

PLANTS AND PLANTING IN MEDITERRANEAN LANDSCAPES

(VOLUME 1)

Editors

Juan José Galán Vivas
Vicente Caballer Mellado



EVERGREEN TREES

DECIDUOUS TREES

SHRUBS

CONIFERS

PALM TREES

MEDICINAL AND AROMATIC

GROUNDCOVERS

HEDGES

CLIMBERS



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SHRUBS

Chapter 5**SHRUBS**

- Subchapter 5.1** Introduction
- Subchapter 5.2** Species
- Subchapter 5.3** Commercialization, use and planting
- Subchapter 5.4** Maintenance
- Subchapter 5.5** Bibliography

Subchapter 5.1**Introduction**

Shrubs in gardening terms, refers to all woody plants with multiple or very short trunks and that measure between one and three meters. Smaller plants of this type are referred to as bushes.

Shrubs play an intermediate role between trees (volumes) and herbaceous plants (ground cover). They act on a more human scale and with their masses and groupings they can also add volume to areas and scenes in the garden. They are useful for establishing successive planes, layers, or levels in the green component of a park or a garden; they serve to conceal areas, limit others, or impede access to certain places without obstructing vision. Shrubs can also cover slopes and are frequently used to draw attention to a certain point or to break the monotony of a landscape.

Shrubs can provide privacy to an area or corner of the garden, or block unwanted views such as service areas, garbage containers, etc. Tall bushes can provide a background for planting beds and other plants of medium and small sizes.

By planting two tall shrubs or adequately arranging several of them, it is possible to frame and add perspective to an area and give it visual importance.

When choosing the right kind of shrub, the landscape architect needs to ask these four questions: Where? Why? When? Which one? The location, function, and season in which one species could be more spectacular than another is essential to improve the effects, arguments and purpose of the design.

The list of shrub species is very extensive, and their ornamental characteristics are varied: there are deciduous, evergreen, ornamental for their foliage, their flowers or their fruits, acidophilic and resistant to lime, and there are those adapted to very different ecological situations.

Shrubs provide the garden with its general shape and constitute the framework where the rest of the plants are located. Their functions in the garden are multiple, providing elements of separation and offering the advantages of evergreen plants, seasonal metamorphosis with a variety of colors in the case of deciduous shrubs, and a wide range of shapes and fragrances.

The arrangement of shrubs in the garden requires the application of compositional criteria that combine the different forms, masses, foliage, colors, of distinct shrub species.

By searching for the right harmony with shapes and colors or by contrasting them, an intelligent compositional use of shrubs will give rise to splendid results, provided that the set is not overloaded with an excess of species and/or the planting becomes too dense.

Care must be taken with the original habitat of each species and the ecological and cultural needs that derive from it. For example, rose bushes do not have the same requirements in terms of soil or lighting as azaleas do.

The choice of species is also related to the times of the year in which the garden is going to be used. For instance, if, in public parks, a green zone is to be in continuous use during the winter, evergreen species should be used more abundantly.

There are big shrubs such as *Prunus laurocerasus* that, due to their size, should be isolated. In other species such as *Nerium oleander*, *Pyracantha coccinea* or *Cotoneaster spp.*, their flowers and fruits and other special characteristics make them worthy of being planted individually or in monovarietal groups.

On other occasions, certain species of shrubs with lesser individual importance can play a positive role as part of a mixed groups as long as they meet the aforementioned criteria.

In a private and small garden, a single specimen of *Jasminum mesnyi* can offer a sufficiently expressive mass and color effect. However, in a large public park the sense of scale makes it necessary to group five, ten or more specimens so that they can be properly perceived by the observer at a medium or long distance. This group of plants will seem like one single large specimen with the typical characters of the species.

Another aspect to consider in the use of shrubs for landscape purposes is the formation of the undergrowth. When a grove is established, an intermediate plant layer must be created that gives support to the tree layer by offering a transition between the herbaceous plants and ground covers, and the crowns of the trees.

Some shrubs thrive well when grown in flower boxes or decorative containers and placed on patios, terraces, pool areas, etc... Some species belonging to *Viburnum*, *Escallonia*, *Mahonia*, *Euonymus* are commonly used for these purposes.

Shrubs can also serve as windbreakers by acting as a type of shield against cold winds. This is achieved by forming masses of medium to high shrubs that use their foliage as protection (*Myoporum*, *Pittosporum*, *Cornus*). They can also offer an interesting and decorative flowering (*Hibiscus*, *Nerium*, *Ficus*).

A practical detail when planting to achieve an appearance of a certain maturity in a newly planted garden is to include among the shrub specimens a certain number that have reached already half their development.

Subchapter 5.2 Species

This subchapter outlines **51 species of shrubs** used in landscape design. They have been selected primarily for their ornamental use, botanical interest, or other characteristics. As a result, an in-depth analysis is carried out in this subchapter.

Firstly, a table shows the different parameters and values that have been used to describe each species in its specific botanic datasheet.

Each sheet gathers the information of a certain shrub species and describes its botanical and ecological aspects, uses, cultivation, and other characteristics of interest, including its commercialization. This information is complemented by photographic information, which shows the general appearance of the shrub species and different morphological details.

PARAMETERS AND VALUES USED FOR THE BOTANIC DATASHEET	
TAXONOMY	
TAXONOMIC RANKS	DIVISION, SUBDIVISION, TYPE, ORDER, FAMILY
VARIETIES	VARIETIES OF INTEREST
STRUCTURE	
SHAPE	GLOBE-SHAPED/ROUND, OVAL, COLUMNAR, CONE, EXTENDED, IRREGULAR, PARASOL, FAN-SHAPED, HORIZONTAL, PALMIFORM, PENDULAR
HEIGHT	AS APPROPRIATE- IN METERS (M) OR CENTIMETERS (CM)
DIAMETER	AS APPROPRIATE -IN M OR CM
TEXTURE	TEXTURE: LEAVES>10CM= COARSE. LEAVES OR LEAFLETS BETWEEN 2-10CM= MEDIUM. LEAVES OR LEAFLETS <2CM= FINE
SHADE	FULL, PARTIAL
ROOT	TAPROOT, FASCICULATE, OBLIQUE, HORIZONTAL, AERIAL, ADVENTITIOUS
MORPHOLOGY	
TRUNK	
BARK	SMOOTH, VERTICAL FISSURES, LONGITUDINAL FISSURES, DIAGONAL FISSURES; ROUGH, SCALY, CORKY WITH PLATES
COLOR OF BARK	GREYS, GREENISH GREY OR BLUISH GREY. SILVER; LIGHT GREEN, YELLOWISH, LIGHT BROWN, DARK, GREENISH, RED, REDDISH, PURPLE, YELLO.; BLACKISH, MARBLED, TWO-TONED, THREE-TONED, LIGHT GREY, DARK GREY
FOLIAGE	
LEAF TYPE	EVERGREEN, DECIDUOUS, SEMI-DECIDUOUS OR SEMI-EVERGREEN
LEAF SIZE	LENGTH (cm)
SIZE OF LEAFLET	LENGTH (cm)
COLOR OF UPPER SIDE (US)	PALE GREEN, LIGHT GREEN, DARK GREEN, BLUE/GREEN, GREY, PURPLE; PALE; YELLOW; VARIEGATED
COLOR OF LOWER SIDE (LS)	PALE GREEN, LIGHT GREEN, DARK GREEN, BLUE/GREEN, GREY PURPLE; PALE; YELLOW; VARIEGATED; RUST COLORED; SILVER
TEXTURE OF UPPER SIDE (US)	GLOSSY, ROUGH, GLABROUS, TOMENTOSE, HAIRY, ROUGH, SCALY, VISCOSE
TEXTURE OF LOWER SIDE (LS)	GLOSSY, ROUGH, GLABROUS, TOMENTOSE, HAIRY, ROUGH, SCALY, VISCOSE
COMPOUND LEAF	NO COMPOUND LEAVES YES. IMPARIPINNATE, PARIPINNATE, TRIFOLIATE, PALMATE, PALMIFORM, PALM, PINNATE, BIPINNATE
HARDNESS	CORIACEOUS, SOFT, SUCCULENT, HARD
ARRANGEMENT	OPPOSITE, ALTERNATE, WHORLED, ROSETTE
VENATION	PINNATE, PALMATE, PARALLEL, RETICULATE, ARCUATE, A3 MAIN VEINS
LEAF SHAPE	ROUNDED, LINEAR, LANCEOLATE, FALCATE, OVAL, OBLONG, ELLIPTIC, DELTOID, RHOMBOID, SPATULATE, ACICULAR GROUPS OF 2, ACICULAR GROUPS OF 3, ACICULAR GROUPS OF 5, ACICULAR GROUPS, ACICULAR IN 1 PLANE, ACICULAR IN SPIRAL, SCALE, PALMATE 7 LOBES, PALMATE 5 LOBES- PALMATE 3 LOBES, POLYMORPHIC, PANDURIFORM, PINNATIFIDA, SAGITATE, RENIFORM, CORDATE, ORBICULAR, OBOVATE, OBLANCEOLATE, LIRATE, HASTATE, RUNCINATE
LEAF MARGIN	ENTIRE, CILIATE, DENTATE, CRENATE, SERRATE, DOUBLY SERRATE, LOBED DOUBLE LOBED
APEX	ACUTE, CUSPIDATE, OBTUSE, RETUSE, MUCRONATE

LEAF BASE	ATTENUATE, CORDATE, ROUNDED, CUNEATE, OBLIQUE, SAGITATE, AURICULATE, HASTATE, ASYMMETRIC
PETIOLE	LONG, SHORT, SESSILE, WIDE
FLOWER	
SIZE	HERMAPHRODITE (OR MALE/FEMALE FLOWERS): CM OR MM
TYPE	UNISEXUAL, HERMAPHRODITE
REPRODUCTION	MONOECIOUS, DIOECIOUS, HERMAPHRODITE, POLYGAMY, SYNOICIOUS, STERILE
FLOWERING	SOLITARY, INFLORESCENCE IN CORYMB, IN CYMOSE, IN RACEME, IN SPIKE, IN UMBEL, IN CATKIN, IN SPADIX, IN FLORET OR CAPITULUM, IN PANICLE (+ INFLORESCENCE SIZE (IN CM OR MM))
FRAGRANCE	YES, NO, UNPLEASANT
FRUIT	
SIZE	IN CM OR MM
TYPE	FOLLICLE, PLURIFOLLICLE, LEGUME, LOMENT, SAMARA, DOUBLE SAMARA, PLURISAMARA, CAPSULE; ACHENE, TETRACHENE, POLYACHENE, NUT, ACORN, SYCONIUM, HESPERIDIUM, SOROSIS, BERRY; RACEME, POME, BALAUSTA, DRUPE, STROBILUS, PSEUDO STROBILUS, CONE, UTRICLE
EDIBLE FRUIT	YES, NO
COLOR	RED, GREEN, YELLOW, BROWN, BLACK, PALE, WHITE, PURPLE
FRUITING SEASON	INTERVAL OF MONTHS: JAN, FEB, MAR, APR, MAY, JUN, JUL, AGO, SEP, OCT, NOV, DEC
DEVELOPMENT	
GROWTH	VERY SLOW, SLOW, MEDIUM, FAST, VERY FAST
LONGEVITY	<25 YEARS, 25 YEARS, 50 YEARS, 75 YEARS, 100 YEARS, 150 YEARS, 200 YEARS, 250 YEARS, 300 YEARS; >300 YEARS
ECOLOGY	
CLIMATE	
ALTITUDE	INTERVAL OF ALTITUDE / ELEVATION ABOVE SEA LEVEL
IRRIGATION	++HIGH, MODERATE, LOW, ++LOW (very low/low < 350 mm; Very high/high > 750 mm)
MINIMUM TEMPERATURE AND INTERNATIONAL CLASSIFICATION	<p>MINIMUM TEMPERATURES: DEGREES CELSIUS</p> <p>CLASSIFICATION ACCORDING TO EUROPEAN REGULATION: (SEE MAP)</p> <p>G2___ HOT GREENHOUSES IN SOUTHERN EUROPE</p> <p>G1___ COLD GREENHOUSES IN SOTHERN EUROPE</p> <p>H5___ THE PLANT SUPPORTS MINIMUM TEMPERATURES FROM 0°C TO -5°C</p> <p>H4___ THE PLANT SUPPORTS MINIMUM TEMPERATURES FROM -5°C TO -10°C</p> <p>H3___ THE PLANT SUPPORTS MINIMUM TEMPERATURES FROM -10°C TO -15°C</p> <p>H2___ THE PLANT SUPPORTS MINIMUM TEMPERATURES FROM -15°C TO -20°C</p> <p>H1___ THE PLANT SUPPORTS MINIMUM TEMPERATURES FROM -20 °C</p> <p>CLASSIFICATION INTERNATIONAL REGULATIONS. ACCORDING TO MINIMUM TEMPERATURE RANGES Z1___SUPPORT MINIMUM TEMPERATURES OF -50°C</p> <p>Z2___ SUPPORT MINIMUM TEMPERATURES OF -50°C TO -40°C</p> <p>Z3___ SUPPORT MINIMUM TEMPERATURES OF -40°C TO -30°C</p> <p>Z4___ SUPPORT MINIMUM TEMPERATURES OF -30°C TO -20°C</p> <p>Z5___ SUPPORT MINIMUM TEMPERATURES OF -20°C TO -10°C</p> <p>Z6___ SUPPORT MINIMUM TEMPERATURES OF -10°C TO -0°C</p> <p>Z7___ SUPPORT MINIMUM TEMPERATURES OF -0°C TO 10°C</p> <p>Z8___ SUPPORT MINIMUM TEMPERATURES OF 10°C TO 20°C</p> <p>Z9___ SUPPORT MINIMUM TEMPERATURES OF 20°C TO 30°C</p> <p>Z10___ SUPPORT MINIMUM TEMPERATURES OF 30°C TO 40°C</p> <p>Z11___ SUPPORT MINIMUM TEMPERATURES OF MORE THAN 40°C</p>

EXPOSURE TO SUNLIGHT	FULL SUN, FULL-SHADE; PART SHADE, SHADE
DROUGHT RESISTANCE	YES, NO, MODERATE
RESISTANCE TO FROST	YES, NO, MODERATE
SOIL	
OPTIMUM PH	ALL TYPES. NEUTRAL, ACIDIC, BASIC OR ALKALINE (OR INTERVAL OF PH)
FERTILITY LEVEL	FERTILE, MODERATE, POOR
TEXTURE OF SOIL	SANDY, SILT OR LOAMY, CLAYEY, SANDY/LOAMY, CLAY LOAM, ALL TYPES
DRAINAGE	HIGH, MODERATE, LOW
RESISTANCE TO SALT	YES, NO, MODERATE
RESISTANCE TO LIME	YES, NO, MODERATE
USES	
RESISTANCES	
COASTAL	1 st LINE; 2 nd LINE, NO, MODERATE
RESISTANCE TO POLLUTION	HIGH, MODERATE, LOW
RESISTANCE TO WIND	HIGH, MODERATE LOW
USE	
IN SLOPES IN LINES ON RIVERBANKS AS WIND BREAKERS IN HEDGES IN FIELD BORDERS IN GROUPS ISOLATED	YES, NO
SPACING	MINIMUM RECOMMENDED DISTANCE BETWEEN PLANTS: M; CM
PLANTING AND PLANT HEALTH	
PLANTING AND PLANT HEALTH	
CALENDAR	
CHROMATIC CALENDAR	FOLIAGE, FLOWERING, FRUITING SEASON: the color white represented with grey or black cell
CULTIVATION CALENDAR	SOWING, PLANTING, PRUNING
TREATMENTS CALENDAR	FUNGICIDES, PESTICIDES, FERTILIZERS, HERBICIDES
COMMERCIALIZATION	
PRESENTATION	RD (BARE ROOT), CT (CONTAINER or POT (in liters), CE (ROOT BALL), CEY (ROOT BALL IN GYPSUM), ROOT BALL IN MESH
STEM GIRTH (TREES)	CM (usually measured at 1 meter above ground) or years
HEIGHT (SHRUBS, CONIFERS AND PALMS)	CM, M

LIST OF SHRUB SPECIES DESCRIBED

1. *Abelia floribunda*
2. *Arbutus unedo*
3. *Atriplex halimus*
4. *Buddleia davidii*
5. *Buxus sempervirens*
6. *Callistemon citrinus*
7. *Callistemon speciosus*
8. *Capparis spinosa*
9. *Carissa macrocarpa*
10. *Cassia corymbosa*
11. *Cassia didymobotrya*
12. *Cestrum nocturnum*
13. *Chrysanthemum frutescens*
14. *Cistus albidus*
15. *Coronilla valentina*
16. *Cotoneaster horizontalis*
17. *Cotoneaster pannosus*
18. *Cotoneaster salicifolius*
19. *Cytisus scoparius*
20. *Datura arborea*
21. *Datura sanguinea*
22. *Deutzia scabra*
23. *Echium fastuosum*
24. *Eleagnus pungens*
25. *Escallonia rubra*
26. *Euonymus japonicus*
27. *Genista monosperma*
28. *Hibiscus rosa-sinensis*
29. *Hibiscus syriacus*
30. *Jasminum officinale*
31. *Lantana camara*
32. *Laurus nobilis*
33. *Myoporum tenuifolium*
34. *Myrtus communis*
35. *Nerium oleander*
36. *Philadelphus coronarius*
37. *Photinia fraseri*
38. *Pistacia lentiscus*
39. *Pittosporum tobira*
40. *Polygala Myrtifolia*
41. *Pyracantha coccinea*
42. *Rhamnus alaternus*
43. *Senecio petasitis*
44. *Senecio maritima*
45. *Solanum rantonnetti*
46. *Spartium junceum*
47. *Spirea x arguta*
48. *Syringa vulgaris*
49. *Teucrium fruticans*
50. *Viburnum tinus*
51. *Vitex agnus-castus*

Abelia

Abelia floribunda

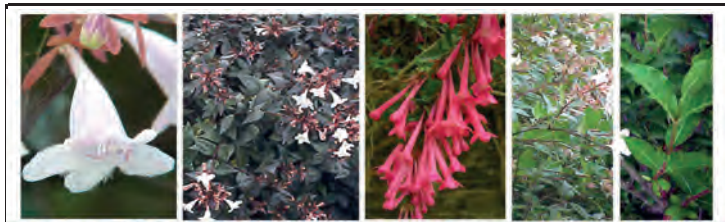
ORNAMENTAL SHRUB

ABELIA SPANISH VALENCIAN ABELIA ENGLISH ABELIA FLORIBUNDA FRENCH

Structure		
Shape	Height	Diameter
ROUND	1-3 M	2-3 M
Texture	Shade	Root
MEDIUM	PARTIAL	SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	DIPSACALES	
FAMILY:	CAPRIFOLIACEAE	

MORPHOLOGY		
Trunk		
Leaf		
EVERGREEN	COMPOUND: NO	HARDNESS: SOFT
SIZE: LEAF: 1.5-4 CM	ARRANGEMENT: OPPOSITE	VENATION: PINNATE
COLOR: US: DK. GREEN	SHAPE: OBLONG	MARGIN: ENTIRE
LS: SMOOTH	APEX: SHARP	LEAF BASE: ACUTE
TEXTURE: US: SMOOTH	PETIOLE: SHORT	
LS: SMOOTH		
Flower		Reproduction
SIZE: 1-3 CM	Type: HERMAPHRODITE	HERMAPHRODITE
	Flowering: SINGLE/CLUSTERS	Fragrant: YES
Fruit		Color
SIZE:	Type: ACHENE	Fruiting season
	Edible	
Growth		Longevity
	Rate: MEDIUM	25 YEARS



ECOLOGY		
Climate	Temperature	Drought resistant
	-5°C,14,26	MODERATE
ALTITUDE: 200-800	Sun exposure	Frost resistant
IRRIGATION: MODERATE	SUN/PARTIAL SHADE	YES
Soil	Texture	Salt resistant
	LOAMY/CLAYEY	MODERATE/LOW
pH: 6-7.5	Drainage	Lime resistant
FERTILITY: MODERATE	MODERATE	MODERATE/LOW

USES	
Resistances	Applications
COASTAL: 2ND LINE	SLOPES: YES HEDGE ROWS: NO
POLLUTION: MODERATE	RIVERBANKS: NO BORDERS: NO
WIND: MODERATE	GROUPS: YES ISOLATED: YES

POINTS OF INTEREST

Introduced in Europe in the middle of the 19th century by the British diplomat Clark Abel -from whom it receives its name-, abelias are a clear example that excessive care is not always necessary to enjoy a truly beautiful plant. It is an evergreen shrub -semi-evergreen in cold areas- with small oval leaves with a shiny upperside. It has arched branches that divide into smaller and more numerous ones. From June or July and until the arrival of the cold, the ends of these branches develop small white and pink funnel-like flowers that are sweetly scented.

SPACING: 1 M

PLANTING AND PLANT HEALTH

It tolerates areas of partial or light shade, but it grows better in sunny exposures, which is where it flowers profusely. It needs well-drained soil but with enough humidity in summer. Although it is not very demanding in terms of nutrients, it prefers lime soils where the proportions of organic matter are low. To obtain a compact or closed appearance, the main branches should be pruned to half their length in winter or early spring. It is also advisable to eliminate damaged or diseased branches and those that are visibly aged.

CHROMATIC CALENDAR

COMMERCIALIZATION

Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid showing seasonal activity]											

Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for cultivation activities]											
Sowing [] Planting [] Pruning [X]											

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for treatments]											
Fungicides [] Pesticides [] Fertilizers []											

Atriplex

Atriplex halimus

ORNAMENTAL SHRUB

SALADOS SPANISH SALAT BLANC VALENCIAN SALT BUSH ENGLISH POURPRIER DE MER FRENCH

Structure		
Shape ROUND	Height 1-3 M	Diameter 2-3 M
Texture MEDIUM	Shade PARTIAL	Root SCATTERING

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	CARYOPHYLLALES	
FAMILY:	CHENOPODIACEAE	

MORPHOLOGY		
Trunk		
Leaf	COMPOUND: NO	
EVERGREEN	HARDNESS: SOFT	
SIZE: LEAF: 1-6 CM	ARRANGEMENT: ALTERNATE	
COLOR: US: GRAY	VENATION: PINNATE	
LS: SMOOTH	SHAPE: OBLONG	
TEXTURE: US: ROUGH	MARGIN: ENTIRE	
LS: ROUGH	APEX: ACUTE	
	LEAF BASE: ACUTE	
	PETIOLE: SHORT	
Flower	Type UNISEXUAL	
SIZE: 0.2cm	Type TERMINAL RACEMES	Fragrant NO
Fruit	Type UTRICLE	Color YELLOW
SIZE:	Edible	Fruiting season
Growth	Rate FAST	Longevity 25 YEARS

ECOLOGY		
Climate	Temperature -3°C, H5, Z6	Drought resistant MODERATE
ALTITUDE: 0-800	Sun Exposure SUN	Frost resistant YES
IRRIGATION: MODERATE	Texture LOAMY	Salt resistant HIGH
Soil	Drainage MODERATE	Lime resistant MODERATE/HIGH
pH: 6.5-9	FERTILITY: MOD/LOW	

USES		
Resistances	Applications	
COASTAL: 1ST LINE	SLOPES: NO	HEDGE ROWS: NO
POLLUTION: MODERATE	RIVERBANKS: NO	BORDERS: NO
WIND: MODERATE	GROUPS: YES	ISOLATED: YES

POINTS OF INTEREST

Shrub 1 to 3 m tall and 3 m wide; leafy, with an extended and disorderly round shape, with a weak stem and numerous upright and silver-gray branches. It has an oblique and scattering root system. Its leaves are evergreen, alternate, entire or somewhat serrated, rhomboid-oval to oblong, with a short petiole and up to 6 cm long, with silver-gray scales. Its flowers are unisexual, greenish purple and very small. They are arranged in large glomerous terminal, round and panicle clusters. Its fruits are bracteate utricle. Seeds are somewhat compressed.

SPACING: 0.80 M

PLANTING AND PLANT HEALTH

It is a temperate climate plant that tolerates light frosts and proximity to the sea. It is resistant to salty soils but needs to be well drained. It adapts to poor, sandy and dry soils. It is also drought resistant. Requires moderate moisture, sunny lighting, and rejuvenation-only pruning, counting shoots in late spring and leaving only three buds from the ground to produce a glossy foliage.

CHROMATIC CALENDAR

COMMERCIALIZATION

Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Sowing		Planting		Pruning		X					
Treatments Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Fungicides		Pesticides			Fertilizers						

Presentation (L)	Height	Topiary shapes
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Buddleia

Buddleia davidii

ORNAMENTAL SHRUB

BUDLEIA SPANISH BUDLEIA VALENCIAN BUTTERFLY BUSH ENGLISH ARBUSTE AUX PAPILLOMS FRENCH

STRUCTURE		
Shape IRREGULAR	Height 1-3 M	Diameter 1-2 M
Texture LIGHT	Shade PARTIAL	Root SCATTERING

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	ALBA
TYPE:	DICOTYLEDON	MAGNIFICA
ORDER:	LAMINALES	HARLEQUIN
FAMILY:	SCROPHULARIACEAE	VEITCHIANA

MORPHOLOGY		
Trunk		
Leaf SEMI-DECIDUOUS SIZE: LEAF:10-25CM COLOR: US: DK. GREEN LS: GRAY TEXTURE: LS: ROUGH US: ROUGH	COMPOUND:	NO
	HARDNESS:	SOFT
	ARRANGEMENT:	OPPOSITE
	VENATION:	PINNATE
	SHAPE:	LANCEOLATE
MARGIN:	ENTIRE	
APEX:	ACUTE	
LEAF BASE:	ACUTE	
PETIOLE:	SHORT	
Flower	Type	Reproduction
	HERMAPHRODITE	HERMAPHRODITE
SIZE: 0.6 CM	Flowering	Fragrant
	INFLORESCENCE IN PANICLE (10-20)	NO
Fruit	Type	Color
	OVOID CAPSULES	
SIZE: 6 MM	Edible	Fruiting season
	NO	
Growth	Rate	Longevity
	FAST	0-25 YEARS



ECOLOGY		
Climate ALTITUDE: 0-1000 IRRIGATION: MODERATE	Temperature	Drought resistant
	-5C,14,26	MODERATE
Sun exposure	SUN	Frost resistant
	YES	YES
Soil pH: 6-7.5 FERTILITY: MODERATE	Texture	Salt resistant
	LOAMY	MODERATE
Drainage	Lime resistant	
MODERATE	MODERATE	

USES	
Resistances	Applications
COASTAL: 1ST LINE	SLOPES: NO HEDGE ROWS: NO
POLLUTION: LOW	RIVERBANKS: NO BORDERS: NO
WIND: MODERATE	GROUPS: YES ISOLATED: YES

POINTS OF INTEREST

Buddleia species native to China. It was discovered in the mid-19th century by the French missionary Armand David, from whom they get their specific name. When the English began to plant them in their gardens, they were called the butterfly bush since it attracted these insects to its sweet fragrance of their flowers. They are open shrubs with brittle, arching branches and a maximum height of 3.5 m. The leaves are very long (up to 25 cm) ending in a sharp spike and have a dull bluish-green color. Groups of small elongated conical flowers with a variety of colors sprout from the ends of these branches in summer.

SPACING: 2 M

PLANTING AND PLANT HEALTH

In bright and sunny exposures it blooms profusely. A good fertilized soil in the garden guarantees optimal development; however, buddleja can survive even in poor soils. These shrubs admit any type of pruning, even the most severe, sprouting vigorously the following year. This does not endanger its flowers since they sprout from the same year's wood. (Prune last year's stems at the beginning of spring until leaving 1 bud 5 cm away from old wood). Pruning in late fall prevents wind damage. A good formative pruning aims at leaving a single trunk with some branches that open up to the height of a person's head. They must have enough lateral space to allow for excellent development.

CHROMATIC CALENDAR

COMMERCIALIZATION

Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC

Presentation(L)	Height (cm)	Topiary Shape
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Sowing Planting Pruning 											

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Fungicides Pesticides Fertilizers 											

Buxus

Buxus sempervirens

ORNAMENTAL SHRUB

STRUCTURE		
Shape	Height	Diameter
OVOID	3-5 M	2-3 M
Texture	Shade	Root
COARSE	PARTIAL	SCATTERING

DIVISION:	BOJ SPANISH	BOIX VALENCIAN	BOX TREE ENGLISH	BUX FRENCH
SUBDIVISION:	PHANEROGAMS ANGIOSPERMS		VARIETIES ARBORESCENS	
TYPE:	DICOTYLEDONS		NANA	
ORDER:	BUXALES		ARGENTA	
FAMILY:	BUXACEAE		GLAUCA	

MORFOLOGY		
Trunk		
Leaf	COMPOUND: NO	HARDNESS: CORIACEOUS
EVERGREEN	ARRANGEMENT: OPPOSITE	VENATION: PINNATE
SIZE: LEAF: 1-3 CM	SHAPE: OBLONG	BORDER: ENTIRE
COLOR: US: DK. GREEN	LEAF BASE: ACUTE	PETIOLE: SHORT
LS: YELLOW/GREEN		
TEXTURE: US: SMOOTH		
LS: SMOOTH		
Flower	Type UNISEXUAL	Reproduction MONOECIOUS
SIZE AND TYPE:	Type	Fragrant
♂/M 1-2mm	GLOMERULUS	NO
♀/F 1-2mm		
Fruit	Type 3 LOBED CAPSULE	Color GREEN/BLUE
SIZE: 0.8 CM	Edible NO	Fruiting season JUL-AUG
Growth	Rate SLOW	Longevity >200 YEARS



ECOLOGY		
Climate	Temperature -15°C, H2, Z5	Drought resistant MODERATE
ALTITUDE: 200-1200	Sun Exposure	Frost resistant YES
IRRIGATION: MODERATE	SUN/PARTIAL SHADE	
Soil	Texture LOAMY/CLAYEY	Salt resistant MODERATE
pH: 6-7.5	Drainage	Lime resistant MODERATE/LOW
FERTILITY: MODERATE	MODERATE	

USES	
Resistances	Applications
COASTAL: 2ND LINE	SLOPES: NO HEDGE ROWS: YES
POLLUTION: MODERATE	RIVERBANKS: NO BORDERS: NO
WIND: MODERATE	GROUP: YES ISOLATED: YES

POINTS OF INTEREST

This shrub is native to Europe, North Africa and Western Asia. It has slow growth and great longevity. It works well for hedges, wind breakers and topiary lasting many years. It is also excellent as a wooden plant, which can be cut into a cone or pyramid shape. Its wood is highly valued for turning and inlay work and ideal for wood engraving, buttons and chess pieces. It is also an excellent fuel. Sometimes it is used instead of hops to make beer. It is a toxic plant.

SPACING: 1.5 M

PLANT AND PLANT HEALTH

It adapts to very hardy climates and resists the wind. Tolerates up to -15°C. It also survives in all types of soil, but thrive in dry and chalky places preferring well-drained soils. It requires normal irrigation but avoid saturation and waterlogging. Somewhat resistant to drought. The ideal is a medium humidity level and sunny or partial shade although it can also live in the shade. Pruning is not essential, at the end of summer. Unwanted branches can be removed or trimmed to give it the right shape. It tolerates severe pruning.

CHROMATIC CALENDAR

Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
■	■	■	■	■	■	■	■	■	■	■	■
Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
■	■	■	■	■	■	■	■	■	■	■	■
Sowing ■		Planting ■		Pruning x							
Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
■	■	■	■	■	■	■	■	■	■	■	■
Fungicides ■		Pesticides ■		Fertilizers ■							

COMMERCIALIZATION

Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	Yes
CT(10)	80-120	Yes
CT(30)	125-150	Yes

Callistemon

Callistemon citrinus

ORNAMENTAL SHRUB

LIMPIA TUBOS
SPANISH

VALENCIAN

LEMON BOTTLEBRUSH
ENGLISH

RINCE-BOUTEILLES
FRENCH

STRUCTURE		
Shape ROUND	Height 2-5 M	Diameter 2 M
Texture LIGHT	Shade PARTIAL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	VIMINALLIS
TYPE:	DICOYLEDONS	
ORDER:	MYRTALES	
FAMILY	MYRTACEAE	

MORPHOLOGY		
Trunk		
Leaf EVERGREEN SIZE: LEAF: 4-9 CM COLOR: US: GREEN LS: GREEN TEXTURE: LS: SMOOTH	COMPOUND: NO	HARDNESS: CORIACEOUS
	ARRANGEMENT: ALTERNATE	VENATION: PARALLEL
	SHAPE: LINEAR/LANCEOLATE	MARGIN: ENTIRE
	APEX: ACUMINATE	LEAF BASE: ACUTE
	PETIOLE: SHORT	
Flower	Type HERMAPHRODITE	Reproduction MONOECIOUS
	SIZE AND TYPE: 5-10CM SPIKED INFLORESCENCE	Flowering Fragrant NO
Fruit	Type CAPSULE	Color BROWN
	Edible NO	Fruiting season NOV-DEC
Growth	Rate MEDIUM	Longevity 25 YEARS



ECOLOGY		
Climate ALTITUDE: 0-800 IRRIGATION: MODERATE	Temperature -3°C, H5, Z6	Drought resistant MODERATE
	Sun Exposure SUN	Frost resistant YES
Soil pH: 6-7.5 FERTILITY: MODERATE	Texture LOAMY	Salt resistant LOW
	Drainage MODERATE	Lime resistant MODERATE

USES	
Resistances COASTAL: 2ND LINE POLLUTION: LOW WIND: MODERATE	Applications SLOPES: NO HEDGE ROWS: NO RIVERBANKS: NO BORDERS: NO GROUPS: YES ISOLATED: YES

POINTS OF INTEREST

Native to South Australia. Commonly known as Bottlebrush. As slow-growing shrub up to 5 m tall, it is suitable for coastal gardens both isolated and in groups or flowerbeds. Adapted to Mediterranean climates, it can tolerate light frosts but it should be placed in a sheltered area.

SPACING: 1.5 M

PLANTING AND PLANT HEALTH

It requires a normal irrigation programme and overwatering should be avoided. It supports drought and preferably medium humidity. It is advisable to prune the tips when young to stimulate growth. Completely remove the old withered branches, since the plant does not renew itself from mature ones. Immediately after flowering, in autumn, a light pruning can be carried out, removing only the stems that have flowered, to promote robust growth. Severe pruning is not necessary as it has a slow almost non-existent growth from the shoots in a dormant state. Propagation is by seed, softwood cuttings in summer or layering in autumn. This species roots very easily.

CHROMATIC CALENDAR

COMMERCIALIZATION

Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC

Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Sowing		Planting		Pruning							

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Fungicides		Pesticides		Fertilizers							

Callistemon

Callistemon speciosus

ORNAMENTAL SHRUB

LIMPIA TUBOS SPANISH VALENCIAN GREY (Albany) BOTTLEBRUSH ENGLISH RINCE-BOUTELLES FRENCH

STRUCTURE		
Shape ROUND	Height 1-3 M	Diameter 2-3 M
Texture LIGHT	Shade PARTIAL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	MYRTALES	
FAMILY:	MYRTACEAE	

MORFOLOGY		
Trunk		
Leaf	COMPOUND: NO HARDNESS: CORIACEOUS ARRANGEMENT: ALTERNATE VENATION: PARALLEL SHAPE: LINEAR/LANCEOLATE MARGIN: ENTIRE APEX: ACUMINATE LEAF BASE: ACUTE PETIOLE: SHORT	
EVERGREEN SIZE: LEAF: 5-13 CM COLOR: US: GREENGRAY LS: GREENGRAY TEXTURE: US: SMOOTH LS: SMOOTH		
Flower	Type HERMAPHRODITE	Reproduction HERMAPHRODITE
SIZE AND TYPE:	5-15 CM SPIKED INFLORESCENCE	Flowering NO
Fruit	Type CAPSULE	Color BROWN
	Edible NO	Fruiting season
SIZE:		
Growth	Rate MEDIUM	Longevity 25 YEARS



ECOLOGY		
Climate	Temperature -3°C,H5,Z6	Drought resistant MODERATE
ALTITUDE: 0-800 IRRIGATION: MODERATE	Sun exposure SUN	Frost resistant YES
Soil	Texture LOAMY	Salt resistant LOW
pH: 6-7,5 FERTILITY: MODERATE	Drainage MODERATE	Lime resistant LOW

USES		
Resistances	Applications	
COASTAL: 2ND LINE POLLUTION: LOW WIND: MODERATE	SLOPES: YES RIVERBANKS: NO GROUPS: YES	HEDGE ROWS: NO BORDERS: NO ISOLATED: YES

POINTS OF INTEREST
 This species can be planted isolated, mixed or in shrubby clusters. Its leaves, with a prominent central nerve, give off a fragrant smell when crushed. It is typical of places with hardy climates or even extreme temperatures where it prefers medium humidity and full sun.
 SPACING 1.5 M

PLANTING AND PLANT HEALTH
 It tolerates hardy soils but prefers neutral, fertile and well-drained ones. It is drought resistant. This shrub requires light formative pruning, trimming to stimulate growth and rejuvenating pruning where appropriate. Its propagation is by seed, cutting of its tender wood in summer or layering in autumn. This species roots very easily.

CHROMATIC CALENDAR											
Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for foliage, flowering, and fruiting seasons]											
Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for sowing, planting, and pruning activities]											
Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for fungicides, pesticides, and fertilizers treatments]											

COMMERCIALIZATION		
Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Capparis

Capparis spinosa

ORNAMENTAL SHRUB

ALCAPARRA SPANISH TAPERA VALENCIAN CAPER ENGLISH CAPRIER FRENCH

STRUCTURE		
Shape	Height	Diameter
ROUND	0.5-1.5 M	0.5-1 M
Texture	Shade	Root
LIGHT	PARTIAL	SCATTERED

DIVISION:	PHANEROGAMS
SUBDIVISION:	ANGIOSPERMS
TYPE:	DICOTYLEDON
ORDER:	BRASSICALES
FAMILY:	CAPPARACEAE

VARIETIES

MORPHOLOGY		
Trunk		
Leaf		
SEMI- EVERGREEN	COMPOUND: NO	HARDNESS: HARD
SIZE: LEAF:1.5-6 CM	ARRANGEMENT: ALTERNATE	VENATION: PINNATE
COLOR: US: GREEN	SHAPE: ROUNDED	MARGIN: ENTIRE
LS:PALE GREEN	MARGIN: ENTIRE	APEX: ACUMINATE
TEXTURE: US:SMOOTH	LEAF BASE: ROUND	PETIOLE: SHORT
LS: SMOOTH		
Flower		Reproduction
SIZE AND TYPE:	Type: 3-10 CM	HERMAPHRODITE
	Flowering	Fragrant
	ISOLATED	YES
Fruit		Color
SIZE: 1 CM	Type: BERRY	OLIVE GREEN
	Edible	Fruiting season
	NO	
Growth		Longevity
	Rate: MEDIUM	25 YEARS



ECOLOGY		
Climate		
ALTITUDE: 0-800	Temperature: -5°C,H4,Z6	Drought resistant: MODERATE
IRRIGATION: MODERATE	Sun exposure: SUN	Frost resistant: YES
Soil		
pH: 6.5-8	Texture: LOAMY/CLAYEY	Salt resistant: MODERATE
FERTILITY: MODERATE	Drainage: MODERATE	Lime resistant: MODERATE

USES	
Resistances	Applications
COASTAL: 2ND LINE	SLOPES: YES HEDGE ROWS: NO
POLLUTION: LOW	RIVERBANKS: NO BORDERS: NO
WIND: MODERATE	GROUPS: YES ISOLATED: YES

POINTS OF INTEREST

Native to the Mediterranean region. It can be found in rocky places and walls and often by the sea. Showy and large flowers, white or pink, with very long stamens with violet filaments, spiny rounded leaves, although the spines are not persistent.

The root, buds and fruits are used to combat arthritis, loss of appetite and inflammation of the spleen. It blooms on wood from the previous year, so pruning after flowering significantly enhances this process for the following spring. The Romans exploited the buds (capers) and the fruits (large capers), by pickling with salt. Today, they are used as a condiment (tartar sauce) to accompany "steak tartare", smoked salmon or as a simple appetizer.

SPACING: 0.75 M

PLANTING AND PLANT HEALTH

The reproduction by seed as well as by cutting presents certain difficulty. Seed germination is slow with rather low average percentages. Also the reproduction by cutting is not easy and should be carried out in the summer months using robust one year old herbaceous or semi-ligneous cuttings.

CHROMATIC CALENDAR											
Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
■	■	■	■	■	■	■	■	■	■	■	■
Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
■	■	■	■	■	■	■	■	■	■	■	■
Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
■	■	■	■	■	■	■	■	■	■	■	■
Fungicides				Pesticides			Fertilizers				

COMMERCIALIZATION		
Presentation(L)	Height (cm)	Topiary shapes
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Cassia

Cassia corymbosa

ORNAMENTAL SHRUB

CASIA DE BUENOS AIRES SPANISH VALENCIAN FLOWERY SENNA ENGLISH SENNA CORYMBOSA FRENCH

STRUCTURE		
Shape OVOID	Height 1.2-3 M	Diameter 1.5 M
Texture LIGHT	Shade PARTIAL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	FABALES	
FAMILY:	FABACEAE	

MORPHOLOGY		
Trunk		
Leaf PERSISTENT SIZE: LEAF: 10 CM LEAFLET: 4-6 COLOR: US: GREEN LS: GREEN TEXTURE: US: SMOOTH LS: SMOOTH	COMPOUND:	YES
	HARDNESS:	SOFT
	ARRANGEMENT:	ALTERNATE
	VENATION:	PINNATE
	SHAPE:	LANCEOLATE
	MARGIN:	ENTIRE
APEX:	ACUTE	
LEAF BASE:	ATTENUATE	
PETIOLE:	SHORT	
Flower	Type	Reproduction
	HERMAPHRODITE	HERMAPHRODITE
SIZE AND TYPE:	2-3 CM	Flowering
	INFLORESCENCE IN CORYMB (3-5 CM)	Fragrant IN NOV
Fruit	Type	Color
	LEGUME	
SIZE: 5 CM	Edible	Fruiting season
		NOV
Growth	Rate	Longevity
	FAST	0-25 YEARS



ECOLOGY		
Climate ALTITUDE: 100-500 IRRIGATION: MODERATE	Temperature	Drought resistant
	-2°C.H5.Z6	MODERATE
	Sun exposure	Frost resistant
	SUN	LOW
Soil pH: 6.5-8 FERTILITY: MODERATE	Texture	Salt resistant
	LOAMY	LOW
	Drainage	Lime resistant
	MODERATE	MODERATE

USES	
Resistances	Applications
COASTAL: 2ND LINE	SLOPES: NO HEDGE ROWS: NO
POLLUTION: HIGH	RIVERBANKS: NO BORDERS: NO
WIND: LOW	GROUPS: YES ISOLATED: YES

POINTS OF INTEREST

Native to Argentina, Uruguay and Brazil. Commonly known as *Casia de Buenos Aires*. It can be used as an isolated shrub or in flowerbeds as a flowering bush. This is a fast growing species and does not live more than 25 years.

SPACING: 1.5 M

PLANTING AND PLANT HEALTH

It requires warm temperatures and is able to resist light frosts. It can reach heights of 100-500 m and is not resistant to wind but tolerates the second line of coastal areas and can cope with urban pollution. It does well in all types of soils, but prefers those that are salt-free with normal to humus-rich content and very permeable. It requires low humidity in watering and medium-high humidity in the environment, and sunny or partially shaded areas. Parts damaged during the winter must be pruned, the crowded parts thinned and topped. Flowering branches must be cut at the end of spring, to give the plant compactness.

CHROMATIC CALENDAR

Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid showing seasonal activity]											

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for cultivation activities]											
Sowing [] Planting [] Pruning [x]											

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for treatments]											
Fungicides [] Pesticides [] Fertilizers []											

COMMERCIALIZATION

Presentation(L)	Height (cm)	Topiary shapes
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Cassia

Cassia didymobotrya

ORNAMENTAL SHRUB

CASSIA ALADA SPANISH VALENCIAN POPCORN CASSIA ENGLISH CASSIA DIDYMOBOTRYA FRENCH

STRUCTURE		
Shape OVOID	Height 1-2 M	Diameter 1.5 M
Texture LIGHT	Shade PARTIAL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	SHRUB
TYPE:	DICOYLEDONS	COMPOUND FOLIAGE
ORDER:	FABALES	
FAMILY:	FABACEAE	

MORPHOLOGY		
Trunk		
Leaf PERSISTENT SIZE: LEAF: 2.5 CM LEAFLET: 10-20CM COLOR: US: GREEN LS: GREEN TEXTURE: US: SMOOTH LS: SMOOTH	COMPOUND:	YES
	HARDNESS:	SOFT
	ARRANGEMENT:	ALTERNATE
	VENATION:	PINNATE
	SHAPE:	LANCEOLATE
	MARGIN:	ENTIRE
	APEX:	ACUTE
	LEAF BASE:	ATTENUATE
	PETIOLE:	SHORT
Flower	Type	Reproduction
	HERMAPHRODITE	HERMAPHRODITE
SIZE: 2-3 CM	Flowering	Fragrant
	INFLORESCENCE IN RACEME (5-10 cm)	NO
Fruit	Type	Color
	LEGUME	GRAY/BLACK
SIZE:	Edible	Fruiting season
Growth	Rate	Longevity
	FAST	0-25 YEARS



ECOLOGY		
Climate ALTITUDE: 100-500 IRRIGATION: MODERATE	Temperature	Drought resistant
	-2°C.H5.Z6	MEDERATE
	Sun exposure	Frost resistant
	SUN	LOW
Soil pH: 6.5-8 FERTILITY: MODERATE	Texture	Salt resistant
	LOAMY	LOW
	Drainage	Lime resistant
	MODERATE	MODERATE

USES	
Resistances	Applications
COASTAL: 2ND LINE	SLOPES: NO HEDGE ROWS: NO
POLLUTION: HIGH	RIVERBANKS: NO BORDERS: NO
WIND: LOW	GROUPS: YES ISOLATED: YES

POINTS OF INTEREST

Native to Ethiopia. This species is comprised of many branches. It has a round shape and is used in mixed flowerbeds or shrubby compositions.

SPACING: 1.5 M

PLANTING AND PLANT HEALTH

It must be protected from frost. Although it tolerates most garden soil conditions, it should be planted in cool, rich and loamy soils. It requires a normal irrigation programme, however waterlogging must be avoided. It requires medium humidity and full sun. Propagation is by seed.

CHROMATIC CALENDAR												COMMERCIALIZATION		
Foliage, Flowering and Fruiting season												Presentation (L)	Height (cm)	Topiary shapes
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	CT(5)	60-80	
[Color-coded bars for foliage, flowering, and fruiting]												CT(10)	80-100	
Cultivation Calendar												CT(30)	125-150	
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC			
[Color-coded bars for sowing, planting, and pruning]														
Treatment Calendar														
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC			
[Color-coded bars for fungicides, pesticides, and fertilizers]														

Cestrum

Cestrum nocturnum

ORNAMENTAL SHRUB

GALAN DE NOCHE
SPANISH

VALENCIAN

QUEEN OF THE NIGHT
ENGLISH

GALANT DE NUIT
FRENCH

Shape	Height	Diameter
ROUND	2-4 M	2-4 M
Texture	Shade	Root
MEDIUM	PARTIAL	SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	SOLANALES	
FAMILY:	SOLANACEAEA	

MORPHOLOGY		
Trunk		
Leaf EVERGREEN SIZE: LEAF: 12-15CM COLOR: US: GREEN LS: GREEN TEXTURE: US: SMOOTH LS: SMOOTH	COMPOUND:	NO
	HARDNESS:	SOFT
	ARRANGEMENT:	OPPOSITE
	VENATION:	PINNATE
	SHAPE:	LANCEOLATE
	MARGIN:	ENTIRE
	APEX:	ACUTE
	LEAF BASE :	ATTENUATE
	PETIOLE:	SHORT
Flower	Type	Reproduction
	HERMAPHRODITE	HERMAPHRODITE
SIZE AND TYPE:	2.5 CM	Flowering
		Fragrant
CYMOSE INFLORESCENCE		
Fruit	Type	Color
	BERRY	WHITE
SIZE:	Edible	Fruiting season
	NO	
Growth	Rate	Longevity
	MEDIUM	25 YEARS



ECOLOGY		
Climate	Temperature	Drought resistant
	-3°C.H5.Z6	MODERATE
ALTITUDE: 0-500 IRRIGATION: MODERATE	Sun exposure	Frost resistant
	SUN	LOW
Soil	Texture	Salt resistant
	LOMAY/CLAYEY	MODERATE
pH: 6.5-8 FERTILITY: MODERATE	Drainage	Lime resistant
	MODERATE	MODERATE

USES		
Resistances	Applications	
COASTAL: 2ND LINE	SLOPES: NO	HEDGE ROWS: NO
POLLUTION: MODERATE	RIVERBANKS: NO	BORDER: NO
WIND: MODERATE	GROUPS: YES	ISOLATED: YES

POINTS OF INTEREST

Native to Antilles and surrounding regions. Commonly known as queen of the night. It is used in Mediterranean gardens and near houses. Since it blooms nocturnally, a deep and pleasant scent can be enjoyed on summer nights. It can also be seen used on patios. It is widely distributed in cities and gardens in Southern Spain.

SPACING: 2 M

PLANTING AND PLANT HEALTH

It resists light frosts and hardy soils, but prefers those that are fertile and well-drained. This shrub is quite sensitive to drought and adapted to medium humidity and full sun or partial shade. Damaged and overgrown branches must be pruned at the end of winter or spring, even the young lateral ones. Propagation is by cuttings in winter.

CHROMATIC CALENDAR

Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for foliage, flowering, and fruiting seasons]											

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for cultivation activities]											
Sowing	Planting	Pruning									

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for treatment activities]											
Fungicides	Pesticides	Fertilizers									

COMMERCIALIZATION

Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Chrysanthemum

Chrysanthemum frutescens

ORNAMENTAL SHRUB

MARGARITA DE BOLA SPANISH VALENCIAN MARGUERITE DAISY ENGLISH MARGUERITE DE PARIS FRENCH

STRUCTURE		
Shape ROUND	Height 0.7-1 M	Diameter 0.7-1
Texture MEDIUM	Shade PARTIAL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	ASTERALES	
FAMILY:	ASTERACEAE	

MORPHOLOGY		
Trunk		
Leaf EVERGREEN SIZE: LEAF: 8-10 CM COLOR: US: GREEN LS: GREEN TEXTURE: US: SMOOTH LS: SMOOTH	COMPOUND: NO	HARDNESS: SOFT
	ARRANGEMENT: ALTERNATE	VENATION: PINNATE
	SHAPE: OVAL/LANCEOLATE	MARGIN: DIVIDED
	APEX: ACUTE	LEAF BASE: ATTENUATE
	PETIOLE: SHORT	
Flower	Type UNISEXUAL	Reproduction MONOECIOUS
	SIZE AND TYPE: 2 CM	Flowering Fragrant
Fruit	Type ACHENE	Color
	Edible	Fruiting season
Growth	Rate MODERATE	Longevity 0-25 YEARS



ECOLOGY		
Climate ALTITUDE: 0-500 IRRIGATION: MODERATE	Temperature -3°C..H5.Z6	Drought resistant MODERATE
	Sun exposure SUN	Frost resistant LOW
Soil pH: 6.5-7.5 FERTILITY: MODERATE	Texture LOAMY/CLAYEY	Salt resistant MODERATE
	Drainage MODERATE	Lime resistant MODERATE

USES		
Resistances	Applications	
COASTAL: 1ST LINE	SLOPES: NO	HEDGE ROWS: NO
POLLUTION: MODERATE	RIVERBANKS: NO	BORDERS: NO
WIND: MODERATE	GROUP: YES	ISOLATED: YES

POINTS OF INTEREST

Excellent for quick color, coastal gardens and impatient gardeners. This is an easy shrub to grow specially for beginners.

SPACING: 0.50 M

PLANTING AND PLANT HEALTH

In Mediterranean climates the daisy is an evergreen and enjoys sunny, well-drained gardens. Generous mulching conserves water. Keep quite dry to promote compact growth and reduce health problems. Propagation by tender cuttings in spring. Cuttings reach flowering in a few months. Deadhead or moderately prune to thin out and gather the branches. This will to make the shrub more compact.

CHROMATIC CALENDAR											
Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
								X	X	X	X
Sowing		Planting		Pruning	X						

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Fungicides											

COMMERCIALIZATION		
Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	

Cistus

Cistus albidus

ORNAMENTAL SHRUB

JARA BLANCA SPANISH ESTEPA D'ESCURAR VALENCIAN GRAY-LEAVED CISTUS ENGLISH CISTE BLANC FRENCH

STRUCTURE		
Shape	Height	Diameter
ROUND	0.4-2 M	0.6-2 M
Texture	Shade	Root
MEDIUM	PARTIAL	SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	MALVALES	
FAMILY:	CISTACEAE	

MORPHOLOGY		
Trunk		
Leaf		
EVERGREEN	COMPOUND: NO	HARDNESS: SOFT
SIZE: LEAF: 3-10 CM	ARRANGEMENT: OPPOSITE	VENATION: PINNATE
COLOR: US: GRN./GRAY	SHAPE: BROADLY OVAL	MARGIN: SMOOTH
LS: GRN./GRAY	MARGIN: SMOOTH	APEX: ROUNDED
TEXTURE: US: TOMENTOSE	LEAF BASE: ATTENUATE	PETIOLE: SHORT
LS: TOMENTOSE		
Flower		Reproduction
Type	HERMAPHRODITE	HERMAPHRODITE
SIZE AND TYPE:	4-6 CM	FLOWERING
		FRAGRANT
		NO
Fruit		Color
Type	CAPSULE	
Edible		
SIZE:		Fruiting season
Growth	Rate	Longevity
	MEDIUM	0-25 YEAR



ECOLOGY		
Climate		
TEMPERATURE: -8°C,H4,Z6	Drought resistant	HIGH
ALTITUDE: 0-800	Sun exposure	Frost resistant
IRRIGATION: LOW	SUN	MODERATE/HIGH
Soil		
Texture	Salt resistant	
ALL TYPES	MODERATE	
pH: 6.5-8	Drainage	Lime resistant
FERTILITY: MOD/LOW	MODERATE	HIGH

USES	
Resistances	Applications
COASTAL: 1ST LINE	SLOPES: NO HEDGE ROWS: NO
POLLUTION: MODERATE	RIVERBANKS: NO BORDERS: NO
WIND: MODERATE	GROUPS: YES ISOLATED: YES

POINTS OF INTEREST

Commonly known as gray-leaved cistus. It is a wild species that grows in almost all the dry hills of the southern part of the European continent, where they are widely spread in fields and shrubland with their unmistakable color and from which many hybrids and some cultivated varieties have been obtained. This shrub species is highly valued in gardening both for its beautiful flowers and ease to cultivate. They are recommended for hardy or wild garden scenes. Isolated specimens can be included in mixed bush formations. Due to the unpleasant odor it gives off on hot days, it should be avoided in transit or living places.

SPACING: 0.50 M

PLANTING AND PLANT HEALTH

The gray-leaved cistus should be placed in full sun. It is highly recommended for inland and coastal areas. They thrive in sandy and rocky terrain, regardless of soil quality. In any case, an excellent drainage capacity is essential. Prune to clean at the end of winter or early spring and when appropriate. It is resistant to droughts, frosty winters and proximity to the sea. Propagation by seed in autumn or tender cuttings in summer.

CHROMATIC CALENDAR

COMMERCIALIZATION

Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
		X	X	X							
Sowing			Planting		Pruning	X					

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Fungicides				Pesticides			Fertilizers				

Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	

Coronilla

Coronilla valentina subs.

ORNAMENTAL SHRUB

CAROLINA SPANISH CORONETA VALENCIANA SCORPION VETCH ENGLISH CORONILLA FRENCH

STRUCTURE		
Shape ROUND	Height 1.5-3 M	Diameter 1.5-3 M
Texture COARSE	Shade FULL	Root SCATTERED

DIVISION:	PHANEROGAMS
SUBDIVISION:	ANGIOSPERMS
TYPE:	DICOTYLEDONS
ORDER:	FABALES
FAMILY:	FABACEAE

VARIETIES
DENSE
GREEN BLUEISH LEAVES

MORPHOLOGY		
Trunk		
Leaf		
COMPOUND: YES. IMPARIPINNATE	HARDNESS: SOFT	
ARRANGEMENT: OPPOSITE	VENATION: PINNATE	
SHAPE: OVAL	MARGIN: ENITE	
APEX: ROUNDED	LEAF BASE: ATTENUATE	
PETIOLE: SHORT	Type: HERMAPHRODITE	
Reproduction: HERMAPHRODITE		
SIZE AND TYPE: 0.7-1.2 CM	Flowering	Fragrant
UMBEL INFLORESCENCE (2-5 FLOWERS)		
Fruit		
Type: LEGUME	Color	
Edible	Fruiting season	
SIZE:		
Growth		
Rate: MEDIUM	Longevity: 0-25 YEARS	



ECOLOGY		
Climate		
Temperature: -3°C,H5,Z6	Drought resistant: MODERATE	
Sun exposure: SUN	Frost resistant: LOW	
Texture: LOAMY	Salt resistant: MODERATE	
pH: 6.5-8	Drainage: MODERATE	Lime resistant: MODERATE
FERTILITY: MODERATE		

USES			
Resistances		Applications	
COASTAL: 2ND LINE	SLOPES: NO	HEDGE ROW: NO	
POLLUTION: HIGH	RIVERBANKS: NO	BORDERS: NO	
WIND: LOW	GROUPS: YES	ISOLATED: YES	

POINTS OF INTEREST

Commonly known as scorpion vetch. Found mainly in the Mediterranean region. It is a dense rounded shrub that can be used isolated or in groups. Its golden flowers perfume the air from winter to spring. It is important to be aware that if irrigated directly above the plant, it will cause premature death. Remove diseased or old branches. To achieve a more compact shrub, cut the rest of the shoots in half in the springtime.

SPACING: 1 M

PLANTING AND PLANT HEALTH

It prefers warm places, but tolerates some cold. Soil should be light and with good drainage. It is somewhat drought resistant and is better adapted to hardy humidity and full sun. It should only be pruned for rejuvenation or reinvigoration purposes. They are easily propagated by seed or tender cuttings in summer.

CHROMATIC CALENDAR											
Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for foliage, flowering, and fruiting seasons]											
Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for cultivation activities]											
Sowing [Red] Planting [Orange] Pruning [X]											
Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for treatments]											
Fungicides [Green] Pesticides [Blue] Fertilizers [Light Blue]											

COMMERCIALIZATION		
Presentation (L)	Height(cm)	Topiary shapes
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Cotoneaster

Cotoneaster horizontalis

ORNAMENTAL SHRUB

COTONEASTER HORIZONTALIS. SPANISH VALENCIAN PROSTRATE ROCK COTONEASTER ENGLISH COTONEASTER RAMPANT FRENCH

STRUCTURE		
Shape <i>SPREADING</i>	Height 0.3-0.8 M	Diameter 1.5 M
Texture <i>LIGHT</i>	Shade <i>PARTIAL</i>	Root <i>SCATTERED</i>

DIVISION:	PHANEROGAMS	VARIETY
SUBDIVISION:	ANGIOSPERM	
TYPE:	DICOTYLEDONS	
ORDER:	ROSALES	
FAMILY:	ROSACEAE	

MORPHOLOGY		
Trunk		
Leaf <i>PERSISTENT</i> SIZE: LEAF: 1-4 CM COLOR: US: GREEN LS: GREEN TEXTURE: US: SMOOTH LS: TOMENTOSE	COMPOUND: <i>NO</i>	
	HARDNESS: <i>CORIACEOUS</i>	
	ARRANGEMENT: <i>ALTERNATE</i>	
	VENATION: <i>PINNATE</i>	
	SHAPE: <i>OVAL</i>	
	MARGIN: <i>ENTIRE</i>	
	APEX: <i>ROUNDED</i>	
	LEAF BASE: <i>ATENUATE</i>	
	PETIOLE: <i>SHORT</i>	
Flower	Type <i>HERMAPHRODITE</i>	Reproduction <i>HERMAPHRODITE</i>
	SIZE AND TYPE: 0.5-0.7 CM <small>(SOLITARY INFLORE. OR IN RACEME. 0-7 FLOWERS)</small>	Flowering <i>NO</i>
Fruit	Type <i>POME</i>	Color <i>RED</i>
	Edible <i>NO</i>	Fruiting season <i>OCT-NOV</i>
SIZE: <i>5mm</i>		
Growth	Rate <i>MEDIUM</i>	Longevity <i>0-25 YEARS</i>



ECOLOGY		
Climate ALTITUDE: <i>0-1000</i> IRRIGATION: <i>MODERATE</i>	Temperature <i>-5°C, H4, Z6</i>	Drought resistant <i>MODERATE</i>
	Sun exposure <i>SUN/PARTIAL SHADE</i>	Frost resistant <i>MODERATE</i>
Soil pH: <i>6.5-7.5</i> FERTILITY: <i>MODERATE</i>	Texture <i>LOAMY</i>	Salt resistant <i>MODERATE</i>
	Drainage <i>MODERATE</i>	Lime resistant <i>MODERATE</i>

USES	
Resistances	Applications
COASTAL: <i>2ND LINE</i>	SLOPES: <i>YES</i> HEDGE ROWS: <i>NO</i>
POLLUTION: <i>HIGH</i>	RIVERBANKS: <i>NO</i> BORDERS: <i>NO</i>
WIND: <i>LOW</i>	GROUPS: <i>YES</i> ISOLATED: <i>YES</i>

POINTS OF INTEREST

Due to their variety of heights and types of growth, cotoneasters have a wide range of uses in gardens, terraces or balconies. Any location or corner can be decorated in a graceful and proportionate way. They provide good groundcovers due to the creeping growth of their multi-branched stems. The hanging feature of its branches allows dressing window boxes on balconies and buildings very effectively. This is a very elegant species when planted in pots on terraces, porches and entrance ways to gardens or buildings.

SPACING: 0.80 M

PLANTING AND PLANT HEALTH

They grow best in full sun, although they tolerate partial shade. They are very undemanding in terms of soil: any normal type of soil that is not too dry or excessively heavy will do. Pruning tasks are not essential since each cotoneaster develops a characteristic shape and size that should not be altered. Some of these shrubs, however, are modeled according to a formal pattern by trimming their branches in early spring. This operation is done with a secateur, cutting each branch just above a leaf. Pruning after flowering makes it possible to remove weak or dry branches.

CHROMATIC CALENDAR

Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for foliage, flowering, and fruiting]											
Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for sowing, planting, and pruning]											
Sowing		Planting		Pruning	X						
Treatments Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for fungicides, pesticides, and fertilizers]											
Fungicides		Pesticides		Fertilizers							

COMMERCIALIZATION

Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

COTONEASTER

Cotoneaster pannosus

ORNAMENTAL SHRUB

COTONEASTER SPANISH VALENCIAN SILVERLEAF COTONEASTER ENGLISH COTONEASTER FRENCH

STRUCTURE		
Shape SPREADING	Height 1.5-3 M	Diameter 1.5-3 M
Texture LIGHT	Shade PARTIAL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	ROSALES	
FAMILY:	ROSACEAE	

MORPHOLOGY		
Trunk		
Leaf		
SEMI-PERSISTENT	COMPOUND: NO	HARDNESS: SOFT
SIZE: LEAF: 2-5 CM	ARRANGEMENT: ALTERNATE	VENATION: PINNATE
COLOR: US: GREEN	SHAPE: OBLONG	MARGIN: ENTIRE
LS: GRAY	APEX: ROUNDED	LEAF BASE: ATENUATE
TEXTURE: US: SMOOTH	PETIOLE: SHORT	
LS:TOMENTOSE		
Flower		
Type	HERMAPHRODITE	Reproduction
HERMAPHRODITE		HERMAPHRODITE
SIZE AND TYPE:	0.5-0.8 CM	Flowering
		FRAGRANT
		NO
Fruit		
Type	POMES	Color
RED		
Edible	NO	Fruiting season
NO		OCT-MAR
SIZE: 6mm		
Growth		
Rate	MEDIUM	Longevity
		0-25 YEARS



ECOLOGY		
Climate		
Temperature	-5°C,H4,Z6	Drought resistant
MODERATE		
Sun exposure	SUN/PARTIAL SHADE	Frost resistant
MODERATE		
Soil		
Texture	LOAMY	Salt resistant
MODERATE		
pH: 6.5-7.5	Drainage	Lime resistant
FERTILITY: MODERATE	MODERATE	MODERATE

USES		
Resistances		Applications
COASTAL: 2ND LINE	SLOPES: YES	HEDGE ROWS: NO
POLLUTION: HIGH	RIVERBANKS: NO	BORDERS: YES
WIND: LOW	GROUPS: YES	ISOLATED: YES

POINTS OF INTEREST

Native to Southeastern China in the Yunnan province. It is cultivated for its abundant fruits and has beautiful autumn colors. If planted isolated on a meadow, it will exhibit and highlight its natural appearance or exhibit geometric or more compact shapes. They do very well in mixed borders and can be used as small border plants. Used as a background element or in intermediate locations can provide foliar textures and vivid winter tones.

SPACING: 0.80 M

PLANTING AND PLANT HEALTH

It prefers temperate climate but has good resistant to cold. It does not support excessive moisture in the soil, but can withstand medium humidity in the environment and sun or partial shade. Pruning is not necessary (at most every 4-5 years). It propagates by seed, of slow germination, after stratification. Also by grafting, cutting or layering.

CHROMATIC CALENDAR

Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for foliage, flowering, and fruiting]											
Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for sowing, planting, and pruning]											
Sowing [] Planting [] Pruning [x]											
Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for fungicides, pesticides, and fertilizers]											
Fungicides [] Pesticides [] Fertilizers []											

COMMERCIALIZATION

Presentation (L)	Height(cm)	Topiary shapes
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Datura

Datura arborea

ORNAMENTAL SHRUB

TROMPETA DEL JUICIO SPANISH TROMPO FRARE VALENCIAN PERUVIAN TRUMPETS ENGLISH DATURA FRENCH

STRUCTURE		
Shape OVAL	Height 3-5 M	Diameter 3 M
Texture MEDIUM	Shade PARTIAL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	SOLANALES	
FAMILY:	SOLANACEAE	

MORPHOLOGY		
Trunk		
Leaf SEMI-PERSISTENT SIZE: LEAF:10-12CM COLOR: US: GREEN LS: GREEN TEXTURE: US: PUBESCENT LS: PUBESCENT	COMPOUND:	NO
	HARDNESS:	SOFT
	ARRANGEMENT:	ALTERNATE
	VENATION:	PINNATE
	SHAPE:	OVOID
MARGIN:	ENTIRE	
APEX:	ACUTE	
LEAF BASE:	ATTENUATE	
PETIOLE:	SHORT	
Flower	Type	Reproduction
	HERMAPHRODITE	HERMAPHRODITE
SIZE AND TYPE:	15-30 CM Flowering	Fragrant
	SINGLE INFLORESCENCE	YES
Fruit	Type	Color
	Edible	Fruiting season
SIZE:		
Growth	Rate	Longevity
	MEDIUM	0-25 YEARS



ECOLOGY		
Climate ALTITUDE: 0-500 IRRIGATION: MODERATE	Temperature	Drought resistant
	-3°C..H4.Z6	MODERATE
	Sun exposure	Frost resistant
	SUN	MODERATE
Soil pH: 6.5-8 FERTILITY: MODERATE	Texture	Salt resistant
	LOAMY	MODERATE
	Drainage	Lime resistant
	MODERATE	MODERATE

USES		
Resistances	Applications	
COASTAL: 2ND LINE	SLOPES: NO	HEDGE ROWS: NO
POLLUTION: MODERATE	RIVERBANKS: NO	BORDERS: NO
WIND: MODERATE	GROUPS: YES	ISOLATED: YES

POINTS OF INTEREST

Commonly known as "Trumpet of Judgment" or "Tree of Trumpets". It is native to Peru, Chile and Ecuador. Of medium-fast growth, it is used as an isolated shrub in gardens due to its striking tubular-bell-shaped hanging flowers which are fragrant at sunset. However, care must be taken due to its toxicity.

SPACING: 2 M

PLANTING AND PLANT HEALTH

Suitable for hot climates, it is sensitive to frost, although it resists light ones. It prefers hardy, light and healthy soils, rich in organic matter. Somewhat resistant to drought and partial shade, but better suited to sun and medium humidity. It requires severe pruning in early spring. Propagation is easy by herbaceous cuttings in spring.

CHROMATIC CALENDAR

COMMERCIALIZATION

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for foliage, flowering, and fruiting seasons]											

Presentation (L)	Height (cm)	Topiary shape
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for cultivation activities]											
Sowing		Planting		Pruning							

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for treatment applications]											
Fungicides			Pesticides			Fertilizers					

Datura

Datura sanguinea

ORNAMENTAL SHRUB

TROMPETA ROJA SPANISH VALENCIAN RED ANGEL'S TRUMPET ENGLISH DATURA FRENCH

STRUCTURE		
Shape OVAL	Height 3-5 M	Diameter 3 M
Texture MEDIUM	Shade PARTIAL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	SOLANALES	
FAMILY:	SOLANACEAE	

MORPHOLOGY		
Trunk		
Leaf	COMPOUND: NO	
SEMI-PERSISTENT	HARDNESS: SOFT	
SIZE: LEAF: 15-25CM	ARRANGEMENT: ALTERNATE	
COLOR: US: GREEN	VENATION: PINNATE	
LS: GREEN	SHAPE: OVOID	
TEXTURE: US: PUBESCENT	MARGIN: ENTIRE	
LS: PUBESCENT	APEX: ACUTE	
	LEAF BASE: ATTENUATE	
	PETIOLE: SHORT	
Flower	Type HERMAPHRODITE	Reproduction HERMAPHRODITE
SIZE AND TYPE:	15-20 CM	Flowering
	SINGLE INFLORESCENCE	Fragrant YES
Fruit	Type CAPSULE	Color
SIZE:	Edible	Fruiting season
Growth	Rate MEDIUM	Longevity 0-25 YEARS



ECOLOGY		
Climate	Temperature -3°C.H5.Z6	Drought resistant MODERATE
ALTITUDE: 0-500	Sun exposure SUN	Frost resistant MODERATE
IRRIGATION: MODERATE	Texture LOAMY	Salt resistant MODERATE
Soil	pH: 6.5-8	Drainage MODERATE
FERTILITY: MODERATE		Lime resistant MODERATE

USES		
Resistances	Applications	
COASTAL: 2ND LINE	SLOPES: NO	HEDGE ROWS: No
POLLUTION: MODERATE	RIVERBANKS: NO	BORDERS: No
WIND: MODERATE	GROUPS: YES	ISOLATED: YES

POINTS OF INTEREST

Native to Colombia, Chile and Peru. It is used as an isolated shrub or in shrub-tree compositions or mixed flowerbeds. It is very decorative due to its elegant flowering. Care must be taken due to its toxicity.

SPACING: 2 M

PLANTING AND PLANT HEALTH

Is sensitive to cold and does not tolerate strong frosts and therefore best adapted to warm climates. It requires hardy, moderately clayey, humus-rich soil with good drainage. Somewhat resistant to drought but welcomes a high irrigation programme in the summer. It is sensitive to root asphyxiation. It prefers medium humidity and sun, although it tolerates partial shade. After flowering it is advisable to reduce the length of the branches by pruning to stimulate new appearance of flowers. Propagation is easy by herbaceous cuttings in spring-summer. Layering to be carried out in spring.

CHROMATIC CALENDAR

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for foliage, flowering, and fruiting seasons]											

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for sowing, planting, and pruning activities]											

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for fungicides, pesticides, and fertilizers treatments]											

COMMERCIALIZATION

Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Deutzia

Deutzia scabra var. candidissima

ORNAMENTAL SHRUB

DEUTZIA SPANISH DEUTZIA VALENCIAN DEUTZIA ENGLISH DEUTZIA FRENCH

STRUCTURE		
Shape IRREGULAR	Height 1-3 M	Diameter 3 M
Texture MEDIUM	Shade PARTIAL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	<i>PRIDE OF ROCHESTER</i>
TYPE:	DICOYLEDONS	
ORDER:	CORNALES	
FAMILY:	HYDRANGEACEAE	

MORPHOLOGY		
Trunk		
Leaf	COMPOUND: NO HARDNESS: SOFT ARRANGEMENT: OPPOSITE VENATION: PINNATE SHAPE: OVAL MARGIN: DENTATE APEX: ACUTE LEAF BASE: ATTENUATE PETIOLE: 2-4 mm	
DECIDUOUS SIZE: LEAF: 3-8 CM COLOR: US: DK. GREEN LS: DK. GREEN TEXTURE: LS: ROUGH US: TOMENTOSE		
Flower	Type HERMAPHRODITE	Reproduction HERMAPHRODITE
SIZE AND TYPE: 2-4 CM INFLORESCENCE IN RACEMES (6-12 CM)	Flowering	Fragrant NO
Fruit	Type CAPSULE	Color
SIZE:	Edible	Fruiting season
Growth	Rate MEDIUM	Longevity 0-25 YEARS



ECOLOGY		
Climate	Temperature -5°C, H4, Z6	Drought resistant MODERATE
ALTITUDE: 0-1000 IRRIGATION: MODERATE	Sun exposure SUN/PARTIAL SHADE	Frost resistant MODERATE
Soil	Texture LOAMY	Salt resistant MODERATE
pH: 6.5-7.5 FERTILITY: MODERATE	Drainage MODERATE	Lime resistant MODERATE

USES	
Resistances	Applications
COASTAL: 2ND LINE POLLUTION: MODERATE WIND: MODERATE	SLOPE: NO HEDGE ROWS: NO RIVERBANKS: NO BORDERS: NO GROUPS: YES ISOLATED: YES

POINTS OF INTEREST

Native to China and Japan. If this shrub has ample space to grow, it will bloom profusely. Given its medium size and low density, it is recommended in small gardens or to form groups in large gardens. It covers its graceful arching branches with snow white flowers in spring. It requires generously mulched soil, dappled shade, and weekly irrigation. Planting evergreens is recommended to hide its characteristic bare base.

SPACING: 1 M

PLANTING AND PLANT HEALTH

It resists frosts but it is affected by late ones. Although undemanding in terms of soil (as long as it is permeable) it prefers fertile ones. It is advisable to maintain a moderate irrigation programme in the summer. It adapts well to sunny or partial shade exposures and medium humidity. It is easy to grow and should be pruned every year after flowering, removing the stems that have flowered and also removing old, unproductive branches. Propagation by semi-woody or woody cuttings in summer-autumn.

CHROMATIC CALENDAR

Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Sowing		Planting		Pruning							

Treatments Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Fungicides			Pesticides			Fertilizers					

COMMERCIALIZATION

Presentation (L)	Height (cm)	Topiary Shape
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Echium

Echium fastuosum

ORNAMENTAL SHRUB

VIVORERA SPANISH VALENCIAN PRIDE OF MADEIRA ENGLISH VIPÉRINE DE MADÈRE FRENCH

STRUCTURE		
Shape	Height	Diameter
IRREGULAR	0.6-1 M	0.6-1 M
Texture	Shade	Root
MEDIUM	PARTIAL	SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	BORAGINALES	
FAMILY:	BORAGINACEAE	

MORPHOLOGY		
Trunk		
Leaf	COMPOUND: NO	
PERSISTENT	HARDNESS: SOFT	
SIZE: LEAF 5-10 CM	ARRANGEMENT: ALTERNATE	
COLOR: US: GREEN GRAY	VENATION: PINNATE	
LS: GREEN	SHAPE: LANCEOLATE	
TEXTURE: US: TOMENTOSE	MARGIN: ENTIRE	
LS: TOMENTOSE	APEX: ACUTE	
	LEAF BASE: ATTENUATE	
	PETIOLE: SHORT	
Flower	Type	Reproduction
	HERMAPHRODITE	HERMAPHRODITE
SIZE AND TYPE:	Flowering	Fragrant
	NO	NO
	INFLORESCENCE IN PANICLE (15-25 CM)	
Fruit	Type	Color
	NUT	
SIZE:	Edible	Fruiting season
Growth	Rate	Longevity
	MEDIUM	0-25 YEARS



ECOLOGY		
Climate	Temperature	Drought resistant
ALTITUDE: 0-400	0°C, HS.26	MODERATE
IRRIGATION: LOW	Sun Exposure	Frost resistant
	SUN	LIGHT
Soil	Texture	Salt resistant
pH: 6.5-7.5	LOAMY	MODERATE
FERTILITY: MODERATE	Drainage	Lime resistant
	MODERATE	MODERATE

USES		
Resistances	Applications	
COASTAL: 2ND LINE	SLOPES: NO	HEDGE ROWS: NO
POLLUTION: MODERATE	RIVERBANKS: NO	BORDERS: NO
WIND: MODERATE	GROUPS: NO	ISOLATED: YES

POINTS OF INTEREST
 Native to the Canary Islands. Given its beautiful flowering, it is primarily used in isolated groups. It is a striking and undemanding plant related to the edible borage.
 SPACING : 1 M

PLANTING AND PLANT HEALTH
 This shrub is delicate to the cold, requires good exposure. It is undemanding in terms of soil although it prefers light and loamy ones. Overwatering and waterlogging must be avoided. It is also hardy when it comes to humidity, preferring full sun. Dry flowering stems should be removed. It can be propagated by seed and cuttings.

CHROMATIC CALENDAR											
Foliage, Flowering Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC

COMMERCIALIZATION		
Presentation (L)	Height (cm)	Topiary shape
CT(5)	60-80	

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
					X	X	X				
Sowing		Planting		Pruning	X						

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Fungicides											

Eleagnus

Eleagnus pungens

ORNAMENTAL SHRUB

ELEAGNO SPANISH VALENCIAN SILVERBERRY, RUSSIAN OLIVE ENGLISH CHALEF PIQUAN FRENCH

STRUCTURE		
Shape OVOID	Height 1-4 M	Diameter 1-3 M
Texture MEDIUM	Shade PARTIAL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	AUREA
TYPE:	DICOYLEDONS	MACULATA
ORDER:	ROSALES	
FAMILY	ELEAGNACEAE	

MORPHOLOGY		
Trunk		
Leaf PERSISTENT SIZE: LEAF: 4-8 CM COLOR: US: DK. GREEN LS: SILVER TEXTURE: US: SMOOTH LS: SMOOTH	COMPOUND:	NO
	HARDNESS:	SOFT
	ARRANGEMENT:	ALTERNATE
	VENATION:	PINNATE
	SHAPE:	OBLONG
MARGIN:	ENTIRE	
APEX:	ACUTE	
LEAF BASE:	ATTENUATE	
PETIOLE:	SHORT	
Flower	Type	Reproduction
	HERMAPHRODITE	HERMAPHRODITE
SIZE AND TYPE:	1-1.2 CM	Flowering
	CLUSTERS OF 2 OR 3 FLOWERS	Fragrant
Fruit	Type	Color
	BERRY	RED
	Edible	Fruiting season
SIZE: 1.5 CM	YES	
Growth	Rate	Longevity
	MEDIUM	0-25 YEARS



ECOLOGY		
Climate ALTITUDE: 0-1000 IRRIGATION: MODERATE	Temperature	Drought resistant
	-3°C.H5.Z6	MODERATE
	Sun exposure	Frost resistant
MODERATE	SUN/PARTIAL SHADE	MODERATE
Soil pH: 6.5-7.5 FERTILITY: MODERATE	Texture	Salt resistant
	LOAMY	MODERATE
	Drainage	Lime resistant
MODERATE	MODERATE	MODERATE

USES		
Resistances	Applications	
COASTAL: 2ND LINE	SLOPES: NO	HEDGE ROWS: YES
POLLUTION: MODERATE	RIVERBANKS: NO	BORDERS: NO
WIND: MODERATE	GROUPS: YES	ISOLATED: YES

POINTS OF INTEREST

Native to China and Japan. It has reddish-brown twigs, mostly spiny. It is cultivated for its foliage. It is easy-to-grow and very suitable for forming hedges in unsheltered places. It is adorned with small scented flowers and produces edible red berries.

PLANTING AND PLANT HEALTH

It prefers warm places, although it resists some cold. It is a hardy soil shrub, growing in any well-drained garden soil except shallow or calcareous ones. It prefers fertile, light and fresh soils, adapting to stony ones. It requires a normal irrigation programme. It is important to keep the soil moist and avoid waterlogging. It requires medium humidity and full sun or part-shade. Pruning is not necessary. In spring, simply cut off unwanted branches. Hedges to be trimmed in early and late summer. It propagates by seeds that germinate in the second year, cuttings from semi-woody branches, layering or grafting in July-August.

CHROMATIC CALENDAR

COMMERCIALIZATION

Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars representing foliage, flowering, and fruiting periods]											

Presentation (L)	Height(cm)	Topiary shape
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for sowing, planting, and pruning]											
Sowing	Planting		Pruning								

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for fungicides, pesticides, and fertilizers]											
Fungicides	Pesticides			Fertilizers							

Escallonia

Escallonia rubra var. macrantha

ORNAMENTAL SHRUB

ESCALONIA SPANISH VALENCIAN ESCALLONIA ENGLISH ESCALLONIA FRENCH

STRUCTURE		
Shape IRREGULAR	Height 1-2 M	Diameter 1-2 M
Texture MEDIUM	Shade PARTIAL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOYLEDONS	
ORDER:	ESCALLONIALES	
FAMILY:	ESCALLONIAEAE	

MORPHOLOGY		
Trunk		
Leaf	COMPOUND: NO HARDNESS: CORIACEOUS ARRANGEMENT: ALTERNATE VENATION: PINNATE SHAPE: OVAL MARGIN: DENTATE APEX: ACUTE LEAF BASE: ATTENUATE PETIOLE: SHORT	
PERSISTENT SIZE: LEAF: 2-5 CM COLOR: US: DK. GREEN LS: GREEN TEXTURE: US: SMOOTH LS: SMOOTH		
Flower	Type HERMAPHRODITE	Reproduction HERMAPHRODITE
SIZE AND TYPE: 1.5-2 CM INFLORESCENCE IN RACEMES	Flowering	Fragrant NO
Fruit	Type CAPSULE	Color
SIZE:	Edible	Fruiting season
Growth	Rate MEDIUM	Longevity 0-25 YEARS



ECOLOGY		
Climate	Temperature -5°C.H4.Z6	Drought resistant MODERATE
ALTITUDE: 0-1000 IRRIGATION: MODERATE	Sun exposure SUN/PARTIAL SHADE	Frost resistant MODERATE
Soil	Texture LOAMY	Salt resistant MODERATE
pH: 6.5-8 FERTILITY: MODERATE	Drainage MODERATE	Lime resistant MODERATE

USES		
Resistances	Applications	
COASTAL: 2ND LINE POLLUTION: MODERATE WIND: MODERATE	SLOPES: NO RIVERBANKS: NO GROUPS: TES	HEDGE ROWS: YES BORDERS: NO ISOLATED: YES

POINTS OF INTEREST

Native to South America, in particular from Chile and Argentina. The different species of escalonía adapt better to mild climates and mild winters. They grow very well in coastal areas where salt water and sea winds would otherwise kill other shrubs. They are also ideal for composing formal hedges that are frequently cut with pruning shears for topiary. It is often used as a border or natural fencing for gardens of single-family homes and because of their rapid growth, they quickly fulfill their purpose.

SPACING: 1 M

PLANTING AND PLANT HEALTH

In areas where strong and repeated frosts occur, they can suffer damage but if pruned, they sprout again in spring. Bright, sunny positions are best, but partial shade is recommended in places with strong summer sunshine. They need fertile soil with an abundance of organic matter, and even fertilizer during the warm season. Alkaline soils are not recommended. It is pruned in mid-spring and late summer to maintain its regular shape. If left to grow freely, it is advisable to cut the tips of the branches in winter so that they take on a more compact form.

CHROMATIC CALENDAR											
Foliage, Flowering, Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for foliage, flowering, and fruiting seasons]											

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for sowing, planting, and pruning activities]											
Sowing	Planting	Pruning									

Treatments Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for fungicides, pesticides, and fertilizers treatments]											
Fungicides	Pesticides	Fertilizers									

COMMERCIALIZATION		
Presentation (L)	Height (cm)	Topiary shape
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Euonymus

Euonymus japonicus

ORNAMENTAL SHRUB

BONETERO DEL JAPON SPANISH VALENCIAN JAPANESE SPINDLE ENGLISH FUSAIN DU JAPON FRENCH

STRUCTURE		
Shape OVOID	Height 2-7 M	Diameter 2-4 M
Texture MEDIUM	Shade PARTIAL	Root SCATTERED

DIVISION:	PHANEROGAMS
SUBDIVISION:	ANGIOSPERMS
TYPE:	DICOTYLEDONS
ORDER:	CELASTRAES
FAMILY:	CELASTRACEAE

VARIETIES
ALBOMARGINATUS
AUREOMARGINATUS
PRESIDENT GAUTHIER

MORPHOLOGY		
Trunk		
Leaf PERSISTENT SIZE: LEAF: 3-7 CM COLOR: US: DK. GREEN LS: GREEN TEXTURE: US: SMOOTH LS: SMOOTH	COMPOUND:	NO
	HARDNESS:	CORIACEOUS
	ARRANGEMENT:	OPPOSITE
	VENATION:	PINNATE
	SHAPE:	OVAL
	MARGIN:	ASERRATE
	APEX:	ROUNDED
	LEAF BASE:	ATTENUATE
	PETIOLE:	SHORT
Flower	Type	Reproduction
	HERMAPHRODITE	HERMAPHRODITE
SIZE AND TYPE:	0.5-0.8 CM	Flowering
	INFLORESCENCE IN CYMES (5-12 flowers)	Fragrant NO
Fruit	Type	Color
	CAPSULE	RED
	Edible NO, TOXIC	Fruiting season NOV-JAN
SIZE: 8 MM		
Growth	Rate	Longevity
	MEDIUM	50 Years



ECOLOGY		
Climate ALTITUDE: 0-1000 IRRIGATION: MODERATE	Temperature	Drought resistant
	-5°C H4,26	MODERATE
	Sun Exposure	Frost resistant
	SUN/PARTIAL SHADE	MODERATE
Soil pH: 6.5-8 FERTILITY: MODERATE	Texture	Salt resistant
	LOAMY	MODERATE
	Drainage	Lime resistant
	MODERATE	MODERATE

USES		
Resistances	Applications	
COASTAL: 1ST LINE	SLOPES: NO	HEDGE ROWS: YES
POLLUTION: MODERATE	RIVERBANKS: NO	BORDERS: YES
WIND: MODERATE	GROUPS: YES	ISOLATED: YES

POINTS OF INTEREST

It is a popular shrub used in gardening for its evergreen leaves and great decorative variety. It has rounded dark green leaves in the original species, but its varieties include different shades and spots of green in its margins. They are primarily used as low clipped hedges and topiary. However, if allowed to grow freely they acquire a very interesting irregular shape. Due to the numerous varieties available, it is important to consider and choose the one that best suits the landscape and the gardeners intended purpose. The names of species are endless but it is worth highlighting the cultivated and widely distributed variety "President Gauthier".

SPACING: 1.5 M

PLANTING AND PLANT HEALTH

They should be planted in rich soil to which large amounts of organic fertilizers have been added. They are very useful plants, especially for calcareous soils. It does not dry out in summer. They grow best with a regular irrigation programme. They tolerate all types of pruning. Normally, in order to keep their shape close and regular, hedges are pruned in mid-spring. It prefers a temperate climate and is resistant to heat. They also prefer moist environments. Propagation by semi-woody cutting in a propagation greenhouse, in spring-summer. It is very sensitive to powdery mildew and mealybugs.

CHROMATIC CALENDAR

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for foliage, flowering, and fruiting]											
Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for sowing, planting, and pruning]											
Sowing [Red] Planting [Orange] Pruning [X]											
Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for fungicides, pesticides, and fertilizers]											
Fungicides [Green] Pesticides [Blue] Fertilizers [Light Blue]											

COMMERCIALIZATION

Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	Yes
CT(10)	80-100	Yes
CT(30)	125-150	Yes

Genista

Genista monosperma

ORNAMENTAL SHRUB

RETAMA BLANCA
SPANISH

VALENCIAN

BROOM
ENGLISH

GENÉT
FRENCH

STRUCTURE		
Shape EXTENDED	Height 2-3 M	Diameter 2-3 M
Texture FINE	Shade LIGHT	Root SCATTERED

DIVISION:	PHANEROGAMS
SUBDIVISION:	ANGIOSPERMS
TYPE:	DICOTYLEDONS
ORDER:	FABALES
FAMILY:	LEGUMINOSAE

VARIETIES

MORPHOLOGY		
Trunk		
Leaf		
COMPOUND: NO	HARDNESS: BASAL TUFT/FLESHY	
DECIDUOUS	ARRANGEMENT: ALTERNATE	
SIZE: LEAF:0.5-1.5cm	VENATION: PINNATE	
COLOR: US: LIGHT GREEN	SHAPE: LINEAR	
LS: LIGHT GREEN	MARGIN: ENTIRE	
TEXTURE: US: PUBESCENT	APEX: ACUTE	
LS: PUBESCENT	LEAF BASE: ATTENUATE	
	PETIOLE: SHORT	
Flower		Reproduction
Type HERMAPHRODITE		HERMAPHRODITE
SIZE AND TYPE:	1-1.2 CM Flowering	Fragrant YES
	INFLORESCENCE IN RACEMES (20-30 CM)	
Fruit		Color
Type LEGUME		BROWN
Edible	Fruiting season	
SIZE: 1.5 CM		
Growth		Longevity
Rate MEDIUM		50 YEARS



ECOLOGY		
Climate		
Temperature	-5°C,H4,Z6	Drought resistant HIGH
ALTITUDE: 0-1000	Sun exposure	Frost resistant MODERATE
IRRIGATION: MODERATE	SUN	MODERATE
Soil		
Texture	ALL TYPES	Salt resistant MODERATE
pH: 6.5-8	Drainage	Lime resistant MODERATE
FERTILITY: MODERATE	MODERATE	MODERATE

USES	
Resistances	Applications
COASTAL: 1ST LINE	SLOPES: YES HEDGE ROWS: NO
POLLUTION: MODERATE	RIVERBANKS: NO BORDERS: NO
WIND: MODERATE	GROUPS: YES ISOLATED: YES

POINTS OF INTEREST

This shrub requires little maintenance. Its scientific name *Genista*, derives from the Celtic word "gen", which means "bush" and was already used in ancient Roman times to define the plants belonging to the genus *Genista*, *Spartium* and *Cytissus*. The genista broom belongs, like the *Cytissus*, to the populous family of legumes. They are useful for fixing dunes. The vivid color of its flowers and its particular size make this broom suitable for meadows and slopes, large rockeries and curbsides. It is advisable to plant genistas in combination with other shrubs and with perennials since this will ensure maximum potential of the plant.

SPACING: 2 M

PLANTING AND PLANT HEALTH

Soil must be poor, loose and not calcareous. Tolerates limestone and salt. To create a long lasting effect, it should be pruned severely in winter after flowering, but without cutting old branches. Blooms on wood of the same year. Dormant in summer, green but leafless, photosynthesis is limited to the stems. It supports drought. In general, this shrub requires a moderate irrigation programme but in the hot summer months, a high irrigation programme is recommended. The ideal altitude is less than 300 m. Propagation by seed, cutting, layering, sprouting and grafting. This shrub can be difficult to transplant in spring.

CHROMATIC CALENDAR											
Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
■	■	■	■	■	■	■	■	■	■	■	■
Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
■	■	■	■	■	■	■	■	■	■	■	■
Sowing ■ Planting ■ Pruning ■											
Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
■	■	■	■	■	■	■	■	■	■	■	■
Fungicides ■ Pesticides ■ Fertilizers ■											

COMMERCIALIZATION		
Presentation (L)	Height (cm)	Topiary shape
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Hibiscus

Hibiscus rosa-sinensis

ORNAMENTAL SHRUB

ROSA DE CHINA
SPANISH

VALENCIAN

ROSE OF CHINA
ENGLISH

ROSE DE CHINE
FRENCH

STRUCTURE		
Shape ROUND	Height 2-4 M	Diameter 2 M
Texture MEDIUM	Shade PARTIAL	Root SCATTERED

DIVISION:	PHANEROGAMS
SUBDIVISION:	ANGIOSPERMS
TYPE:	DICOTYLEDONS
ORDER:	MALVALES
FAMILY:	MALVACEAE

VARIETIES

MORPHOLOGY		
Trunk		
Leaf EVERGREEN SIZE: LEAF:10-15 CM COLOR: US: DK. GREEN LS: DK. GREEN TEXTURE: US: SMOOTH LS: SMOOTH	COMPOUND:	NO
	HARDNESS:	SOFT
	ARRANGEMENT:	OPPOSITE
	VENATION:	PINNATE
	SHAPE:	OVAL
MARGIN:	CRENATE	
APEX:	ACUTE	
LEAF BASE:	ATTENUATE	
PETIOLE:	SHORT	
Flower	Type	Reproduction
	HERMAPHRODITE	HERMAPHRODITE
SIZE AND TYPE:	20-30 CM	Flowering
	SOLITARY OR DOUBLE	Fragrant
Fruit	Type	Color
	CAPSULE	
SIZE:	Eddible	Fruiting season
Growth	Rate	Longevity
	FAST	0-25 YEARS



ECOLOGY		
Climate ALTITUDE: 0-500 IRRIGATION: MODERATE	Temperature	Drought resistant
	-2°C.H5.Z6	HIGH
Soil pH: 6.5-7.5 FERTILITY: MODERATE	Sun exposure	Frost resistant
	SUN	LIGHT
Texture	Salt resistant	
	LOAMY	NO
Drainage	Lime resistant	
MODERATE	MODERATE	

USES	
Resistances	Applications
COASTAL: 2ND LINE	SLOPES: NO HEDGE ROWS: NO
POLLUTION: MODERATE	RIVERBANKS: NO BORDERS: YES
WIND: MODERATE	GROUPS: YES ISOLATED: YES

POINTS OF INTEREST

Native to tropical Asia. It is recommended to place in heterogeneous shrubby groups or in groups that bring together different varieties of this same species. It can be used to create a good backdrop for mixed borders and is also suitable for emphasizing angles, marking doorways or serving as a pot plant.

SPACING: 2 M

PLANTING AND PLANT HEALTH

Hot spring and summer periods are necessary for the flowering to develop in all its splendor. In northern regions it is advisable to cultivate by taking advantage of the shelter of a south facing wall. Porous, lime, rather dry and poor soils are ideal for this shrub. The Hibiscus admits cutting and shaping. When flowering on the branches of the same season, it is advisable to severely prune the shoots of the previous year, shortening it to 3 buds on the main structure, at the beginning of spring and before the appearance of new stems.

CHROMATIC CALENDAR

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
■	■	■	■	■	■	■	■	■	■	■	■

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
■	■	■	■	■	■	■	■	■	■	■	■
Sowing ■ Planting ■ Pruning x											

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
■	■	■	■	■	■	■	■	■	■	■	■
Fungicides ■ Pesticides ■ Fertilizers ■											

COMMERCIALIZATION

Presentation (L)	Height (cm)	Topiary shape
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Hibiscus

Hibiscus syriacus

ORNAMENTAL SHRUB

ROSA DE SIRIA
SPANISH

VALENCIAN

ROSE OF SHARON
ENGLISH

MAUVE EN ARBRE
FRENCH

STRUCTURE		
Shape	Height	Diameter
OVOID	2.5-4 M	1.5 M
Texture	Shade	Root
MEDIUM	DENSE	SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	MALVALES	
FAMILY:	MALVACEAE	

MORPHOLOGY		
Trunk		
Leaf	COMPOUND: YES HARDNESS: SOFT ARRANGEMENT: ALTERNATE VENATION: PINNATE SHAPE: OBLONG MARGIN: LOBULATE APEX: ACUTE LEAF BASE: ATTENUATE PETIOLE: SHORT	
DECIDUOUS		
SIZE: LEAF: 5-8 CM		
LEAFLET: 5-8		
COLOR: US: MID GREEN		
LS: SMOOTH		
TEXTURE: US: SMOOTH		
LS: SMOOTH		
Flower	Type	Reproduction
	HERMAPHRODITE	HERMAPHRODITE
SIZE AND TYPE:	6-10 CM	Flowering
	SOLITARY	FRAGRANT
		NO
Fruit	Type	Color
	CAPSULE	BROWN
SIZE:	Edible	Fruiting season
	NO	
Growth	Rate	Longevity
	MEDIUM/FAST	25 YEARS



ECOLOGY		
Climate	Temperature	Drought resistant
	-6°C.H4.Z6	MODERATE
ALTITUDE: 0-1000	Sun exposure	Frost resistant
IRRIGATION: MODERATE	FULL SUN	YES
Soil	Texture	Salt resistant
	ALL TYPES	MODERATE
pH: 6-8	Drainage	Lime resistant
FERTILITY: MODERATE	MODERATE	MODERATE

USES		
Resistances	Applications	
COASTAL: 2ND LINE	SLOPES: NO	HEDGE ROWS: NO
POLLUTION: MODERATE	RIVERBANKS: NO	BORDERS: NO
WIND: MODERATE	GROUPS: YES	ISOLATED: YES

POINTS OF INTEREST

Native to tropical Asia. It is recommended to place in heterogeneous shrubby groups or in groups that bring together different varieties of this same species. It can be used to create a good backdrop for mixed borders and is also suitable for emphasizing angles, marking doorways or serving as a pot plant. It has given numerous cultivated varieties and interesting hues that can offer flowers of up to 12 cm.

SPACING: 2 M

PLANTING AND PLANT HEALTH

For temperate climate, it resists cold but is affected by late frosts. It adapts to a wide variety of soils and conditions, preferring well-drained, light, permeable and unfertilized ones (very rich, clayey soils do not favor growth). They require a high irrigation programme in the first months of growth and flowering but once established, it needs little irrigation. Prefers moderate humidity and full sun. Faded inflorescences must be deadheaded. When flowering on the branches of the same season, it is advisable to severely prune the shoots of the previous year, shortening it to 3 buds on the main structure, at the beginning of spring and before the appearance of new stems. Propagation is easy and carried out in summer by planting 5 cm semi-woody cuttings or tender cuttings in late spring.

CHROMATIC CALENDAR

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Sowing		Planting		Pruning							

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Fungicides											

COMMERCIALIZATION

Presentation (L)	Height (cm)	Topiary shape
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Jasminum

Jasminum officinale grandiflorum

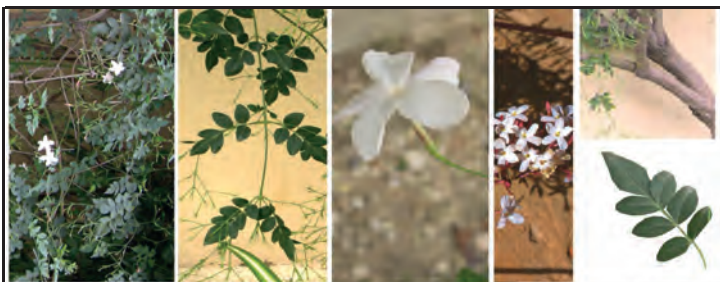
ORNAMENTAL SHRUB

JAZMIN REAL SPANISH GESMILER VALENCIAN JASMINE ENGLISH JASMIN FRENCH

STRUCTURE		
Shape ROUND	Height 2-4 M	Diameter 2 M
Texture MEDIUM	Shade PARTIAL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	LAMIALES	
FAMILY:	OLEACEAE	

MORPHOLOGY		
Trunk		
Leaf	COMPOUND: YES, IMPARIPINNATE HARDNESS: SOFT ARRANGEMENT: OPPOSITES VENATION: PINNATE SHAPE: OVAL MARGIN: CRENATE APEX: ACUTE LEAF BASE: ATTENUATE PETIOLE: SHORT	
EVERGREEN SIZE: LEAF: 0-15CM LEAFLET: 7-10M COLOR: US: DK. GREEN LS: DK. GREEN TEXTURE: US: SMOOTH LS: SMOOTH		
Flower	Type HERMAPHRODITE	Reproduction HERMAPHRODITE
SIZE AND TYPE: 2-3 CM (W/INFLORESCENCE IN PANICLE (2-10 FLOWERS))	Flowering YES	Fragrant YES
Fruit	Type CAPSULE	Color
SIZE:	Eddible	Fruiting season
Growth	Rate FAST	Longevity 0-25 YEARS



ECOLOGY		
Climate	Temperature -2°C, H5, Z6	Drought resistant HIGH
ALTITUDE: 0-500 IRRIGATION: MODERATE	Sun Exposure SUN	Frost resistant LIGHT
Soil	Texture LOAMY	Salt resistant NO
pH: 6.5-7.5 FERTILITY: MODERATE	Drainage MODERATE	Lime resistant MODERATE

USES	
Resistances	Applications
COASTAL: 2ND LINE POLLUTION: MODERATE WIND: MODERATE	SLOPES: NO HEDGE ROWS: NO RIVERBANKS: NO BORDERS: NO GROUPS: YES ISOLATED: YES

POINTS OF INTEREST

Native to Central and Western Asia. In Spain it has found a suitable environment and where it has long been naturalized. It can be left to grow on a wall. Upon reaching the upper parts, it will develop ridges giving it a very interesting volume effect. It can also be used to cover part of a wall by tying down some of its main branches. It is preferable to place it near a living or transit area to enjoy its pleasant fragrance. It is an ideal species to include as a terrace or porch plant, where its aesthetic and fragrant effect will create a more pleasant space.

SPACING: 2 M

PLANTING AND PLANT HEALTH

It should be planted in full sun. In northern regions this species requires a sheltered garden area. Plenty of sunshine will guarantee rich and abundant blooms. Soil can be poor but must have good drainage. It is sensitive to cold, but recovers with pruning. It requires normal irrigation. Overwatering and waterlogging must be avoided. It prefers moderate humidity. Pruning is not necessary, although tolerated. After flowering, eliminate dead or unwanted stems. Propagation can be carried out in summer months by layering the branches or planting semi-woody cuttings.

CHROMATIC CALENDAR

COMMERCIALIZATION

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars indicating foliage, flowering, and fruiting periods]											

Presentation (L)	Height (cm)	Topiary shape
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for sowing, planting, and pruning]											
Sowing [] Planting [] Pruning [X]											

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for fungicides, pesticides, and fertilizers]											
Fungicides [] Pesticides [] Fertilizers []											

Lantana

Lantana camara

ORNAMENTAL SHRUB

BANDERITA ESPAÑOLA
SPANISH

VALENCIAN

LANTANA
ENGLISH

LANTANA
FRENCH

STRUCTURE		
Shape ROUND	Height 1-2 M	Diameter 1-2 M
Texture COARSE	Shade FULL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDON	
ORDER:	LAMIALES	
FAMILY:	VERBENACEAE	

MORPHOLOGY		
Trunk		
Leaf SEMI PERSISTENT SIZE: LEAF: 2-10 CM COLOR: US: DK. GREEN LS: DK. GREEN TEXTURE: US: PUBESCENT LS: PUBESCENT	COMPOUND:	NO
	HARDNESS:	SOFT
	ARRANGEMENT:	OPPOSITE
	VENATION:	PINNATE
	SHAPE:	OVAL
MARGIN:	CRENATE	
APEX:	ACUTE	
LEAF BASE:	ATTENUATE	
PETIOLE:	SHORT	
Flower	Type	Reproduction
	HERMAPHRODITE	HERMAPHRODITE
SIZE AND TYPE: 0.7-0.8 CM <small>INFLO. IN FLOWERHEAD (CAPITULUM) or (D-SCM)</small>	Flowering	Fragrant
	YES	YES
Fruit	Type	Color
	DRUPE	DARK BLUE
SIZE: 3 MM	Edible	Fruiting season
Growth	Rate	Longevity
	FAST	0-25 YEARS



ECOLOGY		
Climate	Temperature	Drought resistant
	-2°C,H5,Z6	HIGH
ALTITUDE: 0-500 IRRIGATION: MODERATE	Sun exposure	Frost resistant
	SUN	LIGHT
Soil	Texture	Salt resistant
	TOLERANT/ALL TYPES	MODERATE
	Drainage	Lime resistant
pH: 6.5-8 FERTILITY: MODERATE	MODERATE	MODERATE/HIGH

USES		
Resistances	Applications	
COASTAL: 1ST LINE	SLOPES: NO	HEDGE ROWS: NO
POLLUTION: MODERATE	RIVERBANKS: NO	BORDERS: YES
WIND: MODERATE	GROUPS: YES	ISOLATED: YES

POINTS OF INTEREST

Commonly known as "Spanish flag". It is native to the tropics of America. It is a fast growing shrub and is used in groups or to create flower hedges. It is very effective for borders. Its flowery cascades achieve wonderful affects of density and abundance. To do this, it must be planted in a tall planter or on the top of a wall or slope. It spreads easily as a groundcover, colonizing the entire soil surface; as it is able to take root in branch nodes. Only a few specimens are needed to cover a large area.

SPACING: 1 M

PLANTING AND PLANT HEALTH

It is sensitive to cold, preferring warm climates. It should be planted in full sun and in areas with mild winters. Hardy to soils, although it prefers rich and well-drained ones. Tolerates drought, but grows vigorously with a normal garden irrigation programme. Indifferent to humidity, although it prefers medium to high levels. It recovers from the cold with pruning and propagates easily by cutting and by seed. It blooms on year-round wood, so pruning at the beginning of spring or the end of winter is recommended.

CHROMATIC CALENDAR

COMMERCIALIZATION

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars indicating seasonal activity]											

Presentation (L)	Height (cm)	Topiary Shape
CT(5)	60-80	

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars indicating cultivation activities]											
Sowing	Planting	Pruning									

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars indicating treatment schedules]											
Fungicides	Pesticides	Fertilizers									

Laurus

Laurus nobilis

ORNAMENTAL SHRUB

LAUREL SPANISH LLORER VALENCIAN LAUREL, SWEET BAY ENGLISH LAURIER FRANC FRENCH

STRUCTURE		
Shape PYRAMID	Height 12-18 M	Diameter 10 M
Texture COARSE	Shade FULL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	LAURALES	
FAMILY:	LAURACEAE	

MORPHOLOGY		
Trunk		
Leaf EVERGREEN SIZE: LEAF: 5-10 CM COLOR: US: DK. GREEN LS: DULL GREEN TEXTURE: US: SMOOTH LS: SMOOTH	COMPOUND: NO	HARDNESS: CORIACEOUS
	ARRANGEMENT: ALTERNATE	VENATION: PINNATE
	SHAPE: OBLONG/LANCEOLATE	MARGIN: ENTIRE
	APEX: ACUTE	LEAF BASE: ATTENUATE
	PETIOLE: SHORT	
Flower	Type UNISEXUAL	Reproduction DIOECIOUS
SIZE AND TYPE: 0.1-1CM	Flowering INFLORESCENCE IN UMBEL (4-6 flowers)	Fragrant SCENTED LEAVES
Fruit SIZE: 1-2 CM	Type BERRY	Color BLACK
	Edible NO	Fruiting season EARLY AUTUMN
Growth	Rate FAST	Longevity 0-25 YEARS



ECOLOGY		
Climate ALTITUDE: 0-800 IRRIGATION: MODERATE	Temperature -10°C.H3.Z5	Drought resistant MODERATE
	Sun exposure SUN	Frost resistant MODERATE
Soil pH: 6.5-8 FERTILITY: MODERATE	Texture LOAMY/SANDY	Salt resistant LOW
	Drainage MODERATE	Lime resistant MODERATE

USES		
Resistances COASTAL: 2ND LINE POLLUTION: HIGH WIND: MODERATE	Applications SLOPES: NO HEDGE ROWS: YES RIVERBANKS: NO BORDERS: NO GROUPS: YES ISOLATED: YES	

POINTS OF INTEREST

Native to the Mediterranean basin. Its name lends itself to many historical characters and reminds us of a past full of honors; people who achieved some act of bravery, courage or poetic quality were crowned with it. Painted, embroidered or sculpted laurel wreaths have adorned (still today) a multitude of places and public buildings and, to varying degrees to documents, seals or coats of arms. These large shrubs are ideal to be used isolated in some prominent position in the garden. This is an excellent specimen for topiary. Its leaves are very fragrant and can be used as a condiment.

SPACING: 2 M

PLANTING AND PLANT HEALTH

Laurels prefer sunny positions due to their Mediterranean origin. However, they adapt perfectly to shady areas. In fact, they seem to need protection during the first years of their lives. They are suitable for any soil that has excellent drainage capacity, including calcareous ones, but free of salt. Resists severe pruning and topiary. In spring, remove mis-shapen or damaged stems. Propagation by cutting, seed, layering, sapling and grafting. It is sensitive to coccidia attacks and subsequent damage from leafspot. This is a low maintenance shrub.

CHROMATIC CALENDAR

COMMERCIALIZATION

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for foliage, flowering, and fruiting across months]											

Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	
CT(10)	80-100	YES
CT(30)	125-150	YES

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for sowing, planting, and pruning across months]											
Sowing		Planting		Pruning		[X]					

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for fungicides, pesticides, and fertilizers across months]											
Fungicides		Pesticides		Fertilizers							

Myoporum

Myoporum tenuifolium

ORNAMENTAL SHRUB

MIOPORO SPANISH MIOPOR VALENCIAN MYOPORUM ENGLISH MYOPORUM FRENCH

STRUCTURE		
Shape	Height	Diameter
ROUND	3.5 M	3.5 M
Texture	Shade	Root
COARSE	FULL	SCATTERED/FIBROUS

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	LAMIALES	
FAMILY:	SCROPHULARIALES	

MORPHOLOGY		
Trunk		
Leaf	COMPOUND:	NO
	HARDNESS:	SOFT
	ARRANGEMENT:	ALTERNATE
	VENATION:	PINNATE
SIZE: LEAF:4.5-10 CM	SHAPE:	OBLONG/LANCEOLATE
COLOR: US: DK. GREEN	MARGIN:	ENTIRE
LS: DK. GREEN	APEX:	ACUTE
TEXTURE: US: SMOOTH	LEAF BASE:	ATTENUATE
LS: SMOOTH	PETIOLE:	SHORT
Flower	Type	Reproduction
	HERMAPHRODITE	HERMAPHRODITE
SIZE AND TYPE:	1.2CM	Flowering
		Fragrant
	INFLORESCENCE IN RACEMES (5-9 flowers)	
Fruit	Type	Color
	DRUPE	BLACK
SIZE:	Edible	Fruiting season
	YES	
Growth	Rate	Longevity
	FAST	25-50 YEARS



ECOLOGY		
Climate	Temperature	Drought resistant
	-5°C, H4, Z6	HIGH
ALTITUDE: 0-800	Sun exposure	Frost resistant
IRRIGATION: LOW	SUN	MODERATE
Soil	Texture	Salt resistant
	LOAMY/SANDY	HIGH
pH: 6.5-8	Drainage	Lime resistant
FERTILITY: MODERATE	MODERATE	MODERATE

USES		
Resistances	Applications	
COASTAL: 1ST LINE	SLOPES: NO	HEDGE ROWS: YES
POLLUTION: MODERATE	RIVERBANKS: NO	BORDERS: NO
WIND: HIGH	GROUPS: YES	ISOLATED: YES

POINTS OF INTEREST

Native to Australia and New Zealand. This shrub or small tree can be used in hedges for gardens and windbreakers against saline winds. It is an easy and fast-growing shrub. Tolerates most soils, position and is resistant to frost. Its beautiful flowers attract bees.

SPACING: 2 M

PLANTING AND PLANT HEALTH

It grows well in lowlands, perfectly resisting proximity to the sea and salinity. Soils can be hardy and they can grow in both sandy and clay-limestone but prefer porous ones. It needs good drainage. This shrub prefers moderate humidity and sun or partial shade. It supports pruning very well. Propagation can be carried out by cutting or by seed.

CHROMATIC CALENDAR											
Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for foliage, flowering, and fruiting seasons]											
Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for cultivation activities]											
Sowing		Planting		Pruning	X						
Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for treatment activities]											
Fungicides			Pesticides			Fertilizers					

COMMERCIALIZATION		
Presentation (L)	Height (cm)	Topiary shape
CT(2)	30-40	NO
CT(3)	40-50	NO
CT(7)	50-60	NO
CT(30)	80-100	YES
CT(50)	125-150	YES
CT(70)	150-175	YES
CT(85)	175-200	YES

Myrtus

Myrtus communis

ORNAMENTAL SHRUB

MIRTO SPANISH MURTA VALENCIAN MYRTLE ENGLISH MYRTE FRENCH

STRUCTURE		
Shapes	Height	Diameter
ROUND	3-5 M	3 M
Texture	Shade	Root
COARSE	FULL	SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	MYRTALES	
FAMILY:	MYRTACEAE	

MORPHOLOGY		
Trunk		
Leaf		
COMPOUND:	NO	
HARDNESS:	SOFT	
PERSISTENT	ARRANGEMENT: OPPOSITE	
SIZE: LEAF: 2-5 CM	VENTINATION: PINNATE	
	SHAPE: OVAL/LANCEOLATE	
COLOR: US: DK. GREEN	MARGIN: ENTIRE	
LS: DK. GREEN	APEX: ACUTE	
TEXTURE: US: SMOOTH	LEAF BASE: ATTENUATE	
LS: SMOOTH	PETIOLE: SHORT	
Flower		Reproduction
Type		HERMAPHRODITE
SIZE AND TYPE: 3 CM		Flowering
SOLITARY		Fragrant
		YES
Fruit		Color
Type		BERRY
Edible		BLACK
Fruiting season		
SIZE:		
Growth		Longevity
Rate		25-50 YEARS
FAST		



ECOLOGY		
Climate		Drought resistant
TEMPERATURE: -3°C H5, 26	MODERATE	
ALTITUDE: 0-500	Sun exposure	
IRRIGATION: MODERATE	SUN/PARTIAL SHADE	Frost resistant
Soil		Salt resistant
Texture		LOAMY
LOAMY		MODERATE/LOW
pH: 6.5-8		Lime resistant
FERTILITY: MODERATE		MODERATE

USES	
Resistances	Applications
COASTAL: 2ND LINE	SLOPES: NO HEDGE ROWS: YES
POLLUTION: MODERATE	RIVERBANKS: NO BORDERS: NO
WIND: MODERATE	GROUPS: YES ISOLATED: YES

POINTS OF INTEREST

Commonly known as bayberry or myrtle. This is native to Mediterranean areas. It leaves and flowers are fragrant and thanks to its adaptability to the terrain, it can be used to create formal hedges of any shape. As a free-growing shrub it is suitable to mediterranean gardens together with oleanders, rockroses or potentillas. It lives comfortably in a pot. The myrtle is an inseparable part of the splendid Hispano-Arab palace of the Alhambra, growing and giving its name to one of its most famous interior patios. The *Patío de los Arayaños* or *de Comares*, where it sobriety frames the architecture that is reflected in the quadrangular pond.

SPACING: 1 M

PLANTING AND PLANT HEALTH

It is suitable to a sunny and warm exposure, typical of the Mediterranean environment to which it belongs. The soil should be well drained and preferably not too moist, but it will need a high irrigation programme during the hot summer months. This bush is not demanding in terms of soil. It can be pruned at any time, but avoid mid summer so as not to harm flowering and subsequent fruiting. In formal hedges it is best to remove spring budding in June and then cut back in October or November to maintain regularity. Propagation can be carried out in spring, sowing the seeds in glasshouses.

CHROMATIC CALENDAR

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for foliage, flowering, and fruiting]											
Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for sowing, planting, and pruning]											
Sowing [] Planting [] Pruning [X]											
Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for fungicides, pesticides, and fertilizers]											
Fungicides [] Pesticides [] Fertilizers []											

COMMERCIALIZATION

Presentation (L)	Height (cm)	Topiary shape
CT(2)	15-20	No
CT(3)	20-25	No
CT(7)	25-30	Yes
CT(9)	30-40	Yes
CT(30)	60-80	Yes
CT(50)	80-100	Yes

Nerium

Nerium oleander

ORNAMENTAL SHRUB

STRUCTURE		
Shape OVOID	Height 4 M	Diameter 4 M
Texture COARSE	Shade FULL	Root SCATTERED

DIVISION:	ADELFA SPANISH	BALADRE VALENCIAN	OLEANDER, ROSE BAY ENGLISH	LAURIER-ROSE FRENCH
SUBDIVISION:	PHANEROGAMS			
TYPE:	ANGIOSPERMS			
ORDER:	DICOTYLEDONES			
FAMILY:	GENTIANALES			
	APOCYNACEAE			
	VARIETIES VARIEGATA			

MORPHOLOGY		
Trunk		
Leaf	COMPOUND: NO HARDNESS: CORIACEOUS ARRANGEMENT: OPPOSITE VENATION: PINNATE SHAPE: LANCEOLATE MARGIN: ENTIRE APEX: ACUTE LEAF BASE: ATTENUATE PETIOLE: SHORT	
PERSISTENT SIZE: LEAF: 20 CM COLOR: US: DK. GREEN LS: DK. GREEN TEXTURE: US: SMOOTH LS: SMOOTH		
Flower	Type HERMAPHRODITE	Reproduction HERMAPHRODITE
SIZE AND TYPE: 5CM INFLORESCENCE IN CYME: NO	Flowering	Fragrant
Fruit	Type FOLLICLE	Color
SIZE: 8-16 CM	Edible	Fruiting season
Growth	Rate FAST	Longevity 0-25 YEARS



ECOLOGY		
Climate	Temperature -5°C,H4,Z6	Drought resistant MODERATE
ALTITUDE: 0-500 IRRIGATION: MODERATE	Sun exposure SUN	Frost resistant MODERATE
Soil	Texture ALL TYPES	Salt resistant MODERATE
pH: 6.5-8 FERTILITY: MODERATE	Drainage MODERATE	Lime resistant MODERATE

USES		
Resistances	Applications	
COASTAL: 1ST LINE POLLUTION: MODERATE WIND: MODERATE	SLOPES: NO RIVERBANKS: NO GROUPS: YES	HEDGE ROWS: NO BORDERS: NO ISOLATED: YES

POINTS OF INTEREST

Commonly known as oleander. It is native to the Mediterranean region and Portugal. Its leaves and flowers are toxic. It is the only European representative of a predominantly tropical family, the *Apocynaceae*, which characteristically present a milky juice in its leaves and stems, and which in many cases, like that of the oleander, is poisonous. It is cultivated as an ornamental in the form of an isolated shrub, in groups for large parks and in shrubby hedges, for its perennial foliage and showy flowering. It is used to correct unstable terrain and river beds.

SPACING: 2M

PLANTING AND PLANT HEALTH

This shrub grows very well in warm places with low altitude, such as areas near the sea. It resists frost although young branches can be affected. It tolerates a wide variety of well-drained soils. It requires a moderate irrigation programme. It is hardy in terms of environmental humidity and resists dry air. It adapts to all types of light, but does very well in full sun to achieve a more exuberant flowering. If its growth needs to be restricted, it can be pruned annually but generally it is not necessary. If pruned during the winter or before flowering, the plant will bloom profusely. Propagation is by seeds and by cutting.

CHROMATIC CALENDAR

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for foliage, flowering, and fruiting]											
Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for sowing, planting, and pruning]											
Sowing [] Planting [] Pruning [x]											
Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for fungicides, pesticides, and fertilizers]											
Fungicides [] Pesticides [] Fertilizers []											

COMMERCIALIZATION

Presentation (L)	Height (cm)	Topiary shapes
CT(5)	Shrub	60-80
CT(10)	Shrub	80-100
CT(30)	Shrub	125-150

Philadelphus

Philadelphus coronarius

ORNAMENTAL SHRUB

CELINDA SPANISH VALENCIAN SWEET MOCK-ORANGE ENGLISH SERINGAT, SERINGA FRENCH

STRUCTURE		
Shape <small>OVOID/EXTENDED</small>	Height 2-4 M	Diameter 2-4 M
Texture <small>COARSE</small>	Shade FULL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	CORNALES	
FAMILY:	HYDRANGEACEAE	

MORPHOLOGY		
Trunk		
Leaf <small>DECIDUOUS</small> SIZE: LEAF: 4-8 CM COLOR: US: LIGHT GREEN LS: LIGHT GREEN TEXTURE: US: SMOOTH LS: SMOOTH	COMPOUND:	NO
	HARDNESS:	SOFT
	ARRANGEMENT:	OPPOSITE
	VENATION:	PINNATE
	SHAPE:	OVAL
MARGIN:	DENTATE	
APEX:	ACUTE	
LEAF BASE:	ATTENUATE	
PETIOLE:	SHORT	
Flor		Reproduction
Type HERMAPHRODITE		HERMAPHRODITE
SIZE AND TYPE: 2.5-3.5CM	Flowering	Fragrant
	<small>(INFLORESCENCE IN RACEMES (3-7 FLOWERS))</small>	YES
Fruit	Type	Color
	CAPSULE	
Edilbe	Fruiting season	
SIZE:		
Growth	Rate	Longevity
	MEDIUM	0-25 YEARS



ECOLOGY		
Climate	Temperature	Drought resistant
	<small>-5°C,H4,Z6</small>	MODERATE
ALTITUDE: 0-800	Sun Exposure	Frost resistant
	IRRIGATION: MODERATE	<small>SUN/PARTIAL SHADE</small>
Soil	Texture	Salt resistant
	<small>LOAMY/CLAYEY</small>	LOW
pH: 6.5-8	Drainage	Lime resistant
FERTILITY: MODERATE	MODERATE	MODERATE

USES			
Resistances	Applications		
	COASTAL: 2ND LINE	SLOPES: NO	HEDGE ROWS: NO
	POLLUTION: LOW	RIVERBANKS: NO	BORDERS: NO
	WIND: MODERATE	GROUPS: YES	ISOLATED: YES

POINTS OF INTEREST

Commonly known by its Spanish name Celinda. It is among the characteristic plants introduced by the Arabs. In ancient times, its branches devoid of pith were used to make flutes. Its large and fragrant flowers make it ideal to cultivate as an ornamental shrub in isolation or in flowerbeds.

SPACING: 1.5 M

PLANTING AND PLANT HEALTH

It prefers a temperate climate, although it resists the cold well. It tolerates all types of soil but does well in light and very siliceous soil mixed with humus. This shrub needs a low irrigation programme. It should be pruned after flowering, eliminating the branches that carry the flowers. The propagation is done by cuttings, during the winter and in a propagation greenhouse.

CHROMATIC CALENDAR

COMMERCIALIZATION

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
						X	X	X	X	X	X
Sowing			Planting		Pruning						

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Fungicides											

Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Photinia

Photinia x fraseri "Red Robin"

ORNAMENTAL SHRUB

FOTINIA
SPANISH

VALENCIAN

PHOTINIA
ENGLISH

PHOTINIA
FRENCH

STRUCTURE		
Shape OVOID	Height 5 M	Diameter 3 M
Texture COARSE	Shade FULL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONES	
ORDER:	ROSALES	
FAMILY:	ROSACEAE	

MORPHOLOGY		
Trunk		
Leaf EVERGREEN SIZE: LEAF:10-18CM COLOR: US: RED/GREEN LS: LGT RED/GREEN TEXTURE: US: SMOOTH LS: SMOOTH	COMPOUND:	NO
	HARDNESS:	CORIACEOUS
	ARRANGEMENT:	ALTERNATE
	VENATION:	PINNATE
	SHAPE:	OVAL
	MARGIN:	SERRATE
	APEX:	ACUTE
	LEAF BASE:	ATTENUATE
	PETIOLE:	SHORT
Flower	Type	Reproduction
	HERMAPHRODITE	HERMAPHRODITE
SIZE AND TYPE:	8 MM	Flowering
	INFLORESCENCE IN SPIKE (10-16)	
Fruit	Type	Color
	POME	RED/PURPLE
	Edible	Fruiting season
SIZE: 6MM		
Growth	Rate	Longevity
	MEDIUM	0-25 YEARS



ECOLOGY		
Climate	Temperature	Drought resistant
	-5C,H4,Z6	MODERATE
ALTITUDE: 0-800	Sun exposure	Frost resistant
IRRIGATION: MODERATE	SUN/PARTIAL SHADE	MODERATE
Soil	Texture	Salt resistant
	LOAMY/SANDY	LOW
	Drainage	Lime resistant
pH: 6.5-7.5	MODERATE	MODERATE
FERTILITY: MODERATE		

USES	
Resistances	Applications
COASTAL: 2ND LINE	SLOPES: NO HEDGE ROWS: NO
POLLUTION: LOW	RIVERBANKS: NO BORDERS: NO
WIND: MODERATE	GROUPS: YES ISOLATED: YES

POINTS OF INTEREST

This hybrid made its appearance in 1955 and has become a worthy shrub among garden plants. It is grown more for its foliage than for its flowers and as an isolated plant on flowerbeds or bushy hedges. With the common name fotinia, the tones of its intensely red sprouts stands out, which are present almost all year round. It forms excellent backdrops, informal hedges; either monospecific or in combination with abelias, pieris or evonymys with shaded leaves. It is also used in mixed borders as it will provide a showy touch, especially in the early spring weeks when the garden is somewhat lacking in colour.

SPACING: 2 M

PLANTING AND PLANT HEALTH

It does well in sunny exposures. However, in areas of intense frosts it should be kept sheltered. They thrive in all types of soils including calcareous. These plants; compact by nature and of uniform development; do not require pruning. To force the appearance of new red shoots, deadhead the new ones as soon as they begin to lose their color. Requires a normal irrigation programme. Prefers medium humidity. This shrub can be affected by powdery mildew. Propagation can be carried out by semi-woody cuttings in summer.

CHROMATIC CALENDAR												COMMERCIALIZATION		
Foliage, Flowering and Fruiting season												Presentation (L)	Height (cm)	Topiary shape
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	CT(5)	60-80	
[Color-coded calendar grid]												CT(10)	80-100	
[Color-coded calendar grid]												CT(30)	125-150	
Cultivation Calendar														
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC			
[Color-coded cultivation calendar grid]														
Sowing [] Planting [] Pruning [x]														
Treatment Calendar														
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC			
[Color-coded treatment calendar grid]														
Fungicides [] Pesticides [] Fertilizers []														

Pistacia

Pistacia lentiscus

ORNAMENTAL SHRUB

LENTISCO SPANISH LLENTISCLE VALENCIAN MASTIC TREE ENGLISH ARBRE AU MASTIC FRENCH

STRUCTURE		
Shape <small>EXTENDED</small>	Height 3 M	Diameter 3 M
Texture <small>COARSE</small>	Shade FULL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONES	
ORDER:	SAPINDALES	
FAMILY:	ANACARDIACEAE	

MORPHOLOGY		
Trunk		
Leaf <small>EVERGREEN</small> SIZE: LEAF: 10 CM <small>LEAFLET: 6-12mm</small> COLOR: US: GREEN LS: GREEN TEXTURE: US: SMOOTH LS: SMOOTH	COMPOUND: YES, PARIPINNATE	HARDNESS: CORIACEOUS
	ARRANGEMENT: ALTERNATE	VENATION: PINNATE
	SHAPE: OBLONG-LANCEOLATE	MARGIN: SMOOTH
	APEX: ACUTE	LEAF BASE: ATTENUATE
	PETIOLE: SHORT	
Flower	Type UNISEXUAL	Reproduction DIOECIOUS
SIZE AND TYPE:	APETALOUS	Flowering
	INFLORESCENCE IN PANICLE	Fragrant NO
Fruit	Type BERRY	Color RED
	Edible NO	Fruiting season AUTUMN
Growth	Rate MEDIUM	Longevity 100 YEARS



ECOLOGY		
Climate ALTITUDE: 0-800 IRRIGATION: LOW	Temperature -8°C.H4,Z6	Drought resistant HIGH
	Sun Exposure SUNPARTIAL SHADE	Frost resistant MODERATE/HIGH
Soil pH: 6.5-8 FERTILITY: MODERATE	Texture LOAMY/SANDY	Salt resistant LOW
	Drainage MODERATE	Lime resistant MODERATE/HIGH

USES	
Resistances COASTAL: 2ND LINE POLLUTION: LOW WIND: MODERATE	Applications SLOPES: NO HEDGE ROWS: NO RIVERBANKS: NO BORDERS: NO GROUPS: YES ISOLATED: YES

POINTS OF INTEREST

Commonly known as lentisco. Its wood has been used in the lumber industry. This species has been cultivated for its ornamental-landscape value. When the stems are bled (making a small cut), a fragrant and astringent resinous juice is released. It has been used as a varnish for paintings, in perfumery, drugs and dentistry. It is also used as chewing gum and for flavouring. From the fruits you can extract an oil for lighting, which is also edible. Firewood is a wonderful fuel and provides top quality charcoal. The lentisco was already used for its resin in the time of the Pharaohs.

SPACING: 1.5 M

PLANTING AND PLANT HEALTH

It tolerates light frosts and resists proximity to the sea. It is part of the maquia, both coastal and continental, in low plant formations and in open areas at the foot of mountains. Its presence will decrease as latitude and continentality increase. It looks spectacular in areas with hot and dry summers. It is indifferent to soils and adapts to dry and rocky soils. It resists drought but benefits from a moderate irrigation programme. It is important not to overwater and to avoid waterlogging. Hardy in humidity, tolerates pruning and propagates by seed and suckers.

CHROMATIC CALENDAR

COMMERCIALIZATION

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars representing foliage, flowering, and fruiting periods]											

Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	
CT(10)	80-100	

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for sowing, planting, and pruning]											
Sowing [] Planting [] Pruning [x]											

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for fungicides, pesticides, and fertilizers]											
Fungicides [] Pesticides [] Fertilizers []											

Pittosporum

Pittosporum tobira

ORNAMENTAL SHRUB

PITOSPORO
SPANISH

VALENCIAN

JAPANESE PITOSPORUM
ENGLISH

PITOSPORUM
FRENCH

STRUCTURE		
Shape ROUND	Height 8 M	Diameter 8 M
Texture COARSE	Shade FULL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONES	
ORDER:	ROSALES	
FAMILY:	PITOSPORACEAE	

MORPHOLOGY		
Trunk		
Leaf		
COMPOUND: NO	HARDNESS: CORIACEOUS	
EVERGREEN	ARRANGEMENT: ALTERNATE	
SIZE: LEAF: 5-8 CM	VENATION: PINNATE	
COLOR: US: GREEN	SHAPE: OBLONG/LANCEOLATE	
LS: GREEN	MARGIN: SMOOTH	
TEXTURE: US: SMOOTH	APEX: ROUND	
LS :SMOOTH	LEAF BASE: ATTENUATE	
	PETIOLE: SHORT	
Flower		Reproduction
Type	HERMAPHRODITE	HERMAPHRODITE
SIZE AND TYPE:	1 CM Flowering	Fragrant
	INFLORESCENCE IN UMBEL	Yes
Fruit		Color
Type	CAPSULE	
Edible		Fruiting season
SIZE: 12MM		
Growth		Longevity
Rate	MEDIUM	25-50 YEARS



ECOLOGY		
Climate		
Temperature	-2°C,H5,Z6	Drought resistant
MODERATE		
ALTITUDE: 0-400	Sun exposure	Frost resistant
IRRIGATION: MODERATE	SUN/PARTIAL SHADE	LIGHT
Soil		Salt resistant
Texture	LOAMY/SANDY	LOW
pH: 6.5-8	Drainage	Lime resistant
FERTILITY: MODERATE	MODERATE	MODERATE/HIGH

USES	
Resistances	Applications
COASTAL: 1ST LINE	SLOPES: NO HEDGE ROWS: YES
POLLUTION: MODERATE	RIVERBANKS: NO BORDERS: NO
WIND: MODERATE	GROUPS: YES ISOLATED: YES

POINTS OF INTEREST

Native to Southern Japan, Korea and China. Its generic name derives from the Greek "pita", which means resin, and "spora", meaning seed, alluding to the seeds that are impregnated with a viscous mucilage. It is used to raise hedges that maintain a good density if they are trimmed regularly. They provide good protection in gardens exposed to the sea wind. They grow well in containers, either in free form or with a well-defined shape.

SPACING: 2 M

PLANTING AND PLANT HEALTH

Hardy shrub with respect to temperature. Withstands proximity to the sea (60-70 cm from the shore). Very hardy to soils, it adapts to sandy and limestone. It requires a normal irrigation programme but avoid overwatering and waterlogging. This shrub is prone to fungi attack when the environment is very humid. Tolerates shady spots and pruning is not essential (except to form hedges or clipped shapes). Propagation occurs by seed in places with a temperate climate, and by cuttings that root easily.

CHROMATIC CALENDAR

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for foliage, flowering, and fruiting]											
Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for cultivation activities]											
Sowing	[Red box]	Planting	[Orange box]	Pruning	[White box with X]						
Treatments Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for treatments]											
Fungicides	[Green box]	Pesticides	[Blue box]	Fertilizers	[Light blue box]						

COMMERCIALIZATION

Presentation (L)	Height (cm)	Topiary shape
CT(5)	60-80	Yes
CT(10)	80-100	Yes

Polygala

Polygala myrtifolia

ORNAMENTAL SHRUB

POLIGALA SPANISH VALENCIAN SEPTEMBER BUSH ENGLISH POLYGALÉ FRENCH

STRUCTURE		
Shape STRAIGHT/BRANCHED	Height 2 M	Diameter 2 M
Texture COARSE	Shade FULL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES <i>GRANDIFLORA</i>
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONES	
ORDER:	POLYGALALES	
FAMILY:	POLYGALACEAE	

MORPHOLOGY		
Trunk		
Leaf	COMPOUND: NO	HARDNESS: SOFT
EVERGREEN	ARRANGEMENT: ALTERNATE	VENATION: PINNATE
SIZE: LEAF: 25-5CM	SHAPE: OBOVATE	MARGIN: SMOOTH
COLOR: US: GREEN	APEX: ACUTE	LEAF BASE: ATTENUATE
LS: GREEN	PETIOLE: SHORT	
TEXTURE: US: SMOOTH		
LS: SMOOTH		
Flower	Type HERMAPHRODITE	Reproduction HERMAPHRODITE
SIZE AND TYPE:	2-3 CM INFLORESCENCE IN UMBEL	Flowering NO
		Fragrant NO
Fruit	Type CAPSULE	Color
SIZE:	Edible	Fruiting season
Growth	Rate MEDIUM	Longevity 25 YEARS



ECOLOGY		
Climate	Temperature -2°C.H5.Z6	Drought resistant MODERATE
ALTITUDE: 0-400	Sun exposure SUN/PARTIAL SHADE	Frost resistant LIGHT
IRRIGATION: MODERATE	Texture LOAMY/SANDY	Salt resistant LOW
Soil	pH: 6.5-8	Drainage MODERATE
FERTILITY: MODERATE		Lime resistant MODERATE/HIGH

USES	
Resistances	Applications
COASTAL: 2ND LINE	SLOPES: NO
POLLUTION: MODERATE	RIVERBANKS: NO
WIND: MODERATE	HEDGE ROWS: NO
	BORDERS: NO
	GROUPS: YES
	ISOLATED: YES

POINTS OF INTEREST

Native to the Cape of South Africa. Planted in dry, sunny areas. Throughout the year (except in the hottest months), it bears pea-like purple flowers on evergreen stems. The *grandiflora* variety has the largest flowers. It responds well to a light pruning that promotes a more compact growth. *Polygala myrtifolia* can be easily propagated from seed and cuttings, preferably in spring or autumn.

SPACING: 2 M

PLANTING AND PLANT HEALTH

This shrub thrives in humus-rich soils, sunny or partially shaded areas, and with a low irrigation programme in summer. Due to the different species available, it is recommended to consider which one is better suited to the environment in which it will be placed.

CHROMATIC CALENDAR

COMMERCIALIZATION

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
X	X	X	X	X	X	X	X	X	X	X	X
Sowing		Planting		Pruning	X						

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Fungicides			Pesticides			Fertilizers					

Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	

Pyracantha

Pyracantha coccinea

ORNAMENTAL SHRUB

ESPIÑO DE FUEGO
SPANISH

VALENCIAN

FIRETHORN
ENGLISH

FEAUDORN
FRENCH

STRUCTURE		
Shape ROUND	Height 4-6 M	Diameter 4-6 M
Texture COARSE	Shade FULL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONES	
ORDER:	ROSALES	
FAMILY:	ROSACEAE	

MORPHOLOGY		
Trunk		
Leaf PERSISTENT SIZE: LEAF: 2,4-5 CM COLOR: US: GREEN LS: LIGHT GREEN TEXTURE: US: SMOOTH LS: PUBESCENT	COMPOUND: NO	HARDNESS: CORIACEOUS
	ARRANGEMENT: ALTERNATE	VENATION: PINNATE
	SHAPE: LINEAR/LANCEOLATE	MARGIN: SOMEWHAT SERRATED
	APEX: ACUTE	LEAF BASE: ATTENUATE
	PETIOLE: SHORT	
Flower	Type HERMAPHRODITE	Reproduction HERMAPHRODITE
	SIZE AND TYPE: 0,8 CM INFLORESCENCE IN UMBEL (2,5-4cm)	Flowering NO
Fruit	Type POME	Color ORANGE
	Edible NO	Fruiting season SEPT-FEB
Growth	Rate MEDIUM	Longevity 25 YEARS



ECOLOGY		
Climate ALTITUDE: 0-1000 IRRIGATION: MODERATE	Temperature -5°C,H4,Z6	Drought resistant MODERATE
	Sun exposure SUN	Frost resistant HIGH
Soil pH: 6,5-8 FERTILITY: MODERATE	Texture LOAMY/SANDY	Salt resistant LOW
	Drainage MODERATE	Lime resistant MODERATE/HIGH

USES		
Resistances	Applications	
COASTAL: NO	SLOPES: YES	HEDGE ROWS: YES
POLLUTION: MODERATE	RIVERBANKS: NO	BORDERS: NO
WIND: MODERATE	GROUPS: YES	ISOLATED: YES

POINTS OF INTEREST

Commonly known by its English name - firethorn. This shrub is native to Western Asia, Italy and northeast of the Iberian Peninsula. It is highly prized for its evergreen leaves and decorative fruit. They are an interesting species to decorate copses and also to form scattered groups or as isolated specimens. They are often positioned against a north-facing wall, which they quickly cover in a few years. They form impregnable hedges that can be trimmed to give them a geometric appearance without affecting their ability to bear abundant fruit.

SPACING: 1.5 M

PLANTING AND PLANT HEALTH

Resists extreme temperatures. Tolerates most soils (including limestone) but prefers rich, well-drained, light and cool ones. It is also resistant to drought but appreciates a normal irrigation programme (if there is good drainage). Also hardy in terms of humidity. Pruning is not very convenient, but unwanted stems must be removed immediately after flowering (white or pinkish-yellow flowers). It propagates by sowing seeds in glasshouses in spring, or by planting semi-ripe cuttings in summer, also by layering or grafting. Transplanting is difficult and preferably in a container to generate rooting.

CHROMATIC CALENDAR

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for foliage, flowering, and fruiting across months]											

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for sowing, planting, and pruning across months]											
Sowing	Planting	Pruning									

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for fungicides, pesticides, and fertilizers across months]											
Fungicides	Pesticides	Fertilizers									

COMMERCIALIZATION

Presentation (L)	Height (cm)	Topiary
CT(5)	60-80	Yes
CT(10)	80-100	Yes

Rhamnus

Rhamnus alaternus

ORNAMENTAL SHRUB

ALADIerno SPANISH ALADERM VALENCIAN ITALIAN BUCKTHORN ENGLISH NERPRUN ALATERNE FRENCH

STRUCTURE		
Shape OVOID	Height 1-6 M	Diameter 1-6 M
Texture COARSE	Shade FULL	Root SCATTERED

DIVISION:	PHANEROGAMS
SUBDIVISION:	ANGIOSPERMS
TYPE:	DICOTYLEDONES
ORDER:	ROSALES
FAMILY:	RHAMNACEAE

VARIETIES

MORPHOLOGY		
Trunk		
Leaf		
COMPOUND: NO	HARDNESS: CORIACEOUS	
PERSISTENT	ARRANGEMENT: ALTERNATE	
SIZE: LEAF: 2-6 CM	VENATION: PINNATE	
COLOR: US: GREEN	SHAPE: OBLONG	
LS: LIGHT GREEN	MARGIN: DENTATE	
TEXTURE: US: SMOOTH	APEX: ACUTE	
LS: SMOOTH	LEAF BASE: ATTENUATE	
	PETIOLE: SHORT	
Flower		Reproduction
Type UNISEXUAL		DIOCEIOUS
SIZE AND TYPE:	♂/M 0.3CM Flowering	Fragrant
	♀ 0.3 CM INFLO: IN UMBEL	UNPLEASANT
Fruit		Color
Type DRUPE		RED
Edible NO		Fruiting season SUMMER/AUTUMN
SIZE: 0.4-0.6		
Growth		Longevity
Rate MEDIUM		25 YEARS



ECOLOGY		
Climate		Drought resistant
TEMPERATURE: 0-400	-3C.H5.Z6	HIGH
IRRIGATION: MODERATE	SUN	Frost resistant
	LOW	
Soil		Salt resistant
LOAMY/SANDY	HIGH	
pH: 6.5-8	Drainage	Lime resistant
FERTILITY: MODERATE	MODERATE	MODERATE/HIGH

USES		
Resistances		Applications
COASTAL: YES	SLOPES: NO	HEDGE ROWS: YES
POLLUTION: MODERATE	RIVERBANKS: NO	BORDERS: NO
WIND: HIGH	GROUPS: YES	ISOLATED: NO

POINTS OF INTEREST
 Native to the Mediterranean region and Portugal. Commonly known by its Spanish name - "Aladierno". This species is popular in gardening for its beautiful foliage, and in the ability to form high or low hedges as it easily supports trimming. The wood is good for turning and cabinet making, although both wood and bark give off an unpleasant odour. The bark is used as a purgative as it contains anthraquinonic principles. The leaves and branches are astringent since they contain a large amount of tannins.

SPACING: 1.5 M

PLANTING AND PLANT HEALTH
 It is a hardy shrub in relation to temperatures. It tolerates the maritime environment well, being able to grow 30-40 m from the shore. Also hardy with soils, it grows even on sandy and rocky ones, but it prefers clayey-limestone. It tolerates drought but thrives best with some constant moisture. It is hardy in terms of environmental humidity and accepts pruning. It propagates by semi-ripe cutting, obtained in summer.

CHROMATIC CALENDAR											
Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for foliage, flowering, and fruiting]											
Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for cultivation activities]											
Sowing [] Planting [] Pruning [x]											
Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded grid for treatments: Fungicides, Pesticides, Fertilizers]											

COMMERCIALIZATION		
Presentation (L) CT(5)	Height (cm) 60-80	Topiary shape

Senecio

Senecio maritima

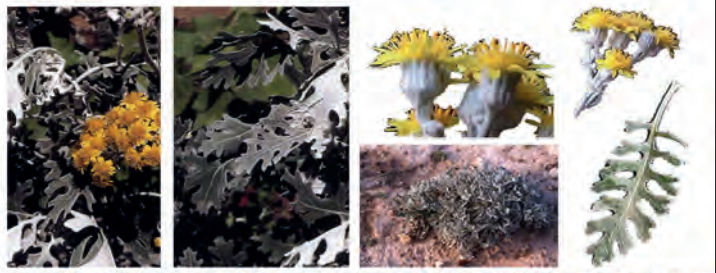
ORNAMENTAL SHRUB

CINERARIA MARITIMA SPANISH VALENCIAN DUSTY MILLER ENGLISH CINERAIRE MARITIME FRENCH

STRUCTURE		
Shape ROUND	Height 0.6-1 M	Diameter 0.6-1 M
Texture MEDIUM	Shade PARTIAL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONES	
ORDER:	ASTERALES	
FAMILY:	COMPOSITAE	

MORPHOLOGY		
Trunk		
Leaf PERSISTENT SIZE: LEAF: 9-15 CM COLOR: US: WHITE LS: WHITE TEXTURE: US: TOMENTOSE LS: TOMENTOSE	COMPOUND: NO	HARDNESS: SOFT
	ARRANGEMENT: ALTERNATE	VENATION: PINNATE
	SHAPE: OBLONG	MARGIN: PINNATISECT
	APEX: ROUND	LEAF BASE: ATTENUATE
	PETIOLE: SHORT	
Flower	Type HERMAPHRODITE	Reproduction HERMAPHRODITE
SIZE AND TYPE: 1-1.5 CM	Flowering	Fragrant
	INFLORESCENCE IN CAPITULUM (1-1.5)	NO
Fruit SIZE:	Type ACHENE	Color
	Edible	Fruiting season
Growth	Rate FAST	Longevity 0-25 YEAR



ECOLOGY		
Climate ALTITUDE: 100-500 IRRIGATION: MODERATE	Temperature -2°C.H5.Z6	Drought resistant MODERATE
	Sun exposure SUN	Frost resistant LIGHT
Soil pH: 6,5-8 FERTILITY: MODERATE	Texture LOAMY/SANDY	Salt resistant MODERATE/HIGH
	Drainage HIGH	Lime resistant MODERATE/HIGH

USES		
Resistances	Applications	
COASTAL: 1ST LINE	SLOPES: NO	HEDGE ROWS: NO
POLLUTION: MODERATE	RIVERBANKS: NO	BORDERS: NO
WIND: MODERATE	GROUPS: YES	ISOLATED: YES

POINTS OF INTEREST

Native to the Mediterranean region and commonly known as "cineraria de mar". It is used as an ornamental shrub in groups of bushes and in rockeries. Senecio is highly valued in popular medicine both for its refreshing and emollient properties and for the possibility of extracting from medication against epilepsy, hemorrhages, eye diseases and sore throats. The name Senecio, derives from the Latin "senex" meaning old man (probably due to the white fluff that covers the seeds of these plants).

SPACING: 0.6 M

PLANTING AND PLANT HEALTH

It is a temperate climate shrub that only tolerates light frosts. It grows very well near coastal areas. It prefers loose, rocky, sandy and well-drained soils. Tolerates limestone. It requires a normal irrigation programme but overwatering and waterlogging should be avoided. Prefers medium humidity. Diseased or old branches must be removed. Trim in winter to shape. It can be propagated by cutting.

CHROMATIC CALENDAR

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
X	X	X	X	X	X	X	X	X	X	X	X
Sowing		Planting		Pruning		X					

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Fungicides		Pesticides		Fertilizers							

COMMERCIALIZATION

Presentation (L)	Height (cm)	Topiary Shapes
CT(5)	60-80	

Senecio

Senecio petasitis

ORNAMENTAL SHRUB

SENECIO SPANISH VALENCIAN CALIFORNIA GERANIUM ENGLISH SENEÇON FRENCH

STRUCTURE		
Shape	Height	Diameter
OVOID	2 M	2 M
Texture	Shade	Root
COARSE	DENSE	SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONES	
ORDER:	ASTERALES	
FAMILY:	COMPOSITAE	

MORPHOLOGY		
Trunk		
Leaf	COMPOUND:	NO
	HARDNESS:	SOFT
	ARRANGEMENT:	ALTERNATE
	VENATION:	PINNATE
	SHAPE:	ROUND
	MARGIN:	LOBED
SIZE: LEAF:15-30CM	VENATION:	PINNATE
COLOR: US: GREEN	SHAPE:	ROUND
LS: GRAY	MARGIN:	LOBED
TEXTURE: US: TOMENTOSE	APEX:	ROUND
LS: TOMENTOSE	LEAF BASE:	ROUND
	PETIOLE:	LONG
Flower	Type	Reproduction
	HERMAPHRODITE	HERMAPHRODITE
SIZE AND TYPE:	1-1.5 CM	Flowering
		Fragrant
	INFLORESCENCE IN PANICLE	
	NO	
Fruit	Type	Color
	ACHENE	
Edilbe	Fruiting season	
SIZE:		
Growth	Rate	Longevity
	MEDIUM	0-25 YEARS



ECOLOGY		
Climate	Temperature	Drought resistant
	-2°C.H5.Z6	MODERATE
	Sun Exposure	Frost resistant
ALTITUDE: 0-400	SUN	LIGHT
IRRIGATION: MODERATE		
Soil	Texture	Salt resistant
	LOAMY	MODERATE
	Drainage	Lime resistant
	pH: 6.5-8	MODERATE
FERTILITY: MODERATE		

USES		
Resistances	Applications	
COASTAL: 2ND LINE	SLOPES: NO	HEDGE ROWS: NO
POLLUTION: MODERATE	RIVERBANKS: NO	BORDERS: NO
WIND: MODERATE	GROUPS: YES	ISOLATED: YES

POINTS OF INTEREST

Native to Southern Mexico. Commonly known as senecio, its name derives from the Latin "senex" meaning old man (probably due to the white fluff that covers the seeds of these plants). It is interesting for its winter flowering and its beautiful velvety foliage. Senecios are highly valued in popular medicine both for their refreshing and emollient properties and for the possibility of extracting medication that can be used against epilepsy, hemorrhages, eye diseases and sore throats.

SPACING: 2 M

PLANTING AND PLANT HEALTH

This shrub should be protected from frost. Prefers rich, well-drained, cool and light soils. It requires a normal irrigation programme but drought and waterlogging must be avoided. Adapted to moderate humidity. Prune after flowering to slightly shorten the branches that have already flowered. It can be propagated with semi-ripe cuttings in spring-summer.

CHROMATIC CALENDAR

COMMERCIALIZATION

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
				X	X	X					
Sowing		Planting		Pruning		X					

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Fungicides		Pesticides		Fertilizers							

Presentation (L)	Height (cm)	Topiary Shapes
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Solanum

Solanum rantonnetti

ORNAMENTAL SHRUB

SOLANO DE FLOR AZUL SPANISH VALENCIAN BLUE POTATO BUSH ENGLISH ARBRE AUX GENTIANES FRENCH

STRUCTURE		
Shape OVOID	Height 2 M	Diameter 2 M
Texture COARSE	Shade FULL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISIN:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	POLEMONIALES	
FAMILY:	SOLANACEAE	

MORPHOLOGY		
Trunk		
Leaf PERSISTENT SIZE: LEAF: 6-15 CM COLOR: US: GREEN LS: LIGHT GREEN TEXTURE: US: SMOOTH LS: TOMENTOSE	COMPOUND:	NO
	HARDNESS:	SOFT
	ARRANGEMENT:	ALTERNATE
	VENATION:	PINNATE
	SHAPE:	LANCEOLATE
	MARGIN:	SMOOTH
APEX:	SHARP	
LEAF BASE:	ATTENUATE	
PETIOLE:	SHORT	
Flower		Reproduction
Type HERMAPHRODITE		HERMAPHRODITE
SIZE AND TYPE:	2-2.5 CM Flowering	Fragrant NO
INFLORESCENCE IN AXILLARY		
Fruit SIZE: 2.5 CM	Type BERRY	Color RED
	Edible NO	Fruiting season JUN-AUG
Growth	Rate MEDIUM	Longevity 0-25 YEARS



ECOLOGY		
Climate ALTITUDE: 0-400 IRRIGATION: MODERATE	Temperature -2°C.H5.Z6	Drought resistant MODERATE
	Sun exposure SUN	Frost resistant LIGHT
Soil pH: 6.5-8 FERTILITY: MODERATE	Texture LOAMY	Salt resistant MODERATE
	Drainage MODERATE	Lime resistant MODERATE/HIGH

USES	
Resistances	Applications
COASTAL: 2ND LINE	SLOPES: NO HEDGE ROWS: NO
POLLUTION: MODERATE	RIVERBANKS: NO BORDERS: NO
WIND: MODERATE	GROUPS: YES ISOLATED: NO

POINTS OF INTEREST
 Spreading and rounded shrub suitable for being shaped as a tree or on walls. Its clusters of bluish-violet flowers, with a yellow button, appear from summer to autumn, giving rise to hanging cord-shaped red fruits. This shrub is a combination of species made for its ornamental use, especially in flowerbeds and as an ornamental climber on sheltered walls. The closest wild plants come from Central America. It is pruned to keep it well shaped, removing any damaged or unwanted stems.
 SPACING: 1.5 M

PLANTING AND PLANT HEALTH
 It requires tropical or subtropical conditions and an abundant irrigation programme during the first stages of growth and then reducing the amount in summer. It is pruned immediately after flowering or in the spring before budding. Trim vigorous stems and remove weak and crowded shoots. Propagation by seed or cutting as well as division of the root ball in summer.

CHROMATIC CALENDAR											
Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for foliage, flowering, and fruiting seasons]											

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for cultivation activities]											
Sowing	Planting	Pruning									

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for treatments]											
Fungicides	Pesticides					Fertilizers					

COMMERCIALIZATION		
Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	

Spartium

Spartium junceum

ORNAMENTAL SHRUB

RETAMA SPANISH GINESTA VALENCIAN SPANISH BROOM ENGLISH SPANTIER JONC FRENCH

STRUCTURE		
Shape OVOID	Height 4 M	Diameter 4 M
Texture MEDIUM	Shade PARTIAL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	FABALES	
FAMILY:	LEGUMINOSAE	

MORPHOLOGY		
Trunk		
Leaf DECIDUOUS SIZE: LEAF:1-3 CM COLOR: US: BLUE/GREEN LS: LGT BLUE/GRN TEXTURE: US: SMOOTH LS: TOMENTOSE	COMPOUND:	NO
	HARDNESS:	SOFT
	ARRANGEMENT:	ALTERNATE
	VENATION:	PINNATE
	SHAPE:	LANCEOLATE
	MARGIN:	SMOOTH
	APEX:	SHARP
	LEAF BASE:	ATTENUATE
	PETIOLE:	SHORT
Flower	Type	Reproduction
	HERMAPHRODITE	HERMAPHRODITE
SIZE AND TYPE:	2.5 CM	Flowering
	INFLORESCENCE IN RACEMES (20-25)	
		Fragrant
		YES
Fruit	Type	Color
	LEGUME	BLACK
	Edible	Fruiting season
SIZE:	4-8 CM	
Growth	Rate	Longevity
	FAST	0-25 YEARS



ECOLOGY		
Climate ALTITUDE: 0-400 IRRIGATION: MOD/LOW	Temperature	Drought resistant
	-3°C H5,26	HIGH
	Sun exposure	Frost resistant
	SUN	LIGHT
Soil pH: 6.5-8 FERTILITY: MODERATE	Texture	Salt resistant
	TOLERANT	MODERATE
	Drainage	Lime resistant
	MODERATE	MODERATE/HIGH

USES		
Resistances	Applications	
COASTAL: 2ND LINE	SLOPES: YES	HEDGE ROWS: NO
POLLUTION: HIGH	RIVERBANKS: NO	BORDERS: NO
WIND: MODERATE	GROUPS: YES	ISOLATED: NO

POINTS OF INTEREST

Commonly known as - fragrant broom- It owes its scientific name *-junceum-* to the bareness of its stems, which resemble reeds; a distinguishing feature from other brooms. This shrub has almost ceased to emit leaves, since it uses the greenery of its branches to carry out the photosynthesis process. It is a suitable shrub for scenes with a marked natural accent, in which it is complemented by other shrub species dressed in various foliar tones, specifically from the green to yellow range. It is a good honey plant. It is also used as a producer of textile fibers used to make ropes. Its stems, branches and flowers can be used in the dyeing process.

SPACING: 1.5 M

PLANTING AND PLANT HEALTH

Commonly found in the dry lands of the Mediterranean and Portugal. Somewhat hardy but does not tolerate harsh winters. It has some resistance to pollution and fire. It is hardy to soils, although it prefers deep, fresh, limestone and permeable ones. It is indifferent to environmental humidity. In the month of March, the previous years' stems can be cut to about 5 cm. Propagation in summer by cuttings and by seed. In cold areas, sowing should be carried out in late spring and the plants should spend the winter months in the greenhouse.

CHROMATIC CALENDAR											
Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for foliage, flowering, and fruiting across months]											
Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for sowing, planting, and pruning across months]											
Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for fungicides, pesticides, and fertilizers across months]											

COMMERCIALIZATION		
Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	

Spiraea

Spiraea x arguta

ORNAMENTAL SHRUB

ESPIREA
SPANISH

VALENCIAN

SPIREA
ENGLISH

SPIRÉE
FRENCH

STRUCTURE		
Shape OVOID	Height 2 M	Diameter 2.5 M
Texture MEDIUM	Shade PARTIAL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERAS	
TYPE:	DICOTYLEDONS	
ORDER:	ROSALES	
FAMILY:	ROSACEAE	

MORPHOLOGY		
Trunk		
Leaf DECIDUOUS SIZE: LEAF: 2-8 CM COLOR: US: GREEN LS: LIGHT GREEN TEXTURE: US: SMOOTH LS: SMOOTH	COMPOUND: NO	HARDNESS: SOFT
	ARRANGEMENT: ALTERNATE	VENATION: PINNATE
	SHAPE: OBOVATE/OBLONG	MARGIN: DOUBLE DENTATE
	APEX: ACUTE	LEAF BASE: ATTENUATE
	PETIOLE: SHORT	
Flower	Type HERMAPHRODITE	Reproduction HERMAPHRODITE
	SIZE AND TYPE: 0.7 CM	Flowering Fragrant NO
Fruit	Type CAPSULE	Color
	Edible	Fruiting season
Growth	Rate MEDIUM	Longevity 0-25 YEARS



ECOLOGY		
Climate ALTITUDE: 0-1000 IRRIGATION: MODERATE	Temperature -5°C, H4, Z6	Drought resistant MODERATE
	Sun exposure SUN	Frost resistant MODERATE
Soil pH: 6.5-7.5 FERTILITY: MODERATE	Texture LOAMY/SANDY	Salt resistant LOW
	Drainage MODERATE	Lime resistant MODERATE/HIGH

USES		
Resistances	Applications	
COASTAL: 2ND LINE	SLOPES: NO	HEDGE ROWS: NO
POLLUTION: MODERATE	RIVERBANKS: NO	BORDERS: NO
WIND: MODERATE	GROUPS: YES	ISOLATED: YES

POINTS OF INTEREST

Commonly known as Spirea. It is a plant of horticultural origin. From the hybridization of *S. thunbergii* with *S. multiflora*. It is one of the prettiest spring Spiraea. It is used to create groups and bushy compositions. They are also suitable for forming part of irregular hedges made up of various species of shrubs. They belong to the Rosaceae family, so a generous and showy bloom can be expected.

SPACING: 1.5 M

PLANTING AND PLANT HEALTH

This shrub is resistant to extreme temperatures. It prefers well-drained soils and with a normal irrigation programme. The soil must be well fertilized before planting. It prefers moderate humidity. To obtain abundant flowering, it is necessary to prune about 15 cm from the ground once flowering has completed. Propagation is by cutting.

CHROMATIC CALENDAR

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Sowing Planting Pruning x											

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Fungicides Pesticides Fertilizer 											

COMMERCIALIZATION

Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	
CT(10)	80-100	

Syringa

Syringa vulgaris

ORNAMENTAL SHRUB

LILA SPANISH VALENCIAN LILAC ENGLISH LILAS COMMUN FRENCH

STRUCTURE		
Shape	Height	Diameter
OVOID	3-5 M	3 M
Texture	Shade	Room
MEDIUM	PARTIAL	SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	LAMIALES	
FAMILY:	OLEACEAE	

MORPHOLOGY		
Trunk		
Leaf DECIDUOUS SIZE: LEAF: 5-15 CM COLOR: US: GREEN LS: LIGHT GREEN TEXTURE: US: SMOOTH LS: SMOOTH	COMPOUND:	NO
	HARDNESS:	SOFT
	ARRANGEMENT:	OPPOSITE
	VENATION:	PINNATE
	SHAPE:	OVAL/CORDIFORM
MARGIN:	SMOOTH	
APEX:	ACUTE	
LEAF BASE:	ATTENUATE	
PETIOLE:	LONG	
Flower		Reproduction
Type		HERMAPHRODITE
SIZE AND TYPE:	Flowering	Fragrant
0.8-1.9 CM	INFLORESCENCE IN RACEMES: 10-20 CM	YES
Fruit	Type	Color
	CAPSULE	
SIZE:	Edible	Fruiting season
Growth	Rate	Longevity
	MEDIUM	0-25 YEARS



ECOLOGY		
Climate	Temperature	Drought resistant
	-5°C,H4,Z6	MODERATE
ALTITUDE: 0-1000	Sun exposure	Frost resistant
IRRIGATION: MODERATE	SUN	MODERATE/HIGH
Soil	Texture	Salt resistant
	LOAMY/SANDY	LOW
	PH: 6.5-7.5	Drainage
FERTILITY: MODERATE	MODERATE	MODERATE/HIGH

USES		
Resistances	Applications	
COASTAL: 2ND LINE	SLOPES: NO	HEDGE ROWS: NO
POLLUTION: MODERATE	RIVERBANKS: NO	BORDERS: NO
WIND: MODERATE	GROUPS: YES	ISOLATED: YES

POINTS OF INTEREST

Native to Asia Minor and Southeast and Western Europe. The generic name derives from the Greek *syrinx* (small tube), as its hollowed-out branches were used by Greek shepherds to make their reed flutes (pipes). Due to its ornamental value, it is used in shrubby groups or as part of mixed borders. To appreciate its fragrance, it should be placed in living areas or where people pass through. The flowers are placed in vases. Its essence is used in perfumery. In popular medicine, its leaves have been used as a tonic and febrifuge. The cultivated varieties are very numerous and must be chosen in the nursery. The one with golden leaves stands out, called "Aurea".

SPACING: 1.5 M

PLANTING AND PLANT HEALTH

It is very resistant to cold, it is the most hardy of the genus. It adapts to any garden soil, although they do better in calcareous, deep and fresh ones. It lives on rocky slopes. It requires a normal irrigation programme and moderate environmental humidity. It must be pruned immediately after flowering, eliminating thin and unproductive branches. Deadhead to make the shrub more compact. To achieve single-trunk growth, suckers must be removed periodically. Propagation by graft in the case of varieties, through tender cuttings or layering in summer and by seed for botanical species.

CHROMATIC CALENDAR

Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
					X	X	X				
Sowing		Planting		Pruning		X					

Treatments Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Fungicides		Pesticides		Fertilizers							

COMMERCIALIZATION

Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Teucrium

Teucrium fruticans

ORNAMENTAL SHRUB

OLIVILLA SPANISH VALENCIAN SHRUBBY GERMANDER ENGLISH GERMANDRÉE ARBUSTIVE FRENCH

STRUCTURE		
Shape	Height	Diameter
ROUND	0.8-2.5 M	0.8-2.5 M
Texture	Shade	Root
FINE	LIGHT	SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	LAMIALES	
FAMILY:	LAMIACEAE	

MORPHOLOGY		
Trunk		
Leaf	COMPOUND: NO	
EVERGREEN	HARDNESS: SOFT	
SIZE: LEAF: 2-4 CM	ARRANGEMENT: OPPOSITE	
COLOR: US: GRAY	VENATION: PINNATE	
LS: GRAY	SHAPE: OVAL/LANCEOLATE	
TEXTURE: US: TOMENTOSE	MARGIN: SMOOTH	
LS: TOMENTOSE	APEX: ACUTE	
	LEAF BASE: ATTENUATE	
	PETIOLE: SHORT	
Flower	Type	Reproduction
	HERMAPHRODITE	HERMAPHRODITE
SIZE AND TYPE:	1.5-2.5 CM	Flowering
		Fragrant
	INFLORESCENCE IN RACEMES	No
Fruit	Type	Color
SIZE:	Edible	Fruiting season
Growth	Rate	Longevity
	MEDIUM	0-25 YEARS



ECOLOGY		
Climate	Temperature	Drought resistant
ALTITUDE: 0-500	-3°C.H5.Z6	MODERATE
IRRIGATION: MOD/LOW	Sun Exposure	Frost resistant
	SUN	LIGHT
Soil	Texture	Salt resistant
pH: 6.5-8	TOLERANT	HIGH
FERTILITY: MODERATE	Drainage	Lime resistant
	MODERATE	MODERATE/HIGH

USES		
Resistances	Applications	
COASTAL: 1ST LINE	SLOPES: NO	HEDGE ROWS: YES
POLLUTION: MODERATE	RIVERBANKS: NO	BORDERS: NO
WIND: MODERATE	GROUPS: YES	ISOLATED: YES

POINTS OF INTEREST

Commonly known in Spanish as "olivilla". Native to the entire Mediterranean area, where it grows on dry hills. This shrub creates interesting foliar contrasts thanks to its general greyish appearance, in mixed plantations or in heterogeneous bush groups. With this bush, irregular geometric figures can be made -cubes, spheres, cones,... It is also very common to use as formal hedges and achieved perfectly due to its rapid growth and the dense branching caused by regular pruning. It was once highly valued as a medicinal plant.

SPACING: 1.5 M

PLANTING AND PLANT HEALTH

This is a hardy shrub in term of temperatures, although it prefers rather mild climates. Also hardy to soils (even limestone) but it prefers well-drained ones. It needs very sunny situations where its coloring will stand out. It resists drought but appreciates a moderate watering. In terms of environmental humidity, it prefers dry places. Pruning is a common practice in this shrub, which is usually maintained with regular or irregular, well-defined shapes. The propagation is easily done by seed, division of bush and by herbaceous cutting under cover.

CHROMATIC CALENDAR

Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC

Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Sowing		Planting		Pruning	X						

Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Fungicides			Pesticides			Fertilizers					

COMMERCIALIZATION

Presentation (L)	Height (cm)	Topiary Shapes
CT(5)	60-80	
CT(10)	80-100	YES

Viburnum

Viburnum tinus

ORNAMENTAL SHRUB

DURILLO SPANISH VALENCIAN LAURUSTINUS ENGLISH VIORNE FRENCH

STRUCTURE		
Shape OVAL	Height 2-4 M	Diameter 1.5 M
Texture COARSE	Shade FULL	Root SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	LUCIDUM
TYPE:	DICOTYLEDONS	
ORDER:	DIPSACALES	
FAMILY:	CAPRIFOLIACEAE	

MORPHOLOGY		
Trunk		
Leaf		
COMPOUND: NO	HARDNESS: CORIACEOUS	
PERSISTENT	ARRANGEMENT: OPPOSITE	
SIZE: LEAF: 4-9 CM	VENATION: PINNATE	
	SHAPE: OVAL	
COLOR: US: DK. GREEN	MARGIN: SMOOTH	
LS: LIGHT GREEN	APEX: ACUTE	
TEXTURE: US: SMOOTH	LEAF BASE: ATTENUATE	
LS: TOMENTOSE	PETIOLE: SHORT	
Flower		Reproduction
SIZE AND TYPE:	0.5-0.6 CM Flowering	Fragrant NO
	INFLORESCENCE IN CORYMB (7-10 CM)	
Fruit		Color
	TYPE: OVAL DRUPE	DARK BLUE
SIZE: 1CM	Edible NO	Fruiting season SUMMER/AUTUMN
Growth		Longevity
	Rate FAST	25-50 YEARS



ECOLOGY		
Climate		Drought resistant
TEMPERATURE: -5°C H4.26	MODERATE	
ALTITUDE: 0-500	Sun exposure	Frost resistant
IRRIGATION: MODERATE	SUN/PARTIAL SHADE	MODERATE
Soil		Salt resistant
	Texture LOAMY/SANDY	MODERATE
pH: 6.5-8	Drainage	Lime resistant
FERTILITY: MODERATE	MODERATE	HIGH

USES		
Resistances		Applications
COASTAL: 2ND LINE	SLOPES: NO	HEDGE ROWS: YES
POLLUTION: MODERATE	RIVERBANKS: NO	BORDERS: NO
WIND: MODERATE	GROUPS: YES	ISOLATED: YES

POINTS OF INTEREST

Commonly known by its English name "Laurustinus". This popular European persistent shrub is highly recommended for its persistent leaves and winter flowering. Viburnums are all excellent shrubs and suitable for the decoration of flowerbeds and rockeries. The leaves are very bitter and have been used as an antifebrifuge in the form of a decoction. The fruits have been used as purgatives and to combat hydropsy.

SPACING: 2 M

PLANTING AND PLANT HEALTH

Delicate to excessive heat and strong frosts. It lives in forests and evergreen thickets and resists sea winds. It prefers a rich, deep, fresh, somewhat sandy soil with abundant humus and well-drained (although it can tolerate limestone and stony soils). Excessive watering will cause chlorosis resulting in suffocation. It adapts better to moderate-high humidity. It is pruned by removing old or damaged branches after flowering or in May. However, pruning is not necessary unless the aim is to rejuvenate. Propagation by seed in autumn by layering the branches, or in summer by planting semi-woody cuttings.

CHROMATIC CALENDAR

COMMERCIALIZATION

Foliage, Flowering and Fruiting season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for foliage, flowering, and fruiting]											
Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for sowing, planting, and pruning]											
Sowing [] Planting [] Pruning [X]											
Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
[Color-coded bars for fungicides, pesticides, and fertilizers]											
Fungicides [] Pesticides [] Fertilizers []											

Presentation (L)	Height (cm)	Topiary shapes
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Vitex

Vitex agnus-castus

ORNAMENTAL SHRUB

SAUZGATILLO SPANISH VALENCIAN CHASTE TREE ENGLISH GATTILIER FRENCH

STRUCTURE		
Shape	Height	Diameter
OVOID	2-4 M	2.5 M
Texture	Shade	Root
MEDIUM	PARTIAL	SCATTERED

DIVISION:	PHANEROGAMS	VARIETIES
SUBDIVISION:	ANGIOSPERMS	
TYPE:	DICOTYLEDONS	
ORDER:	LAMIALES	
FAMILY:	LAMIACEAE	

MORPHOLOGY		
Trunk		
Leaf		
COMPOUND:	PALMATE	
HARDNESS:	SOFT	
ARRANGEMENT:	OPPOSITE	
VENATION:	PINNATE	
SHAPE:	LANCEOLATE	
MARGIN:	SMOOTH	
APEX:	ACUTE	
LEAF BASE:	ATTENUATE	
PETIOLE:	SHORT	
Flower		
Type	Reproduction	
HERMAPHRODITE	HERMAPHRODITE	
SIZE AND TYPE:	0.8 CM	Flowering
	FRAGRANT	
	INFLORESCENCE IN SPIKES (10-18 CM)	
	YES	
Fruit		
Type	Color	
ROUND	BLACK/RED	
Edible	Fruiting season	
YES		
Growth		
Rate	Longevity	
MEDIUM	25-50 YEARS	



ECOLOGY		
Climate		
Temperature	Drought resistant	
-5°C.H4.Z6	MODERATE	
Sun exposure	Frost resistant	
SUN/PARTIAL SHADE	MODERATE	
Soil		
Texture	Salt resistant	
Loamy/sandy	MODERATE	
Drainage	Lime resistant	
MODERATE	HIGH	
pH:	6.5-8	
FERTILITY:	MODERATE	

USES	
Resistances	Applications
COASTAL: 2ND LINE	SLOPES: NO HEDGE ROWS: NO
POLLUTION: MODERATE	RIVERBANKS: NO BORDERS: NO
WIND: MODERATE	GROUPS: YES ISOLATED: YES

POINTS OF INTEREST

Native to southern Europe, Western Asia and the Mediterranean region. Among its most common names are chaste tree, chasteberry and Monk's pepper and it is a colonizing plant. Widely used as a hedge and in private gardens. It has ornamental uses in shrubby groups or isolated, for its abundant flowers. The fruit has an acrid and aromatic flavor and is used as a spice in some regions. When split, it gives off an unpleasant odor and has stimulating properties. It is prevalent for counterfeit pepper.

SPACING: 2 M

PLANTING AND PLANT HEALTH

This shrub is resistant to extreme temperatures and proximity to the sea. It is hardy in terms of soils, adapting to light and dry, even limestone and saline ones. Although it can resist drought, it appreciates a normal irrigation programme. Hardy to ambient humidity. It is necessary to severely prune lower the branches in winter, to obtain good flowering. Propagation by seeds, cuttings from semiherbaceous branches, layering or grafting.

CHROMATIC CALENDAR											
Foliage, Flowering and Fruiting Season											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Cultivation Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
X	X	X	X	X	X	X	X	X	X	X	X
Sowing Planting Pruning X											
Treatment Calendar											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Fungicides Pesticides Fertilizers 											

COMMERCIALIZATION		
Presentation (L)	Height (cm)	Topiary Shapes
CT(5)	60-80	
CT(10)	80-100	
CT(30)	125-150	

Subchapter 5.3 Commercialization, use and planting

COMMERCIALIZATION OF SHRUBS

The commercial formats of shrubs are based on their height for those species or cultivars that have a predominant vertical growth (Table 5.3.1.), and on their span in those with an extended or horizontal size (Table 5.3.2.).

Height in cm
10/20
20/40
40/60
60/80
80/100
100/125
125/150
150/175
175/200
200/225
225/250

Average diameter of crown in cm.
10/20
20/40
40/60
60/80
80/100

Table 5.3.1.: Measurements for classifying shrubs by height

Table 5.3.2.: Measurements for classifying shrubs by crown dimension

A good indication of the format and complexion of the specimen is by the number of main stems that occupy the lower third of the plant. The number of branches or main stems that the shrubs present should be of regular distribution as well as its length and thickness. These features will give an idea of the vigor, balance, and density that the shrub will have in its adulthood.

For example, *Arbutus*, *Choisya*, *Garrya*, *Mahonia*, *Salix caprea* and *Tamarix* should have a minimum of two stems. In *Atriplex*, *Budleya*, *Cercis*, *Cotoneaster*, *Scallonia*, *Genista*, *Hibiscus*, *Jasminum*, *Ligustrum*, *Myoporum*, *Philadelphus* and *Spiraea* a minimum of three. Four or more in *Brunfelsia*, *Deutzia*, *Duranta*, *Justicia*, *Leonotis*, *Myrtus*, *Potentilla* and *Viburnum davidii*. A minimum of six is recommended in some *Citrus*, *Hebe*, and some *Rhododendron*.

In the case of large shrubs, the perimeter of the main stem can also be relevant.

Shrub plants intended as hedges must have particularly dense foliage and have a notable basal branching. Tall bushes should have a straight, vertical stem on which a well-shaped crown develops at a certain height above the ground. Suckers, sprouts, and excess branches must have been eliminated to obtain a clear shape in the crown. It is necessary to specify the total height and the stem length if applying this format.

ROOT FORMATS

The production of shrubs in nurseries follows four procedures:

1. **Bare-root deciduous shrubs:** After a first cycle corresponding to the propagation of the young plants, they are planted in the field. Once the desired formats and sizes have been achieved, they are uprooted and marketed in bare root form.

2. **Evergreen shrubs with root ball:** After a first cycle corresponding to the propagation of the young plants, they are planted in the field. Once the desired formats and sizes have been achieved, they are uprooted and marketed in root ball form.

3. **Shrubs with mixed field/container cultivation:** After a first cycle corresponding to the propagation of the young plants, they are planted in the field. Once the desired formats and sizes have been achieved, they are uprooted and potted in a container. After a period of rooting and adaptation to the new environment, the plants are marketed.

4. **Container-grown shrubs:** After a first cycle corresponding to the propagation, the young plants are potted in progressively larger containers, at least every one or two years depending on the container volume and the vigor and growth of the plant. Once the desired cultivated formats and sizes have been achieved, the plants are marketed.

When dealing with tap root species or varieties, care must be taken to ensure that the tap root has a length of about 20 cm on which sufficient secondary roots have been produced.

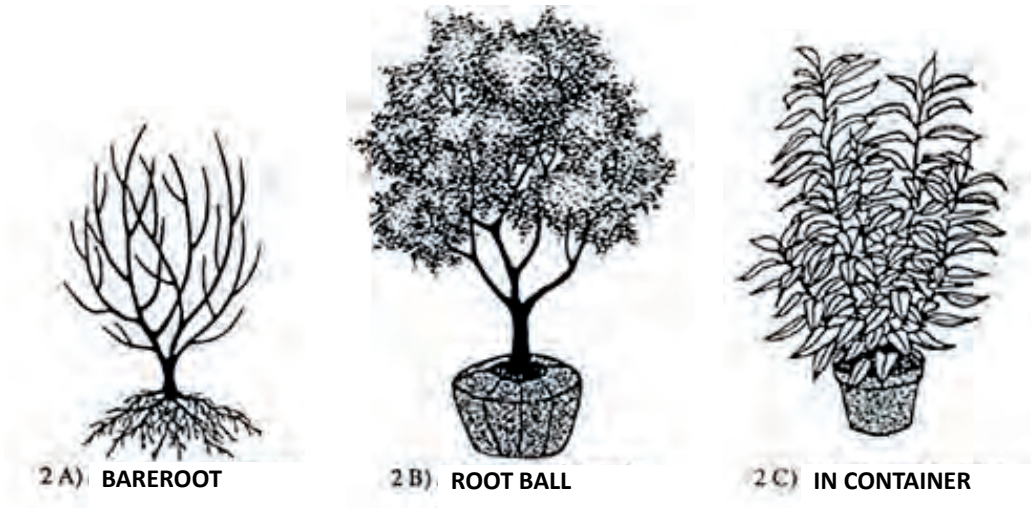


Figure 5.3.1: Root formats of shrubs. 2a – bareroot, 2b – root ball 2c in container (NTJ07F).

DECIDUOUS SHRUBS SUPPLIED IN BARE ROOT

The root system must be consistent with a minimum size stipulated for the species or commercial variety. For example, a shrub of 40/60 cm height should have a root system with a minimum diameter of 20/25 cm. Another shrub measuring 80/100 cm in height, should have a root system with a minimum width of 30 cm and a shrub 125/150 cm tall should have a set of roots greater than 40 cm in diameter. The supply of bare root shrubs should be made from nurseries located in climates similar to where they will be planted.

Generally, bare-root shrubs are supplied by grouping plants of the same format into homogeneous bundles containing 5 to 10 units.

EVERGREEN SHRUBS SUPPLIED IN ROOT BALL

In the case of shrubs supplied with a root ball, the mass of soil should be homogeneous in quality and no added substrate. The root balls will have a volume proportional to the aerial part of the shrub and must be protected and wrapped with a biodegradable mesh that decomposes within 1.5 years from the moment of planting and tied with a similar degradable material. In the case of large specimens, the root ball has a supplementary protection consisting of a non-galvanized metal mesh wrapper or reinforced plaster with non-galvanized mesh.

In the case of large specimens supplied bare root or with root ball, a record of how many times they have been root pruned must be made. This is an important indication of quality, especially in the case of shrubs with a taproot system where the longitudinal growth of the main root has been limited to ensure the development of secondary roots.

Evergreen shrub species should have been periodically root pruned at least every two or three years, depending on the species or commercial variety. This will ensure optimum conditions for the good rooting of the plant in the garden. At least one growing season should have elapsed between the last root pruning and the uprooting of the plant in the nursery. The action of uprooting the shrub prior to its commercialization should not be considered as root pruning.

Height of shrub in cm	Minimum diameter of the root ball	Minimum depth of rootball
20/40	20	15
40/60	20/25	15/20
60/80	25	20
80/100	25/30	20/35
100/125	30/35	25/30
125/150	35/40	30
150/175	40/45	30
175/200	45/50	35
200/225	50/55	35
225/250	55/60	40

Table 5.3.3: Recommended minimum diameter and depth of the root ball according to the height of the shrub.

From N.T.J.P. (C.I.T.A.P.A.C.)

SHRUBS SUPPLIED IN CONTAINERS

The production and supply of shrubs in containers eliminate the severe constraints of bare-root planting in winter and root ball planting in spring and fall, since container-produced shrubs can be planted practically any time of the year, except for the months with the highest evapotranspiration. A good indication of quality containerized shrubs is the absence of root spiraling. This phenomenon of hypogeal

growth will impede the future development of the roots of the shrub in the garden. In addition, roots that protrude from the container's drainage holes will affect future development as well as the use of pots or containers with non-degradable meshes, which in the latter case is unacceptable.

Height of shrub in cm	Recommended minimum volume of container in litres	Upper and exterior diameter of container in cm
20/40	1.5/2	15/16
40/60	2	16
60/80	3	18
80/100	3-5	18/22
100/125	5	22
125/150	7.5	24
150/175	10	26

Table 5.3.4.: Minimum recommended volume of container in terms of height N.T.J.P. (C.I.T.A.P.A.C.)

SUBSTRATE

The substrate used in the production of containerized shrubs must have a composition that does not cause undesirable water movements leading to serious excesses or defects in moisture in the roots after planting.

In the case of acid soil shrubs (*Rhododendron*, *Hydrangea*, *Camellia*...), a substrate with physical-chemical characteristics adapted to this type of plant must be used.

The presence of evergreen weeds and mosses must be avoided and inspected at the source.

PLANT HEALTH

Irrespective of the species, the shrubs should show obvious health, as well as having a good development and a balanced and proportionate shape. Likewise, balance and proportion in the size of the root ball or obtained in a container is required.

Shrubs should show no signs of diseases, pests, nutritional deficiencies or symptoms of phytotoxicity. Their trunks, stems and branches must be free of burns or wounds and no broken branches or buds must be observed. The roots must not show damage or rot.

The supplier must comply with the current legislation on plant health, especially regarding quarantines for harmful organisms and the supply of the required phytosanitary passport.

LABELING AND DOCUMENTATION

The supplier must identify at least 5% of the shrubs in each lot with a durable label that is correctly and solidly attached to the shrub or to the substrate, with indelible, visible characters, recording: its species

and variety, the material used for rootstock and grafting, number of shrubs in the lot and its commercial format (total height and/or span and container volume, if applicable).

In addition, the plants for their commercialization will be accompanied by a delivery note issued by the supplier in which the following administrative information will be indicated:

- Indication: "CEE quality"
- Member State Code
- Name or identification code of the responsible official body.
- Identification of the nursery or supplier (name and registration or authorization number).
- Document issue date.
 - Individual serial or batch number
 - Where applicable, Phytosanitary Passport number.
- Where applicable, Ornamental Label.
- In the case of imports from third countries, the name of the country of production.
- The indication of the Technological Standard NTJ 07F: 1998 on a product represents the commitment by the producer that the product meets the requirements of the Technological Standard.

And the following technical information:

- Botanical name.
- Cultivar denomination.
- Number of shrubs.
- Presentation of the root system.
 - Bare Root: BR.
 - Container: C
 - Pot: P
 - Root ball: RB.
 - Gypsum root ball: RB in Gypsum
 - Root ball with metal mesh: RB - M.M.
- Total height and/or span, depending on the case.
- Stem height, in the case of tall shrubs.
- Volume or diameter of the container, indicating after the letter C (container) the volume in liters, or detailing after the letter P (Pot) a figure indicating the upper and outer width of a square pot or the diameter top and outside of a round pot. In this second case, the letter "r" will be placed after the number.
- If the shrubs supplied come from a forest or an existing garden, the extraction must have been carried out in accordance with the provisions of current legislation, and this origin must be recorded on the delivery note.

Additional important descriptions:

- Denomination of the rootstock, if applicable.
- Sex, in the case of dioecious plants with interesting fruit.
- Number of trunks or main stems.
- Number of root prunes, if applicable.
- Presence of a leader, if applicable.
- Thinning, if applicable.
- Cutting back, if applicable.

- Approximate weight of the plant, counting that of the root ball and that of the container, if applicable.
- Last phytosanitary treatment carried out (active material and date).

The plantation framework (spacing) will depend on the adult size and vigor of the species or cultivar being used, the quality of the soil and other characteristics of the medium and cultivation.

SHRUBS - PLANTING

The following general recommendations should be considered when planting shrubs (Table 5.3.5):

Soil conditioning	The soil will be worked at a depth of 60cm.
	The soil layer will be 40cm deep.
General planting of shrubs	The planting pit will be 15cm wider than the width of the roots.
	The pit will be filled up to half with fertile soil enriched with organic matter, subsequently compacting it by tapping down. Then, it will be completely filled and then tapped down again.
Planting climbers	Before planting climbers, the support they will need will be placed. This support will be temporary for those plants that are capable of climbing by themselves
	The trellis will be placed some distance away from the wall
	The planting pit will be 30cm wider than the width of the roots and will be 50cm deep.
	When the plantation is next to the wall, its impermeability to water will be ensured.
	The supports for the branches will be made with non-abrasive material.

Table 5.3.5: Planting requirements - N.T.J.P. (C.I.T.A.P.A.C.)

Subchapter 5.4 Maintenance

BASE DRESSING/FERTILIZATION

Medium to large sized shrubs.

- Interest for its foliage: 0.5 Kg/hole of 8-8-8 (ratio N-P-K)
- Interest for its flowering: 0.5 Kg/hole of 6-9-14 (ratio N-P-K)

Small shrubs and bushes.

- Interest for its foliage: 0.5 Kg/hole of 8-8-8 (ratio N-P-K)
- Interest for its flowering: 0.5 Kg/hole of 6-9-14 (ratio N-P-K)

FERTILIZATION

Ammonium nitrate: 3Kg/hectare
Lime superphosphate : 2.5 Kg/hectare
Potassium superphosphate: 1.5 Kg/hectare
Ammonium Nitrate: 1.5 Kg/hectare
Lime superphosphate: 2.5 Kg/hectare
Potassium sulphate: 1.5 Kg/hectare
Ammonium nitrate: 1.5 Kg/hectare

Table 5.4.1.: Fertilizing

IRRIGATION

Nº of watering	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
		1	1	1	2	3	3	2	1			

Table 5.4.2.: Monthly irrigation

A guideline to monthly irrigation:

- Doses:** Average: 5 liters per foot of watering/irrigation
 Maximum: 10 liters per foot of watering /irrigation

PRUNING

Prune for free shapes

Including:

1. Deciduous shrubs
2. Flowering shrubs
3. Evergreen shrubs

The specialist, once in the garden will study how the shrubs or bushes need to be pruned, making a note of the number of old branches, suckers, interior branches, etc. Once analyzed, the removal of all the old branches can begin, ensuring healthy vegetation. When it comes to small and thin branches, secateurs or hand shears are used. If cuts need to be made at great height, a long reach looper is used and if necessary, with extendable handles. When dealing with thick branches, a prune saw is used and if tears occur, they can be filed down.

Once the removal of old branches has been completed, the suckers can be removed. The purpose of this pruning is to maintain the vegetative balance of the bush or shrub, preventing these branches from diminishing the plant's vigor.

Then, the removal of interior branches takes place to allow light and air to penetrate the entire plant, and the shortening of excessively thick branches that prevent the bush from developing a homogenous thickness in all its branches. Finally, the trimming of branches that "invade" other bushes or cover the visibility of lampposts, windows... is carried out. In this cut, an attempt is made to maintain an upright structure, since with subsequent development, the bush tends to open up to the sides.

Once the pruning is finished, a fungicidal paint is applied to all the cuts with a diameter bigger than 2 cms.

Green pruning can be carried out every month and includes the removal of withered branches and flowers. At no time will severe pruning be carried out that could damage the bush.

Formative pruning

It includes pruning for the formation of hedges and subsequently their maintenance.

Guides (strings that stretch over the hedges) are placed and arranged according to the desired shape. If hedges are different heights and you want them uniform, the guide is placed taking the lowest of them as a reference.

With the guide positioned at the top of a hedge, the specialist will make the first cut above the guide; if it is not matched, he passes again in the same direction and then in the opposite direction. When the top is trimmed, the specialist can begin to trim the inner and outer sides equally.

The degree of intervention required will depend on the species and the form it presents, as well as the desired objective. In cypress hedges, 50% of the sprouts should not be cut back more than 10 cm.

Then the adjacent paths are swept and the remains of the pruning are collected and taken directly to the landfill or left in piles that will later be collected and adequately disposed of.

PHYTOSANITARY TREATMENTS

The treatments are carried out at the times indicated below, with the consent of the owner and taking into consideration the species, products and methods. (c.p. = commercial product)

March: Treatment against insects, mites and cryptogamic diseases.

- Abamectin: 0.35 cc/l c.p.
- Thiram 80%: 2.5 g/l

May: Treatment against wax scales, other insects and cryptogamic diseases.

- Metilpirimifos: 1.75 g/l c.p.
- Thiram 80%: 2.5 g/l c.p.

June: Treatment against sucking insects, chewing insects and mites.

- Fenvalerate: 0.75 cc/l p.c.
- Dientochlor: 0.9 g/l p.c.

September: Treatment against sucking insects, chewing insects and mites.

- Abamectina: 0.35 cc/l p.c.
- Thiram 80%: 2.5 g/l

December: Zineb 80%: 2.5 g/l p.c.

February: Zineb 80%: 2.5 g/l p.c.

The presence and symptoms of specific pests and diseases in some plants should be monitored throughout the year:

- Aphids/mites: Treat with Abamectin at 0.75 cc/l p.c. or with Ethiofencarb at 1 cc/l c.p.
- Powdery mildew: White spots on the leaves. Treat with Benomyl at 0.6 g/l as soon as it appears and monitor euonymus in a special way.
- Mealybugs: In oleanders and laurels, especially.
- Snails and slugs: Treat late in the day and water with Metaldehyde at a rate of 10-15 granules/m².
- Citrus whitefly: Butracarboxim at 1.5 cc/l c.p.
- Garden whitefly: Sumimix at 1.2 cc/l c.p.
- Orange miner: Treat with Abamectin + moisturizer at 0.4 and 0.5 cc/l c.p.
- Chlorosis (iron deficiency): Sequestrene 138 F at 3 g/m².

The material and equipment used for the treatment will include:

- Low toxicity phytosanitary product
- Wetting
- Small tank
- Vehicle for displacement
- Masks, aprons, forearm gloves, boots.

The treatment requires only one specialist/technician, who prepares the mixture in the tank or backpack and sprays the infected species.

Phytosanitary treatments are preferably carried out during hours of minimal inconvenience, prior to notifying the owners.

WEEDING AND LIGHT DIGGING

Calendar and frequency

Throughout the year, at least once a month in autumn and winter and twice a month in spring and summer. The material used will include baskets, hoes and rakes, curved knives, small sickles and backpacks for herbicide treatments.

Description

Weeding is carried out by lightly digging the entire surface, although sometimes it also includes mechanical means (low mowing) or chemical means (with non-toxic selective herbicides).

Weeding in clumps of shrubs, flower beds, or ornamental hedges should be made by superficially digging the soil between the plants with a hoe. At the same time, the clods of soil should be crumbled and the uprooted weeds removed. After these operations, the soil should be leveled and raked so that the surface is uniform and free of stones or objects. Finally, the weeds are collected and disposed of in the landfill.

CALENDAR OF OPERATIONS

MONTH	OPERATION
MARCH	Transplanting to bareroot Formative pruning
APRIL	Transplanting of evergreen Substrate
MAY	Maintenance pruning
JUNE JULY AUGUST	Deadhead the flowers from shrubs and trees
OCTOBER NOVEMBER	Deep substrate Maintenance pruning Transplanting evergreen species
DECEMBER JANUARY	Transplanting and pruning (weather permitting)
FEBRUARY	Formative pruning and transplanting of deciduous species

Table 5.4.3: Calendar of annual operations

FREQUENCY OF OPERATIONS

OPERATION	FREQUENCY		
		1 Mar / 31 Oct	1 Nov / 28 Feb
Irrigating in beds and platforms	Shrubs with or without trees	3 times a week	Once a week
	Pots	3 times a week	Once a week
	Trees, shrubs and hedges	3 times a year as indicated in <i>Dirección Técnica</i>	
	Base dressing/fertilizing		
Prior to any planting			
Fertilizing: Renewal of substrate or remedies	As indicated D. T.		
Weeding or light digging	Once a month		
Cover fertilizing	Spring and Autumn	Winter	
	5-8 mineral fertilizers	1 organic fertilizer	
Restocking	Shrubs and hedges	As indicated by D. T.	
Formative pruning	Free shapes	Green pruning, light pruning once a month	Formative pruning and rejuvenation: once as indicated by D.T.
	In rose bushes	Traditional pruning (topping and finishing) winter	Remove wilted flowers: spring, summer, and autumn
	In trained forms	Trimming: Once a month	2 trimmings as indicated by D.T.
Phytosanitary treatments	From April to November or as indicated by D.T.		
Herbicides	Monthly		

Table 5.4.4: Calendar of operations and frequency (D.T Technical Director)

Subchapter 5.5

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