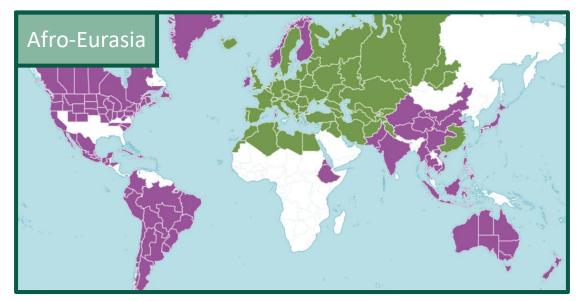




Artemisia absinthium Wormwood









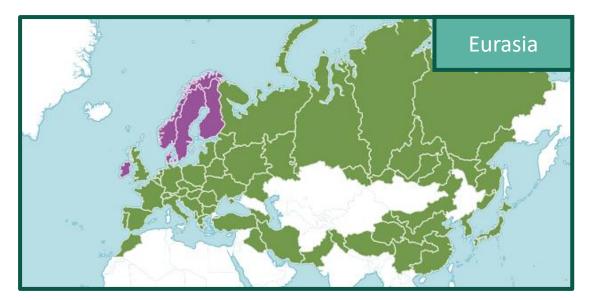


Asteraceae Daisy Family

Bistorta officinalis Common Bistort







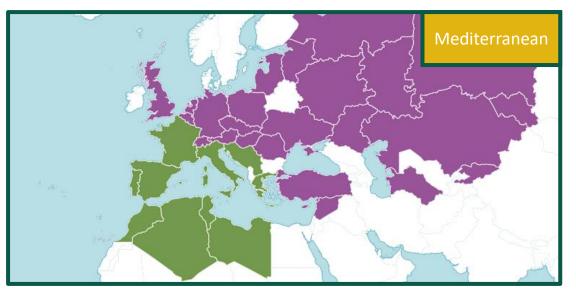


Midsummer - Mid Autumn

Polygonaceae Knotweed Family

Borago officinalisCommon Borage







Late Spring
- Midsummer

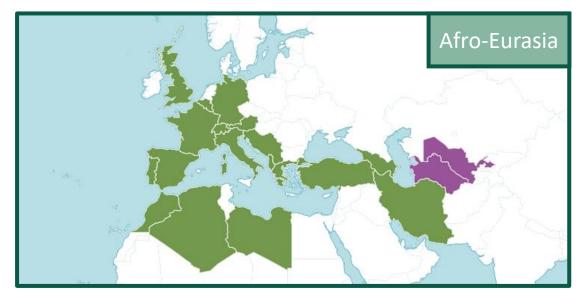
Boraginaceae Borage Family

2ft Annual

Buxus sempervirensCommon Box









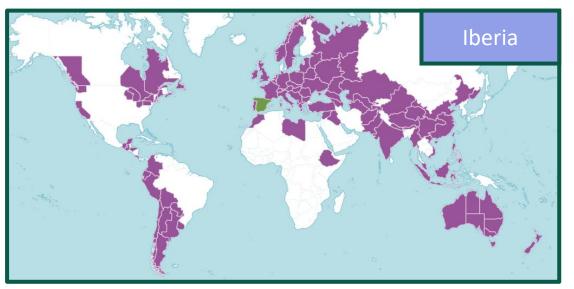


Buxaceae Box Family

Medium Shrub

Calendula officinalis Common Marigold







Early Summer - Early Autumn

Asteraceae Daisy Family

2ft Annual

Chaenomeles speciosa Chinese Quince









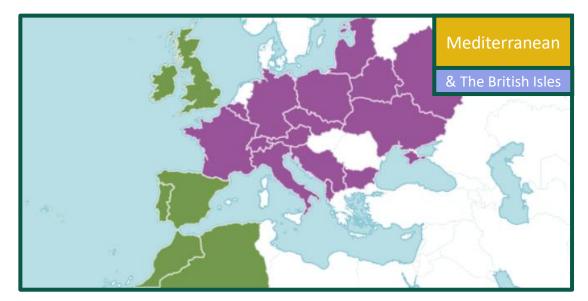
Rosaceae Rose Family

Medium Shrub

Chamaemelum nobile Common Camomile











Asteraceae Daisy Family

Cotinus coggygria Smoke Bush









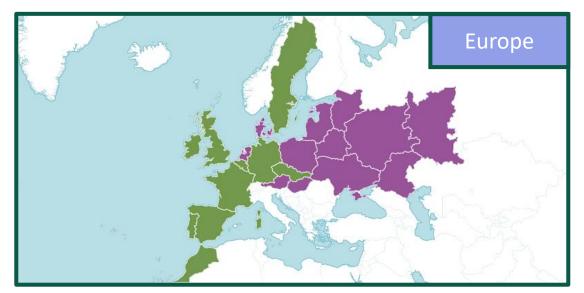
Anacardiaceae Cashew Family

Large Shrub

Digitalis purpurea Common Foxglove









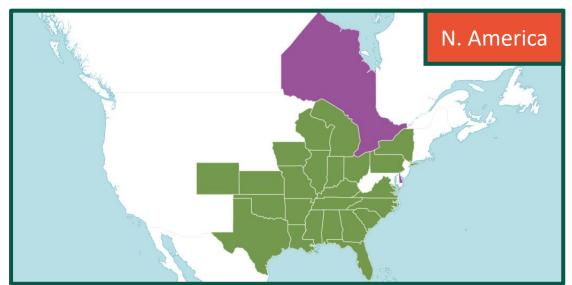


Plantaginaceae Plantain Family

5ft Biennial

Echinacea purpurea Purple Coneflower







Midsummer - Mid Autumn

Asteraceae Daisy Family

Eupatorium cannabinum Hemp-Agrimony







Late Summer - Early Autumn

Asteraceae Daisy Family

Filipendula ulmaria Meadowsweet









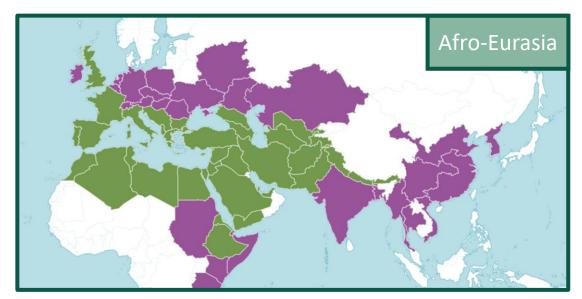
Midsummer
- Early Autumn

Rosaceae Rose Family

Foeniculum vulgare Common Fennel







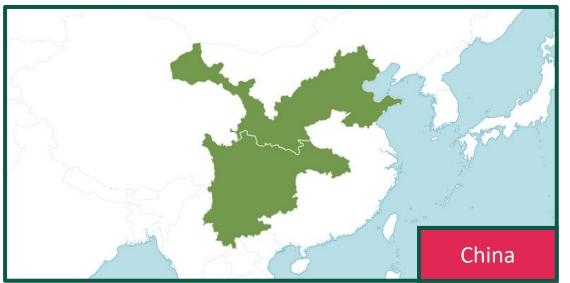




Apiaceae Carrot Family

Hamamelis mollis Chinese Witch-hazel







Mid Winter
- Early Spring

Hamamelidaceae Witch-hazel Family

Large Shrub

Hypericum perforatum Perforate St John's Wort







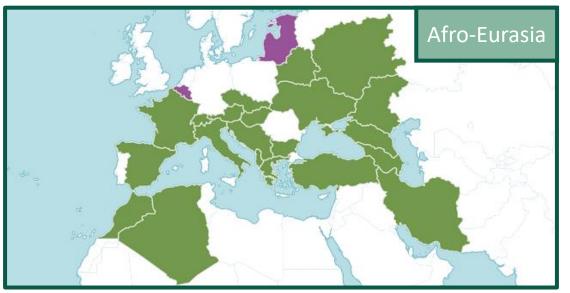




Hypericaceae St Johns Wort Family

Hyssopus officinalis Herb Hyssop







Midsummer
- Early Autumn

Lamiaceae Mint Family

Small Subshrub

*Inula helenium*Elecampane







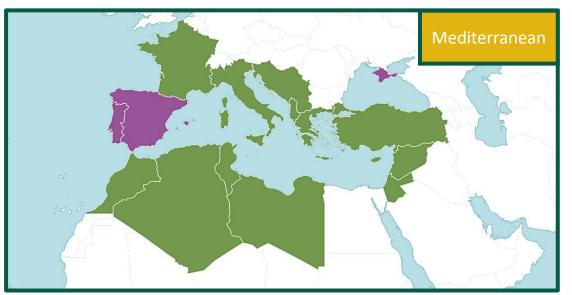




Asteraceae Daisy Family

Laurus nobilis Bay Tree, Laurel







Spring #

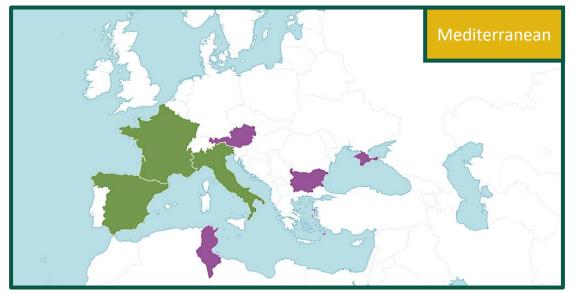
Lauraceae Laurel Family

Large Shrub

* Not to be confused with a shrub, often referred to as a laurel, which is actually a poisonous species of cherry. Its flowers are also white but without yellow pollen and occur on spikes.

Lavandula angustifolia English Lavender









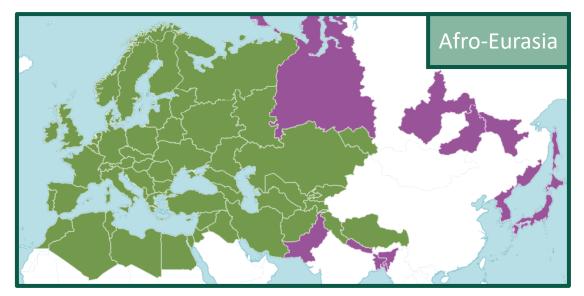
Lamiaceae Mint Family

Small Shrub

Malva sylvestris Common Mallow







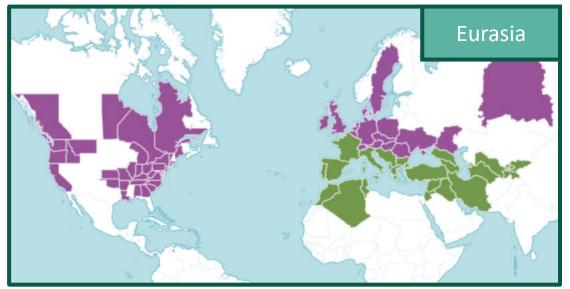


Midsummer
- Early Autumn

Malvaceae Mallow Family

*Melissa officinalis*Lemon Balm







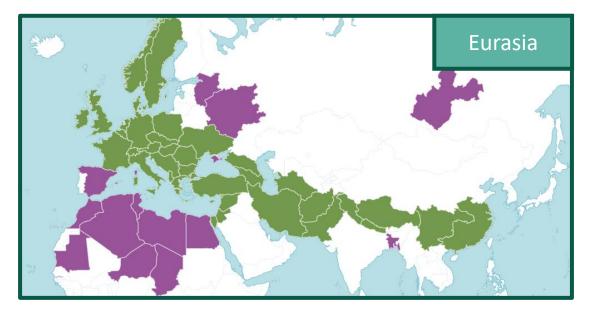


Lamiaceae Mint Family

*Mentha spicata*Spear Mint









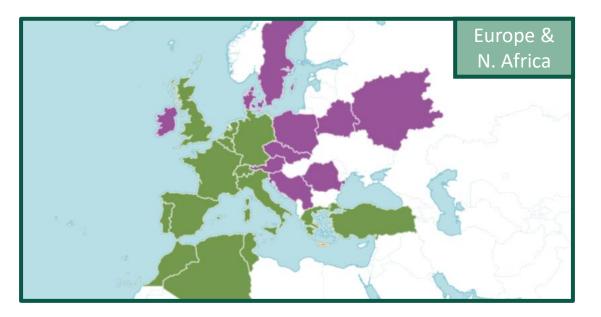
Early Summer - Early Autumn

Lamiaceae Mint Family

*Mentha suaveolens*Apple Mint







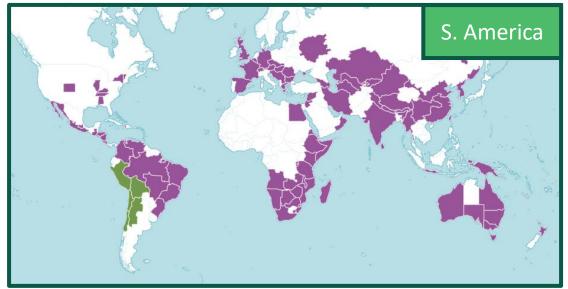


Midsummer
- Early Autumn

Lamiaceae Mint Family

Nicandra physalodes Shoo-fly Plant







Late Spring
- Mid Autumn

Solanaceae Potato Family

Oenothera biennis Common Evening-Primrose







Midsummer
- Early Autumn

Onagraceae Willowherb Family

5ft Biennial

Origanum vulgare Oregano Plant









Midsummer
- Early Autumn

Lamiaceae Mint Family

Papaver somniferum Opium Poppy









Papaveraceae Poppy Family

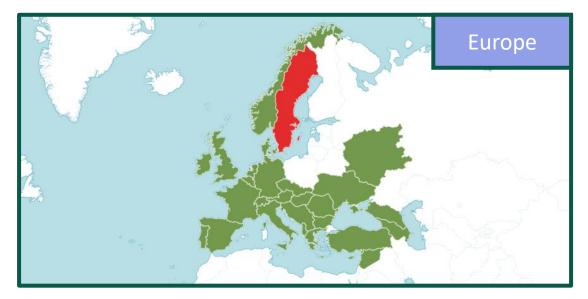
3ft Annual

* Dry Seeds edible ('poppy seeds'), all other parts of the plant age poisonous

Primula vulgaris Common Primrose









Late Winter - Mid Spring

Primulaceae Primrose Family

Pulsatilla vulgaris Common Pasqueflower











Ranunculaceae Buttercup Family

Alpine Perennial

Rosa gallica Rosa-mundi, French Rose









Rosaceae Rose Family

Small Shrub

Rosemary Plant







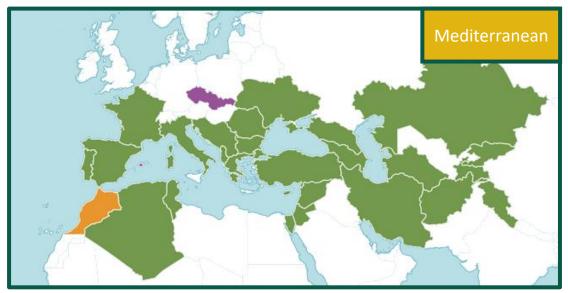
Late Spring
- Midsummer

Lamiaceae Mint Family

Small Shrub

Salvia sclarea Clary Sage







Late Spring
- Midsummer

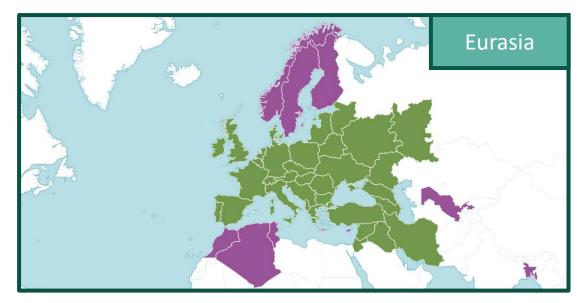
Lamiaceae Mint Family

3ft Biennial

Sambucus nigra Common Elder









Late Spring
- Midsummer

Adoxaceae Moschatel Family

Small Tree

Sanguisorba officinalis Great Burnet





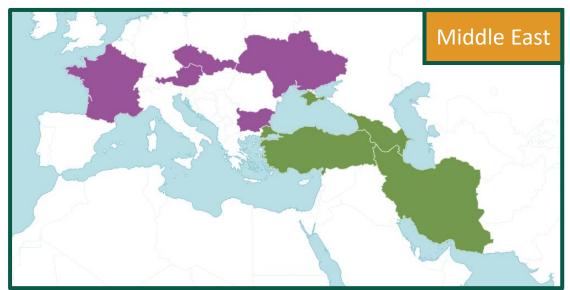




Rosaceae Rose Family

Stachys byzantina Lamb's Ear









Lamiaceae Mint Family

Stachys palustris Marsh Woundwort









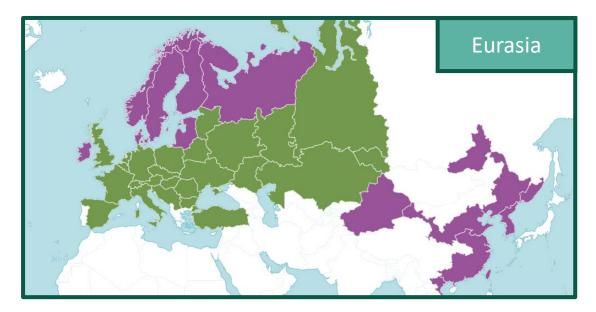


Lamiaceae Mint Family

Symphytum officinale Common Comfrey









Late Spring
- Midsummer

Boraginaceae Borage Family

5ft Perennial

This plant will spread so allow it plenty of room and do not plant in a herbaceous border. Leaves rot down to produce rich compost

Tagetes patula French Marigold







Late Spring
- Early Autumn

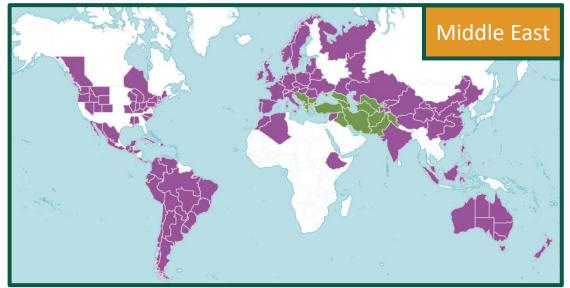
Asteraceae Daisy Family

1ft Annual

NB: Will not survive a frost, only half-hardy

Tanacetum parthenium Common Feverfew









Asteraceae Daisy Family

Tanacetum vulgare Common Tansy









Midsummer
- Early Autumn

Asteraceae Daisy Family

Thymus vulgaris Common Thyme









Lamiaceae Mint Family

1ft Trailing Subshrub

Valeriana officinalis Garden Valerian









Caprifoliaceae Honeysuckle Family

Verbascum nigrum Black Mullein









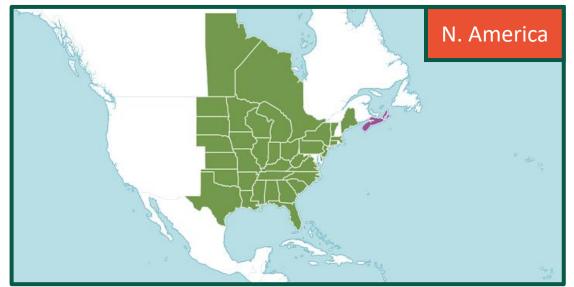
Early Summer - Early Autumn

Scrophulariaceae Figwort Family

4ft Biennial

Veronicastrum virginicum Culver's Root







Midsummer
- Early Autumn

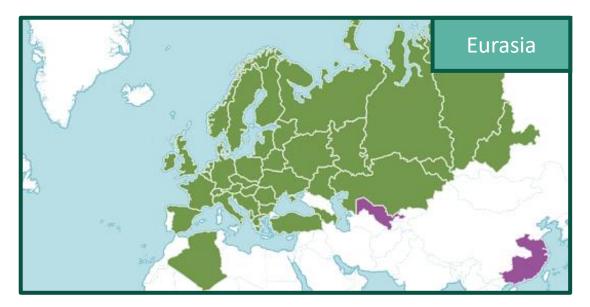
Plantaginaceae Plantain Family

Viburnum opulus











Late Spring
- Midsummer

Adoxaceae Moschatel Family

Large Shrub

Viola tricolor

Heartsease









Late Spring
- Early Autumn

Violaceae Violet Family

1ft Biennial (or Perennial)