# Plant Inventory



By Georgiana Templeton

# **Trees**



- 1. Betula Pendula
- 2. Gingko Biloba
- 3. Paulownia Tomentosa
- 4. Prunus Persica
- 5. Quercus Robur

Latin Name: Betula Pendula

Common Name: Silver Birch

Family/Genus: Betulaceae

**Etymological Root:** 

Betula is latin for the birch family

Pendula means hanging

Type: Deciduous Tree

Ultimate size

Max Height: 15-25m

Max Width: canopy width of 16m

**Growing Conditions** 

**Aspect:** full sun/partial shade, any aspect, exposed or sheltered.

Soil: Chalk, clay, loam or sand

PH: Acid, Alkaline or Neutral

Moisture: moist but well drained

**Other** 

**Cultivation:** H7, hardy in the severest European continental climates (< -20). Will grow pretty much anywhere, effective when planted in small groups or as a multi-stemmed specimen.

Native: yes, from Europe and parts

of East Asia

**Toxicity:** None

# Betula Pendula

	Spring	Summer	Autumn	Winter
Foliage: leaves are oval shaped, alternating buds on stem.	Ø	9	<u>/</u>	Willied
Flowers: Catkins Male catkins - long yellow brown in colour which hang in groups of 2 – 4. Female catkins are smaller, short, bright green and erect.	*			
Fruit: After pollination (by wind), female catkins thicken and turn a dark crimson. Masses of tiny seeds are born in autumn and dispersed wind.		3		

# Landscape Design

**Uses in Landscape:** often planted in parks, gardens, woodland and urban areas.

**Planting Associations:** *Cornus alba* 'Sibirica' (Tatarian Dogwood), *Erica carnea* 'December Red' (Winter Heath), *Pennisetum alopecuroides* (Fountain Grass)

**Design Tips:** low maintenance tree, has some pests (sawflies and aphids), good in urban areas as it is tolerant to pollution. Can thrive in harsh conditions of low nutrient soils and colder climates.



### **Interesting Facts**

Cultural Associations: The silver birch is Finland's national tree. Leafy, fragrant bunches of young silver birch boughs (called vihta or vasta) are used to gently beat oneself while bathing in the Finnish sauna.

**Mythology:** The silver birch is a pioneer species this gives it a symbol of rebirth, new beginnings and growth. It's a sacred tree within the mythology of the Celts and is thought to have very protective influences. On Midsummer's Eve, branches from the tree would be hung around doors of dwellings to bring good luck and guard against any evil misfortune.

**Medicinal Use:** The leaves, bark, and buds of the tree are used to make medicine. It is used for joint pain, kidney stones, bladder stones, urinary tract infections (UTIs), and other conditions, but there is no good scientific evidence to support any use.

Latin Name: Gingko Biloba

Common Name: Maidenhair Tree

or Ginkgo

Family/Genus: Ginkgoaceae

**Etymological Root:** *Ginkgo* is derived from a wrong transcription of the Japanese name Yin-Kwo (silver fruit).

biloba refers to the bilobed shape of leaves.

Type: Deciduous Tree

# **Ultimate size**

Max Height: 25m

Max Width: 12m wide

# **Growing Conditions**

**Aspect:** Any aspect, full sun, exposed location.

Soil: Chalk, clay loam and sand

PH: Acid, Alkaline and Neutral

Moisture: moist but well drained.

#### Other

**Cultivation:** Grow in well-drained soil in full sun. Tolerant of atmospheric pollution.

Native: No, Native to Xitianmu Mountain in Zhejiang, China.

**Toxicity:** Ginkgo seeds have poisoning effects due to the presence of toxins such as methoxypyridoxine (MPN) and cyanogenic glycosides.

# **Interesting Facts**

**Cultural Associations:** Known as a 'living fossil', the Ginkgo biloba is one of the world's oldest living tree species: it was around 350 million years ago.

**Mythology:** Several ginkgo stood near the detonation site of the nuclear bomb dropped on Hiroshima. They not only survived the blast, but they fully recovered and are still standing. It is now regarded as a symbol of endurance and vitality.

**Medicinal Use:** The leaves contain ginkgolides, which are used to improve blood circulation to the brain and to relieve Alzheimer's, tinnitus and Reynaud's Syndrome. It is usually Europe's number one selling herbal medication.

	Spring	Summer	Autumn	Winter
Foliage: fan-shaped, 2-lobed leaves (20cm wide and 15cm long). Foliage turns a bright yellow in autumn.	Ø	Ø		
Flowers: Each tree has either male or female flowers (dioecious): male flowers catkin-like, hanging down (pendulous) and yellow, up to 8cm long; female flowers smaller and on pedicels up to 4cm long.	*			
Fruit: Female trees develop fruits in autumn. A fleshy, brownish yellow fruit the size of a cherry. the tree				

Gingko Biloba

# Landscape Design

20 years old

won't produce fruit until it is about

Uses in Landscape: Parks and open spaces.

**Planting Associations:** *Euonymus alatus* (Burning Bush), *cornus sanguinea* 'Anny's winter orange' (Bloodtwig Dogwood), *Abies concolor* 'Candicans' (White Fir)

**Design Tips:** Low maintenance, generally pest and disease free. Tough enough to cope with air pollution, and reflect heat and light. They are more tolerant of compacted soil than many other types of trees.



Latin Name: Paulownia Tomentosa

Common Name: Foxglove/Empress/

**Princess Tree** 

Family/Genus: Paulowniaceae

# **Etymological Root:**

Paulownia named after Anna Pavlova of Russia a queen consort of the Netherlands by marriage to king William II.

Tomentosa is latin word meaning 'covered in hairs'.

Type: Deciduous Tree

#### **Ultimate size**

Max Height: 10-25m

Max Width: canopy width of 12m

# **Growing Conditions**

**Aspect:** full sun/partial shade, ESW facing in a sheltered space.

Soil: Chalk, clay, loam or sand

PH: Acid, Alkaline or Neutral

Moisture: moist but well drained

# **Other**

**Cultivation:** moist, humus-rich, fertile soil. Protect young trees from frost.

Native: No, from western China and

Korea.

**Toxicity: None** 

#### **Interesting Facts**

# Foliage: large heart-shaped five lobed leaves, opposite on the stem up to 30cm wide. Flowers: large violet blue tubular flowers (10-30cm long) produced before leaves in early spring. Fruit: dry egg-shaped capsules 3-4 cm long.

Paulownia Tomentosa

# Landscape Design

**Uses in Landscape:** often an ornamental tree or flower boarder in parks and gardens. Its nitrogen rich leaves and roots can help to prevent erosion.

**Design Tips:** very fast growing and can be invasive. It can survive wildfires as roots regenerate new stems quickly. It is generally pest and disease free.



**Cultural Associations:** The lightweight seeds were used as a packing material by Chinese porcelain exporters in the 19th century. Packing cases would often leak or burst open in transit scattering the seeds along rail tracks. Due to the amount of seeds scattered the species is now viewed as an invasive species in areas such as Japan and the eastern United States.

**Mythology:** In Japan, where the name of Princess Tree originates, its name stems from the planting of seeds when a daughter is born; it is said that by the time the daughter is at the peak of adulthood and ready to marry, the tree by this time has also grown to maturity. The tree is then felled and made into a tansu dresser as a wedding gift.

**Medicinal Use:** Chinese herbal medicine has used P. tomentosa to relieve bronchitis, especially by reducing coughing and asthma. It has also been used to treat conjunctivitis, gonorrhea, hemorrhoids, traumatic bleeding, tonsillitis and more.

# Latin Name: Prunus Persica

Common Name: Peach

Family/Genus: Rosaceae

# **Etymological Root:**

*Prunus* is a genus of trees or shrubs which hold the fruits plums, cherries, peaches, nectarines, apricots and almonds.

Persica derives from the belief that peaches were native to Persia (Modern-day Iran)

Type: Deciduous Tree

#### Ultimate size

Max Height: 8m

Max Width: 8m

# **Growing Conditions**

Aspect: S/W facing, full sun in a sheltered location.

Soil: Chalk, clay loam and sand

PH: Acid. Alkaline and Neutral

Moisture: moist but well drained.

# Other

Cultivation: Grow in any moist but well-drained, moderately fertile soil in full sun.

Native: No, from Northwest China

Toxicity: toxic if seeds, stem or

leaves are ingested.

### **Interesting Facts**

Cultural Associations: The Spanish explorers took the peach to the New World, and as early as 1600 the fruit was found in Mexico. For centuries the cultivation and selection of new varieties of peaches were largely confined to the gardens of the nobility, and large-scale commercial peach growing did not begin until the 19th century, in the United States.

Mythology: In chinese mythology, peaches were consumed by the eight immortals. The peach is a symbol of immortality and longevity, often depicted within art, descriptions and fables.

Medicinal Use: The leaves can be used internally when carefully measured in the treatment of gastritis, whooping cough, coughs and bronchitis. They also help to relieve vomiting and morning sickness during pregnancy.

# Prunus Persica

Spring

Foliage: green leaves are alternate, long oval shaped

up to 7 cm long.

Flowers: flowers can be yellow, pink, red or white with five petals up to 5cm in

diameter.

Fruit: Peaches (velvety hairs) or nectarines (smooth) is fleshy but firm containing a large oval shaped brown seed.





Summer

Autumn

Winter

# Landscape Design

Uses in Landscape: Cottage and informal garden, wall side borders, edible fruit

Design Tips: Pests include aphids and Caterpillars. High Risk Host for Xylella fastidiosa. May be susceptible to bacterial canker, blossom wilt, brown rot, honey fungus, peach leaf curl and silver leaf.



Latin Name: Quercus Robur

Common Name: Common Oak/

**English Oak** 

Family/Genus: Fagaceae

**Etymological Root:** 

Quercus is the latin name for an

Oak tree

Robur in latin means 'might' or

'strength'

Type: Deciduous Tree

**Ultimate size** 

Max Height: 35m

Max Width: canopy width of 30m

**Growing Conditions** 

Aspect: Full sun/partial shade, NESW facing in an exposed or shel-

tered area

Soil: Chalk, clay, loam or sand

PH: Acid, Alkaline or Neutral

Moisture: moist but well drained

Other

Cultivation: Grows well in most deep fertile soils and is lime tolerant.

Native: yes

**Toxicity:** yes, ingestion of toxic amounts of oak has been shown to cause ulcerative lesions in the upper and lower gastrointestinal tract and

liver.

# **Interesting Facts**

Cultural Associations: In England, the oak is a national symbol of strength. Couples were wed under ancient oaks in Oliver Cromwell's time. Oak is the emblem of many environmental groups, including the Woodland Trust.

Mythology: The oak was sacred to many gods, including Zeus, Jupiter and the Celtic Dagda. Each of these gods ruled over thunder and lightning, and oak trees are often hit by lightning as they are often the tallest feature in the landscape.

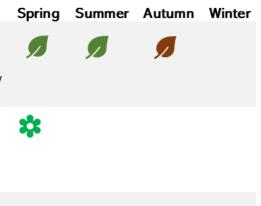
Medicinal Use: Leaves, bark and acorns were believed to heal many medical ailments, including diarrhoea, inflammation and kidney stones.

# Quercus Robur

Foliage: green leaves are alternate, lobed, and up to 14cm long, with very short leaf stalks, these turn brown/ red in autumn.

Flowers: flowers appear in the form of bright green male catkins and red/ brown female flowers on the end of long stalks.

Fruit: Acorn's up to 2.5cm long, appear in groups of one to four on long stalks appearing in late summer.



# Landscape Design

Uses in Landscape: useful as a native specimen tree, or part of a native woodland planting scheme. Once established this tree is drought tolerant.

Design Tips: Requires little maintenance. Pruning of this tree should be carried out during winter to early spring, while this tree is dormant. It supports more life than any other UK tree species. Pests include aphids, caterpillars, leaf-mining moths and oak gall wasps. Can be effected by the disease mildew.



# **Shrubs**



- 1. Buddleja davidii 'Dartmoor'
- 2. Buddleja davidii 'Persephone'
- 3. Camellia sasanqua 'Narumigata'
- 4. Cornus alba 'Siberica'
- 5. Hamamelis x intermedia 'Jelena' 'Siberica'
- 6. Hydrangea macrophylla
- 7. Magnolia stellata 'Waterlilly'
- 8. Spiraea douglasii
- 9. Spiraea japonica 'Goldflame'

Buddleja davidii 'Dartmoor'

Latin Name: Buddleja davidii 'Dartmoor'.

Common Name: Butterfly bush.

Family/Genus: Buddlejaceae/ Buddleja (or Buddleia)

Etymological Root: Buddleja honours the English botanist Reverend Adam Buddle. The species name honours the French missionary and explorer in China, Father Armand David, who was the first European to report the shrub. Dartmoor was cloned from a plant found growing in a small ravine on Dartmoor by a retired American gardener. Butterfly bush relates to the pollen-rich flowers attracting these insects.

Type: Shrub (deciduous, perennial)

#### Ultimate size

Max Height: 2.5 - 4.0m

Max Width: 2.5 - 4.0m

### **Growing Conditions**

**Aspect:** Sun, partial shade. East-facing, SW facing. Exposed or sheltered position.

Soil: Chalk, Clay, Loam, Sand

**pH:** Acid, Neutral, Alkaline.

Moisture: Moist well-drained soil.

# **Other**

Cultivation: Hardy ( $-20^{\circ}$ C  $- -15^{\circ}$ C). Drought tolerant and resistant to

pollution.

Native: Not to UK, from China.

**Toxicity:** None reported.

# Foliage: Long, arching shoots and opposite lanceolate mid-green to greygreen leaves, up to 7-13cm long. Flowers: Fragrant light-purple flowers in open branched, terminal panicles 20cm in length. Fruit:

# Landscape Design

**Uses in Landscape:** City and courtyard gardens, Coastal gardens, Cottage and informal garden, Flower border and beds, Wall-side borders. *Buddleja spp.* are known for attracting bees, butterflies/moths and other pollinators. However in 2008, *Buddleja spp.* were listed as nonnative invasive species, invading important wildlife habitats. Butterfly conservation continue to recommend its planting in gardens, but recommend deadheading after flowering or cutting back in winter to prevent seed development and spread.

**Planting Associations:** Combine with *Lavatera* 'Barnsley' (Tree Mallow), *Rosa rugosa* 'Roseraie De Lhay' (Rugosa rose), *Carpenteria californica* 'Bodnant' (Carpenteria).

Design Tips: Perfect for shrub borders or in foundation plantings.



### **Interesting Facts:**

Buddleja 'Dartmoor' is arguably the most unusual *B. davidii* cultivar ever raised. Cloned from a plant found growing in a small ravine on Dartmoor near Yelverton by a retired American gardener, Mr Hayles; the story goes that with his wife clinging onto him, Mr Hayles was able to reach down and grab some propagation material from the plant.

Latin Name: Buddleja davidii

'persephone'

Common Name: Butterfly bush

'Persephone'

Family/Genus: Scrophulariaceae

# **Etymological Root:**

Genus *Buddleja* was named after the botanist Reverend Adam Buddle.

davidii honours the French missionary and explorer in China, Father Armand David, who was the first European to report the shrub

Type: Deciduous Shrub

#### **Ultimate size**

Max Height: 4m

Max Width: 8m

# **Growing Conditions**

**Aspect:** ESW facing, full sun/partial shade in an exposed or sheltered location.

Soil: Chalk, clay loam and sand

PH: Acid. Alkaline and Neutral

**Moisture:** moist but well drained, well drained.

# Other

**Cultivation:** Grow in well-drained soil in full sun or partial shade.

Native: No, native to China and Ja-

pan.

Toxicity: None Interesting Facts

# Buddleja davidii 'Persephone'

Foliage: The foliage is a greyish green rounded bush of opposite, oval (long) leaves up to 30cm long.

Flowers: The small purple flowers are bunched together on the stem forming the shape of a circular based pyramid 5-20 cm long. Each individual tubular flower is made up of 4 lobed petals, 3-4mm wide.

Fruit:

# Spring Summer Autumn Winter

# Landscape Design

**Uses in Landscape:** urban planting, courtyard gardens, coastal, wall side boarder and flower beds.

**Design Tips:** Drought resistant. May be susceptible to pests such as capsid bugs, caterpillars and glasshouse red spider mite. Generally disease free. Cut back during March, April or May. Great for wildlife gardens and pollinators.



Cultural Associations: Buddleja is classed as an invasive and opportunistic plant that has taken residency along Britain's railway lines.

Mythology: After World War II, it became known as "bombsite bush"- as it turns out, the ravaged rubble of an attacked street is the perfect place for this plant to thrive. When the devastation has passed, there is room for sweet and colourful flowers to bring back the butterflies.

**Medicinal Use:** Buddleja plants are widely used for their wound healing, anti-inflammatory and anti-bacterial properties, often by applying dressings or compresses soaked with the leaves.

Latin Name: Camellia Sasanqua

'Narumigata'

Common Name: Camellia Narumiga-

ta

Family/Genus: Viburnaceace

#### **Etymological Root:**

In Latin *Camellia* means 'helper to the priest' named after the Botanist James Joseph Kamel.

Type: Evergreen Shrub

#### Ultimate size

Max Height: 4m

Max Width: 2.5m

### **Growing Conditions**

**Aspect:** NSW facing, full sun/partial shade/full shade in a sheltered location.

Soil: Clay loam and sand

PH: Acid and Neutral

Moisture: moist but well drained.

#### Other

Cultivation: Suitable for woodland and acidic soils. Position in a site sheltered from cold, dry winds and early morning sun as buds and flowers may be damaged by cold winds and late frosts.

# Camellia sasanqua 'Narumigata'

Spring

Summer

Winter

Autumn

Foliage: The evergreen, oval shaped, alternate leaves grow up to 7cm long and 3cm wide.

Flowers: The flowers are made up of 5-8 white to dark pink petals, 5-

7cm in diameter.

Fruit:

# Landscape Design

**Uses in Landscape:** Urban gardens, container plants, wall side boarders, flower beds.

**Design Tips:** Low maintenance. Susceptible to honey fungus, phytophthora root rot, camellia gall and camellia leaf blight, as well as pests such as Aphids, Scale Insects, and Vine Weevil.



# **Interesting Facts**

**Cultural Associations:** In Japan leaves are used to make tea while the seeds or nuts are used to make tea seed oil, which is used for lighting, lubrication, cooking and cosmetic purposes. Tea oil has a higher calorific content than any other edible oil available naturally in Japan.

**Mythology:** In China, the camellia represents the union between two lovers. The petals represent the woman, and the calyx (green leafy part of the stem that holds the petals together) represents the man who protects her. The two components are joined together, even after death, which is why the camellia also represents eternal love or long-lasting devotion.

Medicinal Use: The seeds are also used as a traditional medicine in folk remedies for the treatment of bleeding and inflammation.

Latin Name: Cornus alba 'Siberica'.

Common Name: Siberian Dogwood

Family/Genus: Cornaceae//Cornus

Etymological Root: Cornus comes from cornu (Latin) meaning "horn" referencing the hardness of the wood. Alba means white referencing the white fruits. The common name Dogwood comes from a colonial description of the fruit as being edible but "not fit for a dog".

Type: Shrub (deciduous, perennial)

# Ultimate size

Max Height: 1.5 -2.5m

Max Width: 1.5 - 2.5m

# **Growing Conditions**

**Aspect:** Sun, partial shade. SWE facing. Exposed or sheltered position.

Soil: Clay, Loam, Sand

pH: Acid, Neutral,.

Moisture: Moist, well-drained soil.

# **Other**

**Cultivation:** Hardy (-20°C). Grows in most soils. Susceptible to dogwood anthracnose (fungal disease).

Native: Not to UK, native to eastern

and central Asia.

Toxicity: None

### **Interesting Facts:**

**Mythology:** The wood of Dogwood is one of the hardest and it is said

that it was chosen to make the cross on which Jesus Christ was crucified.

**Medicinal Use:** The bark of all *Cornus sp.* are rich in tannins and have been used in traditional medicine as a substitute for quinine - a drug that's used to treat malaria and babesiosis. A drink similar to tea can be made from the bark to treat pain and fevers, while the leaves can be made into a poultice to cover wounds.

# Cornus alba 'Siberica'

	Spring	Summer	Autumn	Winter
Stem: Vigorous, upright, produces suckers. Red stems becoming bright crimson in winter.	ł	ł	ļ	-
Foliage: Ovate, dark green leaves, to 10cm long, turning red in autumn.	9	9	9	
Flowers: White flowers in fat cymes, to 5cm across.	£	₩		
Fruit: Ellipsoid fruit, white and often tinged blue.			30	

# Landscape Design

**Uses in Landscape:** Cottage and informal gardens, shrub borders and beds. Can be used for informal hedging and screening. Use for foundation planting and for banks and slopes for erosion control.

Planting Associations: Looks good planted among evergreen shrubs with spring bulbs. Combine with colourful winter bark to add interest to a winter garden: Salix alba subsp. Vitellina 'Britzensis' (orange-scarlet stems), Cornus sericea 'Flaviramea' (bright yellow-green stems); Cornus alba 'Elegantissima' (deep red stems).

**Design Tips:** Used primarily for winter colour. Looks spectacular when massed to accentuate the cold season red stem colour. Produces the brightest winter bark when planted in full sun. Attracts pollinators and birds.



**Latin Name:** *Hamamelis x intermedia* 'Jelena'.

Common Name: Witch hazel

Family/Genus: Hamamelidaceae/

Hamamelis

Etymological Root: Hamamelis (Latin) means "together with fruit" referring to the simultaneous occurrence of flowers with the maturing fruit from the previous year. Intermedia recognises the cross between H.japonica and H.mollis. Jelena (Greek/Russian) means "sun-ray" referring to the orange flower petals.

Type: Shrub (deciduous, perennial)

### **Ultimate size**

**Max Height:** 2.5 - 4.0m

Max Width: 2.5 - 4.0m

# **Growing Conditions**

**Aspect:** Sun, partial shade. Any aspect. Exposed or sheltered position.

Soil: Clay, Loam, Sand

pH: Acid, Neutral,.

Moisture: Moist well-drained soil.

**Other** 

Cultivation: Hardy (-10°C - -15°C).

Native: Not to UK, N. America, Japan

and China.

Toxicity: None

# Hamamelis x intermedia 'Jelena'

	Spring	Summer	Autumn	Winter
Foliage: Vase shaped shrub, ascending branches, alternate, ovate, bright green leaves, to 15cm long, turning orange and red in autumn.	Ø	Я	<b>9</b>	
Flowers: Fragrant, strappy, 4 petaled, coppery-orange flowers, 2.5 cm across, in axillary clusters. Petals are narrow with a crinkled ribbon appearance.				*
Fruit:. Two-part capsule containing a glossy black seed in each part, splits explosively at maturity.			3	3

# Landscape Design

**Uses in Landscape:** Cottage and informal gardens, flower or shrub border and beds. Woodland garden.

Planting Associations: Combine with *Polygonatum odoratum* 'variegatum' (Solomn's Seal), *Erica carnea* 'Springwood white' (Winter Heath), *Cyclamen hederifolium* (Ivy-leaved Cyclamen), *Galanthus spp.* (Snowdrops), *Helleborus spp., Crocus chrysanthus* (Snow Crocus).

**Design Tips:** Mass in mixed shrub border for dramatic winter blooms. Can be used as a screen or hedge or great as a specimen plant due to it's all-year-round interest and beautiful architectural wide vase shape with orange flowers during winter.



# **Interesting Facts:**

**Mythology:** Preference for growing in damp woods and stream corridors was noted by early American settlers who believed that the plant could lead them to underground springs. "Water witching" dowsers selected forked witch hazel branches growing in a north-south orientation to create divining rods.

Medicinal Use: Widely used for medicinal purposes by American Indians. The leaves and bark may be used to produce an astringent available in many products, mainly used externally on sores, bruises, and swelling.

Latin Name: Hydrangea macrophylla

Hydrangea macrophylla

Common Name: Hydrangea

Family/Genus: Hydrangeaceae

**Etymological Root:** 

Hydrangea: water vessel

Hudro - water

Angeion - vessel

Macrophylla in latin means large

or log leaved.

Type: Deciduous Shrub

**Ultimate size** 

Max Height: 2m

Max Width: 2.5m

# **Growing Conditions**

**Aspect:** SW facing, full sun/partial shade in a sheltered location.

Soil: Clay loam and sand

PH: Acid, Alkaline and Neutral

Moisture: moist but well drained.

# Other

**Cultivation:** Grow in any moist but well-drained soil in partial shade or grow in sun if soil remains reliably moist.

Native: No, native to Japan.

**Toxicity:** yes, to cats, dogs and horses and may cause aggravation to skin and an upset stomach if ingested.

# **Interesting Facts**

Foliage: The foliage is made up of leaves up to 15 cm long, rounded oval shaped, opposite on the stem.

Flowers: Flowers are bunched in the form of a sphere. Larger outside flowers have range from blue to pink, while the smaller central flowers have five greenish petals.

Fruit:

# Landscape Design

**Uses in Landscape:** cottage, informal gardens, flower boarders and beds.

Planting Associations: Astilbes, Hakonechloa macra (Hakone Grass), Hosta (Plantain Lily), Dicentra (Bleeding Hearts)

**Design Tips:** Pests include Aphids, Capsid bug, hydrangea scale and vine weevil. Susceptible to diseases leaf spot, grey moulds, powdery



**Cultural Associations:** In Japan, ama-cha, meaning sweet tea, is a herbal tea made from Hydrangeas whose leaves contain a phyllodulcin that develops a sweet taste. Ama-cha is mainly used for kan-butsue (the Buddha bathing ceremony) on April 8 every year—the day thought to be Buddha's birthday in Japan. During the ceremony, Ama-cha is poured over a statue of Buddha and served to people in attendance.

**Mythology**: Legend has it that a Japanese emperor gifted blue hydrangeas to the family of a girl he loved to make up for neglecting her.

Medicinal Use: The root are used to make medicine. Hydrangea is used for urinary tract problems such as infections of the bladder

Latin Name: Magnolia stellata

'Waterlilly'.

Common Name: Star Magnolia

Family/Genus: Magnoliaceae/

Magnolia

Etymological Root: Magnolia is the Latinized name of botanist Pierre Mangol who devised the systematic classification of plants. Stellata from stella (latin) meaning"star-shaped".

Type: Shrub (deciduous, perenial)

# **Ultimate size**

Max Height: 1.5 -2.5m

Max Width: 2.5—4.0m

# **Growing Conditions**

**Aspect:** Full-sun, partial shade. SWE facing. Sheltered position.

Soil: Chalk

pH: Acid, Neutral, Alkaline

Moisture: Moist, well-drained soil.

### **Other**

**Cultivation:** Slow-growing. Hardy (-15°C), late frosts may damage flower buds. Grow in moist humus rich soil. Prune mid-summer in full leaf.

Native: No, native to Japan.

Toxicity: None

# Magnolia stellata 'Waterlilly'

# Landscape Design

**Uses in Landscape:** City and courtyard gardens, Patio and container plants, Cottage and informal gardens.

Planting Associations: Plant with *Helleborus x hybridus* 'Ashwood Garden Hybrids', *Gallanthus spp.* (Snowdrops), *Ophiopogon planiscapus* 'Nigrescens', *Pachysandra terminalis* 'Silver Edge', *Convallaria majalis* (Lily of the Valley), *Cyclamen coum* (Persian Violet), *Hyacinthoides spp.* (Bluebells).

**Design Tips:** Architectural and low maintenance. Compact habit makes it ideal for a small garden space. Splendid specimen shrub for lawns or in borders and may be grown as an informal hedge.



<u>Interesting Facts:</u> Magnoliaceae are ancient (fossils date to 95 million years ago) appearing before bees evolved and it is thought the flowers evolved to encourage pollination by beetles.

**Cultural Associations:** In Japan, brides used white magnolia in their wedding bouquets to represent the strength and purity of their love.

**Mythology:** According to Japanese legend it is not wise to sleep or stay too long by a blooming magnolia since the intensity of it's perfume could stun or kill.

**Medicinal Use:** Bark and flowers are used in Traditional Chinese Medicine. People also use magnolia for obesity, stress, gingivitis, plaque, and other conditions, but there is no good scientific evidence to support most of these uses.

# Spiraea douglasii

Latin Name: *Spiraea douglasii*Common Name: Rose Spirea

Family/Genus: Rosaceae

**Etymological Root:** 

Spiraea is Greek for coiled/wreath.

douglasii honours the Scottish bot-

anist David Douglas.

Type: Deciduous Shrub

<u>Ultimate size</u>

Max Height: 2.5m

Max Width: 2.5m

# **Growing Conditions**

**Aspect:** NESW facing, full sun/partial shade in an exposed or sheltered location.

Soil: Chalk, loam and sand

PH: Acid, Alkaline and Neutral

Moisture: moist but well drained,

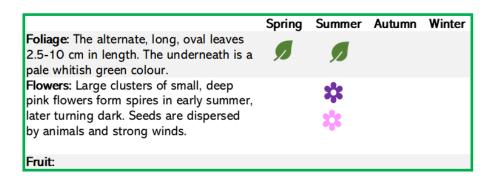
well drained.

### **Other**

Cultivation: Easy to grow in most moist soils, tolerant of all but the most extreme conditions. A rampant shrub that in time can form a dense thicket

Native: No, native to North America.

**Toxicity: None** 



# Landscape Design

Uses in Landscape: Cottage and informal gardens, banks/slopes, flower borders and beds.

**Design Tips:** Low maintenance, Generally pest and disease free. Can be invasive.



# **Interesting Facts**

**Cultural Associations:** Native Americans found S. douglasii useful for making brooms and hanging seafood to cook.

Medicinal Use: An infusion of the seeds has been used in the treatment of diarrhoea.

Latin Name: Spiraea japonica

'Goldflame'.

Common Name: Japanese spiraea.

Family/Genus: Rosaceae/Spiraea

Etymological Root: *Spiraea* (Latin) means wreath, referencing the flower clusters seen on most shrubs in the genus. *Japonica* as Japan is part of its native range. Goldflame is noted for its changing leaf colours.

Type: Shrub (deciduous, perennial)

# **Ultimate size**

Max Height: 0.5 - 1.0m

Max Width: 0.5 - 1.0m

# **Growing Conditions**

**Aspect:** Sun, partial shade. East-facing, South-facing or West-facing. Exposed or sheltered position.

Soil: Chalk, Clay, Loam, Sand pH: Acid, Neutral, Alkaline.

Moisture: Moist well-drained soil.

### **Other**

Cultivation: Hardy (-20°C - -15°C). Easy to grow in most moist soils, tolerant of all but most extreme conditions in full sun or light shade.

Native: Not to UK, from Korea, Japan

and China.

**Toxicity:** None reported.

# **Interesting Facts:**

Medicinal Use: None known.

# Spiraea japonica 'Goldflame'

	Spring	Summer	Autumn	Winter
Foliage: Clump forming with erect				
shoots, ovate, sharply toothed leaves to				
12cm long. Bronze-red young leaves,				
turning bright yellow, then mid-green,	70			
then orange and red in autumn.				
Flowers: Bowl-shaped, dark pink		<b>SS</b>		
flowers in flat sprays.		<b>***</b>		
Fruit:.				

# Landscape Design

**Uses in Landscape**: City and courtyard gardens, cottage and informal gardens, patio and containers, wildlife gardens, coastal gardens, flower borders and beds.

Planting Associations: Combine with *Berberis thunberii f. atropupurea* Rose glow' (Japanese Barberry), *Heuchera* 'Obsidian' (Coral Bells), *Clematis* 'Polish Spirit' (Late large flowered Clematis), *Crocosmia* 'Lucifer' (Montbretia).

**Design Tips:** Perfect for borders or in foundation plantings, can be grown as a low hedge. Especially suitable for mixed borders. Attracts bees and other pollinators.



# **Perennials**



- 1. Echinacea purpurea
- 2. Eryngium x zabelii
- 3. Helleborus foetidus
- 4. Hosta sieboldiana "Frances Williams"
- 5. Nectaroscordum siculum

Latin Name: Echinacea purpurea (syn. Rudbeckia purpurea)

**Common Name:** Purple cone flower or Hedgehog flower.

Family/Genus: Asteraceae/

**Echinacea** 

Etymological Root: Echinacea (Greek) meaning "spiny one" as in sea urchins or Echinus (Latin) Hedgehog, purpurea means "reddish-purple". Referring to the flower colour. The flowers have raised cone-like centres to which the name "cone flower" refers.

**Type:** Perennial (Herbacious)

**Ultimate size** 

Max Height: to 1.0—1.5m

Max Width: 0.1—0.5m

# Foliage: Ovate, toothed, rough-hairy basal leaves, 15cm long, and ovate-lance-shaped, toothed stem leaves. Flowers: Flower heads to 12cm across, with golden brown, cone-shaped discs and partly reflexed, purplish red ray-florets Fruit:

Echinacea purpurea

# Landscape Design

**Uses in Landscape:** Cottage and informal gardens, Prairie planting, Wildlife gardens, Wildflower meadows, Flower borders and beds.

**Planting Associations:** Grow among grasses and rudbeckias in a prariestyle planting scheme.

**Design Tips:** Perfect for growing in drifts towards the middle or back of a cottage-stle or herbaceous border. Flowers are long lived, excellent for cutting and attractive to pollinators. Deadhead the flowers to encourage more to form, but in autumn leave the seedheads for birds.. Generally pest and disease free.

# **Growing Conditions**

**Aspect:** Full sun, can tolerate some shade. South-facing, East-facing, West facing. Exposed or sheltered location.

Soil: Chalk, Loam, Sand.

pH: Acid, Alkaline, Neutral

Moisture: Well-drained. Drought tol-

erant.

# **Other**

**Cultivation:** Easy to grow, prefers deep, well-drained humus rich soil, tolerates most soils (except very dry). Hardy in most places throughout the UK even in severe winters (- $10 \text{ to } -15^{\circ}\text{C}$ ).

**Native:** Not to UK, originates from North America.

# Interesting Facts

**Cultural Associations:** *E. purpurea* was and still is a widely used medicinal plant of the native American Plains Indians. Used as a painkiller and even to treat snakebite.

### Mythology:

Medicinal Use: E . Purpurea is widely used in herbal medicine, used to treat the common cold and believed to have immunological properties. There is some scientific data supporting these properties but it has not yet been proven, and there remain concerns over side effects seen in some individuals.



Latin Name: Eryngium x zabelii

Common Name: Sea Holly "Big Blue"

Family/Genus: Apiaceae / Eryngium

**Etymological Root:** Some *Eryngium spp.* are native to rocky and coastal areas hence the name Sea Holly due to their spikey leaves similar to the true Hollies (*llex spp.*)

The genus name is derived from the Greek noun "eryngion" which means Sea Holly.

Type: Perennial

# **Ultimate size**

Max Height: 0.5 - 1m

Max Width: 0.5—1m

# **Growing Conditions**

**Aspect:** Full sun, South-facing, West-facing or East-facing

Soil: Chalk, Loam or Sand

PH: Acid, Alkaline or Neutral

Moisture: Well-drained

## **Other**

Cultivation: Grow in dry, well-drained soil that is poor to moderately fertile. Hardy in most places throughout the UK even in severe winters (-10 to  $-15^{\circ}$ C). Protect from winter wet.

Native: Not to UK. *E. x zabelii* is a cross between *E. alpinum* (native to the Alps, Jura and the Balkans and *E. Bourgatii* (native to the Pyrenees).

Toxicity: None

### **Interesting Facts**

**Cultural Associations:** To celebrate the Golden Jubilee of Queen Elizabeth II in 2002, the conservation charity Plantlife organised a competition to choose county flowers; the **sea-holly** was Liverpool's final choice.

# Mythology:

Medicinal Use: Sea Holly roots were collected on a large scale in the 17th and 18th centuaries in England and were candied and then used as restorative, quasi-aphrodisiac lozenges. The plant is still used in modern herbalism with may claimed benefits but particularly for it's diuretic action.

# Eryngium x zabelii

	Spring	Summer	Autumn	Winter
Foliage: Heart-shaped, spiny-toothed, dark green basal leaves 8-12cm long. Electric blue stems bear deeply 3-lobed, palmate, spikey, silvery-green foliage.	99	99	99	
Howers: Intense blue, thimble-shaped flower-heads 2-4cm with an involucre of prickly, rigid, silver-blue bracts.		*		
Fruit				

# Landscape Design

**Uses in Landscape:** Versatile, striking architectural plant. Used in flower borders or gravel gardens, city and courtyard gardens, costal gardens of more informally in cottage gardens or within prairie planting.

**Design Tips:** *E. x zabelii* can be propagated from root cuttings in late winter. It has nectar/pollen rich flowers and is known for attracting bees, lepidoptera and other pollinators After flowering the seedheads provide an attractive feature that can be left over winter. May be affected by leaf and bud eelworms, powdery mildew and root rot.



Latin Name: Helleborus foetidus

Common Name: Bear's foot, Dungwort, Stinking hellebore, Stinkwort

Family/Genus: Ranunculaceae/ Helleborus

**Etymological Root:** Common names refer to pedate leaf shape and the unpleasant smell if leaves are crushed. Helleborus from Greek: "elein" - to injure; "bora" - food, alluding to toxicity. Foetidus from Lat- Landscape Design in "fetidus" - offensive odour.

Type: Perennial (Herbacious)

**Ultimate size** 

Max Height: 30-60cm

Max Width: 30-45cm

# **Growing Conditions**

Aspect: Any, but sheltered position

Soil: Chalk, Clay, Loam

pH: Alkaline, Neutral

Moisture: Moist but well-drained

# Other

Cultivation: Thrives in neutralalkaline moist, fertile, humus-rich soils. Partial shade is ideal but can tolerate full sun. Hardy in the severest European continental climates <-20°C.

Native: to UK. Range Western and Southern Europe.

**Toxicity:** Poisonous (All parts). Toxic if eaten in large quantities. Can cause minor skin irritation. Protoanemonin.

# **Interesting Facts**

# **Cultural Associations:**

Mythology: In Christian lore, the first Hellebore grew from the spot where a little girl's tear dropped onto the snow because she had no gift for the Christ child. Hellebore was an ingredient in the legendary "flying ointment" and it has a long association with witches and witchcraft.

Medicinal Use: A very toxic plant that is considered to be useful for reducing blood pressure in various conditions of hypertension. It should not be taken except under professional supervision. Ihas been used as a heart stimulant for the elderly, though this treatment is no longer recommended.

# Helleborus foetidus

	Spring	Summer	Autumn	Winter
Foliage: Alternate, pedate dark green				
leaves 23cm long. Flowers: Many flowers, long-lasting, bell-shaped green flowers, 1.5-2.5cm across, usually purple margined above large, pale green bracts.	**			**
Fruit: Clustered fleshy green capsules surrounded by persistent sepals.		3		

Uses in Landscape: Cottage and informal gardens, wildflower meadows, city and courtyard gardens. Prized for their winter and early spring blooms, useful in shade gardens and attractive to bees. Associates well with shade loving spring flowers such as coloured primroses, violets, dwarf narcissi and hardy cylamen.

Design Tips: Low maintenance, can be used for underplanting, will selfseed under correct growing conditions. Deer and rabbit resistant. Hellebore aphid and snails may be a problem. May be subject to hellebore leaf spot and hellebore black death.



Latin Name: Hosta sieboldiana "Frances Williams" (syn. H. Eldorado or H. Yellow Edge).

Common Name: Gold-edged Plantain lilly; gibōshi

Family/Genus: Asparagaceae/Hosta

Etymological Root: Genus named honouring Austrian botanist Nicholas Thomas Host. Species named for Franz Philipp von Siebold, 19th century German doctor who introduced many Japanese plants to Europe. Cultivar named for Frances Williams, influential in the modern history of Hostas. "Eldorado" and "Yellow-edge" colour of the leaf margins.

Type: Perennial (Herbacious)

Ultimate size

Max Height: to 0.5—1.0m

Max Width: 0.5—1.0m

# **Growing Conditions**

**Aspect:** Partial shade. North-facing, East-facing, West facing. Sheltered location.

Soil: Chalk, Loam.

**pH**: Acid, Neutral

Moisture: Moist but well-drained.

#### **Other**

**Cultivation:** Grow in fertile, moist, well-drained soil sheltered from cold, drying wind. Hardy in severest European continental climates (<-20°C).

Native: Not to UK, originates from

Toxicity: Not to humans can be toxic

to dogs, cats and horses.

# Hosta sieboldiana "Frances Williams"



# Landscape Design

**Uses in Landscape:** Cottage and informal gardens, City and informal gardens, Patio gardens, Flower borders and beds.

**Planting Associations:** Goes well with Ferns, Astilbes, *Anemone nemorosa* (Wood Anemone) and *Brunnera macrophylla* "Jack Frost"., *Hakonechlora macra "Aureola"* (Hakone grass).

**Design Tips:** The primary contribution of this Hosta is it's lovely foliage. Perfect for shade gardens, mixed with other perennials as groundcover,



### **Interesting Facts**

None.

Latin Name: Nectaroscordum siculum (syn. Allium siculum)

Common Name: Sicilian Honey Garlic, Ornamental Onion, Mediterranean Bells.

Family/Genus: Amaryllidaceae (sub family Alliaceae) /Nectaroscordum

Etymological Root: Common name Mediterranean/Sicilian refer to the native habitat. Honey from attraction to bees, Garlic scent is given off if leaves are crushed, Onion as a member of the Onion family, Bells reflect flower shape. Nectaroscordum means "Nectar-garlic". Siculum (Latin) means Sicily.

Type: Perennial (Bulbous)

**Ultimate size** 

Max Height: to 1.0—1.5m

Max Width: 0.1—0.5m

# **Growing Conditions**

Aspect: Any, exposed or sheltered

Soil: Chalk, Clay, Loam, Sand

pH: Acid, Alkaline, Neutral

**Moisture:** Moist but well-drained—Well-drained. Drought tolerant.

### **Other**

Cultivation: Grows well in any moderately fertile, well-drained soil. May self-seed freely. Hardy in most places throughout the UK even in severe winters (-10 to  $-15^{\circ}$ C).

**Native:** Not to UK, originates Southern Europe and Western Asia.

# **Interesting Facts**

Mythology:

# Nectaroscordum siculum

Spring	Summer	Autumn	Winter
	$\infty$		
	<del>???</del>		
	<b>**</b> **********************************		
	.94.		
	36		
	Spring	Spring Summer	Spring Summer Autumn  Summer Autumn

# Landscape Design

**Uses in Landscape:** Wildflower meadows, flower borders and beds, gravel or rock gardens. City and courtyard gardens. Coastal gardens, Mediterranean gardens.

**Planting Associations:** Combines nicely with late flowering tulips. Jumble with Rosa rubrifolia, blue hostas, wine-coloured foliage of Cotinus, dark leaved Heuchera and perennial Geraniums.

**Design Tips:** Generally pest and disease free. Plant at the front of the border where other plants can be seen through its stems. Nectar/pollen rich flower attract bumble bees and other beneficial insects. The flowers stay attractive after flowering because the seed pods are decorative.



**Medicinal Use:** Nectaroscordum siculum has been used in folk medicine but there is little information on its specific application. There has been recent research into it's active compounds including potential to treat kidney stones.

# Groundcovers



- 1. Leptinella squalida 'Platt's Black'
- 2. Leucobryum glaucum
- 3. Pachysandra terminalis 'Green Carpet'
- 4. Sagina subulata
- 5. Thymus serpyllum

# Leptinella squalida 'Platt's Black'

Latin Name: Leptinella squalida 'Platt's Black'

Common Name: Brass Buttons

Family/Genus: Asteraceae/ Leptinel-

la

Etymological Root: Leptinella from leptos (Greek) meaning "slender", "thin" or "delicate", referring to the ovary. Squalida meaning "unattractive" refers to the almost black foliage. This variety was named after Jane Platt of Portland, Oregon who discovered the variety in her garden.

**Type:** Perennial (evergreen, herbaceous)

### **Ultimate size**

Max Height: Up to 10cm

Max Width: 0.1-0.5m

# **Growing Conditions**

**Aspect:** Full sun or partial shade. Any aspect. Exposed or sheltered.

Soil: Chalk, Clay, Sand, Loam.

pH: Acid, Neutral, Alkaline.

Moisture: Moist but well-drained.

**Other** 

Cultivation: Fully hardy (-15°C).

Native: Not to UK, found in Austral-

ia, New Zealand and South

America..

Toxicity: None.

	Spring	Summer	Autumn	Winter
Foliage: Low mat forming habit, spreads	a	a	4	a
by rhizomes/runners. Fern-like leaves	<b>/</b>	/-	/-	/-
that are bronzy black, up to 2-3cm long and 12mm wide but often smaller.				9
and 12mm wide but often smaller.	9	9	9	Ø
Flowers: Insignificant yellowish-green flowers, composed of just the disk flowers of the normal daisy flower (discform) without the white rays,		*		
Fruit:				

# Landscape Design

Uses in Landscape: City and courtyard gardens, gravel gardens, patio and container plant, Cottage and informal gardens

**Planting Associations:** Useful for underplanting roses and shrubs. Looks good in contrast with bright green, gold or chartreuse-foliaged companion plants such as *Sagina subulata v.Aurea*)

**Design Tips:** Low maintenance, goods for garden edging and ground cover and useful for planting in walls and between garden paving as tolerant of high foot traffic. Generally pest and disease free.



# **Interesting Facts**

Medicinal Use: None

Latin Name: Leucobryum glaucum

**Common Name:** Pincushion moss, Cushion moss, White moss

Family/Genus: Leucobryaceae/ Leu-

cobryum

Etymological Root: Leuco means "white" (ancient Greek). Bryon means "moss". This and the common name White moss refer to light shade of green colour for this moss. Glaucum meaning blue-grey refers to the off-white colour when it dries out.

Type: Perennial (Evergreen)

# **Ultimate size**

Max Height: 0.12-12.5cm

Max Width: 0.12-60cm

# **Growing Conditions**

**Aspect:** Medium shade to partial sun. North or East-facing.

**Soil:** Humus, clay, sand, gravel or rocky material.

**pH:** Prefers acidic conditions but will tolerate neutral and alkaline.

**Moisture:** Moist to dry-mesic conditions. *L. glaucum* soak up and retain water so it takes a long time to dry out.

#### **Other**

**Cultivation:** Able to tolerate drier conditions than most mosses. Hardy to sub-zero temperatures.

**Native:** Widespread in temperate and cool temperate regions of the Northern Hemisphere.

**Toxicity:** None

# Leucobryum glaucum

Foliage: Varies from pale greyish-green to medium green. Stems 1-12cm, long, pale green, browning with age. Leaves 6-9mm long, erect lanceolate, turning slightly in one direction in larger plants. The lower, broader part of the leaf is aslong-as the narrow, tubular upper part. Flowers:

Fruit:

Spring Summer Autumn Winter

Winter

Foliage: Varies from pale greyish-green

Foliage: Varies from pale green

Foliage: Varies from

# Landscape Design

**Uses in Landscape:** Japanese/Rock/Woodland/Courtyard gardens, Ground cover especially underplanting of trees and shrubs. Living walls and roofs.

**Planting Associations:** Plant with *Hosta spp.* or ferns in shady areas. With spring bulbs such as snowdrops or daffodils to add spring colour. Underplant Japanese maples or evergreen rhododendrons. Interplant with other moss species to create different greens and texture.

**Design Tips:** Avoid underplanting trees that drop needles as this will require a lot of maintenance. Birds may overturn the cushions in search of food, but the moss is adapted to this disruption and can develop rhizoids from its leaves to reattach itself.



### **Interesting Facts**

**Cultural Associations:** In Japan, historic temples called koke-dera (moss temples) draw thousands of visitors. Saiho-ji exemplifies these retreats with a moss garden with large expanses of Leucobryum moss species.

Latin Name: Pachysandra terminal-

is 'Green Carpet'

Common Name: Japanese spurge

Family/Genus: Buxaceae /

Pachysandra

Etymological Root: Pachy (meaning "thick" or "large"; aner meaning "man",in botany refers to "stamen" (Latinized Greek).

Pachysandra spp. notable for having four stamen. Terminalis (Latin) means "ending", refers to the clusters of leaves at the end of the short stems.

Type: Perennial (Evergreen)

#### **Ultimate size**

Max Height: 7-15cm

Max Width: 0.5-1.0m

# **Growing Conditions**

**Aspect:** Full or partial shade. Any aspect.

Soil: Calk, Clay, Loam or Sand pH: Acid, Alkaline or Neutral

Moisture: Moist but well-drained

# **Other**

**Cultivation:** Will grow in poor soil and gravel. Hardy (-30°C). Drought tolerant and also tolerant of urban pollution.

Native: Native to China and Japan.

**Toxicity:** None

# Pachysandra terminalis 'Green Carpet'

	Spring	Summer	Autumn	Winter
Foliage: Mat forming, rhizome-like fleshy green creeping stems and upright branches with alternate, ovate, toothed, glossy, dark green leaves, 7cm long. Leaves are clustered at the end of short stems.	9	Ø	Ø	9
Flowers: Erect spikes (2-3cm) of small flowers, male flowers with prominent white stamen.  Fruit:	₩			₩

# Landscape Design

**Uses in Landscape:** City/Courtyard/Coastal gardens, Ground cover especially banks and slopes, underplanting of roses and shrubs.

**Planting Associations:** Plant with Iris or Astilbe. Can be combined with spring flowering bulbs such as Snowdrops or Daffodils.

**Design Tips:** *P. terminalis* can be placed at the foot of fresh ground perennials. It retains humidity of the soil and limits weed growth. It is a good alternative to lvy in a cool shady corner. Use to form an under carpet for tall trees or shrubs. Plant on a shaded slope or along a path or wall to limit maintenance. Disease free but young shoots may be attached by slugs and snails.



# **Interesting Facts**

Medicinal Use: None known.

**Latin Name:** *Sagina subulata* (also *Sagina subulata* 'Aurea')

**Common Name:** Pearlwort, Irish moss, Awl-leaf pearlwort, Scottish moss.

Family/Genus: Caryophyllaceae/ Sagina

Etymological Root: Sagina (Latin) means "food for cows" due to grass-like appearance. Subulata (Latin) means "an awl" (a pointed tool used to make holes in wood/leather) from the shape of the leaves. Common name Pearlwort refers to small spherical flowers resembling pearls. Irish moss has an emerald-green colour while Scottish moss (v. Aurea) has a golden colour, the reference to moss comes from the moss-like-appearance.

**Type:** Perennial (Herbaceous, evergreen)

#### **Ultimate size**

Max Height: 2-5cm

Max Width: Indefinate

# **Growing Conditions**

**Aspect:** Full or partial sun. Any aspect.

Soil: Chalk, Loam, Sand.

pH: Acid, Neutral, Alkaline.

Moisture: Moist but well drained

soil.

#### Other

**Cultivation:** Poor to moderately fertile soil. Fully Hardy (-15°C). Dislikes hot, dry conditions.

Native: Western and Central Europe

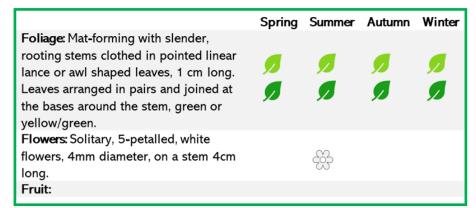
including parts of the UK.

**Toxicity:** None

### **Interesting Fact**

Medicinal Use: None known.

# Sagina subulata



# Landscape Design

**Uses in Landscape:** Gravel/Rock/Forest gardens. Roof greening, ground cover, underplanting and containers. Can be used as a lawn substitute, will tolerate moderate foot traffic.

**Planting Associations:** Mix *S. subulata* with *S. subulata* v. Aurea to create a patchwork of different greens. Use as edging for paths, beds and borders, to blend with hostas or ferns.

**Design Tips:** Due to its small size *S. subulata* can be grown between cracks in paving stones and stone walls. Use on slopes for easy maintenance. Robust plant rarely showing signs of disease, but young plants attract slugs and snails.



Latin Name: Thymus serpyllum

**Common Name:** Creeping Thyme, Wild Thyme, Breckland Thyme

Family/Genus: Lamiaceae/ Thymus

Etymological Root: *Thymus* derived from either *thumos* (Greek) meaning "courage" or *thymos* (Greek) meaning "perfume" linked to the plant's aromatic fragrance. *Serpyllum* (Greek) means "creeping" or "trailing".

**Type:** Perennial (Alpine herb, evergreen)

# **Ultimate size**

Max Height: Up to 10cm

Max Width: 0.1-0.5m

# **Growing Conditions**

**Aspect:** Full sun. S or W facing. Exposed or sheltered.

Soil: Chalk, Sand, Loam.

pH: Neutral, Alkaline.

Moisture: Well drained soil.

Drought resistant.

#### **Other**

Cultivation: Fully hardy (-15°C).

Native: Europe and Asia including

the UK.

**Toxicity:** None—used as a culinary

herb.

# Thymus serpyllum

	Spring	Summer	Autumn	Winter
Foliage: Low prostate shrub with mat forming habit, finely trailing hairy stems, small elliptic or elliptic-ovate aromatic leaves (4-8mm long) in opposite pairsevergreen	Ø	Ø	Ø	Ŋ
Flowers: Terminal whorls of small 2- lipped, tubular, purple, pink or white flowers (4-6mm long) – late summer or spring		<b>₩</b>		
Fruit:				

# Landscape Design

**Uses in Landscape:** Gravel/Rock/Coastal/Wildlife or Mediterranean gardens. Courtyard or patio garden - grow in containers with other herbs such as Oregano or Rosemary.

**Planting Associations:** Other thyme varieties: *T. citriodorus* 'Variegara'; *T. nitidus* 'Peter Davis'; *T. vulgaris* 'Silver Queen'. Companion plants might include *Gaillardia x grandiflora* 'Arizona Sun' (Blanket Flower); *Helictotrichon sempervirens* (Blue Oat Grass).

**Design Tips:** Ideal for filling in crevices in rock gardens and patios. Provides interesting texture to pathways. Known for attracting bees and Lepidoptera. Can be used to create an aromatic thyme lawn and xeriscape light foot traffic areas.



# **Interesting Fact**

Mythology: In medieval times knights wore sprigs of thyme on their armour as a sign of courage.

Medicinal Use: Wide range of uses in traditional medicine, ranging from treatment of breathing problems (cough, bronchitis), kidney and bladder disorders, improving circulation, lowering cholesterol and stimulating to improving he immune system. Also applied directly to skin as an antimicrobial and to treat arthritis and eczema. In modern medicine research is ongoing into the use of chemical components for their cytotoxic ac-

# Climbers



- 1. Actinidia kolomikta
- 2. Hydrangea anomala subsp. Petiolaris
- 3. Humulus lupus 'Aureus'
- 4. Lonicera periclymenum 'Serotina'
- 5. Rose Canina

Latin Name: Actinia kolomikta.

**Common Name:** Ornamental Kiwi, Kolomikta vine/kiwi.

Family/Genus: Actinidaceae/Actinia

Etymological Root: Actinidia (Greek) means rayed, referencing the style of the flowers. Kolomikta is probably in reference to the Amur river valley on the border between Russia and China where the plant is native. Kiwi is the common name of a group of climbing plants in the genus Actinidia including A.deliciousa (Kiwi fruit), originating in China.

Type: Climber (deciduous, perennial)

### **Ultimate size**

**Max Height:** 4.0 – 8.0m

Max Width: 4.0 - 8.0m

# **Growing Conditions**

**Aspect:** Full-sun. South-facing. Sheltered position. Will tolerate light shade at expense of leaf variegation.

Soil: Chalk, Clay, Loam, Sand.

pH: Acid, Neutral, Alkaline

Moisture: Moist, well-drained soil.

#### Other

Cultivation: Slow-growing. Hardy (-10°--15°C). Generally pest and disease free. Attractive to cats which can damage small plants.

Native: Not to UK, native temperate

East Asia.

Toxicity: None

# Actinidia kolomikta

Foliage: Vigorous twining climber with alternate, simple, ovate, mid-green leaves. Purple tinged when young becoming variegated with white/silver and then pink tips, up to 15cm long, 12cm wide.

Flowers: Clusters of 3 fragrant, 6 - petaled flowers, white, 2cm across. Dioecious (male and female on separate plants).

Fruit: Female plants produce ovoidolong, yellow-green, edible fruit 2.5cm long.

# Landscape Design

**Uses in Landscape:** Vertical spaces in city and courtyard gardens, cottage and informal gardens, Wallside borders and walkways. Grown for foliage effect, rapid growth makes it perfect for creating cover on fences, and pergolas. Use for accent, barrier, mass planting screening or as a specimen plant.

**Planting** Associations: Goes well with purple or mauve flowering Clematis spp. such as *Clematis* 'Jackmanii', *Clematis* Etoile Voilette' *Clematis* 'Arrabella' or *Astrantia* "Roma' (Masterwort).

**Design Tips:** The flowers are attractive to pollinators and the fruit attractive to birds and some mammals. Requires little maintenance. If not grown for fruit select male plants only as these have more attractive variegation.



# **Interesting Facts:**

Cultural Associations: Young leaves used as a pot-herb in Eastern Asia.

Medicinal Use: Root extract found to contain anti-oxidant and anti-tumour activity in recent Chinese research.

**Latin Name:** *Hydrangea anomala* subsp. *Petiolaris.* 

**Common Name:** Climbing hydrangea.

Family/Genus: Hydrangeaceae/ Hydrangea

Etymological Root: Hydrangea is derived from (Greek) hydor meaning water and aggeion meaning vessel linked to the cup-shaped seed pods. Anomala means anomalous or unlike other Hydrangeas, probably because they are vines which explains the common name. Petiolaris refers to the plant's long petioles.

Type: Climber (deciduous, perennial)

### **Ultimate size**

Max Height: 12.0m +

Max Width: 4.0 - 8.0m

# **Growing Conditions**

Aspect: Full or partial shade. Fullsun (providing the soil is not too dry, flowers do not last as long), Any aspect. Sheltered position.

Soil: Clay, Loam, Sand, Chalk.

pH: Acid, Neutral, Alkaline.

Moisture: Moist, well-drained soil.

#### Other

Cultivation: Hardy ( -10° - -15°C). Generally disease free. Can get aphids, capsid bug and hydrangea scale.

**Native:** Not to UK, native to Korea, and Japan.

**Toxicity:** Can be toxic to domestic pets, horses can cause mild stomach upset in humans if ingested and may aggravate skin allergies.

Interesting Facts: None.

# Hydrangea anomala subsp. petiolaris

Winter

Foliage: Vigorous climber, self-clinging to walls by adventitious aerial roots, opposite ovate-rounded leaves with heart shaped bases, 11cm long and 8cm wide, dark-green turning to yellow.

Flowers: Corymbs (flattened clusters) of white flowers, up to 20cm across.

Lacecap-style flowers, tiny cream-white to greenish yellow fertile flowers in the centre of each cluster surrounded by a ring of showy white sterile flowers.

Fruit:.

# Landscape Design

**Uses in Landscape:** Cottage and informal gardens, City and courtyard gardens. Good for wall-side borders.

Planting Associations: Goes well with subtle greens found in *Hosta spp.* E.g. *Hosta* 'El Nino', and ferns Eg. *Osmunda regalis* (Royal Fern),. Contrast with vibrant colours found in *Hemerocallis* 'Chicago Apache' (Bright red Day Lily), Geranium psilostemon (Bright pink American Cranesbill) or plant with other climbers, *Rosa* 'Albertine (Rambling rose), or Clematis 'Niobe' (Early large-flowered Clematis)

**Design Tips:** Low maintenance, perfect for shady or north facing walls. Will attract bees and pollinating insects. Dried flower heads are reddish brown. Exfoliating bark on mature stems is also reddish brown and attractive in winter.



Latin Name: Humulus lupus 'Aureus'

Common Name: Golden Hop

Family/Genus: Cannabidaceae/

Humulus

Etymological Root: Humulus (Latin) uncertain origin, possibly from humela meaning hop plant or from "humus", a component in the soil. Lupus (Latin) means "small wolf" linked to the plant's tendency to climb over and strangle other plants like a wolf does to sheep. Aureus (Latin) means golden describing the leaf colour. Hop comes from hoppan (Anglo-Saxon) meaning to climb.

**Type:** Climber (deciduous, perennial)

#### Ultimate size

Max Height: 4.0 - 8.0m

Max Width: 1.5 - 2.5m

# **Growing Conditions**

**Aspect:** Full sun or partial shade. S or W facing. Sheltered position.

Soil: Clay, Loam, Chalk.

pH: Acid, Neutral, Alkaline.

Moisture: Moist, well-drained soil.

# **Other**

**Cultivation:** Hardy ( -20° - -15°C). May suffer from downy mildew and Vertillium wilt. Can get aphids, and caterpillars.

cato. p...a.o.

Native: Yes: Native to Europe and

Western Asia.

Toxicity: Toxic to dogs.

# Humulus lupus 'Aureus'

	Spring	Summer	Autumn	Winter
Foliage: Rhizomatous, twining clockwise with rough hairy shoots and leaves, opposite, palmately 3-5 lobed, coarsely toothed golden yellow to 15cm long.	<b>9</b>	<b>9</b>		
Flowers: Dioecious (separate male and female plants), small flowers, male in axillary panicles, female (hops) cone-like catkins, green up to 6cm.		<b>₩</b>		
Fruit:. Cone-shaped (like flower) light green initially ripening to brown. Unique scent (mix of yeast, apples and garlic).			3	

# Landscape Design

**Uses in Landscape:** Cottage and informal gardens, City and courtyard gardens. Wildlife gardens.

Planting Associations: Ideal for covering an arch or pergola or fence - require a sturdy support. Plant with *Astelia* 'Silver Shadow' (Silver spear) adds striking colour and form. *Heleborus argutifolius* (Corsican Hellebore), *Sedum* 'Matrona' (stonecrop), *Clematis* 'Etoile Violette', *Crocosmia* 'Lucifer' (montbretia), *Allium hollandicum* 'Purple Sensation' (Ornamental Onion.

**Design Tips:** Low maintenance, makes a good screening plant and is suitable for a wildlife garden due to its native provenance. It is tolerant of urban conditions. Care should be taken when locating this plant as the stem is abrasive if rubbed on one direction and may cut. Ecologically attractive to butterflies, birds and small mammals.



<u>Interesting Facts:</u> Hops are used in brewing. The first information about the hop cultivation date back to the 8th century. Numerous aromatic and embittering varieties are cultivated whose cones (female flowers), properly mixed and added in different times of the preparation, grant unique characteristics to the beers.

**Medicinal Use:** Hops are claimed to have a wide range of medicinal properties. They have been used historically to promote sleep, often in combination with the sedative herb valerian. Additionally, hops have an antianxiety effect, which may help explain why you feel less tense after drinking hoppy beer.

Latin Name: Lonicera periclymenum 'Serotina' '

**Common Name:** Late Dutch Honeysuckle

Family/Genus: Caprifolaceae/ Lonicera

Etymological Root: Lonicera (Latin) named after Adam Lonitzer a 16th century German botanist.

Periclymenum is from the Greek mythology, Argonaut Periklymenon, who could change shape, referencing how honeysuckle flowers change shape and colour. Serotina (Latin) from serus (late) and in botany "appearing later in the season than usual". Honeysuckle derives from the sweet nectar obtainable from it's tubular flowers.

**Type:** Climber (deciduous, perennial)

#### Ultimate size

**Max Height:** 4.0 - 8.0m

Max Width: 1.0 - 1.5m

# **Growing Conditions**

**Aspect:** Full sun or partial shade. Any aspect, exposed or sheltered.

Soil: Chalk, Clay, Loam, Chalk.

pH: Acid, Neutral, Alkaline.

Moisture: Moist, well-drained soil.

# **Other**

**Cultivation**: Hardy ( -20° - -15°C). May suffer from powdery mildew. Can get aphids, and thrips.

**Native:** Cultivar of native *L. per-iclymenum* found in most of Europe including the UK.

**Toxicity:** Foliage and fruits toxic, and irritant to skin.

**Interesting Facts:** 

# Lonicera periclymenum 'Serotina'

	Spring	Summer	Autumn	Winter
Foliage: Vigorous woody twining climber with paired, simple, ovate, mid-				
green leaves to 6cm long, glaucous underneath.	7	9	9	
Flowers: Terminal clusters of tubular, 2-		***	***	
lipped, deep red-purple outside, yellow within to 4cm long.		-555-	÷	
Fruit:. Bright red berries.				3

# Landscape Design

**Uses in Landscape:** Cottage and informal gardens, Coastal gardens, Wildlife gardens. Wall-side borders, vertical spaces.

Planting Associations: *Trachelospermum jasminoides* (Star Jasmine), *Passiflora* 'Amethyst' (Passion Flower), *Cobaea scandens* (Cathederal Bells), *Clematis* 'Etoile Voilette' (Viticella Group), *Clematis* 'Prince Charles' (Late Large-Flowered Clematis), *Rosa* 'Albertine', *Lavandula augustifolia* 'Hidcote' (Lavender).

**Design Tips:** A fast growing climber of benefit to native fauna, attractive to pollinators and food lant to some *Lepidoptera spp.*. Can be used as a component of hedging or woodland planting. Choose for covering walls,, fences, trellises, pergolas or trees. Excellent for screening.



**Mythology**: It was believed that if honeysuckle grew around a home's entrance, it would bring good luck and stop any evil spirits from entering.

Medicinal Use: The flowers are antispasmodic, astringent, diuretic, expectorant, and used to reduce fever.

Latin Name: Rosa Canina

Common Name: Dog Rose.

Family/Genus: Rosacea/Rosa

Etymological Root: Rosa (Latin) is from the ancient Latin term for rose. Canina (Latin) means "dog-like" and may refer to this rose being inferior to cultivated garden roses or alternatively the historical use of this rose in treating the bite of a rabid dog.

Type: Climber (deciduous, perennial)

# **Ultimate size**

Max Height: 2.5 - 4.0m

Max Width: 1.5 - 2.5m

# **Growing Conditions**

**Aspect:** Full sun or partial shade. Any aspect, exposed or sheltered.

Soil: Chalk, Clay, Loam, Sand.

pH: Acid, Neutral, Alkaline.

Moisture: Moist, well-drained soil.

### **Other**

**Cultivation:** Hardy ( <-20° C). Grow in full sun with moderately fertile, humus-rich, moist but well-drained soil. For best flowering apply a balanced fertiliser and mulch in late winter or early spring.

Native: Yes, Europe including UK.

**Toxicity:** None. There is a layer of hairs around the seeds which can irritate the mouth and digestive tract.

# Rose Canina

	Spring	Summer	Autumn	Winter
Foliage: Vigorous rambling and arching habit. Spiny stems bear mid-green, alternate, imparipinnate leaves each with 5-7 leaflets with serrated margins. with	Ø	Ø	Ø	
foliage.  Flowers: Pink or white, cupped or flat flowers, 5 sepals 5cm across, solitary or in small clusters.		<b>**</b>		
Fruit:. Ovoid red fruits (hips) approx.1.5cm long.			3	

# Landscape Design

Uses in Landscape: Cottage and informal gardens, Wildlife gardens and meadows. Flower borders and beds. Useful in naturalistic applications where native planting is essential. A good choice for an informal mixed hedge or as part the understory of a woodland mix.

**Planting Associations:** Plant with other rose varieties, such as *Rosa pimpinellifolia* (Scottish Briar), *Rosa rugosa* 'Rubra' (Red Japanese Rose), and *Rosa* 'Fru Dagmar Hastrup.

**Design Tips:** A great wildlife plant for bees, butterflies, moths and birds. The density of growth provides shelter for birds and small mammals. May suffer from rose rust and powdery mildew. Can be attacked by aphids, and caterpillars, sawfly and leaf cutting bees. Tolerant of poor soil.



<u>Interesting Facts:</u> Rosehip syrup made from the Dog-rose has 4x the vitamin C of blackcurrant juice and 20x that of orange juice.

Cultural Associations: The Dog Rose is the county flower of Hampshire.

**Medicinal Use:** As a medicinal herb today, rosehips used for a wide range of conditions from headaches, sore throats, infections, sciatica, gout, rheumatism, stress and nervousness.

# Grasses



- 1. Carex testacea
- 2. Helictotrichon sempervirens
- 3. Miscanthus sinensis 'flamingo'
- 4. Pennisetum advena 'Rubrum'
- 5. Stipa tenuissima

Latin Name: Carex testacea

Common Name: New Zealand Sedge

Family/Genus: Cyperaceae

**Etymological Root:** *Carex* is the latin word for sedge while *testacea* or *'testaceous'* means "made of brick or tiles" or "brick colored".

Type: Ornamental grass (evergreen)

#### **Ultimate size**

Max Height: 0.5 - 1m

Max Width: 0.5 - 1m

#### **Growing Conditions**

**Aspect:** Full sun or partial shade. S,E or W facing, exposed or sheltered.

Soil: Chalk, Clay, Loam, Sand.

pH: Acid, Neutral, Alkaline.

**Moisture:** Moist but well-drained, well drained soil.

#### **Other**

**Cultivation:** Hardy ( -5 to -10° C). Easy to grow in most well-drained fertile soils. Will not tolerate excessive winter wet and avoid extremes of wet and dry.

Native: No, from New Zealand.

Toxicity: None.

Interesting Facts: None.

#### Carex testacea

	Spring	Summer	Autumn	Winter
Foliage: Evergreen tufts of triangular stems bearing linear or strap-shaped	Ø	Ø		Ø
leaves.			9	9
Flowers: Flowers are small, insignificant, green or brown and droop gracefully along the top of the stem.		*		
Fruit:				

#### Landscape Design

Uses in Landscape: Coastal, Gravel garden, Patio and container plants, Prairie planting, Cottage and informal garden, Banks and slopes, Flower borders and beds or Ground cover.

**Planting Associations:** Plant with *Hakonechloa macra 'Aureola'* (Hakone Grass), *Anaphalis triplinervis 'Sommerschnee'* (Pearly Everlasting), Heuchera 'Ginger Ale' (Coral Bells) or *Narcissus 'Jetfire'* (Cyclamieus Daffodil).

**Design Tips:** Useful in naturalistic planting design. Is susceptible to aphids. Low maintenance, but ensure dead leaves are removed in



#### Latin Name:

Helictotrichon sempervirens

Common Name: Blue Oat Grass

Family/Genus: Poaceae

Etymological Root: The genus name comes from the Greek *heliktos* meaning twisted, and *trichos* meaning hair, referring to the shape of the awn. The name *sempervirens* derives from the Latin *semper* meaning 'always' and *virens* meaning 'green'.

**Type:** Ornamental grass (evergreen perennial)

#### Ultimate size

Max Height: 1 - 1.5m

Max Width: 0.5 - 1m

#### **Growing Conditions**

**Aspect:** Full sun, Any aspect, exposed or sheltered.

Soil: Chalk, Clay, Loam, Sand.

pH: Neutral, Alkaline.

Moisture: Moist but well-drained

soil.

#### **Other**

Cultivation: H5 hardy in most places throughout the UK even in severe winters (-15 to -10). Grow in poor to moderately fertile, neutral to alkaline, well-drained soil.

Native: No, South-west Europe.

Toxicity: None.

#### Helictotrichon sempervirens

	Spring	Summer	Autumn	Winter
Foliage: a dense evergreen silver bule tufted grass which forms compact	9	9		9
tussocks of linear leaves, with erect and arching stems			9	
Flowers: During the summer small, straw-coloured spikelets form upon large open panicles on erect stems up to 1.4m in height.		*		
Fruit:				

#### Landscape Design

**Uses in Landscape:** Coastal, Architectural and rock gardens. Useful in flower borders and beds. When planted in mass groups could be used as groundcover.

Planting Associations: Plant with Euphorbia seguieriana subsp. Niciciana (Siberian Spurge), Nepeta 'Six Hills Giant' (Catmint), Lavandula angustifolia 'Munstead' (Lavender), Iris sibirica (Siberian Iris).

**Design Tips:** Low maintenance. Drought tolerant. Generally pest free but could be affected by a rust. Remove dead foliage and old flowered stems during spring.



#### **Interesting Facts:**

None.

**Latin Name:** *Miscanthus sinensis* 'flamingo'

**Common Name:** Flamingo grass, Chinese Silver Grass or Japanese

Silver Grass

Family/Genus: Poaceae

Etymological Root: *Miscanthus* gets it name from the Greek for stem, *miskos*, and flower, *anthos. siensis* means 'from China' in Latin. While flamingo describes the pink colour of the grass.

**Type:** Ornamental grass (deciduous, perennial)

#### Ultimate size

Max Height: 1 - 1.5m

Max Width: 0.5 - 1m

#### **Growing Conditions**

**Aspect:** Full sun, any aspect, exposed or sheltered.

Soil: Chalk, Clay, Loam, Sand.

pH: Acid, Neutral, Alkaline.

Moisture: Moist but well-drained

soil.

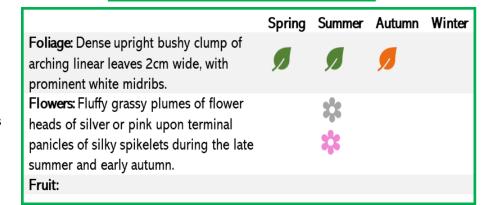
#### **Other**

**Cultivation:** Hardy ( <-15° C). Grow in any moderately fertile, moist but well-drained soil in full sun. Protect from excessive winter wet.

Native: No, from Asia.

Toxicity: None.

#### Miscanthus sinensis 'flamingo'



#### Landscape Design

**Uses in Landscape:** Architectural, Coastal, City, Courtyard, Cottage and informal gardens. Also perfect for flower borders or beds and prairie planting. It can be used as a graceful accent plant create a screen or hedge.

Planting Associations: Plant with *Anemone tomentosa* 'Robustissima' (Japanese Anemone), *Sedum* 'Herbstfreude' (Autumn Joy), *Echinacea* (Coneflowers), *Pennisetum setaceum* 'rubrum' (Purple Fountain Grass), *Persicaria amplexicaulis* (Mountain Fleece).

**Design Tips:** Can be considered invasive in parts of the USA. Ensure to cut foliage to the ground in late winter before new shoots appear. It is generally pest and disease free.



#### **Interesting Facts:**

Miscanthus sinensis is a candidate for bioenergy production due to its high yield, even in high stress environments, easy propagation, effective nutrient cycling, and high genetic variation - **From** the ecology and agronomy of "Miscanthus sinensis", a species important to bioenergy crop development, in its native range in Japan, by Stewart R, Toma Y, Fernández FG, Nishiwaki A, Yamada T, Bollero G (2009).

Latin Name: Pennisetum advena

'Rubrum'

Common Name: Fountain grass

'Rubrum'

Family/Genus: Poaceae

Etymological Root: Pennisetum comes from the Latin penna ("feather") and seta ("bristle") referring to the long bristles coated in plume like hairs. While Rubrum refers to the colour red/burgundy red in latin.

**Type:** Ornamental grass (deciduous, perennial)

#### <u>Ultimate size</u>

Max Height: 1 - 1.5m

Max Width: 0.5 - 1m

#### **Growing Conditions**

**Aspect:** Full sun, S or W facing, sheltered.

Soil: Loam, Sand.

pH: Acid, Neutral, Alkaline.

Moisture: Well-drained soil.

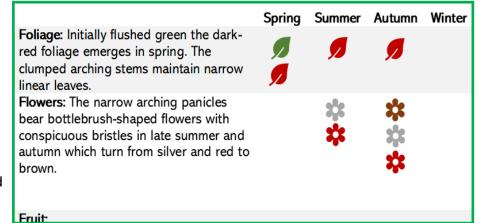
#### Other

Cultivation: H3 hardy in coastal and relatively mild parts of the UK (-5 to 1). Drought and heat tolerant, but requires frost-free conditions so will need winter protection or moving into an unheated glasshouse if grown in a pot.

Native: No, from Africa, southwestern Asia to Arabian Peninsula.

Toxicity: None.

#### Pennisetum advena 'Rubrum'



### Landscape Design

**Uses in Landscape:** Coastal, City, Courtyard, Cottage, Informal gardens or patio and container plants. It is a versatile plant that can provide a dramatic effect in groups. It is ideal in boarders where it provides texture, colour and contrast. Can soften hard landscaping.

Planting Associations: Plant with *crocosmia* 'Lucifer' (Montbretia), *Verbena bonariensis* (Tall Verbena), *Berberis thunbergii f. atropurpurea* (Purple Japanese Barberry), *Helichrysum petiolare* (Licorice Plant) or *Salvia farinacea* 'Victoria Blue' (Mealy Cup Sage).

**Design Tips:** Drought tolerant. Low maintenance. Generally pest and disease free. Cut back last seasons foliage in early spring.



#### **Interesting Facts:**

Pennisetum advena 'Rubrum' is a hybrid between P. macrostachyum and P. setaceum.

Latin Name: Stipa tenuissima

Common Name: Mexican feather

grass

Family/Genus: Poaceae

Etymological Root: *Stipa* describes the feather like seeds on the grass. *Tenuissima* is derived from the Latin *tenuis* meaning 'slender' and the whole name to mean 'most slender'.

**Type:** Ornamental grass (Deciduous)

#### **Ultimate size**

Max Height: 0.5 - 1 m

Max Width: 0.5 - 1m

#### **Growing Conditions**

**Aspect:** Full sun. Any aspect, exposed or sheltered.

Soil: Chalk, Clay, Loam, Sand.

pH: Acid, Neutral, Alkaline.

Moisture: Moist but well-drained.

#### **Other**

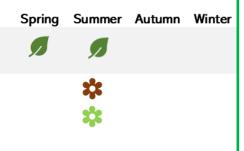
**Cultivation**: Grow in medium to light, moderately fertile soil in full

Native: No, from S America.

Toxicity: None.

#### Stipa tenuissima

Foliage: Compact upright tufts os threadlike folded or rolled, arching, linear leaves, up to 60cm tall. Flowers: Flowers are small feathery flowering upon drooping panicles.



#### Fruit:

#### Landscape Design

**Uses in Landscape:** Architectural, City and courtyard gardens, Cottage and informal garden, Flower borders and beds.

**Planting Associations:** Plant with other perennials such as *Crocosmia* 'Lucifer' (Montbretia), *Salvia nemorosa 'caradonna'* (Sage), *Allium sphaerocephalon* (Drumstick allium) or *Eschscholzia californica* (Californian Poppy).

**Design Tips:** A low maintenance drought tolerant plant, can be used in pots or in flower boarders giving a natural feel to a space. It is generally pest and disease free. Leaves can be cut back when they die off.



**Interesting Facts:** None

## Hedging



- 1. Carpinus betulus
- 2. Cornus mas
- 3. Photina x fraseri 'Red Robin'
- 4. Prunus spinosa
- 5. Taxus baccata

Latin Name: Carpinus betulus

Common Name: Common Hornbeam

Family/Genus: Betulaceae/Carpinus

Etymological Root: Carpinus (Latin) was the ancient Latin name for this species. Betulus (Latin) is the Latin name for Birch which has similar catkins and is also a Betulaceae. The common name Hornbeam comes from the hardness of the wood, like horn and the Old English for tree "beam".

**Type:** Hedging/Tree Deciduous, perennial

#### Ultimate size

Max Height: 12m + Max Width: 8.0m +

#### **Growing Conditions**

**Aspect:** Full-sun, Partial shade. Any aspect. Exposed or sheltered.

Soil: Chalk, Clay, Loam, Sand.

pH: Acid, Neutral, Alkaline

Moisture: Moist, well-drained soil.

#### **Other**

Cultivation: Hardy( -20°C). Susceptible to powdery mildew and coral spot. May be susceptible to aphids.

Native: Yes. To Western Asia, Eu-

rope including the UK.

Toxicity: None

#### Carpinus betulus

	Spring	Summer	Autumn	Winter
Foliage: Smooth fluted grey bark. Ovate, serrated, ribbed mid green leaves, 7-12cm long. Turning yellow to orange in autumn.	Ø	Я	D	
Flowers: Monoecious: Separate female (green 12cm long) and male (yellow 3cm long) catkins.	**			
Fruit: Winged nutlets: Racemes of green fruit with 3 lobed bracts maturing to yellow brown			3	

#### Landscape Design

**Uses in Landscape:** Informal and cottage gardens, Architectural, hedges and screening. Known for attracting birds, provides shelter, good wildlife hedge. Can create privacy screen or topiary.

Planting Associations: Alchimillia mollis (Lady's Mantle), Hosta spp. (Plantain Lilly), Rudbckia fulgida (Black-Eyed Susan), Allium spp. (Ornamental Onions).

**Design Tips:** Because the plant retains its juvenile leaves in winter and regular trimming ensures all new growth is juvenile, hedges perform the function of an evergreen barrier with green leaves in the growing period and brown leaves during winter.



<u>Interesting Facts:</u> Hornbeam timber is the hardest wood of any tree in Europe. It is mainly used for furniture, flooring and turning. Traditionally it was made into Ox yokes for ploughing.

#### **Cultural Associations:**

Mythology: Romans used hornbeam to make their chariots because of the strength of the wood.

**Medicinal Use:** A tonic made from hornbeam was said to relieve tiredness and exhaustion, and its leaves were used to stop bleeding and heal wounds.

Latin Name: Cornus mas

Common Name: Cornelian

Family/Genus: Cornaceae/Cornus

Etymological Root: Cornus comes from cornu (Latin) meaning "horn" referencing the hardness of the wood. Mas means male, derived from another of its old names "Male Cornel" given by John Gerard in his 17th Century herbal. The common name is derived from the Latin name Cornus.

**Type:** Hedging/Shrub, evergreen, perennial

#### **Ultimate size**

Max Height: 2.5 - 4.0m

Max Width: 2.5 - 4.0m

#### **Growing Conditions**

**Aspect:** Full-sun, Partial shade. Any aspect. Exposed or sheltered.

Soil: Chalk, Clay, Loam, Sand.

pH: Acid, Neutral, Alkaline

Moisture: Moist, well-drained soil.

#### **Other**

**Cultivation:** Hardy( -20 - -15°C). Generally pest and disease free.

**Native:** Not to UK, from central, southern and western Asia.

**Toxicity:** None reported.

#### Cornus mas

	Spring	Summer	Autumn	Winter
Foliage: Ovate, dark green leaves to 10cm long, turning red/purple in autumn.	Ø	Ø	Ø	
Flowers: Yellow flowers are produced on small umbels to 2cm across in winter (before the leaves).				₩
Fruit: Oblong-ellipsoid, fleshy, bright red fruit.		3	3	

#### Landscape Design

**Uses in Landscape:** Hedges and screening, cottage and informal gardens, Flower borders and beds.

Planting Associations: Polygonatum odoratum 'Variegatum' (Solomon's Seal), Helleborus Winter Jewels 'Amber Gem', Amsonia tabernaemontana (Blue Star), Galanthus nivalis (Snowdrop).

**Design Tips:** valued for its bright yellow flowers in winter and red/purple leaves in autumn. Ecologically, berries may be eaten by birds and flowers attract pollinators. Best as a hedge, screen or foundation plant.



<u>Interesting Facts:</u> The wood of C. mas is extremely dense and sinks in water, Its density makes it usefl for crafting tool handles. From the 7th century BC Greek craftsmen used its wood for weapons - spears, javelins and bows.

**Medicinal Use:** *C. mas* fruits have been used for centuries as traditional cuisine and folk medicine in various countries of Europe and Asia for treatment of a range of diseases Some indications from ethnomedicines have been validated as a potential treatment of diabetes, obesity, hyperlipidaemia and gastrointestinal disorders. Future studies are needed for commercial application in modern medicines.

Latin Name: Photina x fraseri 'Red

Robin'

Common Name: Christmas Berry

'Red Robin'

Family/Genus: Rosaceae/Photina

Etymological Root: *Photina* (Greek) means shining in reference to the glossy leaves. *X Fraseri* is a hybrid named after Fraser's Nursery in Birmingham, USA. 'Red Robin' is a reference to the bright waxy red of new shoots and leaves. The name Christmas Berry comes from the red fruits which provide beautiful winter decoration.

**Type:** Hedging/Shrub, evergreen, perennial

#### **Ultimate size**

Max Height: 2.5 - 4.0m

Max Width: 2.5 - 4.0m

#### **Growing Conditions**

**Aspect:** Full-sun, Partial shade. Any aspect. Exposed or sheltered.

Soil: Clay, Loam, Sand.

pH: Acid, Neutral

Moisture: Moist, well-drained soil.

#### **Other**

**Cultivation:** Hardy( -15 - -10°C). May be affected by fireblight. Leaves my be eaten by vine weevils.

Native: Not to UK, from temperate

regions of Asia.

**Toxicity:** Yes especially to grazing animals and should not be planted where they may encounter it.

#### Photina x fraseri 'Red Robin'

	Spring	Summer	Autumn	Winter
Foliage: Alternate, inversely lance- shaped to elliptic, leathery, dark-green leaves, 10-20cm long, bright red when young.	9	Ø	Ø	Ø
Flowers: Small, 5-petalled, white flowers in corymb-like panicles to 15cm across. Smell unpleasant.	₩			
Fruit: Flowers sometimes followed by spherical red fruit – pome, 5-12mm across.			3	

#### Landscape Design

**Uses in Landscape:** Hedges and screening.

**Planting Associations:** *Euonymous fortunei* 'Emerald 'n' Gold' and *Euonymous fortune* Emerald Gaiety; are classic companions in form size and colour. Hebes also work well. Lavenders contrast well. Ornamental grasses offer a wispier contrast. Bulbs also provide colour contrast.

**Design Tips:** useful as a low maintenance hedge or screen which provides spring colour. Ecologically valuable as it attracts pollinating insects.



<u>Interesting Facts:</u> Some varieties of Photina are toxic due to the presence of cyanogenic glycoside. When leaves and fruit are chewed the compounds are rapidly converted to hydrogen cyanide a respiratory poison. The amount of cyanide produced varies between taxa, is greatest in young leaves and particularly affects ruminants.

Medicinal Use: None.

Latin Name: Prunus spinosa

Common Name: Blackthorn, Sloe

Family/Genus: Rosaceae, Prunus

Etymological Root: *Prunus* is the Latin name of the plum tree. *Spinosa* (Latin) is derived from *spinosum* meaning thorny indicting the thornlike spurs found on this plant. The common name Blackthorn also relates to the thorny nature of this shrub and possibly its very dark coloured bark. Sloe is the word used for the fruit and comes from Old English name "slah".

**Type:** Hedging/Shrub/Small tree, decidulous, perennial

#### Ultimate size

Max Height: 2.5 - 4.0m

Max Width: 2.5 - 4.0m

#### **Growing Conditions**

**Aspect:** Full-sun, dappled shade. Any aspect. Exposed or sheltered.

Soil: Chalk, Clay, Loam, Sand.

pH: Acid, Neutral, Alkaline

Moisture: Moist, well-drained soil.

#### **Other**

Cultivation: Hardy( -20°C). Susceptible to aphid damage, may be subject to silver leaf and blossom wilt.

**Native:** To UK, range southern-central Europe to Asia Minor.

Toxicity: Toxic to cats, dogs and

horses.

#### Interesting Facts:

# Foliage: Thorny, with ovate, mid to deep-green leaves to 5cm long. Flowers: Solitary, rarely paired, bowl shaped flowers to 1.5cm across with 5 creamy-white petals. Flowers before the leaves open. Fruit:. Ovoid, edible, black with a

Prunus spinosa

#### Landscape Design

across.

purple-blue waxy bloom fruit 1.5 cm

**Uses in Landscape:** Hedges and screening, wildlife gardens and wildflower meadows, coastal gardens.

Planting Associations: Can form part of a native woodland planting or mixed hedge. Underplant with spring bulbs: *Galanthus spp.* (Snowdrops), Crocus spp., *Narcissus spp.* (Daffodils) to flower before the leaves open. For a natural look plant with *Anthriscus sylvestris* 'Ravenswing' (Cow Parsley), *Gallium odoratum* (White woodruff).

Design Tips: Low maintenance, traditionally used to make a natural informal hedge and the sharp thorns make it useful as a defensive hedge. Provides interest throughout the year with white flowers in spring and spherical purple berries (sloes) in autumn. Extremely valuable as a wildlife plant.



**Mythology:** Blackthorn was long associated with witchcraft, and it is said that witches' wands and staffs were made using blackthorn wood.

Medicinal Use: Traditionally, blackthorn (bark, flowers and fruit) was used in many remedies including tonics and syrups that 'cleansed the blood', aided digestive complaints and eased rheumatism. These days, the

Latin Name: Taxus baccata

Common Name: Common Yew, Eng-

lish Yew

Family/Genus: Taxaceae, Taxus

Etymological Root: *Taxus* is the Latin name of the Yew tree which is probably derived from *taxon* (Greek) meaning bow - bows were made from Yew wood. Baccata is derived from baca (Latin) meaning berried. The names Common or English Yew reflect the plant as native to the UK.

**Type:** Hedging/Shrub/Tree, evergreen, perennial.

#### Ultimate size

Max Height: 12m +

Max Width: 8m +

#### **Growing Conditions**

**Aspect:** Full-sun, partial or full shade. Any aspect. Exposed or sheltered.

Soil: Chalk, Clay, Loam, Sand.

pH: Acid, Neutral, Alkaline

Moisture: Well-drained soil.

#### Other

Cultivation: Hardy( -20°C). May be attacked by tortrix moth, vine weevil, gall mites and scale insects.

Native: To UK,

**Toxicity:** All parts are highly poisonous except the fleshy fruit surrounding the seed, it should not be located close to playgrounds and schools.

#### Taxus baccata

	Spring	Summer	Autumn	Winter
Foliage: Purple-brown bark and shoots that remain green for several years. Linear, glossy or matt dark green leaves 2-3 cm long and 2-3mm wide, in 2 flat rows wither side of the stem.	Ø	Ø	Ø	Я
Flowers: Yew is dioecious (male and female flowers on separate trees) Male flowers are insignificant white-yellow globe-like structures. Female flowers are bud-like and scaly, green when young, becoming brown and acorn-like with age.	₩			
Fruit:. Single green seed with juice, sweet usually red arils.			3	

#### Landscape Design

**Uses in Landscape**: Hedges and screening. Often serve as foundation plantings. Good plant for topiary. Clipped topiary hedges can be used to add traditional shapes and structure to a garden or clean contrasting lines to a modern space.

**Planting Associations:** The dark green of a yew hedge provides a good backdrop for either a brightly coloured contrasting border or more subtle planting.

Design Tips: Low maintenance, will tolerate urban pollution.



Interesting Facts: Yew is the longest living tree in Britain with recorded lifespans of over 2000 years.

**Religion:** *T. baccata* has a strong association with religion and is traditionally found in churchyards. They may have been used to stop 'commoners' grazing their cattle there. Yew trees were used as symbols of immortality but also omens of doom. For many centuries it was the custom to carry yew branches on Palm Sunday and at funerals.

Medicinal Use: Paclitaxel is an anticancer drug originally isolated from the bark of the Yew tree.

## Aquatics



- 1. Geum rivale
- 2. Iris laevigata
- 3. Lysichiton camtschatcensis
- 4. Nymphea alba
- 5. Typha laxmannii

Latin Name: Geum rival

**Common Name:** Water, Nodding or Drooping Avens. Chocolate Root.

Family/Genus: Rosaceae/Geum

Etymological Root: Geum (Greek) from the geuo meaning'to give an agreeable flavour' as the roots of some species are aromatic. Rivale (Latin) comes from rivulus meaning rivulet or small stream where the plant is habitually found. Avens is the popular English name for Geum spp., the other elements of the common names reflect the location or appearance of the plant while Chocolate Root refers to its culinary use.

**Type:** Deciduous, marginal, herbaceous perennial.

#### **Ultimate size**

Max Height: up to 0.1- 0.5m

Max Width: 0.1 - 0.5m

#### **Growing Conditions**

**Aspect:** Full-sun or partial shade. East-facing, South-facing, East-facing or West-facing. Exposed or sheltered.

Soil: Chalk, Loam, Sand.

pH: Acid, Alkaline, Neutral.

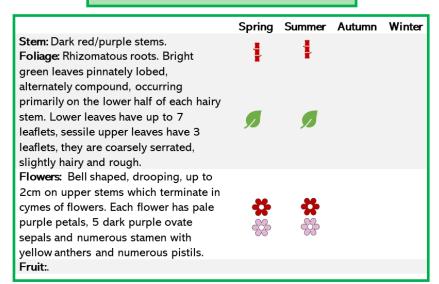
Moisture: Moist soils but well drained.

#### **Other**

Cultivation: Hardy( -20 °C). Wet planting depth 0 -150cm. No serious pest or disease issues.

Native: Yes—Europe (except Mediterranean) including UK, Central Asia and

#### Geum rivale



#### Landscape Design

**Uses in Landscape:** Cottage and informal gardens, Wildlife gardens, underplanting roses and shrubs, Bog gardens and around ponds and streams.

**Planting Associations:** Plant with *Iris lavegata* (Water Iris), *Oenanthe javanica* 'Flamingo' (Water Dropwort), Equisetum hymale (Horsetail), Carex Iimosa (Bog Sedge).

**Design Tips:** Useful as a low ground cover perennial with a long flowering period and particularly useful for planting in



<u>Interesting Facts:</u> If boiled its roots yield a liquid that tastes faintly of chocolate, its dried roots have been used as seasoning and are also said to have moth repellent properties.

*G.rivale* is a component of 'purple moor grass and rush pastures' habitat occurring on poorly drained neutral and acidic soils of lowlands and upland fringe (found in the South-West of England especially Devon) and is a Biodiversity Action Plan habitat in the UK.

Medicinal Use: Used in herbal medicine as a digestive, anti-inflammatory and astringent.

Latin Name: Iris laevigata

Common Name: Water Iris, Japanese

Iris, Smooth Iris.

Family/Genus: Iridaceae/Iris

Etymological Root: Iris (Greek) means rainbow referring to the variety of flower colours found among the many species. Laevigata (Latin) means smooth, because, being more dependent on water for support, this Iris lacks the strong midrib in the foliage seen in other Japanese Irises. Water Iris reflects the aquatic growth of this plant (5-15cm depth.) Japanese Iris as the plant is native to Japan.

Type: Aquatic or marginal, Deciduous, perennial.

#### **Ultimate size**

**Max Height:** 0.5 - 1.0m

Max Width: 0.1 - 0.5m

#### **Growing Conditions**

Aspect: Full-sun. South-facing or West-facing. Exposed or sheltered.

Soil: Clay, Loam.

**pH:** Acid, Neutral.

Moisture: Poorly-drained.

#### **Other**

Cultivation: Hardy( -15 - -20°C). Preferred depth of water O-15cm. Sawflies may be a problem, can be attacked by slugs and snails.

Native: No. Native to temperate Asia, were it grows on the banks of streams and ponds.

Toxicity: Potentially harmful, ingestion may cause severe discomfort.

## **Interesting Facts:**

Iris laevigata

Spring

Summer

Autumn

Winter

Foliage: Rhizomatous. Clumps of erect, sword-shaped broad leaves to 40cm long, lime-green. Flowers: Unbranched (simple) stem bears 2-4 purple-blue flowers, petals as 3 standards & 3 falls, flowers 8-10cm across, beardless, the standards much shorter than the falls. Falls with a white central ridge. Fruit:.

#### Landscape Design

Uses in Landscape: City and courtyard gardens, Informal and cottage gardens, Flower borders and beds, bog gardens, water gardens or near streams or ponds.

Planting Associations: Plant alongside Primula pulverulenta (Candelabra Primrose), for contrast or Carex elata 'Aurea' (Bowles'Golden Sedge). To brighten a pond margin, plant with Euphorbia griffithii 'Fireglow' (Spurge) and Hosta sieboldiana 'Elegans' (Plantain Lily).

Design Tips: Spectacular when planted in large groupings where it develops a bouquet effect and rises up to 75cm. Effective as a spreading ground cover marginal plant suitable for planting at the edges of water bodies.



Cultural Associations: I. laevigata is called Kakitsubata in Japanese. In Chiryu (Aichi prefecture), Yatsuhashi Kakitsuba garden at the Muryojuji Temple is known for its Kakitsubata garden dating back to the Heian period (794-1185CE). The Nezu Museum in Tokyo has a pair of painted screen by Ogata Korin, Irises, the most famous depiction of Kakitsubata art.

Medicinal Use: None

Latin Name: Lysichiton camtschatcensis

Common Name: Asian or White

Skunk Cabbage.

Family/Genus: Araceae/Lysichiton

**Etymological** Root: Lysichiton (Greek) from lusis meaning loose and xitwn meaning tunic. Camtschatcensis (Latin) means from Kamchatka. In the common name Asian and white refer to the origin and colour of the flower respectively. Skunk cabbage refers to the slightly foxy smell of the plant. And the cabbage-like appearance of the leaves.

**Type: Marginal,** aquatic, perennial, preferring waterlogged conditions.

#### **Ultimate size**

Max Height: up to 0.5-1.0m

Max Width: 0.1 - 0.5m

#### **Growing Conditions**

**Aspect:** Full-sun or partial shade. East-facing, South-facing or West-facing. Exposed or sheltered.

Soil: Loam.

pH: Acid, Alkaline, Neutral.

Moisture: Poorly-drained.

#### <u>Other</u>

Cultivation: Hardy( <-20°C). Generally pest and disease free.

Native: No. Native to Japan and the Kamchatka Peninsula of Eastern Russia.

**Toxicity:** Yes, harmful if eaten, skin/ eye irritant. Rich in calcium oxylate.

#### Lysichiton camtschatcensis

Foliage: Rhizomatous, clump forming.
Basal clusters of ovate mid-green leaves with distinctive veining, up to 90cm long.
Flowers: Fragrant white flowers, lance shaped pointed spathes, appear before the leaves, up to 30cm in height.

Spring Summer Autumn Winter

Winter

Fruit:

#### Landscape Design

**Uses in Landscape:** Water gardens, bog gardens or in ponds or lakes.

Planting Associations: Plant with *Iris pseudacorus* (Yellow Iris)

Carex elata 'Aurea' (Bowles' Golden Sedge), *Primula denticulate*(Drumstick Primula), *Primula vulgaris* (Primrose) or Anemone *nemorosa* (Wood Anemone)..

**Design Tips:** Useful for marginal planting to soften the edges of lakes, ponds and streams providing a mass of spring flowers. *L. camschatcensis* attracts beetles as pollinators. The small of the flowers or cushed foliage is not particularly pleasant so plant away from seating areas.



<u>Interesting Facts:</u> Lysichiton americanus (American Skunk Cabbage) has been classed as an alien invasive species and it is against the law in the UK to keep, cultivate, sell or exchange this species.

Medicinal Use: None known.

Latin Name: Nymphea alba

Common Name: European or White

Water Lily.

Family/Genus: Nymphaceae/

*INymphea* 

Etymological Root: *Nymphea* (Greek) from mythology where nymphs were minor deities associated with specific locatopns including springs and small bodies of water. *Alba* (Latin) means white or pale..

Type: Aquatic, deciduos perennial.

**Ultimate size** 

Max Height: 10cm

Max Width: 1.0 - 1.5m

**Growing Conditions** 

**Aspect:** Full-sun. South-facing or West-facing. Exposed or sheltered.

Soil: Clay, Loam.

pH: Acid, Alkaline, Neutral.

Moisture: Poorly-drained.

**Other** 

Cultivation: Hardy( -15 - -10°C).

Planting depth of water 30 150cm. Susceptible to Water-lily
beetle and water-lily aphid. May be
affected by crown rot.

Native: Yes. To Europe including the UK, parts of North Africa and the Middle East.

**Toxicity:** Yes.— contains alkaloids nupharine and nymphaeine.

#### Nymphea alba

	Spring	Summer	Autumn	Winter
Foliage: Rhizomes anchor the plant to the pond bed. Dark green leaves (often red underneath) with floating habit, glossy, round, cleft into 2 lobes, with a basal sinus and long leaf-stalk, up to 30cm across.	Ø	Я		
Flowers: White, cup shaped becoming star shaped with maturity up to 20cm across. 4 sepals and numerous narrow petals, yellow stamen. Day blooming.	₩;			
Fruit:.				

#### Landscape Design

**Uses in Landscape:** In ponds within City and courtyard gardens, informal and cottage gardens. Water gardens or lakes.

Planting Associations: Plant with Lysimachia nummularia 'Aurea' (Golden Creeping Jenny), *Iris pseudacorus* (Yellow Iris) *Carex elata* 'Aurea' (Bowles' Golden Sedge).

**Design Tips:** Useful in water planting schemes within large bodies of still / slow moving water. This plant will also reduce nitrogen levels in water bodies. *N. alba* will attract aquatic insects and provides cover for amhibians.



#### **Interesting Facts:**

**Cultural Associations:** In Hinduism waterlilies represent rebirth as they close every evening and reopen with the sun. In Buddhism they represent enlightenment as the beautiful flowers emerge from the muddy water.

**Mythology:** Associated with Greek and Italian Nymph goddesses associated with water including wells and springs.

**Medicinal Use:** *N. alba* contains the alkaloid nymphaeine which is a sedative and anaphrodisiac. Traditionally the roots were crushed and mixed with wine and consumed by nuns and monks.

Latin Name: Typha laxmannii

**Common Name:** Bullrush, Graceful or Narrow leaved European Cattail

Family/Genus: Typhaceae/Typha

Etymological Root: *Typha* (Greek) from the Greek name for this plant 'Tufh'. *Laxmnnii* (Latin) is named for Erik Gustavovich Laxmann (1737-96), Finnish scientist and explorer. The name cattail comes from the cylindrical furry spike of the female flower. The origin of bullrush is not clear.

**Type:** Deciduous, marginal, perennial, preferring waterlogged conditions.

#### **Ultimate size**

Max Height: up to 1.0-1.5m

Max Width: 1.0 - 1.5m

#### **Growing Conditions**

**Aspect:** Full-sun. East-facing, South-facing or West-facing. Exposed or sheltered.

Soil: Clay, Loam.

pH: Acid, Alkaline, Neutral.

Moisture: Poorly-drained.

#### <u>Other</u>

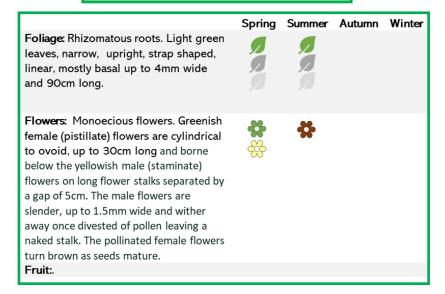
Cultivation: Hardy( -20 - -15°C). Wet planting depth 0 -150cm. Generally pest and disease free.

Native: Yes—Southwest Asia and Eu-

rope.

Interesting Facts: *T, laxmannii* roots can be boiled and eaten like potatoes or macerated and boiled to form a sweet syrup. They can also be dried and ground into a flour. He stems make a good thatch and are a good source of biomass, making good compost or used as a source of fuel. A fibre obtained from the leaves has also been used in making paper.

#### Typha laxmannii



#### Landscape Design

**Uses in Landscape:** Water gardens or in ponds or lakes. Wldlife gardens.

**Planting Associations:** Plant with Nymphea alba (White Waterlily), *Iris pseudacorus* (Yellow Iris), Caltha palustris (Marsh Marigold) or Myosotis scorpiodes (Water forget-me-not).

**Design Tips:** Useful for ponds streams and lake planting. This plant is suitable for use as part of a Sustainable Drainage System (SUDS). It may be used for planting in drainage ditches, swales and balancing ponds. *T. laxmannii* can be invasive, spreading by rizomes.



Bullrushes are important in Judeo-Christian religions as it is believed that Moses was found among bullrushes. In is more likely that Moses was found amongst Papyrus stems in Egypt.

Medicinal Use: None known.