PLANTS AND PLANTING IN MEDITERRANEAN LANDSCAPES (VOLUME 1)

Editors

Juan José Galán Vivas Vicente Caballer Mellado

SHRUBS

DECIDUOUS TREES



EVERGREEN TREES

PALM TREES

MEDICINAL AND AROMATIC

GROUNDCOVERS

8 8 8 de

HEDGES

CLIMBERS



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LIST OF PLANT SPECIES

539



Chapter 3	CONIFERS
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Taxonomy

Conifers are seed plants (spermatophyte or phanerogamous division) belonging to the group of gymnosperms and therefore characterized by having:

- seminal primordia (ovules) naked on carpel leaves
- less reduced gametophytes than in angiosperms
- more primitive xylem and phloem than in angiosperms
- flowers are less differentiated than in angiosperms

In addition:

- **Arboreal habit**, or more rarely shrubby, with monopodic growth, the main axis grows more than the secondary ones, which allows them to surpass many other plants. In their places of origin, they can reach 80 m in height by 8 in trunk diameter. They have resin canals.

- **Numerous branches**, usually well arranged in superimposed whorls, mainly in young plants, and sometimes clearly differentiated into macroblasts (elongated branches) and brachyblasts (branches with very short internodes and limited growth). See figure 3.1.1

According to this definition, conifers can be ideal for: providing shade, hiding views, as a noise buffer etc.



Figure 3.1.1: Macroblasts and brachyblasts in Cedrus. According to F.J. Esteras

- **Relatively small and numerous leaves**, generally evergreen (multi-annual) or rarely deciduous (*Larix, Taxodium*, etc.), ± coriaceous and ± xeromorphic (with thick cuticle, thick epidermis, hypodermis with thick walls and sunken stomata). They may be:

For their shape:

- acicular (Pinus). Fig.3.1.2-A
- scale-like (cupressaceae). Fig.3.1.2-B
- flat and lanceolate (Podocarpus, Cephalotaxus). Fig. 3.1.2-C and D.

By its position on the stem:

- alternate (Podocarpus, Cephalotaxus). Fig. 3.2-C and D.
- opposite (cupressaceae), being able to have:
 - "cupressoid" arrangement (Cupressus). Fig. 3.1.2-E.
 - "thuja" disposition (Calocedrus). Fig. 3.1.2-F.
- whorled (juniperoid, as in some Juniperus, the so-called "junipers"). Fig. 3.1.2-G.
- fasciculated (Cedrus, Pinus). Fig. 3.1.2-H and A.



Figure 3.1.2: Shape and position of conifer leaves A) acicular (*Pinus*); B) scale -like (*Cupressus*); C) flat (*Podocarpus*); D) flat (*Cephalotaxus*); E) "cupressoid" position in *Cupressus*; F) "thuja" position in *Calocedrus*; G) whorled position, "juniperoid" leaf, in *Juniperus*; H) fasciculate leaf in *Cedrus*. According to F.J. Esteras.

- Flowers are always unisexual, with monoecious distribution or more rarely dioecious. (*Araucaria, Juniperus*), are strobiliform groups of special leaves (*sporophylls*).

- Strobilus ♂ (androstrobilus), solitary or in apical groups, made up of stamens (microsporophylls), of highly variable size and shape, and generally arranged in a helical fashion. Each sporophyll carries between 2-15 pollen sacs (sporangia) on its underside. Frequently the pollen (microspore) is anemogamous, it has 2 air vesicles to favor its buoyancy and therefore improve its dissemination capacity. See Figure 3.1.3.



Figure 3.1.3: Androstrobilus and androsporophylls in conifers. A) *Pinus*; B) *Cupressus*; C) *Calocedrus*; D) *Cephalotaxus*;
 E) *Araucaria*; F) *Cedrus*; G) *Pinus*; H) *Junipers*; I) *Araucaria*; J) *Cupressus*; K) *Taxus*. E taken from Scagel.
 Those remaining are according to F.J. Esteras.

- Strobili ♀ (gynostrobili), solitary and axillary, woody or fleshy, dehiscent or not, erect with deciduous scales or pendulous with persistent scales, and made up of (see Figure 3.1.4):

• Fruiting leaves (macrosporophylls) that are consumed in the formation of the seminal primordia (ovules).

· Seminiferous scales or ovuliferous scales, which are responsible for protecting the ovules.

 \cdot Tectrix bracts, in whose axil are located the seminiferous scales and the fruitful leave. These are arranged in a helix or in whorls and which are ± welded to the seminiferous scale (sometimes they are not even distinguishable). They can be included or exserted, depending on how they appear (or not) between the seminiferous scales. Figure 3.1.4. A' and D'.



Figure 3.1.4: Gynostrobili in conifers: A) Pinus pinea; A') Detail of the cone in Pinus; B) Spruce abies; C) Cedrus deodara; D) Pseudotsuga menziessii; D) Detail of the cone in Pseudotsuga; E) Cupressus arizonica; F) Juniperus oxycedrus subsp. macrocarp; G) Tetraclinis articulata; H) Platyclados orientalis; I) Calocedus decurrens; According to F.J. Esteras.

- Seeds, generally with a woody external coat coat), more rarely fleshy (Cephalotaxus) or even protected by an "aril" (*Taxus*) or "epimacium" (Podocarpus), can have wings (*Abies, Pinus*) or not (*Cupressus*) and have a variable number of cotyledons. See figure 3.1.5



Figure 3.1.5: Coniferous seeds: A) Cupressus; B) Platyclades; C) Spruce; D) Pinus; E) Araucaria; F) Cedrus; G) Tetraclinis; H) Taxus; I) Podocarpus. According to F.J. Esteras.

Subchapter 3.2

Species

This chapter describes **35 species of conifers**, used in gardening and landscape architecture, selected according to their ornamental use, their botanical interest, or other characteristics which make them of special interest in this chapter.

Below is a guide table with the parameters that have been used to describe each species See Table 3.2.1.

PARAMETERS AND VALU	ES USED IN THE BOTANIC DATASHEET				
TAXONOMY					
TAXONOMIC RANKS	DIVISION, SUBDIVISION, TYPE, ORDER, FAMILY				
VARIETIES	OTHER VARIETIES OF INTEREST				
STRUCTURE					
	CLORE SHARED ROUNDED OVAL COLUMNIAR CONE EXTENDED IRRECULAR DARASOL				
SHAPE	FAN-SHAPED, HORIZONTAL, PALMIFORM, PENDULAR, WEEPING				
HEIGHT	IN METERS OR CENTIMETERS				
DIAMETER	IN METERS OR CENTIMETERS				
TEXTURE	LEAVES>10CM= COARSE. LEAVES OR LEAFLETS BETWEEN 2-10CM= MEDIUM. LEAVES OR LEAFLETS <2CM= FINE				
SHADE	LIGHT, FULL, DENSE				
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	GREY; GREEN/GREY OR BLUE/GREY. SILVER; LIGHT GREEN, YELLOW, LIGHT BROWN, DARK, GREEN, RED; RED. PURPLE; YELLOW; BLACK; MARBLED; TWO-TONED; THREE-TONED; LIGHT GREY, DARK GREY				
LEAF					
ТҮРЕ	EVERGREEN, SEMI-EVERGREEN, DECIDUOUS, SEMI-DECIDUOUS				
SIZE OF LEAF	LENGTH IN CM				
SIZE OF LEAFLET	LENGTH IN CM				
COLOR OF UPPER SIDE (US)	PALE GREEN, LIGHT GREEN, DARK GREEN, BLUE/GREEN, GREY, PURPLE; PALE; YELLOW; VARIEGATED				
COLOR OF LOWER SIDE (LS)	GREEN, LIGHT GREEN, DARK GREEN, BLUE/GREEN, GREY PURPLE; PALE; YELLOW; VARIEGATED; RUST COLORED; SILVER				
TEXTURE OF UPPER SIDE (US)	SHINY, ROUGH, GLABROUS, TOMENTOSE, HAIRY, ROUGH, SCALY, VISCOSE				
TEXTURE OF LOWER SIDE (LS)	SHINY, ROUGH, GLABROUS, TOMENTOSE, HAIRY, ROUGH, SCALY, VISCOSE				
	NO COMPOUND LEAVES				
COMPOUNDS	YES. COMPOUNDS: IMPARIPINNATE, PARIPINNATE, TRIFOLIATE, PALMATE, PALMIFORM,				
	PALM, PINNATE, BIPINNATE				
HARDNESS	CORIACEOUS, SOFT, SUCCULENT, HARD				
ARRANGEMENT	OPPOSITE, ALTERNATE, WHORLED, VERTICAL FASICULATE				
VENATION	PINNATE, PALMATE, PARALLEL, RETICULATE, ARCUATE, A3 MAIN VEINS				
SHAPE	ROUNDED, LINEAR, LANCEOLATE, FALCATE, OVAL, OBLONG, ELLIPTIC, DELTOID, RHOMBOID, SPATULATE, ACICULAR GROUPS 2, ACICULAR GROUPS 3, ACICULAR GROUPS 5, ACICULAR GROUPS, ACICULAR IN 1 PLANE, ACICULAR IN SPIRAL, SCALY, PALM 7 LOBES, PALM 5 LOBES- PALM 3 LOBES, POLYMORPHIC; PANDURIFORM; PINNATIFID, SAGITATE, RENIFORM, CORDATE, ORBICULAR, OBOVATE, OBLANCEOLATE, LIRATE, HASTATE, RUNCINATE				
LEAF MARGIN	WHOLE, CILIATE, DENTATE, CRENATE, SERRATED, DOUBLE SERRATED, LOBED, DOUBLE LOBED				
APEX	ACUTE, CUSPIDATE, OBTUSE, RETUSE, MUCRONATE				
LEAF BASE	ATTENUATE, CORDATE, ROUNDED, ASYMMETRIC, CUNEATE, OBLIQUE, SAGITATE, HASTATE				
PETIOLE	LONG, SHORT, SESSILE, WIDE				
STROBILUS					
SIZE	INIALE/FEIVIALE STRUBILUS: (UNI UK IVIIVI)				

	ESTROBILUS male or hermaphrodite: COLOR OF INFLORESCENCE, TYPE OF					
FLOWERING	INFLORESCENCE					
	ESTROBILUS female:), COLOR OF INFLORESCENCE, TYPE OF INFLORESCENCE					
FRAGRANCE	YES, NO, UNPLEASANT					
SIZE	FEATURES OF THE CONF OR GAUBULUS (IN CMS)					
TYPE	CONF GALBUILIS EPIMACHIUM DRUPF WITH ARI					
FDIBLE	YES (Part), NO					
COLOR	WHEN MATURE					
FRUITING SEASON	INTERVAL OF MONTHS: JAN - DEC					
DEVELOPMENT						
GROWTH	SLOW, VERY SLOW, MEDIUM, FAST, VERY FAST					
LONGEVITY	<25 YEARS, 25 YEARS, 50 YEAR, 75 YEARS, 100 YEARS, 150 YEARS, 200 YEARS, 250 YEARS,					
	300 YEARS, >300 YEARS					
ECOLOGY						
	ADECULATE ALTITUDE FOR THE PLANT: interval of sea level altimetry					
IRRIGATION	$\pm\pm$ HIGH MODERATE LOW $\pm\pm10W$ (very low/low < 350 mm; Very high/high > 750 mm)					
INNIGATION	MINIMUM TEMPERATURES: DEGREES CELSIUS					
	CLASSIFICATION ACCORDING TO EUROPEAN REGULATION: (SEE MAP)					
	G2 HOT GREENHOUSES IN SOUTHERN EUROPE					
	G1 COLD GREENHOUSES IN SOTHERN EUROPE					
	H5 THE PLANT SUPPORTS MINIMUM TEMPERATURES FROM 0°C TO -5°C					
	H4 THE PLANT SUPPORTS MINIMUM TEMPERATURES FROM -5°C TO -10°C					
	H3 THE PLANT SUPPORTS MINIMUM TEMPERATURES FROM -10°C TO -15°C					
H2 THE PLANT SUPPORTS MINIMUM TEMPERATURES FROM -15℃ TO -20℃						
	H1 THE PLANT SUPPORTS MINIMUM TEMPERATURES FROM -20					
MINIMUM						
TEMPERATURE	CLASSIFICATION INTERNATIONAL REGULATIONS. ACCORDING TO MINIMUM					
TEIVIPERATURE	TEMPERATURE RANGES					
AND	Z1 SUPPORT MINIMUM TEMPERATURES OF -50°C					
INTERNATIONAL	Z2 SUPPORT MINIMUM TEMPERATURES OF -50°C TO -40°C					
CLASSIFICATION	Z3SUPPORT MINIMUM TEMPERATURES OF -40°C TO -30°C					
	Z4SUPPORT MINIMUM TEMPERATURES OF -30°C TO -20°C					
	Z5 SUPPORT MINIMUM TEMPERATURES OF -20ºC TO -10ºC					
	Z6 SUPPORT MINIMUM TEMPERATURES OF -10ºC TO -0ºC					
	Z7 SUPPORT MINIMUM TEMPERATURES OF -0℃ TO 10℃					
	Z8SUPPORT MINIMUM TEMPERATURES OF 10°C TO 20°C					
	Z9SUPPORT MINIMUM TEMPERATURES OF 20°C TO 30°C					
	Z10 SUPPORT MINIMUM TEMPERATURES OF 30°C TO 40°C					
	Z11 SUPPORT MINIMUM TEMPERATURES OF MORE THAN 40°C					
EXPOSURE TO	FULL SUN, FULL SHADE, SHADE, PART SHADE					
DROUGHT RESISTANCE	YES, NO, MODERATE					
FROST RESISTANCE	YES, NO, MODERATE					
SOIL						
ΡΗ ΟΡΤΙΜUΜ	ALL TYPES- NEUTRAL, ACID, BASIC (OR INTERVAL OF PH)					
LEVEL OF FERTILITY	FERTILE, AVERAGE, POOR					
TEXTURE OF SOIL	SAND, SILT OR LOAM, CLAY, SANDY/ LOAMY, CLAYEY/ LOAMY, ALL TYPES					
DRAINAGE	HIGH, MODERATE, LOW					
RESISTANCE TO SEA	YES, NO, MODERATE					
RESISTANCE TO LIME	YES, NO, MODERATE					

USES	
RESISTANCES	
COASTAL	1 st LINE, 2 ND LINE, NO.
POLLUTION	HIGH, MODERATE, LOW
WIND	HIGH, MODERATE, LOW
APPLICATIONS	
IN SLOPES	
IN LINES	
ON RIVERBANKS	
AS WINDBREAKERS	VEC NO
IN HEDGES	1ES, NO
IN FIELD BORDERS	
IN GROUPS	
ISOLATED	
SPACING	MINIMUM RECOMMENDED DISTANCE BETWEEN PLANTS: (IN M). Since the use is diverse and variable, these measurements are simply a guideline
PLANTING AND PLANT H	EALTH
PLANTING AND PLANT HEALTH	TRANSPLANT
CALENDARS	
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
COMMERCIALIZATION	
PRESENTATION	BR (BARE ROOT); CT (CONTAINER or POT (size in LITERS), CE (ROOT BALL); CEY (ROOT BALL IN GYPSUM), ROOT BALL IN MESH
DIMENSION OF THE CONTAINER	LITERS
PLANT HEIGHT	METERS OR CENTIMETERS OR YEARS
TRUNK HEIGHT	METERS OR CENTIMETERS





Figure 3.2.1: Thermal classification map according to European regulations

Taxonomy of the described conifers

The conifers, whose general characteristics have already been presented in Subchapter 3.1, are distributed in 7 families, some of which (*Taxaceae*) of controversial inclusion, whose composition, distribution and characteristics are included in Table 3.2.2. The described species include those genera and species that are most frequently marketed in Spain for ornamental purposes.

Family / Characteristics	Subfamily	Genus	Species	Sheet
ARAUCARIACEAE • evergreen trees • monoecious (gen.) • whorled branching • woody cone, erect, with deciduous scales				
		Agathis (13)		
		Araucaria (19) • whorled branches • seed fused to the scale	Araucaria araucana Araucaria bidwillii Araucaria columnaris Araucaria heterophylla	Yes Yes
PINACEAE • evergreen trees. (gen.) • monoecious • woody cone, erect or pendulous, with deciduous or persistent scales • winged seed				
	Abietoideae • all leaves are alternate	Abies (50) • leaf ± flat • erect cone with deciduous scales	Abies alba Abies concolor Abies koreana Abies x masjaani Abies nobilis Abies nordmanniana Abies pinsapo	Yes
		Spruce (40) • leaf with rhomboid section • pendulous cone with persistent scales	Picea abies Picea engelmannii Picea glauca Picea omorika Picea orientalis Picea pungens	Yes
		Pseudosuga (6) • almost flat leaf • pendulous cone with persistent scales and trifid bracts	Pseudosoga menziesii	Yes
		Tsuga (10)		
	Laricoideae • alternate and fasciculate leaves	Cedrus (3) • evergreen, stiff • erect cone with deciduous scales, duration 2-3 years	Cedrus atlantica Cedrus deodara	Yes Yes
		Larix (12) • deciduous, soft • erect cone with persistent scales, annual duration.	Larix decidua Larix kaempferi	Yes
			Pinus brutia Pinus canariensis Pinus densiflora Pinus halepensis Pinus leucodermis	Yes Yes Yes
	 Pinoideae Fasciculated leaves surrounded by a membranous sheath. 	Pinus (100) • leaves in groups of 2, 3 or 5. • cone ± reflexes with persistent scales	Pinus mugo Pinus nigra Pinus parviflora Pinus pinaster Pinus pinea	Yes Yes Yes
			Pinus radiata Pinus strobus Pinus sylvestris Pinus uncinata Pinus wallichiana	Yes

TAXODIACEAE • evergreen and resinous trees.(gen.), • monoecious • woody cone with persistent or deciduous scales, (resinous) • winged seeds			
	Cryptomeria (1)	Cryptomeria japonica	Yes
	Sequoia (1)	Sequoia sempervirens	
	Sequoiadendron (1)	Sequoiadendron giganteum	Yes
	Taxodium (2)	Taxodium distichum	Yes
CUPRESACEAS • trees and shrubs: evergreen, diverse sizes; resinous. • monoecious (gen.) • woody and dehiscent cone or fleshy and indehiscent • seeds with or without wings			
	Calocedrus (3) thuja leave sheet woody cone that opens winged seed	Calocedrus decurrens	Yes
	Chamaecyparis (6) • cupresoid sheet • woody cone that opens with peltate scales • seed with rudimentary wing	Chamaecyparis lawsoniana Chamaecyparis nootkatensis Chamaecyparis obtusa Chamaecyparis pisifera Chamaecyparis thuyoides	Yes
	X Cupresocyparis (1) • thuja leave	X Cupresocyparis leylandii	Yes
	Cupressus (15) • cupresoid sheet • woody cone that opens with peltated scales • seed with rudimentary wing	Cupressus arizonica Cupressus glabra Cupressus macrocarpa Cupressus sempervirens	Yes Yes Yes Yes
	Juniperus (60) • often dioecious • juniperoid (juniper) or cupresoid (sabina) leaf • fleshy and indehiscent cone	Juniperus chinensis Juniperus communis Juniperus conferta Juniperus horizontalis Juniperus x media Juniperus phoenicea Juniperus phoenicea Juniperus sabina Juniperus scopulorum Juniperus scopulorum Juniperus squamata Juniperus thurifera Juniperus virginiana	Yes Yes Yes Yes
	Platyclados (1) • thuja leaf • dehiscent cone with non- peltate scales • wingless seed	Platycladus orientalis	Yes

	Tetraclinis (1) • thuja leaf • dehiscent cone with non- peltate scales • seed with two wings	Tetraclinis articulata	Yes
	Thuja (5) • thuja leaf • dehiscent cone with non- peltate scales • seed with one wing	Thuja occidentalis Thuja plicata	
PODOCARPACEAE •trees or shrubs (evergreen, somewhat resinous). • dioecious (gen.) • leaves with 1 nerve from scale-shaped to linear- oblong • drupaceous seeds with fleshy receptacle.			
	Dacrydium (20)		
	Podocarpus (100)	Podocarpus macrophyllus Podocarpus nerifolius Podocarpus salignus	Yes
CEFALOTAXACEAE • shrubs or trees (evergreen, little resinous) • dioecious • flattened linear leaves with 1-nerve • drupaceous seeds			
	Cephalotaxus (7) • dioecious usually • "drupaceous" seed	Cephalotaxus harringtonia var. drupacea	Yes
TAXACEAE • trees and shrubs (evergreen, aromatic, and not resinous). • dioecious • flat linear sheets with 1 central nerve • seed surrounded by a fleshy aril.			
	Taxus (9) • dioecious • seed with aril	Taxus baccata Taxus x media	Yes

Table 3.2.1. List of families and genus included in conifers. (Due to space limitations, the abbreviation of the botanist has been omitted from the names of the species). The number of recognized species in each genus is indicated in parentheses

List of the species described in the datasheets

Each Botanic datasheet contains information about the name, botanical characteristics, ecological needs, uses, cultivation, phenological stages, commercialization, and other characteristics of each described species. This information is complemented with a selection of photographs, in which both the general appearance of the species and different details of interest for its recognition are displayed.

LIST OF THE CONIFER SPECIES DESCRIBED IN THE BOTANIC DATASHEET

- 1. Abies pinsapo
- 2. Araucaria araucana
- 3. Araucaria heterophylla
- 4. Calocedrus decurrens
- 5. Cedrus atlantica
- 6. Cedrus deodara
- 7. Cephalotaxus harringtonia
- 8. Chamaecyparis lawsoniana
- 9. Cryptomeria japonica
- 10. Cupressus arizonica
- 11. Cupressus macrocarpa
- 12. Cupressus sempervirens
- 13. Juniperus communis
- 14. Juniperus horizontalis
- 15. Juniperus oxycedrus
- 16. Juniperus thurifera
- 17. Larix decidua
- 18. Picea abies
- 19. Picea pungens
- 20. Pinus brutia
- 21. Pinus canariensis
- 22. Pinus halepensis
- 23. Pinus nigra
- 24. Pinus pinaster
- 25. Pinus pínea
- 26. Pinus sylvestris
- 27. Pinus wallichiana
- 28. Platycladus orientalis
- 29. Podocarpus macrophylla
- 30. Pseudotsuga menziesii
- 31. Sequoiadendron giganteum
- 32. Taxus baccata
- 33. Taxodium distichum
- 34. Tetraclinis articulata
- 35. X Cupressocyparis leilandii

ABIES

Abies pinsapo Boiss.

CONIFER				PINSAPO SPANISH	AVET DE RONDA VALENCIAN	SPANISH FIR ENGLISH	SAPIN D'ANDALOUSIA FRENCH		
5	STRUCTURE		DIVISION:	SPERMATOPHYTES	VARIETIES				
Shape	Height	Diameter	SUBDIVISON:	CONIFEROPHYTAS		GLAUCA			
CONICAL/OVAL	10-20 M	5-10 M	TYPE:	PINOPSIDAS					
Texture	Shade	Root	ORDER:	PINALES					
FINE	FULL	TAPROOT	FAMILY:	PINACEACE					
М	ORPHOLOGY		7		Jan Kantanana	1 728	1		
Trunk	Bark	Color	1 VI	Sale Sale	1 1000 0	Contraction of the	A CONTRACTOR		
THUNK	FISSURED	DARK GREY	1		A Date of	SIS SIS			
Leaf	COMPOUND:	NO				A REAL PROPERTY.			
	HARDNESS:	CORIACEOUS	-	7 11/	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	ALL VE			
EVERGREEN (10 YEARS)	ARRANGEMENT: ALTER	NATE(SPIRAL) BOTTLEBRUSH	and a mark	CALLED A			11 -		
SIZE: 10-15x2.5MM	VENATION:	ACICULATE				AN CONTRACTOR			
LEAFLETS: NO	SHAPE:	ACICULAR	CS CL	A STATE OF A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Ser many	All and and a second		
COLOR: US:DARK GREEN	MARGIN:	ENTIRE	a share	and the second second		ALL SUL			
LS:STRIPED GREEN	APEX:	ACUTE	11/2/200	all the seal	AND IN COLUMN				
TEXTURE: US: GLOSSY	LEAF BASE:	ELONGATE	A 120	and the second	200 H	2.38 C.			
LS: GLOSSY	PETIOLE: SES	SSILE/SUB-SESSILE	1 - A		10 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	States			
Strobilus	Sex	Distribution	A Tree of						
SIZE AND AM 15 MM	PURPLE-SPIKE	Fragrant	Sec.						
TYPE: 0/F 25 MM	DARK GREEN -SOLITARY	NO	and the second			A A A			
	Type	Color			T BARKAN	3371			
Fruit	CONE(1)	DARK RED		10 20 10 10 10	25,297 4	S. K.Ketto			
	Edible	Fruiting season	and the second		2 Star	T SAVER	MUN SA		
SIZE: 10-14x3-4 CM	NO	SEPT-OCT	1	- 10	A ANTI	1179-	CERNING CONTRACTOR		
Growth	Rate	Longetivity	1						
Growin	SLOW	< 150 YEARS	100 CO.	10 C C C C	1 Sach	3 -1 - /	and the second		
	ECOLOGY			Vala		The second			
Climata	Temperature	Drought resistant			and the second second	S. S. S. S. S.	Sector and		
Climate	H-2	YES	and the second	1 a 1 3 4		and and and a second	A STATE OF STATE		
ALTITUDE: 600-1800	Sun exposure	Frost resistant	200	1. S. 1. 2. 1		1. 200	A State of the sta		
IRRIGATION: MODERATE	SUN/SHADE	YES	Carl I	A COLOR		The second second	A MARKED		
Soil	Texture	Salt resistant	1000	- 1 - 15			A second second		
0011	LOAMY/SANDY	NO	- 1 · · · ·		PERSONA THE	and the second second			
pH: 6.5 - 8.5	Drainage	Lime resistant	C. C. Carrier	and the second	· · · ///	100			
FERTILITY: MODERATE	HIGH	YES	1 1 A	Contraction of	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	a second	CO - Control		
	USES			and a strength	1		Contraction of the second of the		
Resistances	Applic	ations	the start was a start	N 812					
COASTAL: 2ND LINE	SLOPES: YES	LINE: NO	tan F	and the second second	and the second	18 2 21			
POLLUTION: NO	RIVERBANKS: NO	WINDBREAKER: YES	1 1 1 1 1 Z				A second second		
WIND: YES	GROUP: YES	ISOLATED: YES	14	2 - 1 - 2		100			
			PO	INTS OF INTEREST					
Native to South of Spain	n (Mountain areas o	f Cadiz and Malaga	. Main branches are who	orled and almost horizontal. The b	asal ones detach with age, le	eaving the trunk clea	an. Twigs in groups of 2-3.		
Flat leaves, radially arra	nged (in "pipe clear	ners" and older ones	in " bottlebrush" due to	deformation, sometimes frostlike	white/pale green on both sur	faces. Oblong-cylind	drical cones, erect,		
foliar color. Interesting for	racis not exserted.	winged seed. This is	s great ornamental spec	that of a fir tree. Care must be to	nonage and nardy. It has son	re cultivars of intere	esi, variable in size and		
roman obior. Interesting it	5. 10.0103tation. It5 1	1000 10 HOL VOLY 100	nous almough more that	rates of a fir tree. Gare must be to	anon do policir carreause alle	signos. Concrally ut	see net need pruning.		

SPACING: 7-8 m

PLANTING AND PLANT HEALTH

Propagation by seed in the spring. Properly preserved seeds maintain their germinative power for 1-2 years. Transplanting can be delicate and should be carried out in the winter. This species is prone to pests (insects) and cryptogamic diseases.

CHROMATIC CALENDAR	CO	MMERCIALIZATIO	DN
FOLIAGE, FLOWERING AND FRUITING SEASON	Presentation	Height (cm)	Topiary shape
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	1/2 years	15/25	
CULTIVATION CALENDAR	C 28	100/125/150	
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	C100	200/250	
Sowing Planting Pruning X			
TREATMENT CALENDAR			
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC			
Fungicides Pesticides Fertilizers			

Araucaria araucana (Molina) Kock.

CONIFER				SPANISH	VALEN	A DE XILE MONK ICIAN	ENGLISH	FRENCH
5	STRUCTURE		DIVISION:	SPERMATOPHYTES		VA	ARIETIES	
Shape	Height	Diameter	SUBDIVISION:	CONIFERPHYTAS				
OVAL/SPREADING	20-25 M	8-10 M	TYPE:	PINOSIDAS				
Texture	Shade	Root	ORDER:	PINALES(CONIFERS)				
MEDIUM	PARTIAL	TAPROOT/HORIZONTAL	FAMILY:	ARAUCARIACEAE				
M	ORPHOLOGY		ALC: NO.	whith Atten			Sauce Not	States 1
Trunk	Bark	Color	1 1 1 1 1 1 1 N	DALE AND ALL		State V		11/
	FISSURED/HORIZONTAL	BROWN-RED	-112-5	AND AND AND AND	1400	A manufacture of	1.7123	24G
Leaf	COMPOUND:	NU	and the second	Sale States	H	1 th	- A CONTRACTOR	15 / 200
EVERGREEN	APPANGEMENT:	TERNATE(SPIRAL)	141				The same	Ville gering
SIZE: 30-50x15 MM	VENATION:	ACICULAR	1 - 1 - 1	1 SERVICE	Sandall.			10 - 10
LEAFLETS: YES	SHAPE: C	VAL/LACEOLATE		1. 4. 5 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	KAT P	-1-	100 M	1
COLOR: US:DARK GREEN	MARGIN:	ENTIRE	SCORE		50	1		6
LS:DARK GREEN	APEX:	CUSPIDATE	and the second second					
TEXTURE: US: GLOSSY	LEAF BASE:	ACUMINATE	state 1=		AL AND		1 1 21	
LS: GLOSSY	PETIOLE:	SHORT		CALLS IN COLORS	10 million		A DEF	Alberth.
Strobilus	Sex	Distribution	Star all	States (1990)	A STA		BEEN	20150150
onobilus	UNISEXUAL	DIOECIOUS	7. 1		Sugar Sugar		11.11	592457/3
SIZE AND TYPE:	YELLOW-SOLITARY	Fragrant		the second second	Mar In		12/20	1 A A A
♀/F 8-10 CM	GREEN-SOLITARY	NO	Contraction of the	AN ACTIVE STATE	LUFF		the set	
Envit	lype	Color		COPE CURSES	EN YM	0.12	1-10	- 18 M
Fruit	CONE (2 YEARS)	Enuiting apost		Martin C.S.	EX)		1010-1712	20.60
SIZE: 8-12 × 10 CM	Edible YES (THE SEED)	Pruiting season					SAL CAR	THE WEAT
0.22. 8-12 X 10 CM	Rate	Longevity	ALC: NOT		R.C.		ALC: NO	ML ·
Growth	SLOW	>400 YEARS			ANY K	100 M	Stone S	200
					The Real			
	ECOLOGY		The sea of	A STATE OF STATE		ST- SN	STIC	A DE MA
Climate	Temperature	Drought resistant		a section		AR THE		and the second
	10 to 15° C	NO	19 30	Car Based as	4		States and a state	un etter
ALTITUDE: 500-1500	Sun exposure	Frost resistant		18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C	a lost of		· · · · · · · · ·
IRRIGATION. HIGH	Texture	Frost resistant	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			a march and	a service of the serv	ton of
Soil	LOAMY	NO	S. A. Starter	A STATE AND A STAT	2.2	A DESCRIPTION OF	NULLH W	a hand had not if
pH: 6 - 7.5	Drainage	Lime resistant			the s		And a New York	गणान्त्र व
FERTILITY: MODERATE	MODERATE	NO	and the second second	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10.00		Shar -	
				A DAY BUILD AND A		-		- Change
Pasistanaas	USES	otione		10 3 2	IS DON	-		-
	SLOPES: NO	LINE: NO		And And Parks	1991	-	_	
POLLUTION: NO	RIVERBANKS: NO	WINDBREAKER: NO	AUT.			-	The second second	
WIND: YES	GROUPS: NO	ISOLATED: YES		All		-	Carlot Party	
	•		DC					
Native to Chile and Arge	entina Characteristi	ic crown especially	in old specimens with wt	norled branches, deciduous at the l	hase and arch	ing upwards in its :	anical area Regrowi	ing root. Generally
dioecious although occa	asionally monoeciou	is individuals have t	been detected. Flat leave	s hide the branch. Spherical cones	s, upright, deci	duous scales. Oblo	ong seeds fused to th	he scale, without
wings, with a mucron ap	ical, 2.5-4 cm. Its s	eeds are edible. Th	e yellowish wood is of inte	erest as it is easy to work (furniture	, construction,	paper pulp,). Its	resin is also of intere	est: "resin from
Unite". Care must be tal	ken with its leaves	as they can pose ris	sks. Usually pruning is not	t needed and in some cases not to	lerated.			
				0010				
				SPAC	ING: ISULATE	D. THIS WILL HIG		LIKY UP ITS CROWN
			PLAN	T AND PLANT HEALTH				
Propagation by seed in	n the spring or by	apical cutting or g	graft. Seeds loose their	germinative power after 2-3 mor	hths and there	efore should be k	ept in suitable con	ditions (hermetically
seared containers; RH (protected during the firs	ou-70% and 3-6 °C st years. Transplant	 i nis will ensure i ing can be delicate 	(spring and autump) Not	tor o-12 months. Germination lasts	s perween 20- ence of fungi i	ou days. Seedling n the soil must be	s are very sensitive monitored.	to cold and must be
	, sara. manapidin		(-p.ing and automity, NO	president prosto, nowever the presi	2.50 or rungi i			
		CHROMATI	C CALENDAR			COL	MMERCIALIZATI	ON
	FOLIA	GE, FLOWERING	G AND FRUITING SE	ASON		Presentation	Height (cm)	Topiary shape
JAN FEB	MAR ABR	MAY JUN	JUL AUG	SEPI OCI NOV	DEC	OT OF	45/00	
						CT 2.5	15/30	
		CULTIVATI	ON CALENDAR			CT 7	30/40	
JAN FEB	MAR ARR	MAY JUN	JUI AUG	SEPT OCT NOV	DEC	017	00/00	

	CON	INIERCIALIZATION	
FOLIAGE, FLOWERING AND FRUITING SEASON	Presentation	Height (cm)	Topiary shape
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC			
	CT 2.5	15/30	
	CT 3	30/40	
	CT 7	50/60	
JAN FEB MAR ABR MAY JUN JUL AUG SEFI OCI NOV DEC	CT15	60/80	
	CT25	80/100	
Sowing Planting Pruning X	CT 40	100/125	
	Rootball in mesh	125/150/175/200	
TREATMENT CALENDAR			
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC			
Fungicides Pesticides Fertilizers			

ARAUCARIA

Araucaria heterophylla (Salisbury) Franco

CONIFER				PINO DE NORFOLK SPANISH	ARBRE DE PISOS VALENCIAN	NORFOLK-ISLAND TREE ENGLISH	PINO DE NORFOLK FRENCH
	STRUCTURE		DIVISION:	SPERMATOPHYTES		VARIETIES	
Shape	Height	Diameter	SUBDIVISIOIN:	CONIFERPHYTAS			
CONICAL	15-20 M	8 M	TYPE:	PINOSIDAS			
I exture	Shade	Root	ORDER:	PINALES (CONIFERS)			
Fline	PARTIAL	TAPROUT/HORIZOWTAL	FAMIL 1:	ARAUCAKIAGEAES			
МС	RFPHOLOGY		The second	FEMENINA	8 8		
Trunk	Bark	Color					
	COMPOUND:	NO	Contraction of the				
Leaf	HARDNESS:	CORIACEOUS	· CARLY				
EVERGREEN	ARRANGEMENT: AL	TERNATE(SPIRAL)	-				
SIZE: LEAF: 1.2-1.6 CM	VENATION:	ACICULAR	- here and				
LEAFLETS: YES	SHAPE: O	VAL/LANCEOLATE					
COLOR: US: MEDIUM GREEN	MARGIN:	ENTIRE	at the second				
LS: MEDIUM GREEN	APEX:	ACUTE	Read and a second		1		
TEXTURE: US: GLOSSY	LEAF BASE:	WIDE	A CONTRACTOR		N. S. M.	1. 3 1. 191	
LS: GLOSSY	PETIOLE:	SESSILE		MASCULI	NA	LISS SAME	100 H 10
Strobilus	Sex	Distribution					
	UNISEXUAL	MONOECIOUS		No. 10 March 19			F-1
TYPE: 0/E E2	LIGHT RED/SOLITARY	Fragrant		AND			PLACER
¥/F EZ	GREEN/SOLITAKY	Color					
Fruit		LIGHT GRAY			Vite		
Truit	Edible	Fruiting season		June 1 34		5612	
SIZE: 10-14 x 9-12	NO	OCT-DEC	Part of		ALS		
Oneverth	Rate	Longevity	ALC: NO	CALL WHEN	11 Man		
Growth	MEDIUM	>150 YEARS	ALC: NOT THE REAL PROPERTY OF	AN IS MAN	Walle		NOV BUT
	ECOLOGY		N Y TOP			10 0 0 m	AL B
	Temperature	Drought resistant		ALLANDARY AND ALLANDARY	E. WANDER		Car ASP
Climate	0 to -5°C	MODERATE	ALL SHOULD	Re D. South and Market	Section 1	and an a	
ALTITUDE: 0-300	Sun exposure	Frost resistant	alles maint to		Vinter and		
IRRIGATION: MODERATE	SUN/PARTIAL SHADE	NO	AND THE M	Carl Par States		ALL AND ALL AND	
Soil	Texture	Salt resistant		Martin Martin	and the second		And And And
0011	LOAMY	NO	and the second second	· · · · · · · · · · · · · · · · · · ·	Seal to mark	132	No. State State
pH: 6.5-7.5	Drainage	Lime resistant			A CALL AND		SLAR BASH
FERTILITY: MOD/POOR	HIGH	NO		Contractor States	C. Martin	A TOMAN	19873803A
	USES		- Alle			1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	20 20 18
Resistances	Applic	ations		· · · · · · · · · · · · · · · · · · ·		1 P 1	D. D. B. B.
COASTAL: 1ST LINE	SLOPES: NO	LINE: NO		A strategy manage		2 - Di	and the second
POLLUTION: NO	RIVERBANKS: NO	WINDBREAKER: NO					automas, entre
WIND: YES	GROUPS: NO	ISOLATED: YES				- B - B - B	
			P	DINTS OF INTEREST			
Native to theNorfolk Isla shape. Its flexible worm	nds. Commonly kno like twigs fall in a c	own as Araucaria ex	celsa. A characteristic:	species bearing clearly whorled and rched, almost flat: young leaves are	I horizontal primary bran e linear-falcate and rhom	ches and secondary ones a boid-shaped. Cones are si	rranged in a "V"

Native to meNorlok islands. Commonly known as Araucana excelsa. A charactensitic species bearing oleany whorled and norizontal primary branches and secondary ones arranged in a "V" shape. Its flexible, worm-like twigs fall in a characteristic way. Adult leaves, somewhat arched, almost flat; young leaves are linear-falcate and rhomboid-shaped. Cones are subspherical or upright, deciduous scales. Winged seeds fused to the scale and with mucron apical. Its wood is heavy, hard and easy-to-work and used for making poles, furniture, sculpture, etc. Young specimens are cultivated as an indoor plant. Pruning is not necessary.

ISOLATED. THIS WILL HIGHLIGHT THE SYMMETRY OF ITS CROWN

PLANTING AND PLANT HEALTH

Propagation by seeds, cutting or grafting in the spring. See A. araucana. Transplanting can de delicate (spring and autumn). Not seriously affected by pests however is prone to sooty mold specifically the Capnodium genus.

	CHROMATIC CALENDAR									CON	IMERCIALIZATIO	N		
	FOLIAGE, FLOWERING AND FRUITING SEASON										Presentation	Height (cm)	Topiary shape	
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC			
				CUL		CALEN	DAR							
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC			
Sowin	g	Plan	iting	P	runing	Х								
				TRI	EATMENT	CALEN	DAR							
JAN	FEB	MAR	ABR	MAY	JÜN	JÜL	AUG	SEPT	OCT	NOV	DEC			
Fung	icides		Pesticic	les		Fertilizers								

Calocedrus decurrens (Torr.) Florin

Conifer				CALOCEDRO SPANISH	CALOCEDRE VALENCIAN	INCENSE CEDAR ENGLISH	LIBOCEDRE FRENCH
	STRUCTURE		DIVISION:	SPERMATOPHYTES		VARIETIES	
Shape	Height	Diameter	SUBDIVISION:	CONIFERPHYTAS	AUREO VARIE	GATA - BRANCHES WITH YE	LLOW SPOTS
COLUMNAR	15-20M	2-4M	TYPE:	PINOSIDAS	COLUMNA	RIS - STRICTLY COLUMNAR	CROWN
lexture	Shade	Root	ORDER:	PINALES			
FINE	FULL/PARTIAL	TAPROOT	FAMILY:	CUPRESSACEAE			
N	ORFOLOGY		and the state		1. 20		
Trunk	Bark	Color				ARE BAR	
	RETICULATE/FIBROUS	SALMON-RED		LAND I HIND	-STATE HA	LAK PUL	
Leaf	HARDNESS:	NO		CONTRACTOR OF THE			A BARA
PERSISTENT	ARRANGEMENT: OF	PPOSITE(TUYOIDE)			Children and	Sector V	A NAME
SIZE: 3.5 *2MM	VENATION:			E SE ALL AND MARK			
LEAFLETS: YES	SHAPE:	SCALE			1		1
COLOR: US:DARK GREEN	MARGIN:	DENTATE				Section 1	13
LS: DARK GREEN	APEX:	ACUTE	The second second	COLUMN AND A DESCRIPTION OF A DESCRIPTIO			
TEXTURE: US:GLOSSY	LEAF BASE:	DECURRENT	Star La	SEP RELATION	No I I State	ARA WALLAND	The second
LS: GLOSSY	PETIOLE:	SESSILE			100-00	DEAN 23	WA WARE COM
Strobilus	Sex	Distribution		STATE AN ANY	1 1 1 1 K	A STATE STATE	N. MELLAN
SIZE AND 3/M 6-7 MM		Fragrant	A TALE A		62 1.1.	C34. 40.8	
TYPE: 0/F	GREEN/SOLITARY	NO	Sherry 3	State In the		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 × 1
T.,	Туре	Color	100	Star Spark Protect	1 1 1 2 2		and the second
Fruit	CONE (1 YEAR)	LIGHT BROWN	and the state	DATE: NO	AN UL DES WILL	ATAN	N. A.S.
	Edible	Fruiting season	A Street Street	A REAL PROPERTY OF			1. 18. 19
SIZE: 2-3 x 0.6	NO	SEPT-OCT					
Growth	Rate	Longevity	200 2000		DATE AN		and the second
	MEDIUM	> 150 YEARS			the west of the	N N N N N	ALL THE
	ECOLOGY			AND PROPERTY AND	ALC: 1 1	A REAL PROPERTY	N. K. MAR
Climate	Temperature	Drought resistant	The second second	CAN SERVICE	10.312613.51	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	347 A. 19 19
	-20°C A9	YES				and the second	Pres and
IRPIGATION: MODERATE		VES	1242	The Martin A	100	A LANGE STREET	2. 19
	Texture	Frost resistant		CARLE AND CO	C.C.L. MIL	A Loss	AGAN ME
Soil	ALL TYPES	NO	AM IN	The second second	11 1 1 1 1	AT COMPANY TO T	
pH: 6.5-8.5	Drainage	Lime resistant		and the second		A	Ta Dolla Lin
FERTILITY: MODERATE	MODERATE/HIGH	YES		CONCERNE.	1 - 24		
	USES		224056 28	The second			Selection of
Resistances	Applic	ations	and the state	Mar Contactor and			100 Mar 10
COASTAL: 2ND LINE	SLOPES: NO	LINE: YES	The state of the	and the the	and the second second	Called Called	A STREET
POLLUTION: YES (URBAN)	RIVERBANKS: NO	WINDBREAKER: YES	a de case	and the state	1 State	Section States	1 2 4 4
WIND: MODERATE	GROUPS: YES	ISOLATED: YES		The second secon	The here's	Sector 1	
			PO	INTS OF INTEREST			
Native to the West Coast	st of North America	. Its bark exfoliates in	n elongated plates. Flatte	ned branchlets , in vertical planes	s, very aromatic, rough an	d with an articulated appea	rance. Imbricated
leaves in thuyoide arran	gement, without do	rsal gland with a sm	ell of resin. Cones are ob	long, pedunculate, woody, pendu	lous. Winged seed. This s	pecies is of ornamental in	terest and varies in
trimming.	age color. Pilitk woo	u, light, bhttle and dt	nable, nagrant and easy	to work. It is used in cabinetmaki	ng, carpentry and pencir n	aking. This species toleral	es pruning and
							SPACING: 3-4 m
			PLANTING	AND PLANTING HEALTH			
Propagation by seed (p	preferably in autum	n, also in spring) or	its varieties by cutting of	r grafting on Calocedrus, Platyc	lados, Cupressus and C	hamaecyparis. The seed	must always be fresh,
since it quickly loses its	germinative power	and must be previo	ously stratified (in moist s	and at 2-3° C for 1-2 months) to	improve its germination. T	ransplanting can be delic	ate (winter). This tree
is prone to pests.							
		0115014-57				000000000000000000000000000000000000000	
		CHROMATI	GALENDAR			COMMERCIALIZA	TION
	FOLIA		AND EDUITING OF	1001	Descent	- the second sec	T : 01

			FOLIA	GE, FLO\	VERING	AND FRU	ITING SE	ASON				Presentation	Height (cm)	Topiary Shape
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC			
												CT1	1/1	
												CT5	50/60	
				CUL	TIVATIO	N CALEN	DAR					CT10	60/80/100	
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	CT20	100/125	
												CT28	100/125/150/200	
Sowing	g	Plan	iting	F	runing	Х								
				TRE	EATMEN	T CALENI	DAR							
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC			
FFFFF				HHH										
Fungi	icides		Pesticio	des		Fertilizers								

3. CONIFERS

CEDRUS

Cedrus atlantica Manetti

Conifer				CEDRO DEL ATLAS SPANISH	CEDRE DE L'ATLAS VALENCIAN	ATLAS CEDER ENGLISH	CEDRE DE L'ATLAS FRENCH
	STRUCTURE		DIVISION:	SPERMATOPHYTES		VARIETIES	
Shape	Height	Diameter	SUBDIVISION:	PINOPHYTAS	GL	AUCA - DEEP BLU	JE
EXTENDED CONE	10-25 M	6-10 M	TYPE:	PINOSIDAS	PENDULA - PE	NDULOUS WITH I	BLUE LEAVES
Texture	Shade	Root	ORDER:	PINALES			
MEDIUM	PARTIAL	TAPROOT/HORIZONTAL	FAMILY:	PINACEAE			
М	ORPHOLOGY		and when a	1.2.4			
Trunk	Bark	Color	- The second of	15 15 M	there and the state		
	SCALY	LIGHT GRAY	A Start Bar	ALC: NO	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1220	
Leaf	COMPOUND:	NU		PACK THE	A DE LA DE L	5.0	State and the
	HARDNESS:	CORIACEOUS	Service M	and the second s			
SIZE: 15-25y1 MM	ARRANGEMENT. ALT	ACICULAR		Service and the service of the servi	T HAL MERINAN MIL		
LEAFLET: NO	SHARE:	ACICULAR	- Control	The second		AND P	
COLOR: US: DARK GREEN	MARGIN:	ENTIRE	al	1 50	5 5 - 10 K	1	A STATE DA
LS: DARK GREEN	APEX.	ACUMINATE	- Jan the off	A DE CONTRACTOR	TAL NOT	15 - De	2
TEXTURE: US: GLOSSY	LEAF BASE	ACUMINATE	11	The second second		TANK CALL	
LS: GLOSSY	PETIOLE:	SESSILE	and the Last	Are an			
A	Sex	Distribution	and the loss		ALCOMON		
Strobilus	UNISEXUAL	MONOECIOUS	and all the	12 1	× (02 (12 (14) (10) (10)		
SIZE AND 35 MM	OCHER-SOLITARY	Fragrant	State of State	and the	1 ALAN AND AND	1	
TYPE: ♀/F 25 MM	YELLOW/RED-SOLITARY	NO	-	A DOWN	ANNINA IN		Vieta (
	Туре	Color		1	Contraction of		
Fruit	CONE (2 YEARS)	BROWN/PURPLE		-4	The state of the state	2	THE REAL PROPERTY OF
	Edible	Fruiting season	3			1. 10	
SIZE: 6-9 x 4-5 CM	NO	SEPT-OCT		at a	A TANK	Alt in the	TO ROP DE LA
Growth	Rate	Longevity	in S				
	MEDIUM	> 300 YEARS	S - market	and the second s	12 3 V.V.	1 Statistics	
	ECOLOGY		18	1	North Walt	S Charles S	
Climata	Temperature	Drought resistant	10.1	and the state		10-22-21-21-	RIGA ROL
Climate	-15°C to -20°C	YES	his the	Star Star			1 4 4 1 4 4 1
ALTITUDE: 500-2500	Sun exposure	Frost resistant	Ship dates 1			1002 8	ALC: NO. S.
IRRIGATION: MOD/LOW	PARTIAL SUN	YES	the state of the		State of the second second	C. C. Carlo	A CONTRACTOR OF
Soil	Texture	Salt resistant	AL LAND			A 14448	1999年1月1日
	LOAMY/SANDY	NO	10 11 11 500	and the state of the		C Call	D. E.W.E.
pH: 6.5-8.5	Drainage	Lime resistant	10 10	A State of the second	and the second	1.1.1.1.1	
FERTILITY: MOD/LOW	HIGH	YES	13 14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A CONTRACTOR OF THE REAL			
	USES						
Resistances	Applic	cations	2 States A			286	
COASTAL: NO	SLOPES: NO	LINE: YES	State Carlos			and the second	ALL
POLLUTION: YES(URBAN)	RIVERBANKS: NO	WINDBREAKER: YES		M	the the second	A States	A PS I A
WIND: MODERATE	GROUPS: YES	ISLOATED: YES				100 K 4 - 11	2012/02/01 17
			PO	INTS OF INTEREST			
Native to Atlas Mountair	ns. Whorled branch	es, somewhat raised	and non-hanging branc	hlets. Leaves are tetragonous, a	Iternate (macroblasts) or fas	sciculated and somewh	nat longer (brachyblasts).
Pines are elliptical and f	lattened, erect, ped	unculated, deciduou	is scales. Winged seed.	This tree is of great ornamental v	alue as it varies in sizes and	d color of its foliage. It	hybridizes very easily,
giving rise to types that a pencils). If distilled it	are difficult to distin gives a type of esse	guish among them.	its wood is white, durable pharmacy and perfume	e and easy to work. It is tragrant a rv. Aromatic and medicinal resin	Care must be taken as its r	seu for luxury carpent collen can cause allerr	ry (marquetry, sculpture, nies, Does not tolerate
pruning.	5 a type of 6330		- prising and ponume			our ouroo allorg	
							SPACING:8 m
			PLANTI	NG AND PLANT HEALTH			
Propagation by seed (s	spring) or its varie	ties by cutting or gr	afting on ungrafted bas	e. It does not need treatment b	ut it germinates much bett	er if the seeds are pl	aced in water 3-4 hours
before sowing. Germin	ation time is 30 c	lays. The seed car	maintain its germinati	ive power for 1-2 years by ke	eping it in an airtight con	tainer, at 2-4 °C and	d with minimal humidity.
Transplanting can be o	delicate (winter). It	is sensitive to pes	ts and cryptogamic dise	eases. For their best developm	ent, greater showiness an	d better protection ag	gainst fungal attack, the

CHROMATIC CALENDAR	CON	IMERCIALIZATION	
FOLIAGE, FLOWERING AND FRUITING SEASON	Presentation	Height (cm)	Topiary shape
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC			
	Pot	1/1	
CUIL TIVATION CALENDAR	CT 5	40/60	
	CT10	80/100	
JAN TED MAR ADA MAT JON JOE AGG GETT OCT NOV DEG	CT 18	150/175	
	CT 28	125/150-175/200	
Sowing Planting Pruning X	CT 30	200/250	
	Root ball in mesh	150/175/200/250	
TREATMENT CALENDAR			
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC			
Fungicides Pesticides Fertilizer			

CEDRUS

(

Cedrus deodara (Don) G. Don

CONIFER				CEDRO DEL HIMALAYA SPANISH	VALENCIAN	ENGLISH	CEDRE DE L'HIMMALAYA FRENCH
5	STRUCTURE		DIVISION:	SPERMATOPHYTES		VARIETIES	
Shape	Height	Diameter	SUBDIVISON:	CONIFERPHYTAS	AUREA AND GOL	DEN HORIZON -	GOLD LEAVES
EXTENDED/CONCIAL	15-25M	6-10M	TYPE:	PINOSIDAS	PEND	ULA - PENDULO	US
Texture	Shade	Root	ORDER:	PINALES	FEELING BLUE - PE	ENDULOUS WITH	H BLUE LEAVES
MEDIUM	FULL	TAPROOT	FAMILY:	PINACEAE			
M	ORPHOLOGY				k. M	D."	
Trunk	Bark	Color			A. 11 18 18		2 STON
	RETICULATE	DARK GRAY	1995年1				21112011
Leaf	COMPOUND:	NU				128	
	HARDNESS:	CORIACEOUS	S THE REAL			1/2 art	1
EVERGREEN (2)	ARRANGEMENT: AL	ACIOULA D	A DELAL			Ja-	AND -
	VENATION:	ACICULAR	18 24 4		meter the -		NACK.
	SHAPE:	ACICULAR		B C S contract and	a state of the sta		
COLOR: US: LIGHT GREEN	MARGIN.	ENTIRE	A CONTRACTOR	1-112-	and the second second		
LS: LIGHT GREEN	APEX:	ACUMINATE	a marker			1	
Lei CLOSEV	LEAF BASE:	ACOMINATE	and the faith of the second se	A REAL PROPERTY AND		Provide States	CONTRACTOR OF THE OWNER
L3. GL0331	PETIOLE:	Distribution	Participant and	V. BILL AND		and the second	1
Strobilus	UNISEXUAL	MONOCEIOUS	a start of			States and	St m
SIZE AND A/M 40MM	YELLOW -SOLITARY	Fragrant	The state of the s	have a set of the	A DECEMBER OF THE PARTY OF THE	a la barre la la	AL STALL
TYPE: Q/F 10MM	BLUE/GREEN SOLITARY	NO			and the second	the states	and the Park Mille
	Type	Color	13 Stantes	and to call it.			Contraction of Contraction
Fruit	CONE (2 YEARS)	BROWN/RED	1000	LAN ROLL		the strength	
	Comestible	Fruiting season	1577 201		San a Maria	and a state of	C. C. Torsky V.
SIZE: 7-11 x 5-6 CM	NO	OCT-DEC	Sector Sector			A State of the	
0 //	Rate	Longevity		Star Protock	The second		Distance
Growth	MEDIUM/FAST	> 150 YEARS	Contract of		S States and	the leaves	Max Wals
	ECOLOGY		76750	A ALLENT			STALLS
	Temperature	Drought resistant		P ASSAN	- Hereit	ST / Contract	The manual the
Climate	H-3	MODERATE/HIGH	and the second second	- and - and -	A MARSON MARSON	N. Les	ATT The
ALTITUDE: 1000-3000M	Sun exposure	Frost resistant	LOT HAVE		· Cons	This Area	
IRRIGATION: HIGH	SUN/PARTIAL	MODERATE/HIGH	States and a second	COLORADON SILVER	Sent the	AL AND	144
Soil	Texture	Salt resistant		and the second	Section 2014	201 112	and the second second
3011	ALL TYPES	NO	108	the second second	2 Stranson	5.415	- BERGER
pH: 6 - 8.5	Drainage	Lime resistant	and the second		NEW CONTRACTOR	100 miles	
FERTILITY: MOD/POOR	HIGH	YES		A REAL PROPERTY.	S SACON S	E DAS	
	USES				- HELEPELS		S-DATE I
Resistances	Applic	ations		Martin Carlos Al			
COASTAL: 2ND LINE	SLOPES: NO	LINE: YES	1773	A	A A A	Contra Mar	State State
POLLUTION: YES (URBAN)	RIVERBANKS: NO	WINDBREAKER: YES	See See	A STATES	WHAT STOLEN	- Trail	The second
WIND: MODERATE	GROUPS: YES	ISOLATED: YES	- Aller and		2 2 3 A 16	100 2	A SHELL TH
			PO	NTS OF INTEREST			
Also known as Cedrus	libani Laws. var. De	odara Hook. Native	to Western Himalayan re	gion. It differs from the other speci	es of the genus for its longe	r needles (> 4 cm).T	he crown has a recurved
top, somewhat inclined a	and pendulous brar	iches (the basal one	es can even touch the gro	und) giving the tree a certain weep	ing appearance of great effe	ect. It has a large nu	mber of varieties of
ornamental interest, vari	able in size (includ	ng dwarf and prosta	ata" (low growing spreadin	g mound species) and color of its f	toliage. Its wood is light, stro	ong, rot resistant, ea	sy to work and of good
quality. Ideal for constru	cuon, peams, sleep	ers and luxury carp	entry, its resins are exploit	eu. Gare must de taken as its polle	en can cause allergies. Thes	e nees do not tolera	ne pruning.

PLANTING AND PLANT HEALTH

Propagation by seed (spring) or its varieties by cutting or grafting on ungrafted base (similar to Cedrus atlantica). In very cold winters it can lose part of its foliage. Transplanting can be delicat winter). This tree is prone to pests and cryptogamic diseases.

	CHROMATIC CALENDAR										
	FOLIAGE, FLOWERING AND FRUITING SEASON										
JAN	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											
Sowin	g	Plar	nting	P	runing	Х					
				TRE	ATMENT	CALEND	AR				
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Fungi	Fungicides Pesticides Fertilizers										

COMMERCIALIZATION

Presentation	Height (cm)	Topiary shape
Year 0/1	10/15	
Year 1/1	15/30	
CT 3	20/40	
CT 5	20/40	
CT 10	50/60-80/100	
CT15	100/125/150	
CT 25	150/175	
CT 40	175/200	
CT 45	200/250	
CT80	250/300	
Rootball in mesh	150/175/200/250	

ALTITUDE: 300-900M

Soil

Resistances

6.5-8.5

MODERAT

NO

YES

MODERA

IRRIGATION:

pH:

FERTILITY:

COASTAL:

POLIUTION

WIND

CEPHALOTAXUS TEIX D'ORIEN VALENCIAN CONIFER SPANISH ENGLISH FRENCH DIVISION: STRUCTURE SPERMATOPHYTES VARIETIES SUBDIVISION Shape Height Diameter CONIFERPHYTAS GLOBULAR/EXTENDED TYPE: PINOPSIDA 2.5M 4.51 Texture Shade Root ORDER: PINALES MEDIUM DENSE FAMILY CEPHALOTAXUS MORPHOLOGY Bark Color Trunk MOOTH/ ± SCA DARK GRAY COMPOUND NO I eaf HARDNESS: SOFT EVERGREEN PRANCEMENT: ALTERNATE SUBDISTICHI OUS SIZE 20-50 × 4MM VENTATION: VEIN-NEARLY INVI LEAFLET: NO SHAPE: LINEAR-FALCATE COLOR: US: DARK GREEN MARGIN: ENTIRE LS: GRAY/GREEN APEX: ACUTE/ACUMINATE EXTURE: US: GLOSSY LEAF BASE: EXTENDED/DECURREN LS: OFF-WHITE PETIOLE SHORT Sex Distribution Strobilus UNISEXUAL DIOECIOUS (GEN E AND AM 6-8 MM CREAM-SOLITARY Fragrant TYPE: ହ/F CREAM-PAIRS (X2) NO Color Туре BROWN Fruit DRUPE (2 YEARS Edible Fruiting seasor SIZE 2-3x1.5CM NO SEPT-NOV Rate Longevity Growth SLOW > 150 YEARS ECOLOGY Temperature Drought resistar Climate

NO

Frost resistant

MODERATE

Salt resistant

NC

Lime resistan

ISOLATED:

Applications

NO LINE: VES

YES

YES

YES

YES

Sun exposure

RTIALSUN/SE

Texture

ALL TYPES

Drainage

MODERATE/HIGH

RIVERBANKS: NO

USES

SLOPES.

GROUPS

POINTS OF INTEREST Also known as Cephalotaxus drupacea, Native to China, Japan and Korea, Opposite (or whorled) branches somewhat pendulous, Leaves organized in 2 planes arranged in V; with 2 stomatal pands on its underside. Male strobili pedunculated and axillary; the female is scaled and terminal, in pairs. The seed is roughly pyriform (pear-shaped), pedunculated, pendulous, drupaceous in appearance with a woody inner shell and a fleshy outer shell, with an unpleasant odour. It has some cultivars of interest. This tree tolerates pruning and trimming (topiary).

SPACING: 5 m

PLANTING AND PLANT HEALTH

propagation by seed (in autumn with seed of the year, or spring with stratified seed during winter for a minimum period of 6 months) or cultivars by apical cutting (March) or by grafting (on Cephalotaxus or Taxus rootstocks). The seeds must be soaked to remove the fleshy seedpods, and adequate storage is necessary to preserve their germinative power. Germination asts 1-2 years. Cuttings take almost a year to root. Transplanting can be delicate (winter). This species is not prone to pests or diseases.

CHROMATIC CALENDAR	CON	IMERCIALIZATIO	N
FOLIAGE, FLOWERING AND FRUITING SEASON	Presentation	Height (cm)	Topiary shape
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	CT5	30/40/50	
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			

Cephalotaxus harringtonia K.Koch. var.drupacea Koidz.

CHAMAECYPARIS

Chamaecyparis lawsoniana (A. Murray) Parl.

CONIFER				CEDRO DE OREGON SPANISH	XIPRER DE LAWSON VALENCIAN	OREGON CEDAR ENGLISH	FAUX CYPRÈS FRENCH
	STRUCTURE		DIVISION:	SPERMATOPHYTES		VARIETIES	
Shape	Height	Diameter	SUBDIVISION:	CONIFERPHYTAS	ALUM	IIGOLD, COLUMNAR	'/S ,
CONICAL/COLUMNAR	10-15 M	2-6 M	TYPE:	Pinopsida PINOPSIDA	ELWOODII (GI	REEN-SILVER BLUE)	,GLOBOSA
Texture	Shade	Root	ORDER:	PINALES	MINIMA	AUREA, MINIMA GLA	AUCA
FINE	FULL	TAPROOT	FAMILY:	CUPRESSACEAE		NIDIFORMIS,	
М	ORPHOLOGY					i and	
Trunk	Bark	Color	1000	Concerning of the second se		a second a los	C. S. C. C. C.
	FISSURED	DARK RED	and the second		-	and the M	ALL PARTY OF
Leaf	COMPOUND:	NO	and the second se		and the second s	A BAR AND	ANNE SER
DEDEIETENT	HARDNESS:		19-17-		1.1.1	and the second	Contract 1
SIZE: 1-2y1-2 MM	VENATION	PPOSITE (TUYOIDE)	2 34		A ATTAC		A CARL
OLC: I DATE MAIN	SHAPE:	SCALE				100 A 100	AND A
COLOR: US:DK BLUE/GREEN	MARGIN:	ENTIRE		Section 2.			
LS:DK BLUE/GREEN	APEX:	ACUTE		18. 100		THE REAL	CARGE -
TEXTURE: US:GLOSSY	LEAF BASE:	DECURRENT		100 M			and the state
LS:GLOSSY	PETIOLE:	SESSILE	1.1.46676787		SHOW OF ALL SHOW	STATISTICS STATIST	
Strobilus	Sex	Distribution	A coper a	and the stations !	19 18 1 1 1 1		1 2 5 3
Strobitus	UNISEXUAL	MONOECIOUS	1		Set and	1 302	Ser and
SIZE AND TYPE:	YELLOW/RED-SOLITARY	Fragrant		A REAL PROPERTY	4 1 1 1 1 1 1 1		To and the
♀ /F 4-6 MM	GREEN/BLUE-SOLITARY	NO		and the second second	12	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Erwit	I ype	DARK RED		10000		100	10 X 2
rruit	Edible	Fruiting season					100 - 10 miles
SIZE: 0.7-1x0.7-1CM	NO	SEPT-NOV			R. C. POLO		
Crowth	Rate	Longevity			B. Stall		
Growth	FAST	> 300 YEARS	and the		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	AND SA	A MARINE
	ECOLOGY		S		1. 1. T		100
	Temperature	Drought resistant	2 at the		P 19.36	ALL	
Climate	-5 to 10°C	MODERATE		A Starte A	The same of the	AND DET	1 K -
ALTITUDE: 500-1500M	Sun exposure	Frost resistant	the state		12 · 新闻学校		-The Letter
IRRIGATION: HIGH	SUN/SHADE	YES	0.15				Endier
Soil	Texture	Salt resistant	1.4		S YO CAP	100 Car	20
	LOAMY	NO				S	The factor
pH: 6-8	Drainage	Lime resisitant	Contraction of the second			100	
PERTIENT. MODERATE	нон	WODERATE		and a	and the second	a las	State of the second
	USES					- AT	
Resistances	Applic	cations		and the second	A State State		
COASTAL: NO	SLOPES: NO	WINDBREAKER: VEC	A PER			10 C	CAN STORE
WIND: YES	GROUPS: YES	ISOLATED: YES	and a state	AND AND	Read and the second	and the second second	
1110							
			PO	INTS OF INTEREST			
Native to Western U.S.A some of them with recur	 Flattened branch wed mucron (simila 	lets, smelling of resil ir to those of Cupres	n when crushed. Leaves sus but smaller). Winged	in thuyoid arrangement, with dorsa seed, with glands. This tree is of g	il gland. Cones are spher ireat ornamental value as	ical, pedunculate with pel it has a large number of y	tate woody scales, varieties of interest
(>200) that vary in heigh	nt, size and leaf colo	or. In Spain it has be	en used for reforestation	. Light brown wood, light, resistant	to rot, fragrant and easy	to work. It is used in shipt	building, carpentry,
furniture, matches, Ca	ire must be taken a	s its pollen can caus	e allergies. This tree tole	rates pruning and trimming (topiary	/).		
					SPACI	NG:Variable according	g to use and cultivar.
			PLANTIN	G AND PLANT HEALTH			
Propagation by seed ((autumn) or its va	rieties by cutting (s	soft or hard) and grafti	ng. Seeds lose their germination	n power quickly therefor	e they must be proper	y preserved (airtight
2-4 ° C, for 1-2 months.	Transplanting can	be delicate (winter).	They are prone to Phyte	ophthora (root browning), Armillaria	a and Phomopsis (types	of fungus); also pests (in:	sects).
						2 /	
		CHROMATIC	CALENDAR			COMMERCIALIZA	TION
r							

FOLIAGE, FLOWERING AND FRUITING SEASON	Presentation	Height (cm)	Topiary shape
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC			
	CT1	1/1	
CILI TRATION CALENDAR	CT5	50/60	
	CT10	60/80/100	
JAN FED WAR ADR WAT JUN JUL AUG SEFI OCI NOV DEC	CT20	100/125	
	CT28	100/125/150/200	
Sowing Planting Pruning X			
TREATMENT CALENDAR			
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC			
Fungicides Pesticides Fertilizers			

CRYPTOMERIA

Cryptomeria japonica (L.f.) D. Don.

CONIFER				SPANISH	VALENCIAN ENGLISH FRENCH
	STRUCTURE		DIVISION:	SPERMATOPHYTES	VARIETIES
Shape	Height	Diameter	SUBDIVISION:	CONIFERPHYTAS	CRISTATA
CONICAL/COLUMNAR	8-12 M	3-4 M	TYPE:	PINOPSIDA	ELEGANS and ELEGANS VIRIDIS
Texture	Shade	Root	ORDER:	PINALES	VILMORIANA
FINE	PARTIAL/FULL	TAPROOT	FAMILY:	TAXIDIOIDEAE	GLOBOSA NANA
M	ORPHOLOGY				
Trunk	Bark FIBROUS	Color BROWN/RED		1 354	and the second
	COMPOUND:	NO		A AND	and the second se
Leat	HARDNESS:	SOFT(FLEXIBLE)		100	
EVERGREEN(4-5 YEARS)	ARRANGEMENT:	ALTERNATE	and the second	3.2 8	
SIZE: 10-20x2 MM	VENATION:	ACICULAR	ALC: NO	, setting	
LEAFLET:NO	SHAPE:	POINTED	N 10 AL 1		
COLOR: US:LIGHT GREEN	MARGIN:	ENTIRE	Contraction of		
LS:LIGHT GREEN	APEX:	ACUTE		and the second second	
TEXTURE: US: SMOOTH	LEAF BASE:	DECURRENT			A TOWN A TOP A REAL
LS: SMOOTH	PETIOLE:	SESSILE	and the second sec	the second second	STATISTICS THE STATE OF
Strabilua	Sex	Distribution		Section 18	
Strobilus	UNISEXUAL	MONOECIOUS	and the state	ale and the second	
SIZE AND J/M 7.5 MM	YELLOW/CLUSTERED	Fragrant		alf weeks	
ागPE: ₽/F	GREEN/RED-SOLITARY	NO	- Sudan	A COMPANY	A REAL PROPERTY AND A REAL
	Туре	Color		and the first	
Fruit	CONE	BROWN/RED		201 200	
	Comestible	Fruiting season	and the second	1 Mar 1	
SIZE: 1.5-2.5x2.5 CM	NO	OCT-NOV	States and	and the set	
Growth	Rate	Longevity		A. C. Park	A Start Contractor
0.0.0	MEDIUM/SLOW	>150 YEARS	and the second	30 31 1	C / SOLE AND CONSAND
	ECOLOGY			Cherry Control of the	V- / COMMAN STANDARS NOT
011	Temperature	Drought resistant		NULL TO A COL	AS 27 DAY MALE TRANSPORT
Climate	H-2	NO		State of the second	CARLEND ASSAULT
ALTITUDE: 200-2000	Sun exposure	Frost resistant	And the second second	CONTRACT REL	
IRRIGATION: HIGH	SUN/PARTIAL SHADE	NO	and the second second	States and States	
Soil	Texture	Salt resistant	1000	A de la de l	
3011	LOAMY/CLAYEY	NO		NR Start	
pH: 6-7.5	Drainage	Lime resistant		States of the	
FERTILITY: HIGH	MODERATE/HIGH	NO	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	States in	-think
	USES		10.4		
Resistances	Applic	cations	EF SAL		
COASTAL: 2ND LINE	SLOPES: YES	LINE: YES			
POLLUTION: YES (URBAN)	RIVERBANKS: NO	WINDBREAKER: YES			
WIND: NO	GROUPS: YES	ISOLATED: YES	NOTE -		
			PO	INTS OF INTEREST	
Nativo to China and Jar	an Ite bark can be	neeled off in long st	ring Somewhat pendulor	us whorled branches and decidu	ous branchlets. Tetragonal leaves, brown in winter and green in spring. Its

conces are subglobular, somewhat pedunculated, slightly pendulous with scales not pellate with recurved dorsal appendage and 2-3 toothed apex, sometimes the axis of the strobilus gives rise to a bud. Its seed has a rudimentary wing. It has a large number of varieties that are variable in height, size and color. Reddish wood, resistant, durable, aromatic, of good quality and easy to work. sed in construction (shipbuilding), interior carpentry. Its resin is aromatic. Care must be taken as its pollen can cause allergies. Does not require pruning.

SPACING: 2m

PLANTING AND PLANT HEALTH

Propagation by seed (spring) or its varieties by cutting, layering or grafting. The seed loses its germinative power quickly and therefore if properly preserved it can be viable for 2 years or nore. It does not need previous treatments for its germination. During the first year the seedlings should be protected from the sun. Transplanting is delicate (winter). It is sensitive to cryptogamic diseases (parasites and/or fungi).

CHROMATIC CALENDAR	COMMERCIALIZATION			
FOLIAGE, FLOWERING AND FRUITING SEASON	Presentation	Height (cm)	Topiary shape	
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC				
	CT3	30/40/50		
	CT5	30/40		
	CT7	50/60-80/100		
JAN FEB MAR ABR MAY JUN JUL AUG SEPI OCI NOV DEC	CT10	60/80		
	CT15	60/80/100		
Sowing Planting Pruning X	CT40	175/200/250	Ball	
	CT220	250/300		
TREATMENT CALENDAR				
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC				
Fungicides Pesticides Fertilizers				

CUPRESSUS

Cupressus arizonica Greene

CONIFER				CIPRES DE ARIZONA SPANISH	XIPRER VAL	D'ARIZONA ENCIAN	ARIZONA CYPRESS ENGLISH	CYP	RÈS DE L'ARIZONA FRENCH
	STRUCTURE		DIVISION:	SPERMATOPHYTES			SUBESPECIES		
Shape	Height	Diameter	SUBDIVISION:	CONIFERPHYTAS	CUPRES	SUS ARIZONI	CA VAR. $GLABRA = C$	UPRES	SUS GLABRA
CONICAL ± EXTENDED	10-15 M	4-6 M	TYPE:	POINOPSIDA	THEY DIFFER E	BY HAVING A BAI	RK THAT CAN BE PEELED	OFF	
Texture	Shade	Root	ORDER:	PINALES	IN THIN GRAY	STRIPS.			
FINE	FULL	TAPROOT	FAMILY:	CUPRESSACEAE					
M	ORPHOLOGY					E 30			14 C
Trunk	Bark	Color	10000000000000000000000000000000000000	THE ALL AND A DECK	1.15	1000	S 37 10		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
TTUTK	RETICULATE	DARK GRAY			1.5	1000	ST North		10 - F
Leaf	COMPOUND:	NO			SHOW.	1000		1	there is
Loui	HARDNESS:		A AN AN	and the second	S 89 6	S. Andrews	1 2 3 C 10	×.<	- K-
EVERGREEN (4 YEARS)	ARRANGEMENT: OPP	OSITE(CUPRESSOIDE)	Ser State	1121 22	100	39 A S		N.,	1-1-1-1
SIZE: 1.5 x1.5 MM	VENATION:		4 30 A 50 4	SRIGL - AND		S 9	No. Carlos	-5-75	- A
	SHAPE:	SCALE	service of	THE PARTY OF THE P		31.11	and the second		1045 T
COLOR: US: GREEN/GRAY	MARGIN: SL	IGHTLY DENTATED	HOTOS HOTOS AND A						
LS: GREEN/GRAY	APEX:	ACUTE			Ex.	ALL SHE	A Pe	140	and the second second
TEXTURE: US:SMOOTH	LEAF BASE:	DECURRENT			1.4		12.61	100	ALL ADDRESS
LS: SMOOTH	PETIOLE:	SESSILE			- 14		8-10 AL	1	and the second second
STROBILUS	Sex	Distribution	Sea 255		5	38. 25		12	1 m 1
SIZE AND 1744 - 2 2544	UNISEXUAL	Fragrant	6	24	1	P . 25	State of the second	14	e to t
TYPE: 0/E 24MM	TELLOW/SULITARY	riagram NO		20 A.M.A.			and the	-	
¥/F 3MM		Color		Barrie Harris	1	100		-	and a state
Fruit	CONE (2 VEABO)	DARK GRAY	Sector and	the state of the s	Pri-		21	-	Contraction of
Truit	Edible	Fruiting season	A. 1	Market Street of the	. 13	H. 18		1	State of the local division of the local div
SIZE: 2-2.5x2 cm	NO	SEPT-DEC		and the second		2. 10	21 1.6	5	
	Rate	Longevity		5 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2	Wei	E Store	ALC: NO	6	alabra
Growth	MEDIUM/FAST	< 150 YEARS	1	Seal and the seal	A 26	1.14			.grabia
			154.		100	States and	I I - Clank A.	100	No. Contractor
	ECOLOGY	December of starts	ALC: NOT	2 MARINE		12 June 1		1.1	A
Climate	Temperature	Drought resistant	1 5 mm		1 I I I I I I I I I I I I I I I I I I I		LINE HALL		Sec. 1
	-5 to -10°C	YES	1.0 M	at a se	1	15724		1	
ALTITUDE. 1000-2400M	Sun Exposure	FIOSLITESISTATI	and the second	States and States					10.0
IRRIGATION. MODERATE	Texture	Salt registant	St. Contract	State of the second			的时间,在19 99年1月		27
Soil	CLAYEY	NO	and the second	the second second	1.2		2.1		Accession in which the
pH: 6-8.5	Drainage	Lime resistant		A					10-100
FERTILIITY: POOR	MODERATE/HIGH	YES		1	Contraction of the	100	1211年1月1日日		Statistics and
				March March			法 自己的 200	1.00	
	USES		Co Part and an		a survey of	- Arrest	A REAL PROPERTY OF		-
Resistances	Applic	ations			- 82	1	ANTE SA I	-	
COASTAL: 1ST LINE	SLOPES: YES	WINDBREAKER: YES						1	
POLLUTION: YES(URBAN)	GROUPS: VES	ISOLATED: YES					A Market	iriz	onica
WIND. TEO						10		1	and the second se
			POI	INTS OF INTEREST				_	
Native to Mexico/U.S.A.	Crown widens with	age. Cylindrical bra	nchlets on non-flattened s	shoots. Imbricate leaves, cupres	soids, with a v	ery conspicuo	us dorsal gland, smelli	ng of re	sin when
been used in Spain for r	reforestation. Straw	-colored wood, hard	, heavy and durable. It is i	used in construction, poles Ca	are must be ta	ken as its polle	en can cause allergies.	This tre	ee tolerates
pruning and trimming (to	opiary).								
						SPAC	NG: variable acco	rding t	to use: 0.4 - 5 m
			PLANTING	AND PLANT HEALTH					
Propagation by seed. n	nainly in spring (ea	sy), cutting (Septerr	ber) or graft (on Cupres	sus and Chamaecyparis) Since	e this species	tends to lose	germination power au	iickly, th	ne seeds should
be properly stored (in a	irtight containers, o	dry and between 2-	-4 °C). This will ensure ge	rmination power for 2-4 years a	and generally	/ not needing	prior treatment (at mo	st 1-2 c	days soaking) to
germinate. The germina	ation percentage he	owever is low due to	o the large number of ste	erile seeds. Germination time is	s between 14	-20 days. Trar	nsplanting can be del	icate (v	winter). Prone to
iungi and insects. Minin	nai maintenance re	quirea.							
L									
		CHROMATIC	CALENDAR				COMMERCIALIZ	ATION	4
	FOLIA	GE, FLOWERING	G AND FRUITING SEA	ASON		Presenta	tion Height (ci	m)	Topiary Shape
JAN FEB	MAR ABR	MAY JUN	JUL AUG	SEPT OCT NOV	DEC				
						CT1	1/1		
		CULTIVATIO	ON CALENDAR			CT10	80/100/1	25	

	CT15	125/150	
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	0110	120/100	
	C115		Ball
	CT20	150/175	
Sowing Planting Pruning X	CT25	175/200	
	CT40	200/250	
TREATMENT CALENDAR	CT40		Ball
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	CT80	250/300/350	
Fungicides Pesticides Fertilizers			

CUPRESSUS

Cupressus macrocarpa Hartw.

CONIFER				SPANISH	VALENCIAN ENGLISH FRENCH
	STRUCTURE		DIVISION:	SPERMATOPHYTES	VARIETIES
Shape	Height	Diameter	SUBDIVISION:	CONIFERPHYTAS	GOLDCREST, GOLDEN CONE, GOLDEN PILLAR - YELLOW FOLIAGE
CONICAL ± EXTENDED	12-15 M	4-7 M	TYPE:	PINOPSIDA	LAMBERTINA AUREA, LUTEA - GOLDEN FOLIAGE
Texture	Shade	Root	ORDER:	PINALES	WILMA - YELLOW FOLIAGE
FINE	FULL	TAPROOT/HORIZONTAL	FAMILY:	CUPRESSACEAE	
М	ORPHOLOGY		1 and 1	Ser Y.	and the starting of the starti
Trunk	Bark	Color	NOT -N	NOW NOW	and the second
TTUIK	FISSURED	DARK RED		LA FILM	and the second s
Leaf	COMPOUND:	NO		2 South Brown 15	A A A A A A A A A A A A A A A A A A A
Loui	HARDNESS:				and the set in the
EVERGREEN (3-4 YEARS)	ARRANGEMENT: OPP	POSITE(CUPRESSOIDE)			TAR & BU TOUL VIEW
SIZE: 1.5x1.5 MM	VENATION:				WARE NORTH
	SHAPE:	SCALE	100		The second second second
COLOR: US:DARK GREEN	MARGIN:	SERRATE	1 2 6 6		A AND JENNE
LS: DARK GREEN	APEX:	ACUTE/OBTUSE	TRE	12-14 1 KV 8	
TEXTURE: US: GLOSSY	LEAF BASE:	DECURRENT		ATTAX A	
LS: GLOSSY	PETIOLE:	SESSILE		Charles and and	
Strobilus	Sex	Distribution	17	LAN MARTIE	
SIZE AND that a short	UNISEXUAL	MONOECIOUS	1		
TYPE: 0/E 40 MM	YELLOW/SOLITARY	Fragrant	A.		
¥/F 4-6 MM	GRAY/SOLITARY	Color	CARLES STATE		NOR SHUELD IN
Enuit	Туре	BROWNIPED	CONTRACTOR OF A		and the second sec
Fruit	CONE (2 YEARS)			Section Strain	The second secon
SIZE: 2-4×2-3 CM	Edible	OCT-NOV	A CONTRACTOR	and a strength	
2-472-3 GW	Rate	Longevity	THE CANAR	STATE	
Growth	FAST	> 200 YEARS		and the second	
	ECOLOGY	-			
Climate	Temperature	Drought resistant	and the second of		NAME OF TAXABLE PARTY O
	H-4	MODERATE/LOW	THE TRANSPORT		
ALITIUDE: 0-400 M	Sun exposure	⊢rost resistant			
IRRIGATION: MODERATE	SUN/PARTIAL SUN	NU Calt registert			
Soil	LOAMY	Sait resistant	Contraction of the		and the second se
elle 6095	Droipago	NU Limo registant	the second second	States & Proventier	
EEDTILITY MODEDATE	Dialitage	LITTLE TESISTATI	2 - Q		CONTRACTOR OF A
TERTETT. MODERATE	MODERATE	MODERATE/EOW	A CONTRACTOR	March March 199	
	USES		A State of the second	A ALE IN COLORAD	
Resistances	Applie	cations	and the second second	Store -	and the second se
COASTAL: 1ST LINE	SLOPES: YES	LINE: YES	and and the		
POLLUTION: YES (URBAN)	KIVERBANKS: NO	WINDEREAKER: YES		and the second sec	
WIND: YES	GROUPS: YES	ISOLATED: YES			Alter
			PO	INTS OF INTEREST	
Native to Monterey Bay	(California). Chara	cteristic crown with b	oranches arranged at a 4	45º angle. Cylindrical branches in	clusters not flattened, with a lemon scent when crushed. Adult leaves in
cupressoid arrangemen	t, with inconspicuou	us dorsal gland; you	ng leaves are somewhat	acuminate, very durable, on elong	pating and interior shoots. Globose cones, pedunculate, peltate scales with

value to wonterey bay (California). Unaracteristic crown win branches arranged at a 45° angle. Quinorical prantees in clusters not lattered, wint a territor scent when crusted. Addit leaves in cupressiol arrangement, with inconspicuous dorsal gland; young leaves are somewhat accuminate, very durable, on elongating and interior hoots. Globose cones, pedunoultate, pelate scales with slightly protruding dorsal appendix. Seed with poorly developed wing. Of great ornamental interest, it has varieties that vary in appearance, size and color. White wood, heavy and hard, durable, very good although it has many knots. Interesting in repopulation in temperate and humid zones and to fix coastal dures. Care must be taken as its pollen can cause altergies. This tree tolerates pruning and trimming.

SPACING: Variable according to use: 4 - 5 m.

PLANTING AND PLANT HEALTH

Propagation by seed, mainly in spring (easy), or cultivars by grafting, on Cupressus or Chamaecyparis, or layering. Properly stored seeds can maintain their germinative power for 2-4 years, generally not needing any prior treatment. The percentage of germination is low due to the abundance of sterile seeds. Transplanting can be delicate (winter). This tree is prone to cryptogomic problems (parasites and fungi) and pest attacks. Minimal maintenance is required.

				CHR	OMATIC	CALEND	AR					COMMERCIALIZATION		
			FOLIA	GE, FLO	WERING	AND FRU	JITING S	EASON				Presentation	Height(cm)	Topiary shape
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC			
												CT1	1/1	
				CU1								CT3	30/40	
LAN	FED			CUL			DAR	OFDT	007	NOV	DEO	CT7	50/60/80/100/125	
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	001	NOV	DEC	CT15		Ball
												CT20	125/150/175	
Sowin	g	Pla	nting	F	runing	х						CT28	200/250	
	· _		÷ _		-							CT40	200/250/300	
				TRI	EATMEN	CALENI	DAR					CT80	250/300/350/400	
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC		450	
HTT			TTT		HTT	HTT	İΠΠ	HTT		TTT		CT130	400/450	
Fungi	icides		Pesticic	les		Fertilizers	;	1						

Fungicides

L

Cupressus sempervirens L.

CONIFER				CIPRÉS COMUN SPANISH	XII VALI	PRER I ENCIAN	ALIAN CYPRESS ENGLISH	CYPRÈS COMMUM FRENCH
	STRUCTURE		DIVISION:	SPERMATOPHYTES		١	ARIETIES	
Shape	Height	Diameter	SUBDIVISION:	CONIFERPHYTAS			GARDA	
CONICAL/EXTENDED	15-25 M	2-4 M	TYPE:	PINOPSIDA		07510	GRACILIS	
I exture	Shade	HORIZONTAL	ORDER:			STRICT	A, STRICTA AURE	A
TINE	TOLL	HONIZONTAL	FAMILT.	COFRESSACEAE		TOTE	N, TOTEN AUREA	
M	ORPHOLOGY	Oslar			2.3.8	AND A DAY	SWA W SE	The lot of
Trunk	Bark	COIOF					ENGLISH REL	A MAR A
	COMPOUND:	NO		CONTE DE MARTINE		APARONAL I		
Leaf	HARDNESS:		Station of the second	Contract In the state			AUSTRIA TEL	1. 12 37
EVERGREEN (4 YEARS)	ARRANGEMENT: OPP	OSITE (CUPRESSOIDE)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			BUILDESS	Ars.	
SIZE: 1.2 x 1.2 MM	VENATION:		- ALAS	Mark & Star	1 Barris	E NUGED		
LEAFLET:NO	SHAPE:	SCALE	Sold Shield					
COLOR: US: DARK GRAY	MARGIN:	SERRATE			R. M. e	A AND MEAN	AND NO	
LS: DARK GRAY	APEX:	ACUTE/OBTUSE	and the second second	A Ar Backson		1100-5 11/2	MARK AND	mar 1
IEXTURE: US: SMOOTH	LEAF BASE:	DECURRENT		And And	100			
L3. SMOOTH	PETIOLE:	Distribution		ALL MARCE	(all sold		*	
Strobilus	Unisexual	MONOECIOUS			2532			
SIZE AND J/M 4-6 MM	YELLOW/SOLITARY	Fragrant	Toto I	1914 2000 - 19				
TYPE: ♀/F 4-5 MM	GRAY/SOLITARY	NO	3	A CONTRACTOR	1928			
	Туре	Color		189 - A 10 A				
Fruit	CONE (2YEARS)	DARK RED		1 4 4 A 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1	5 F. S. W.			
	Edible	Fruiting season	100		- 132			3
SIZE: 2.5-4x2-3 CM	NO	SEPT-NOV	States and	Store and		in .		
Growth	Rate	Longevity	and the second	BE SHOWN IN	自主		0.	
	MEDIUM	> 300 YEARS		1 A	162	Mr.	1	1
	ECOLOGY			MARCEL MARCE	14		20	1 3
Climate	Temperature	Drought resistant		ALSO LARGE	Caller 1		10. 15	
onnato	-5 to -10°C	MODERATE/LOW	1. 1. 1.	HEAL MERINE ME	14		10 34	100 100
ALTITUDE: 0-1000 M	Sun exposure	Frost resistant	11	MAR MARS 13	公法 案		12h X2	10 18
IRRIGATION: MOD/LOW	SUN/PARTIAL SUN	MODERATE Calt registerat	1 1 1		44.		and an lat	and the second
Soil	NO SAND	Sait resistant	BALL CO	WARRAN	1, 1, 10	× 101 0	A PARTY A	
pH: 6-8.5	Drainage	Lime resistant		- An Makaza AV	200.	- 2011	能同意是自己	
FERTILITY: LOW	MODERATE/HIGH	YES						
·	11050			TEFFELL	1000	14-10-	In Maria	
Posistanaaa	USES	otiona	1	A DEAD	-	- Kita		- Contraction
	SLOPES: YES	LINE: YES		01				House I.
POLLUTION: YES	RIVERBANK: NO	WINDBREAKER: YES			the first			
WIND: YES	GROUPS: YES	ISOLATED: YES			25			-
Nativo to Eastorn and S	outhorn Moditorron	oon region Variable	PU	VINTS OF INTEREST	unk and in th	o 'horizontalic' var	oty the branches are s	aparated from it
Cylindrical branches in	groups not flattened	and smelling of res	in when rubbed. Adult lea	aves in cupressoid arrangement, it	mbricate, with	n dorsal gland. Th	e cones are elliptic-oble	ong, pedunculate,
peltate scales with shore	t mucron. The seed	has a rudimentary v	ving. Essential in the Med	diterranean garden, it has a large i	number of va	rieties. The wood	is somewhat pink, com	pact and light,
fragrant, rot-proof, easy	to work. Used in c	abinetmaking, turner	ry, sculpture and soundb	oards. Its resin and oil were used i	in ancient tim	es. Used in refore	station. Care must be ta	aken as its pollen
causes anergies. The th	ce tolerates pruning	g and uninning.				004.00	0	
						SPACIN	G. variable accordin	ig to use. 0.4-5 m.
			PLANTING	S AND PLANT HEALTH				
Propagation by seed,	mainly in spring (e	asy) or its varieties	by cutting (September),	, layering, or grafting (May), on	Cupressus of	or Chamaecyparis	. Properly stored see	ds (see Cupressus
Transplanting can be d	elicate (winter). The	e fungus Coryneum	cardinale can kill it and s	some insects can harm it. Minimal	I maintenanc	e is required.	de to the large numb	er or sterne seeus.
		Ŭ,						
		CHROMATIC	CALENDAR			c	OMMERCIALIZATI	ON
	50111			1001		5		
	FOLIA	GE, FLOWERING	AND FRUITING SE	ASUN	DEC	Presentation	Height (cm)	Topiary shape
JAN FED	MAR ADR	MAT JUN	JUL AUG	SEPT OCT NOV	DEC	CT1	1/1	
						CT5	40/60/100	
		CULTIVATIO	ON CALENDAR			CT10	80/100/125/150)
JAN FEB	MAR ABR	MAY JUN	JUL AUG	SEPT OCT NOV	DEC	CT28	200/250	
						CT40	200/250/300/35	D
Sowing	Planting	Pruning	х			CT80	300/350	
						CT extra sizes	350/400/450/50	D
		TREATMEN	IT CALENDAR				550	

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

Fertilizers

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Pesticides

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3. CONIFERS

JUNIPERUS

Juniperus communis L.

CT130

400/450

CONIFER				ENEBRO	NISH	GINEBRE VALENCIAN	COMMON JUNIPER ENGLISH	GENÈBRIER COMMUN FRENCH
5	STRUCTURE		DIVISION:	SPERMATOPH	IYTES		VARIETIES	
Shape	Height	Diameter	SUBDIVISION:	CONIFERPH	(TAS	GREEN CARPET,	CARPET and REPANDA -G	ROUND COVER
VARIABLE	0.3-4 M	2-3 M	TYPE:	PINOPSID	A		HIBERNICA, SENTINEL	
Texture	Shade	Root	ORDER:	PINALES	5	DEPRESA AUREA,	SPRING GOLD, SUECICA A	UREA - VARIEGATED
FINE	FULL	TAPROOT/HORIZONTAL	FAMILY:	CUPRESSAC	EAE			
M	ORPHOLOGY				Sec. 1		ALC: NO.	
	Bark	Color			and the	25	1000	
Trunk	FISSURED/RETICULATE	BROWN/GRAY		1		ها ــــــــــــــــــــــــــــــــــــ	Stering /	-
Loof	COMPOUND:	NO		2	A STATE OF	14.1.1		
Leai	HARDNESS:	CORIACEOUS	45			211	S SI	
EVERGREEN	ARRANGEMENT:	WHORLED (X3)	E SE		- Real	8 1 Kg		
SIZE: 7-15x2.5MM	VENATION:		and a second		340	till to the		
LEAFLET: YES	SHAPE:	ACICULAR		72	S STA	S A LAN	A LACE	A 10 1
COLOR: US:LIGHT GREEN	MARGIN:	ENTIRE			Part Sel	PER SS		
LS: DARK GREEN	APEX:	ACUTE	Call Contract	- 1	and	103531	Rod State	
IS: CLOSSY	LEAF BASE:	EXTENDED		X L. M	an Shares	JA-ST		10 March 10
L3. GL0331	PETIOLE:	Distribution		have / start		Same A		
Strobilus	UNISEXUAL	DIOFCIOUS		1-1-1	and the E	A PARE	al as we	1 dest
SIZE AND 3-5 MM	YELLOW/SOLITARY	Fragrant	A TOLEN A	S. CAR		STACHER	Service , -	VIAL
TYPE: 2/F 3-4 MM	GREEN/RED -SOLITARY	YES		TOTAL STREET	A destation	State State		200
Ţ 1	Туре	Color	Constant of the second	A STATIC	- 11 4	S 8 8 8	Same May	
Fruit	GALBULOS (2 YEARS)	BLACK/BLUE	and the start	のなどの	A AND	Vet P	The state of the	A ANTA
	Edible	Fruiting season	Some States of the	The true		AL CONC	Starter BV	XXX
SIZE: 6-8x 5-6 MM	NO	SEPT-NOV		A PALAN	and the second			
Growth	Rate	Longevity	and the second	a la cauras		E Altres		
Growth	SLOW	> 150 YEARS	a - Times	A. 18		1	Real-	1. Sec. 1. Sec
	ECOLOGY					a an an	4.2	
Climate	Temperature	Drought resistant			A DECK	Set 10.00	1 × 1 ×	and the
Climate	-15 to -20 °C	YES		at so the la	200	Ster 1024	Sec. 1	New Yorks
ALTITUDE: 0-2500M	Sun exposure	Frost resistant			and Tage	THE WAY	1-2012	
IRRIGATION: MODERATE	INDIFFERENT	YES		A Part IN	State of the second	THE BO	ALL STREET	THE REAL
Soil	Texture	Salt resistant	Sty Kast		and the second	C ASSA	The States	
0011	INDIFFERENT	YES		STAR ARE		Part of the	の後日間に	114
pH: 6-8.5	Drainage	Lime resistant			and the		1.10	ALL AND STORE
FERTILITY: MOD/POOR	INDIFFERENT	YES				Buckson.		NONE DEC
	USES		- 2. 8 . 6			181	Serve-	
Resistances	Applica	ations		and the N	1985 A	and the second	1.2	VS ARNING
COASTAL: 2ND LINE	SLOPES: YES	LINE: NO	and the second		34	The second	1000	A HALLAND
POLLUTION: YES	RIVERBANKS: NO	WINDBREAKER: YES		The second	L'and		1	S NYG
WIND: YES	GROUPS: YES	ISOLATED: YES			- Als			
			POIN	TS OF INTERES	т			
Native to Europe, N.	Africa, Asia and	N. America. Distri	buted in the Nothern par	rt of Spain. Its mo	rphology is varia	able. The bark ca	an be peeled off in st	rips. Juniperoid
leaves, almost flat, w	ith a characterist	ic greyish band or	n the upper side, aromat	tic. Nut shaped, s	lightly peduncula	ated, fleshy, inde	hiscent, with bloom.	Of ornamental
interest, it has numer	ous varieties of v	variable interest in	size, size and color. Re	eddish wood, soft,	resistant, rot-pro	oof and easy to	work with.The berry-li	ke fruit (three awns
or bristles) used to al	omatize gin and	outer alconolic be	werages (beer). This tre	e tolerates prunir	iy and ulmming.			
								SPACING: 3-4 m.
			PLANTING A	AND PLANT HEA	LTH			
Propagation by see	d (spring or autu	umn) or its varieti	es by grafting, layering	g and grafting. P	roperly stored s	seeds (airtight o	ontainers, dry and a	at low temperatures)
can maintain germin	nation power for	3-4 years. Germ	ination occurs naturally	y in the 2nd-3rd	spring after dise	semination due	to its internal dorma	ancy and the strong
waterproofing of the	seed. The see	d must be stratifi	ed in moist sand for 3	-4 months at 3-4	4 °C, sometimes	s being necess	ary to accompany it	with mechanical or
chemical scarification	n. The germinativ	ve power of the s	pecies is low, 15-30%.	I ransplanting ca	n be delicate (w	inter). Prone to	attacks by insects. N	linimal maintainence
is required.						_		
		CHROMATIC	CALENDAR				COMMERCIALIZA	ATION
	FOLIA	GE, FLOWERING	AND FRUITING SEAS	ON		Presenta	ation Height (cr	n) Topiary Shape
JAN FEB	MAR ABR	MAY JUN	JUL AUG S	SEPT OCT	NOV DEC	- 11		
						POT	7 Sappling 1	/1
		CULTIVATIO	ON CALENDAR			CT2.	5 20/40	
JAN FEB	MAR ABR	MAY JUN	JUL AUG S	SEPT OCT	NOV DEC		20/40/60)
		····					30/40	, ,
Sowing	Planting	Pruning				0110	3 50/60/80	, 175
Gowing		Fruining				CT extra	sizes 60/80/10	0
		TREATMEN	IT CALENDAR				00,00/10	-

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

Fertilizers

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Fungicides

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Pesticides

JUNIPERUS

Juniperus horizontalis Moench.

CONIFER				SABINA RASTRERA AMERICANA SPANISH	SABINA HORIZONTAL VALENCIAN	CREEPING JUNIPER ENGLISH	GENÉVRIER RAMPANT FRENCH			
	STRUCTURE		DIVISION:	SPERMATOPHYTES		VARIETIES				
Shape	Height	Diameter	SUBDIVISION:	CONIFERPHYTAS		ANDORRA				
"POSTRATE"	1 M	2-3 M	TYPE:	PINOPSIDA	ANDORRA V	AREIGATA - WITH WH	ITE SPOTS			
Texture	Shade	Root	ORDER:	PINALES	BLUE CHIP - BL	UE THAT TURNS PURF	PLE IN WINTER			
FINE	FULL	TAPROOT/HORIZONTAL	FAMILY:	CUPRESSACEAE	PRINCE	OF WALES - LIGHT G	REEN			
M	ORPHOLOGY		12002	2-5-		IS IN IN	9.5			
Trunk	Bark	Color	and the second of a	Total Conception			See of			
	FISSURED	BROWN/RED	14 J 1 1 1 1	A RANGE AND A REAL PROPERTY AND A	11 12 1	JAC 10	A stat			
Leaf	COMPOUND:	NO	a start of the	201 201 201	28 6 8 (1)		A States			
EVERGREEN	ARRANCEMENT	ASCICULATE (X2)	a start of	States of		1-11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	100			
SIZE: 15-25x0.2 CM	VENATION:	ADDIODEATE (AZ)		and and the loss	and a	N N				
LEAFLETS: YES	SHAPE:	SCALE/ACICULAR		a the met of	1.1	J D St				
COLOR: US: VARIABLE	MARGIN:	ENTIRE	1. 2. 2.		11521	A STATE OF THE STATE OF				
LS: VARIABLE	APEX:	ACUTE	×		the state of the	A SAME S	ENGLISH			
TEXTURE: US: SMOOTH	LEAF BASE:	DECURRENT			and the second second	APR. WAR	Name and a state			
LS: SMOOTH	PETIOLE:	SESSILE		CALL OF MERINE		CERTIFICATION FOR				
Strobilus	Sex	Distribution	100			AND THE PARTY				
	UNISEXUAL	MONOECIOUS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A State State State	Service of the servic		· · · · · · · · · · · · · · · · · · ·			
TYPE:	YELLOW/SOLITARY	Fragrant	A DECK	and the second s	14 M	an 19 19 17	A. 1991			
⊊/F 4 MM	GREEN/RED - SOLITARY	Color	-250	St. 1 1 19 19	and the second second		a suist			
Eruit	Type	BROWN/RED	1.1			AND THE REAL				
rruit	Edible	Fruiting season	2 . M. M. Y	har and			Sale and the sale			
SIZE: 7-9 x7-9 MM	NO	SEPT-NOV		BRUNN STA		The star of	The second			
Oneverth	Rate	Longevity		The second		and an and and	iter to a start to			
Growth	SLOW	> 100 YEARS	15 - AC	AND REAL RY						
	ECOLOGY			2 Martin Constant	States and	A TARAS	St marking and			
Climate	Temperature	Drought resistant		A CONCRETE OF	Prove and the	Corres a	The second			
Climate	H-2	MODERATE	AC SAND	理由のと、著名は新		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Constant Constant			
ALTITUDE: 0-1500M	Sun exposure	Frost resistant	A At a get	NEW CONTRACTOR	State 1 - 10	5 - 4-1	Carl Martin Start			
IRRIGATION: MODERATE	SUN/PARTIAL SHADE	YES	A State of the second		100000	ALL ALL	the second states			
Soil	Texture	Salt resistant		The American			三洲新兴 圣皇。			
all 5575	Dreinege	NO	New Sold	101 - 2 1 3 1 1 (1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Service No.	South This				
FERTILITY: MODERATE	MODERATE	VES		the man deal was		A CALL TO ME	STRAIN STR			
TERRETT. MODERATE	MODERVILE	120	as the set	ALL AND NEW	Kerne .	N. D. Starting	The seal			
-	USES		AVE STORE				the second second second			
Resistances	Applic	cations	AS STOLL	AL REAL		S. S. Star	19 -			
COASTAL: NO	PIVERBANKS: NO	WINDBREAKER' NO		the mark to be a first			and the second			
WIND: YES (URBAN)	GROUP YES	ISOLATED: YES	S. 7. 5.	E ALL SALE		and a land	Salt In the			
1110			28864.25 .1087A88-1							
			PO	INTS OF INTEREST						
Also known as Juniperu distingiush among then	s sabina var. proci	umbens; J. prostrata.	Native to Eastern and of slopes. This tree tolers	Northern America. Its seeds are wi ates pruning and trimming	inged. There is a great nu	imper of varieties that a	re very difficult to			
			PLANTI	NG AND PLANT HEALTH						
Propagation by seed (a	utumn or spring) ar	nd its varieties by cut	ing, grafting or layering	(sometimes natural). Transplanting	is delicate (winter). They	are prone to fungal and	insect attacks.			

CHROMATIC CALENDAR	CON	IMERCIALIZATIO	N
FOLIAGE, FLOWERING AND FRUITING SEASON	Presentation	Height (cm)	Topiary shape
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC CULTIVATION CALENDAR CULTIVATION CALENDAR DAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	POT 7 CT 2.5 CT 3	Year 0/1 and 1/1 20/40 20/40	
Sowing Planting Pruning X	CT 7 CT 10	40/50 40/60	
TREATMENT CALENDAR JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC Fungicides Pesticides Fertilizers			

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JUNIPER US

Juniperus oxycedrus L.

CONIFER				ENEBRO DE LA MIERA SPANISH	GINEBRÓ VALENCIAN	BROWN-BERRIED CEDAF ENGLISH	R GENÉVRIER OXYCEDRE FRENCH
5	STRUCTURE		DIVISION:	SPERMATOPHYTES		SUBSPECIES	
Shape	Height	Diameter	SUBDIVISION:	CONIFERPHYTAS	SUBSP. O	XYCEDRUS- SMALL FRUIT (0.	.8-1.2 mm)
CONICAL ± EXTENDED	1.5-4 M	1-2 M	TYPE:	PINOPSIDA	SUBSP. MA	ACROCARPA-LARGE FRUIT (1	1.3-1.5 mm)
Texture	Shade	Root	ORDER:	PINALES			
FINE	FULL	TAPROOT/HORIZONTAL	FAMILY:	CUPRESSACEAE			
M	ORPHOLOGY				- Antipation		4. 3
Trunk	Bark	Color					
	FISSURED	DARK GRAY			Carlos 1-	No.	
Leaf	COMPOUND:	CODIACEOUS	- TRACK		Contraction of the second		
	HARDNESS:	WHORLED (v2)			The second second	- Carson	
SIZE: 10-15x2.5MM	VENATION:	WHOREED (X3)			The second	Mars. a.	12322 1
LEAFLET:YES	SHAPE:	ACICULAR	Contraction and a		Jus Par		
COLOR: US: LIGHT GREEN	MARGIN:	ENTIRE			NATIVE STATES	The second se	C STALL
LS: DARK GREEN	APEX:	ACUTE		6 15	and the second second	SPARA AND	aller all
TEXTURE: US: GLOSSY	LEAF BASE:	EXTENDED	-	ALL AND	5-5-T-7-6	Y STANDED	
LS: GLOSSY	PETIOLE:	SESSILE	1240	The state and	San YIL		A DECT
Of a shill be s	Sex	Distribution	2.0	Real Property in	ND SAME	LALE SHOW	
Strobilus	UNISEXUAL	DIOECIOUS		LAN UNDER	EN STREET	Marker Marca	V Xut
SIZE AND J/M 3-5MM	YELLOW-SOLITARY	Fragrant	10000		17518 2851	LAL A S	AL ATA
다YPE: 우/F 3-4MM	GREEN- SOLITARY	NO			P. Marker P.	ALC: THE PARTY	A PARALE
	Туре	Color			一一一一		Section State
Fruit	GALBULUS (2 YEARS)	BROWN/RED	Sector States		7440 513	TEXT BOARD - CAR	
	Edible	Fruiting season	See and		- The second		PARTIAL V/X
SIZE: 8-10x 8-10MM	NO	SEPT-NOV	45 11 2	AND THE OWNER	Se at the	A States	AS THE AVENUES
Growth	Rate	Longevity	Set of the set of the	Statistics and		NY L	Letter Land
	SLOW	> 150 YEARS	ALC: NO		1 Art of the	SEINES FROM THE	1 Production
	ECOLOGY			8	EL STORA	AND STREET & T	n 2 h and the
Climato	Temperature	Drought resistant	A State of the	18 Ann 19 4 - 9.5		新一般的长天 人	A STATE
Climate	-10 to-15°C	YES		Seal De Star	3/13/244		and the second sec
ALTITUDE: 0-2500M	Sun exposure	Frost resistant	10 Sec. 10		14 1 552	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	The The
IRRIGATION: MOD/LOW	SUN/PARTIAL SHADE	YES		Carlos and the	Strates	126 S 1	
Soil	Texture	Salt resistant	1 1 1 1 N	10 A.		Contract La survey	TALES A PROPERTY OF THE OWNER OF T
	LOAMY	NO	104 - C. G		1 1 1 1 1 1		THAT STUDIO AND
pH: 6.5-8	Drainage	Lime resistant			11111		ANAL ANALY ANA
FERTILITY: MOD/LOW	MODERATE/HIGH	YES	and states a		CT END TR		ALL COMPANY AND CO
	USES		La trade A	28. Y 3 8		DANK A	
Resistances	Applic	ations	1 4 6 6 K 1 1 1		and the first state		
COASTAL: 1ST LINE	SLOPES: YES	LINE: NO		AN PROPERTY	Carl Mar Sa		
POLLUTION: YES (URBAN)	RIVERBANKS: NO	WINDBREAKER: YES			Contraction in the	Contraction of the second	AND AREA DAY AND A
WIND: YES	GROUPS: YES	ISOLATED: YES	P- 8				
			PC	INTS OF INTEREST			
Native to the Mediterran "Juniperiod" adult leave: some varieties of ornam produces "juniper cade	tean region. The bar s, visible, with articu- tental interest that v oil", with a resinous	rk can be peeled off ulate arrangement, v ary in size, leaves, j odor and used as	in strips. Visible branche vith 2 white lines on the u position of the branches, a medicine (skin conditio	s or somewhat hanging that give it pper side, somewhat keeled on the Reddish wood, compact, resistar ns, vermifuge, etc.) or insecticide. I	a certain weeping appe e underside. Round gal nt, aromatic, easy to we t is a protected species	earance and the branchlet bulus fruit, short stalks, fle rrk. It is used to make pend . Tolerates pruning and tri	s somewhat trigonous. shy, indehiscent. It has cils etc. By distillation, it mming.
					SI	PACING: Variable acco	ording to use: 0.5-2 m.
2							

PLANTING AND PLANT HEALTH Propagation by seed, mainly in autumn and spring, or its varieties by layering. The seeds require the same treatment as in *Juniperus communis*. Transplanting can be delicate (winter). Prone to attacks by insects. Minimum maintenance required.

CHROMATIC CALENDAR	COMMERCIALIZATION			
FOLIAGE, FLOWERING AND FRUITING SEASON	Presentation	Height (cm)	Topiary shape	
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	CT130	400/450		
	POT7	Year 1/1		
	CT2.5	20/40		
CULTIVATION CALENDAR	CT3	20/40/60		
JAN FEB MAR ABR MAY JUN JUL AUG SEPI OCI NOV DEC	CT5	30/40		
	CT10	50/60/80		
Sowing Planting Pruning X	CT28	100/125/150/175		
	CT extra sizes	60/80/100		
TREATMENT CALENDAR				
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC				
Fungicides Pesticides Fertilizers				

Juniperus thurifera L.

CONIFER				SABINA ALBAR SPANISH	SAVINA TURIFERA VALENCIAN	INCENSE JUNIPER ENGLISH	GENÉVRIER À ENCENS FRENCH
STRUCTURE			DIVISION:	SPERMATOPHYTES		VARIETIES	
Shape	Height	Diameter	SUBDIVISION:	PINOPHYTAS			
CONICAL ± EXTENDED	4-12 M	2-5 M	TYPE:	PINOPSIDA			
Texture	Shade	Root	ORDER:	PINALES			
FINE	FULL	TAPROOT/HORIZONTAL	FAMILY:	CUPRESSACEAE			
M	ORPHOLOGY				and the second states		A MARINE CON
Trunk	Bark FISSURED	Color LIGHT GRAY	a fit attack	State 1	16. 2314		ALL MARSH
Last	COMPOUND:	NO		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			IN RAP SEC //
Lear	HARDNESS:					的经济和国家	
EVERGREEN	ARRANGEMENT: OPP	POSITE(CUPRESSOIDE)		and the second		11 12-	ALL A BARY
SIZE: 1.4 x 1.4 mm	VENATION:		No Ma	N. C. S. C.	23 7 3 WW	W SHEWA	X MER NOISE
LEAFLETS: YES	SHAPE:	SCALE	15 6 Mg =		AND ANY	DAL A	da an season
COLOR: US: LIGHT GREEN	MARGIN: E	NTIRE/SERRATE	1 - A		Second Bull	81 31 50-	SILISTRE LINES
LS: LIGHT GREEN	APEX:	ACUTE/OBTUSE	To be well	3		1140 # 200	人類の行動権的な
TEXTURE: US: GLOSSY	LEAF BASE:	DECURRENT	A Sec Product	51.0	122 18 18/16		THE REAL PROPERTY AND
LS: GLOSSY	PETIOLE:	SESSILE	and monthly the			18 S 18	ZA HO, YIANN MAR
Strobilus	Sex	Distribution		*			The serve
SIZE AND J/M 3-6 MM	YELLOW-SOLITARY	Fragrant				1.8	· 市公司
TYPE: Q/F	GREEN-SOLITARY	NO			SE NORE	100	
	Туре	Color	.4 8	A STATE OF A STATE OF	A State of the second	ALC: NO	and the second
2	GALBULUS (2 YEARS)	LIGHT BLUE				25,4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Edible	Fruiting season	10000	A State of the second second	Coller .	Chin and	Contraction of the second
SIZE: 9 x 7-10 MM	NO	OCT-DEC			State of	19	91-14 A.
Growth	Rate	Longevity			Profession and	A State	
0.0111	SLOW	> 200 YEARS	and the second sec	Service States		1 2 3 4	
	ECOLOGY			11.1 St 12.1			
Climato	Temperature	Drought resistant	200		AND ALSO		
Gilliate	-5 to -10 °C	YES	and the second				
ALTITUDE: 500-1500M	Sun exposure	Frost resistant	- CREWE	A State of the	Carlos and Part	SIL AND	the product of
IRRIGATION: MODERATE	SUN	YES	N The Part of the Part			Part and a	States and states
Soil	Texture	Salt resistant		and the second	and the state of the		at double here
-11- 7.05	Drainage	YES	State State State	alt.	on the second second	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
PH: 7-8.5	Drainage	Lime resistant	Caller and a second		Will and the	The second state	A CARLER OF THE
PERILIT. LOW	MODERATE/HIGH	163			Caller Strain	1 44 Mar	States al +
	USES		Contraction of the Local Division	Sec. March		and the second	Statistics and
Resistances	Applic	ations		The second second	THE REAL PROPERTY AND		and a second s
COASTAL: 2ND LINE	SLOPES: YES	LINE: YES	the second second		A DECK OF THE OWNER	E ST.	Marth 1
POLLUTION: YES (URBAN)	CROURS: VES		and the second	Section 1. 1 Contraction	all all as	A State	A Shirt I
WIND. TES	Choole 120	10051125. 120					New WARDER ET
			POI	NTS OF INTEREST			
Native to Western Medit	terranean region. Its	s bark can be peeled	off in strips. Branchlets a	re rough, cylindrical and 1-2 mn	n in diameter. Imbricate adu	t leaves, generally o	pposite, somewhat keeled
proof and aromatic woo	Galbulous ± obiono	, fiesny, indeniscen , fine cabinetry, per	cils, interior carpentry, etc.	ct. its use is restricted due to coll Protected species of difficult re	reproduction and deneration. Great care mus	slow growth. Reddisr t be taken as its folia	n, compact, resistant, rot-
pruning and trimming (to	opiary).	, into oubinony, por	one, interior carpenay, etc		generation: ereat eare mae		
					SPA	CING: Variable ac	cording to it use: 1-4 m
				AND PLANT HEAT TH			
Propagation by seed (a	utumn and sprind)	or cultivars by cuttin	g or grafting, on Juniperus	s virginiana. See Juniperus con	nmunis. Transplanting is del	icate (winter). It does	not sprout from the stock.
Prone to attacks by inse	cts. Minimal mainte	nance required.	0 0 0/	• • • • • • • • • • • •	,	,	
		CHROMATIC	CALENDAR			COMMERCIALIZ	ZATION

FOLIAGE, FLOWERING AND FRUITING SEASON										Presentation	Height (cm)	Topiary form		
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC			
				CUL	TIVATIO		DAR							
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC			
Sowin	g	Planti	ing	P	runing	Х								
				TRE	ATMENT	CALENE	DAR							
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC			
Fungi	icides		Pesticid	es		Fertilizers]						

LARIX

Larix decidua Mill.

CONIFER				ALERCE EUROPEO SPANISH	LARIX VALENCIAN	EUROPEAN LARCH ENGLISH	MÉLEZÈ D'EUROPE FRENCH
	STRUCTURE			SPERMATOPHYTES		VARIETIES	
Shape	Height	Diameter	SUBDIVISION:	CONIFERPHYTAS			
IRREGULAR CONICA	AL 15-25 M	4-7 M	TYPE:	PINOPSIDA			
Texture	Shade	Root	ORDER:	PINALES			
MEDIUM	PARTIAL	TAPROOT	FAMILY:	PINACEAE			
	MORPHOLOGY		a sa			W	
Trunk	Bark FISSURED	Color BROWN/GRAY			H-F	A IN TH	SAMP -
Leaf	COMPOUND:		AAA	the second			Test
DECIDUOUS	ARRANGEMENT: AL	TERNATE/FACICULATE			-		and the second
SIZE: 20-35x1 MI	M VENATION:	1 CENTRAL VEIN	PT THE P	and the second	Cel		
LEAFLETS:N	O SHAPE:	ACICULAR			1 SK		
COLOR: US: LIGHT GRE	EN MARGIN:	ENTIRE	A Sector				
LS: LIGHT GRE	EN APEX:	ACUTE					
TEXTURE: US:SMOOTH	LEAF BASE:	EXTENDED	and the second			N MART	
LS: SMOOTH	PETIOLE:	SESSILE	10.578	HE SHALL AND			1
Strobilus	Sex	Distribution MONOCEIOUS	A STA		16 20	Star I	SEL .
SIZE AND 3/M 10	MM YELLOW/RED-SOLITARY	Fragrant		the set of	Contraction Section 198	2	
TYPE: Q/F 10	MM REDDISH -SOLITARY	NO			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	AND INCOME AND ADDRESS IN A	
	Туре	Color	the address	Manager and and	N	THE REPORTS IN	PL TITLE
Fruit	CONE (1 YEAR)	REDDISH BROWN					
SIZE: 2-4x1.5-2.5	Edible 5CM NO	Fruiting season OCT-NOV		AN ADA STORY		P. SONATOLE	
	Rate	Longevity	A LOW MANY		1	- A - 1	1
Growth	FAST	> 300 YEARS				All the rest	Statement of the second se
	ECOLOGY	·	SU.	The the state of the		STUK	-
Oliverate	Temperature	Drought resistant	1112				
Climate	H-2 / H-3	MODERATE					
ALTITUDE: 500-20	OOM Sun exposure	Frost resistant	S. Marshey				
IRRIGATION: HIG	H SUN	YES	State of the state	CARLET DESIGNATION OF			1
Soil	Texture	Salt resistant		THE PERSON PAR		1 1 2	~
0011	LOAMY/ALL TYPES	NO	0		(P)	11	
pH: 6-8.	5 Drainage	Lime resistant	- Product	And And And And	\$1		1 19
FERTILITY: MOD/H	HIGH HIGH	NO	C PULLER		al	NA Dec	C. Marian
	USES		C.D.Y		1		
Resistances	Applic	ations	S.L.	1 Contraction			DATE MA
COASTAL: NO	SLOPE:	LINE : NO	2017			Carlo B	CARLE AND
POLLUTION: NO	RIVERBANK:	WINDBREAKER: YES	State Same	1 m		1 The second	
WIND: YES	GROUP: YES	ISOLATED: YES		8. F.			
			PC	INTS OF INTEREST			
Native to Central Europe. Leaves with a triangular section, alternate (macroblasts) or fasciculated (brachyblasts). Cones are ovoid, erect with persistent scales not reflexed, bracts exserted. Winged seeds. Its slender crown and the striking coloration of its foliage (light green in the vegetative period and golden before it falls) give it great ornamental value in gardens and mountain recreation areas. It has some varieties of interest (including pendulums and dwarfs). Light wood, heavy and hard, resistant to rot, aromatic and easy to work. Its wood is of excellent quality and used to make posts, beams, in construction and shipbuilding. "Balsam of Venise" (medicinal) and tannins are produced from its resin. This tree tolerates pruning and trimming.							

Propagation by seed (mainly in spring) and cultivars by grafting before budding. The seed does not need prior treatment to germinate, maintaining its germinative power for up to 4-5 years if stored properly (humidity < 10%; temperature 2°C and hermetic closure). Germination time is 4-5 weeks. Transplanting is delicate (winter). This species is prone to canker.

CHROMATIC CALENDAR	CON	IMERCIALIZATIO	N
FOLIAGE, FLOWERING AND FRUITING SEASON	Presentation	Height (cm)	Topiary Shape
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC Sowing Planting Pruning X X X X X	Year 0/1 CT 5 CT 40	10/20 75/100/150 200/250	
TREAMENT CALENDAR JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC Fungicides Pesticides Fertilizers Image: Color of the second s			

PICEA					Pice	a abies (L) Karsten
CONIFER				ABETO ROJO, A. DE NAVIDA SPANISH	D AVET ROIG VALENCIAN	NORWAY SPRUCE ENGLISH	EPICÉA COMMUN FRANCE
	STRUCTURE		DIVISION:	SPERMATOPHYTES		VARIETIES	
Shape	Height	Diameter	SUBDIVISION:	CONIFERPHYTAS	ACROCONA, C	CINDERELLA, COMPAC	TA, EXCELSA
CONICAL/SUBCYLINDRICAL	15-25M	8-10M	TYPE:	PINOPSIDAS		INVERSA, REMONTI	
Texture	Shade	Root	ORDER:	PINALES	NIDIFORMII, OHLEN	VDOFII and PUMILA GLA	AUCA (CLIMBERS)
FINE	PARTIAL	HORIZONTAL	FAMILY:	PINACEAE			
M	ORPHOLOGY				ALL AL	1000	00000
Trunk	Bark RETICULATE/SCALE	Color BROWNISH RED			A CAR	000	WWWWW
Leaf	COMPOUND: HARDNESS:	NO CORIACEOUS			MEX X 1	0	-98,000033
EVERGREEN	ARRANGEMENT:	ALTERNATE	and the second		1.3054533311	100	X
SIZE: 15-20x15 MM	VENATION:	1 CENTRAL VEIN	1 - N				
LEAFLETS:NO	SHAPE:	ACICULAR	Sec. Sec. 1	1 The second sec	11日本 小田 二		1
COLOR: US:DARK GREEN	MARGIN:	ENTIRE	1 Calman		A CALLES N=		
LS: DARK GREEN	APEX: A	CUTE/ACUMINATE	10.000		ANY TALLY		j j
TEXTURE: US: GLOSSY	LEAF BASE: EXF	PANDED (CUSHION-LIKE)	4		MERSING PLAN	A COLOR	Se 1
LS: GLOSSY	PETIOLE: (ALMOST) SESSILE	SHARE I	and a second			N 8
Strobilus	Sex UNISEXUAL	Distribution MONOCEIOUS		×.	196	1	
SIZE AND J/M 20MM	YELLOW/RED - SOLITARY	Fragrant	AN ROMAN	and the second s	110		and the second
IYPE: ₽/F 25MM	ROSE - SOLITARY	NO			St. Ite		the second
	Туре	Color	A Statement		and site		
Fruit	CONE (1 YEAR)	LIGHT BROWN			1 - A BARREN	-	1 1 23
SIZE: 9-15x3-4 CM	Edible NO	Fruiting season OCT-NOV			HAR	11	211
Growth	Rate MEDIUM/SLOW	> 300 YEARS	Contraction of the			SB/	
	ECOLOGY	·	AN THE			100	and the second of
	Tomporatura	Drought registent	A CONTRACTOR	PROVIDE A			48
Climate	remperature	NO	The second second		PAR INTE	See Sector	E. K.
ALTITUDE: 500-1500M	Sup exposure	Frost resistant	sugar weeks				STATE LINE
IRRIGATION: HIGH		VES	HUDRA A	A HARRY NO.			
	Texture	Salt resistant			to all fur see to	MT CONTRACT	A 200
Soil	LOAMY	NO			ALL AND AN		
pH: 6.5-7.5	Drainage	Lime resistant	Sanali vite a		March Park		
FERTILITY: MODERATE	HIGH	NO		PHOLE ALL THE	the starter		
	USES		The Car A		State of the	AND AND	and the
Resistances	Appli	cations	AND AND			and and	
COASTAL: NO	SLOPES: YES	LINE: YES		NATES N		to all	
POLLUTION: NO	RIVERBANKS: NO	WINDBREAKER: YES	CONFRONT STORE	/ the service is	- Plan SIV		
WIND: NO	GROUPS: YES	ISOLATED: YES		A ALEXANDER	A A A A A A A A A A A A A A A A A A A	124 84	A Real Property lies
	-		PO				
Picea excelsa. ORIGIN: Central and North of Europe. Its bark has deciduous plates. Whorled branches and somewhat pendulous branchlets. Colored leaves with teragonal sections and somewhat arched. Cylindrical cone just or almost over the branch, pendulous, persistent scales and included branches. Minged seed. Due to its size and beauty it has great ornamental interest and has numerous varieties that vary in size and color (those of the dwarf variety are highly appreciated for rockeries, etc.). Widely used for "Christmas trees" and in reforestation (Pyrenees). White wood, light, resistant and easy to work with, of good quality; for construction, cabinetry, soundboards (Stradivarius violins), paper pulp. Provides resin and tannins. Care must be taken as it can cause allergies. Pruning is not necessary.							
							SPACING: 7-8 m

PLANTING AND PLANT HEALTH

Propagation by seed (spring), or its varieties by layering or grafting on *Picea Abies*. Properly preserved seed (humidity 6-8%, temperature 0-5° C, darkness and hermeticity) maintains its germinative power > 5 years; seeds do not have a dormant period and therefore germinate easily without treatment. It takes between 15-30 days to germinate, and the seedlings must be protected from the sun during the first summer. Transplanting is easy (winter). It is sensitive to pests and diseases. It must be treated against insects, mites and fungi (from the soil, rot, rust, etc.). Fertlize in spring or summer with Nitrogen and Potassium.

CHROMATIC CALENDAR	COMMERCIALIZATION						
FOLIAGE, FLOWERING AND FRUITING SEASON	Presentation	Height(cm)	Topiary Shape				
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC							
	Year 0/2	10/20					
	Year 1/1	15/30					
	POT9	15/25					
JAN FED IWAR ADR WAT JUN JUL AUG SEFI UCI NOV DEC	CT 3	20/30/40/50					
	CT 5	30/40/50					
Sowing Planting Pruning X	CT 10	60/80					
	CT 15	75/100/125/150					
TREATMENT CALENDAR	CT 28	60/80/100/125/150					
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	CT 40	100/125/150/175					
	CT 80	150/175					
	CT 100	175/200					
Fungicides Pesticides Pertilizers	CT 100	200/250/300					
PICEA					Pice	ea punger	s Engelm.
-----------------------	-----------------------	----------------------	--	--	---------------------------------------	---	--
CONIFER				PICEA AZUL SPANISH	PICEA PUNGENT VALENCIAN	BLUE SPRUCE ENGLISH	SAPIN DU COLORADO FRENCH
S	TRUCTURE		DIVISION:	SPERMATOPHTYES		VARIETIES	
Shape	Height	Diameter	SUBDIVISION:	CONIFERPHYTAS	KOST	TER- SILVER BLUE CO	LOR
CONICAL OR COLUMNAR	10-15 M	3-5 M	TYPE:	PINOPSIDA		GLOBOSA KOSTER	
Texture	Shade	Root	ORDER:	PINALES	HOO	PSII - DEEP BLUE CO	LOR
FINE/MEDIUM	FULL	HORIZONTAL	FAMILY:	PINACEAE			
MC	ORPHOLOGY			1243 1155	E ANAL DATE		· ····································
Trunk	Bark	Color			C Station	ALL CONTRACTOR	and the
TTUIK	SCALE	BROWNISH GRAY			Contraction of the second	E-Januar Int	
l eaf	COMPOUND:	NO			A WAR THE ACTE	AL CHARLES	
Loui	HARDNESS:	CORIACEOUS		al de la concela		A ANTE	1000
EVERGREEN	ARRANGEMENT: AL	TERNATE(SPIRAL)			A AN AN ANA	E ANNI ANNI	1000
SIZE: 20-30 x 2 MM	VENATION:	1 CENTRAL VEIN		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	E street		and the second second
LEAFLETS: NO	SHAPE:	ACICULAR	1 220 53		305		TODAL AL
COLOR: US: BLUE GREEN	MARGIN:	ENTIRE	all and the	STR MUSER AND	a with	PERSONAL PROPERTY AND	The State of Long
LS: BLUE GREEN	APEX: ACL	JTE (SHARP POINT)		A share for the second		(4)	1000 23
TEXTURE: US:GLOSSY	LEAF BASE: EXP	ANDED (CUSHION-LIKE)	·			Para Carlo Maria	A PORT OF
LS: GLOSSY	PETIOLE: (A	LMOST) SESSILE				The state	She and a she
Strobilus	Sex	Distribution			A MAR	A CONCEPT	NEW STR
SIZE AND ARA COMMA	UNISEXUAL	MONOCEIOUS			. A West and	Se . attern	
TYPE:	YELLOW/RED - SOLITARY	Fragrant	State of the second second	A CONTRACTOR	Se Mart	ALC: N	S -S Carl
¥0₩₩	REDDISH - SOLITARY	Color		A States		- AND SA - CAN	
Eruit	CONE (1 VEAD)	LIGHT BROWN	1000		Annual Torrestore (1)	Contractor Maker accord	
Fruit	Edible	Eruiting coocon	Sec. 2 Sec.	A STATE OF	1	4	1000
SIZE: 5-9 x 3 CM	NO	OCT-NOV				Shi total	1.5.5
OILL: OOXOOM	Rate	Longevity		Rest and		-	E . E . D . J
Growth	SLOW	< 100 YEARS	1 North	11 - 6	4	The second	JP
	5001 00V			the state of the s		the second se	
	ECOLOGY			Contraction of the second	A MARK	ALL	Sec. 1
Climate	Temperature	Drought resistant	PHUE STATE			And And And	all a second
	Sup ovpoduro	Front registrant			-700	State State	E Store
IRRIGATION: MOD/HIGH		VES	ALC: NOT	g to play the		27 F 125	Carlos -
	Texture	Salt resistant	a consulta	A Case of the second			Sector Sector
Soil	LOAMY/SANDY	NO	2.5. 2.4.4	S. 8497	AL		
pH: 6.5-8.5	Drainage	Lime resistant	and the second	and ante		Transfer St. S.	and male and
FERTILITY: MODERATE	HIGH	NO	and the second	C. S. D. M.	the state	N. Stan	
			1 2 1	0-0	- Shine and the	ALL ROUS	CON EN
Desistances	USES		The second s				
Resistances	Applic SLOPES: NO	ations	110-115 S		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Sterror St.	Contraction of the
COASTAL: ZND LINE	DIVERBANKS: NO	WINDBREAKER VEC	A. S. Carlos and	and the state of the	and the second		and the second
PULLUTION: YES	GROUP VES			A CONTRACTOR	The second second	- Man - Dia	AN ANALS
WIND: MODERATE	SIXODI . TES	ISSERTED. TES				a secondar	
			PO	INTS OF INTEREST			

Vative to South West of the Rocky Mountains (U.S.A). Its needles have a tetragonal section and are spiral-shaped and produce a pleasant odor when rubbed. Its cones are oblong-cylindrical, bendulous and their scales are persistent and have inclusive bracts. This is a highly appreciated ornamental tree for the intense color of its foliage. It has a large number of it varieties that vary in size and intensity of color. The wood is used for construction, soundboards, paper pulp, etc. Care must be taken as its pollen can cause allergy. Pruning is not necessary.

SPACING: 4 m

PLANTING AND PLANT HEALTH

Propagation by seed in winter (without scarification) or in spring (with scarification), and its varieties by grafting or cutting. The seed shows dormancy of variable intensity, being inconvenient to stratify it in moist sand for 1-2 months at 2-3°C. Transplanting is easy (winter). It can be somewhat sensitive to cryptogamic diseases. Does not tolerate excessive heat.

CHROMATIC CALENDAR	CO	MMERCIALIZATION	1
FOLIAGE, FLOWERING AND FRUITING SEASON	Presentation	Height (cm)	Topiary shape
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC			
	Year 1/1	15/20	
	CT 5	20/30	
	CT 7	30/40	
JAIN FED IMAR ADR INAT JUN JUL AUG GEFT OUT NOV DEC	CT10	40/50-60/80/100	
	CT 28	50/60-100/125/150	
Sowing Planting Pruning X	CT 40	60/80-125/150/175	
	CT 45	150/175/200	
TREATMENT CALENDAR	CT 80	100/125/150/175	
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	CT 100	175/200	
	CT 150	200/250/300	
Fungicides Pesticides Fertilizers	CT 240	200/250	

164

PINUS

Sowing

Fungicides

Planting

Pesticides

Pinus brutia Ten.

CONIFER				PINO DE CHIPRE SPANISH	PI DE XIPRE VALENCIAN	CYPRUS PINE ENGLISH	PIN DE CHIPRE FRENCH
5	TRUCTURE		DIVISION:	SPERMATOPHYTES		VARIETIES	
Shape	Height	Diameter	SUBDIVISION:	CONIFERPHYTAS			
CONICAL/LOBED	10-12 M	5-8 M	TYPE:	PINOPSIDA			
Texture	Shade	Root	ORDER:	PINALES			
COARSE	PARTIAL	TAPROUT/HURIZUNTAL		PINACEA			
M	ORPHOLOGY		State The		Control N		
Trunk	Bark	Color	Star Start		Barrow C		
	COMPOUND:	NO	Dr. R. Care				
Leaf	HARDNESS:	CORIACEOUS	SAL MARK		NO WARKS		
EVERGREEN (2 years)	ARRANGEMENT:	ASCICUALTE (X2)	124 FAMMENT			to all	
SIZE: 10-15x0.15 CM	VENATION:	1 CENTRAL VEIN	Sector Sec.	the second	L	SA COM	
LEAFLETS: NO	SHAPE:	ACICULAR		UPPER 24	- Selvine -	× 34/1	WHAT HUR GAL
COLOR: US: DARK GREEN	MARGIN:	ENTIRE	and the second	North CE	STANK CONT	- 15 A.S.S.	#//EANIASA
LS: DARK GREEN	APEX:	ACUTE	Profile State		//// 医症	111 N. N. M.	7.000003336
TEXTURE: US: GLOSSY	LEAF BASE: WI	TH BASAL SHEATH			OL MARKS	CAL DECEMBER	ALL PLACERUM
LS: GLOSSY	PETIOLE:	SESSILE					
Strobilus	UNISEVUAL	MONOECIOUS		WAY INST ACCOUNTS	NORMANICA		
SIZE AND A/M 6-8MM	YELLOW/SPIKE	Fragrance		Strand Lines			
TYPE: P/F 10MM	VIOLET/SOLITARY	NO			State of the state		
	Туре	Color	a state and	NY SAL			ALC: NOT
Fruit	CONE (2 YEARS)	RED BROWN	2	XI / TE	Bac the		16 C
	Edible	Fruiting season	Contraction of the		NULLEA.		
SIZE: 6-10 x 4-5 CM	NO	SEPT-OCT	21 -		NAMA CON		
Growth	Rate	Longevity					Altor March
	FAST	>200 YEARS			S ALAN		「月4月」以著四日
	ECOLOGY		hist stra		ALL TELES	12 Think	化全国的生产的合
Climate	Temperature	Drought resistant	and the start			10 X 10 X	
· · · · · ·	0° to -5°C	YES	And Annual Providence				
ALTITUDE: 0-1000M	Sun exposure	Frost resistant	Same Ale		An Januar	5- (SA)	A MARKED AND
IRRIGATION: MOD/LOW	Toxturo	Solt registert	and the second second	W AR BULLE			V. S. S. S. S.
Soil	CLAYEY	NO	Part Arter Art		1910 N 181		11. 2. 1.
pH: 7-8.5	Drainage	Lime resistant		My Phy Constant	Same A		11111100
FERTILITY: MOD/LOW	HIGH	YES		The second second	Mar A		
	USES				41		AVY STREET
Resistances	Applie	cations			MARIA		MAR SPOLE
COASTAL: 1ST LINE	SLOPE: NO	LINE: YES	Salaters 1		A A BARA		新闻新闻的
POLLUTION: YES	RIVERBANK: NO	WINDBREAKER: YES	Carlour Car	SA -ZANAN AN	A CARE		110月11日1日
WIND: MODERATE	GROUPS: YES	ISOLATED: YES		and the second			NV INV
			POI	NTS OF INTEREST			
Also known as Pinus ha	lepensis var brutia	; Pinus eldarica. Na	tvie to Eastern Mediterran	ean. Leaves are longer and thicke	r than in Pinus halepens	sis. Cones are ovate, jus	t or almost over the
branches, erect and ge	nerally whorled. Th	e scales of the cones	s consist of a flat crest and	a slightly protruding umbo with br	acts included. Its seed h	has an articulated wing.	This species has the
required.	st as <i>r.naiepensis</i> ,	which it replaces in	gardens and in reiorestati	on activities. Gare must be taken a	is its polien causes allere	gy. This tree tolerates pr	uning although it is not
							SPACING: 7 m
Propagation by seed (p	referably in spring)	and its varieties by	grafting. If properly preser	rved the seed can maintain its de	rminative power for 3-4	years. It does not need	prior treatment, although
immersion in water for 2	days promotes qu	icker germination. Ge	ermination time is 21 days.	. Transplanting is easy (winter). Thi	s species is prone to the	processionary moth. (L	imantria monacha).
		CHROMAT	IC CALENDAR			COMMERCIALIZ	ATION
	FOLIA	GE, FLOWERING	AND FRUITING SEA	SON	Presenta	ation Height (cr	n) Topiary shape
JAN FEB	MAR ABR	MAY JUN	JUL AUG	SEPT OCT NOV	DEC	- 1	

 CULTIVATION CALENDAR

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

Pruning X TREATMENT CALENDAR JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC Fertilizers

PINUS

Pinus canariensis Chr. Sm. ex DC.

CONIFER				PINO CAN SPANIS	ARIO PI DE CANARIES H VALENCIAN	CANARY ISLANDS PINE ENGLISH	PIN DES CANARIES FRENCH
s	TRUCTURE		DIVISION:	SPERMATOPHY	TES	VARIETIES	
Shape	Height	Diameter	SUBDIVISION:	CONIFERPHYTI	ES		
IRREGULAR CONICAL	15-25M	6-8 M	TYPE:	PINOPSIDA			
l exture	Shade	Root	ORDER:	PINALES			
CUARSE	PARTIAL	TAPROOT/HORIZONTAL	FAMILY:	PINACEAES			
M	ORPHOLOGY		-ANC			C PRAN E E	
Trunk	Bark RETICULATE/SCALE	Color	10-17		- all	1 Alla Ca	MARY R
1 (COMPOUND:	NO				LAR AN	118 11 112
Lear	HARDNESS:	SOFT (FLEXIBLE)	the last - A	an there dougt			TOPPAL CALING
EVERGREEN (2-3YEARS)	ARRANGEMENT: F	ASCICULATE (X3)			and a start of the		Contraction of the
SIZE: 10-15x0.15CM	VENATION:	CENTRAL VEIN	105 10				Star Day
LEAFLET: NO	SHAPE:	ACICULAR	and the		1000	States and	- Aller -
COLOR: US: LIGHT GREEN	MARGIN:	ENTIRE	ZISTAN AND		168 61 191		All Startes and
LS: LIGHT GREEN	APEX:	ACUTE				10月1日日本 10月1日	D AVER V
TEXTURE: US: GLOSSY	LEAF BASE: WI	TH BASAL SHEATH	ALL THE	A State of the second	- <u> </u>	IMRON I	N 28 1
LS: GLOSSY	PETIOLE:	SESSILE				ANNAL REPORT	100 10 32
Strobilus	Sex	Distribution			tere	115	THE PLANE
SIZE AND A/M 10MM	YELLOW/SPIKE	Fragrant			the second	663	Contra Data America
TYPE: Q/F 15MM	GREED/RED - SOLITARY	NO			Martin These		Strather Play
	Туре	Color				3.2	\mathcal{H} (\mathcal{H} and
Fruit	CONE (2 YEARS)	LIGHT RED					61 K. MARKO
	Edible	Fruiting season	de	1		States City	S IV YAASK
SIZE: 12-15x 5-6CM	NO	JUL-SEPT	die 1		A RELIMENT		
Growth	Rate	Longevity		a deal		-ANY	1 Alexander
	MEDIUM/FAST	> 200 YEARS		A COLONIA	Renge 10 10 10 10 10	ALC: NO.	10-060 10000
	ECOLOGY		14 A 43 54		COM STREET		CHAR ALL
Climata	Temperature	Drought resistant	1000	S. L. C. And	S. C. Carl	Serves 1	
Climate	H-5	MODERATE/HIGH				12 3 3 4 5 C 19	111111111111
ALTITUDE: 0- 2000M	Sun exposure	Frost resistant	and watch	Service Service			11 11 31 11 1
IRRIGATION: MODERATE	SUN	YES	The second second		Street of Lands		
Soil	Texture	Salt resistant		States of the	and the states of		1910 - MALADA
-11- 0.0	ALL TYPES	NO		ALC: NO			17 T. I. W. BAS
PH: 6-8	Drainage	Lime resistant	Sec. Stat	Strategies and			ANNA NYANS
PERHEITT. MOD/LOW	нон	163	and the second			S Star ANI	NIN M TOOLS
	USES		100				The Plant And
Resistances	Applic	ations		2			11 A. A. 19 A. M. 1983
COASTAL: 2ND LINE	DIVERBANKS: NO		ARE	in the second			
WIND: YES	GROUPS: YES	ISOLATED: YES	1 P 6	200		- S	A Distant and a distant
1110						The second se	
Native to the Caper- lak	ande It has great a	mamontal interact d	PC		as that begin borizontal than an	th unwards to roach a horse	ing position of its long
and flexible needles. Ob	long fusiform cone	s, almost attached to	the branches, generally	/ solitary, persistent scale	with pyramidal umbo and protru	ding apophysis. Seed with	fixed wing. Good
quality wood; soft, heavy	y, yellowish-white. It	s pine needles are u	sed in the Canary Island	ds as an organic amendme	ent and as packaging material (I	pananas). Interesting for re	forestation and
recreational areas. Care	must be taken as	ts pollen can cause	allergies. This tree tolera	ates pruning although not r	necessary. Does not tolerate trir	nming.	

SPACING: 6 m

PLANTING AND PLANT HEALTH

Propagation by seed (spring) or by graft. The seed does not require any previous treatment to germinate. Transplanting can be delicate (winter). Affected by the processionary moth of the pine tree (Limantria monacha).

CHROMATIC CALENDAR	COMMERCIALIZATION
FOLIAGE, FLOWERING AND FRUITING SEASON	Presentation Height (cm) Topiary Shape
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	

Fungicides

Pesticides

Fertilizers

PINUS

Pinus halepensis Mill.

CONIFER				PINO CARRASCO SPANISH	PI BORD VALENCIAN	ALEPO PINE ENGLISH	PIN D'ALEP FRENCH
	STRUCTURE		DIVISION:	SPERMATOPHYTES		CULTIVATED VARIETIES	
Shape	Height	Diameter	SUBDIVISION:	CONIFERPHYTAS			
OBLONG-LOBED	12-15M	6-8 M	TYPE:	PINOPSIDA			
I exture	Shade	ROOT	ORDER:	PINALES			
COARGE	TAITIAL	TAPROOTHORIZOWIAL		TINACEAS	11		
M	ORPHOLOGY	Calar	A	1. 1	1	Mark Links	ALC: NO
Trunk	FISSURED	PALE RED		Elle	1 . 1		
Last	COMPOUND:	NO	15-2				at the fit
Lear	HARDNESS:	SOFT (FLEXIBLE)		Call and the form			WELL IL
EVERGREEN (2 YEARS)	ARRANGEMENT: F	ASCICULATE (X2)				14111	LAN CA
SIZE: 6-10x0.07 CM	VENATION:	1 CENTRAL VEIN			110518/	No Principal	R HE
COLOR: US:LIGHT GREEN	SHAPE: MARGIN	ACICULAR	4		MAX WH	MAL TH	A ST YELT
LS:LIGHT GREEN	APEX:	ACUTE	Sector Sector			A STATE OF A	ALC: NO
TEXTURE: US: GLOSSY	LEAF BASE: WI	TH BASEL SHEATH				ALC: NO	C T C C C
LS: GLOSSY	PETIOLE:	SESSILE	100		1	de transfer	N IN SUL
Strobilus	Sex	Distribution		111 111	and the second s	ALL I	130100
SIZE AND	UNISEXUAL	MONOECIOUS			COM		
TYPE: 0/F 10 MM	CREEN/RED SOLITARY	⊢ragrant NO	Sec	4	A allow		
¥/1 10 MM	Type	Color	14	1			
Fruit	CONE (2 YEARS)	PALE RED		Re non			
	Edible	Fruiting season		and the second second			
SIZE: 6-12x 4-5CM	NO	SEPT-OCT	att where	and the second		Sec. 1 Sec. 2	Par Par
Growth	Rate	Longevity	100 Mar	States			
	FAST	200 TEARS	The second	12000			1.3
	ECOLOGY	Deverte en el et en el	-HALL B	ALL CONTRACT			Vision V
Climate	-5 to-10°C	YES	-				1 2 3 3 45
ALTITUDE: 0-1500M	Sun exposure	Frost resistant	The second				A COMPANY OF A
IRRIGATION: MODERATE	SUN	MODERATE	APPL		15		All To
SOIL	Texture	Salt resistant	And Internet			0	CARA BAR
	CLAYEY	NO	S. A. B. A.	Contraction of the			1. 1.42
FERTILITY: LOW	Drainage	VES		Chippen Co. Co.	Sal and		
- Lon		120	1 Aller	A State State	4. 小市市市20		LOS AT
Pesistances	USES	ations	2		E. CON	16023	
COASTAL: 1st LINE	SLOPES: NO	LINE: YES		and the second second second	1 - N		
POLLUTION: YES (URBAN)	RIVERBANKS: NO	WINDBREAKER: YES	1 - 1	A PARTY AND		a star and a	
WIND: MODERATE	GROUPS: YES	ISOLATED: YES			1 miles	and the second of the second	C C C
			PO	INTS OF INTEREST			
Native to the Mediterran	ean region. Ovate-	conical cone, with bu	indled peduncle, genera	Ily solitary, persistent scale with flat	t crest and slightly p	rotruding umbo. Seed with articul	ated wing. Essential
from which turpentine is	extracted. The bar	k is rich in tannins. V	ery resistant to heat and	drought (it even supports gypsum :	soils). Interesting as	a protective species, due to its h	ardiness that allows
it to be planted in adver-	se situations, and fo	or reforestation even	in arid and degraded soi	Is. Care must be taken as its poller	n causes allergy. Thi	s tree tolerates pruning but does	not require it.
L							GFACING: D-0 M
Propagation by seed (n	referably in spring)	and its varieties by	PLANTIN arafting. No pre-treatment	NG AND PLANT HEALTH	nting is easy (winter). It can be sensitive mainly to th	e pine processionary
moth (Thaumatopoea p	ityocampa).	and the tended by	,		5	,	, the presidentially
CHROMATIC CALENDAR						COMMERCIALIZATIO	ON
	FOLIA	GE. FLOWERING	AND FRUITING SEA	ASON	Pres	entation Height (cm)	Topiary Shape
JAN FEB	MAR ABR	MAY JUN	JUL AUG	SEPT OCT NOV	DEC	noight (off)	
					Ye	ear 0/1	
		CULTIVATIO	N CALENDAR		1	CT2 40/60/80	
JAN FEB	MAR ABR	MAY JUN	JUL AUG	SEPT OCT NOV	DEC	CI 5 80/100/125/150)
						T 28 200/250/300	
Sowing	Planting	Pruning	х			200/200/000	
					DEC		
JAN FEB		IVIAT JUN	JUL AUG	SEPT UCT NUV			

PINUS

Pinus nigra Arnold

CONIFER				PINO SALGAREÑO SPANISH	PÍ DE AUSTRIA, PÍ DE L'ASEGA VALENCIAN	AUSTRIAN PINE ENGLISH	PIN NOIR D'AUSTRIA FRENCH
	STRUCTURE		DIVISION:	SPERMATOPHYTES		VARIETIES	
Shape	Height	Diameter	SUBDIVISION:	CONIFERPHYTAS	PINUS NIGR	A subsp. NIGRA AU	STRIACA
CONICAL-IRREGULAR	15-25M	8-12M	TYPE:	PINOPSIDA	PINUS N	IGRA subsp. SALZM	ANNII
Texture	Shade	Root	ORDER:	PINALES			
COARSE	PARTIAL	TAPROOT/HORIZONTAL	FAMILY:	PINACEAE			
M	ORPHOLOGY			Start Barris	MALLENDER		
Trunk	Bark	Color		The American	ASING SUBLA	atter lat	14 1 1 1
	COMPOUND:	NO		MAL: C			
Leaf	HARDNESS:	CORIACEOUS	S leev.				ANT THE !!
EVERGREEN(3-6 YEARS)	ARRANGEMENT: F	ASCICULATE (X2)	A	a strate and			SPACE OF
SIZE: 8-12 x 0.15CM	VENATION:	1 CENTRAL VEIN		and the second			
LEAFLETS:NO	SHAPE:	ACICULAR	Marth Martin		all in		
COLOR: US: DARK GREEN	MARGIN:	ENTIRE		Carl State	ATT SHI		1-1-1
LS: DARK GREEN	APEX:	ACUTE		AM	and the first		1
IS: GLOSSY	RETIOLE:	SESSILE			"SERVER	_	
20.020001	Sex	Distribution	1.1	STANKA LANGER	All a lit Weak	and the second se	
Strobilus	UNISEXUAL	MONOECIOUS		San Star Strand	EST NAME.	SIMALITY	
SIZE AND J/M 15-20MM	YELLOW/SPIKE	Fragrant		30-0 A A A P			6. N
IYPE: ₽/F 10MM	GREEN/RED-SOLITARY	NO	1	(Read of the		1 Street 1	Per Muril
	Туре	Color		A CONTRACT		1. 20 - 11	KINK X
Fruit	CONE (2 YEARS)	LIGHT CHESTNUT	1		1 1 1 1 1 1 1	STATISTICS OF	
SIZE: 4 8 × 2 CM	Edible	Fruiting season	378.4		The second	1 San M	
4-8 X 3 CM	Rate		2.20	- A ALL ALL ALL ALL ALL ALL ALL ALL ALL	E AND SOL	THE POLA	-10
Growth	MEDIUM-LOW	> 200 YEARS	100	PC VIP C	N. W. Long		
	ECOLOCY	·	* 200	Sector 140	N STREET	1	-11 -
	Temperature	Drought resistant		CALL PARA	2 50000	aller -	11
Climate	-15º to -20ºC	YES			No Whee		
ALTITUDE: 500-1500	Sun exposure	Frost resistant	5 6 M . C	ALL THE LAND	1 Inthe		
IRRIGATION: MODERATE	SUN	YES	Carl Tank		1	CONTRACTED DA	MET AN ININ
Soil	Texture	Salt resistant	195	A CARLES AND			The start
	ALL TYPES	NO					
pH: 6.5-8	Drainage	Lime resistant	3000 2003	The loss of the second			11111
TERRETT. LOW	MODERATEMION	125					
	USES					de la interior	
COASTAL: 1ST LINE	SLOPE YES	LINE YES	1. 1. 1. 1.	States and		EL N	
POLLUTION: YES	RIVERBANKS: NO	WINDBREAKER: YES	Same I Par			IMA MAN	MUXX
WIND: YES	GROUPS: YES	ISOLATED: YES				Al Unke	XANNE
	•		PO				
Native to Central and So	outh East Europe.	Ovate-conical cone,	symmetrical and attached	to the branch in the variety austr	iaca; Solitary in groups of :	2-3. Persistent scale with	almost flat umbo. Its
seeds are winged. It ha	s great ornamental	value. Wood of vari	able quality depending or	the place of origin. Sometimes the	he best of the Spanish pine	s, hard and resistant to	rot and easy to work. It
is used in construction, s protects the soil, due to	shipbuilding, paper its rusticity. Care m	pulp, etc. It produce just be taken as its p	s good quality resin altho ollen causes allergies. A	ugh it is not fully exploited (it has a Ithough this tree can tolerate prun	a lower yield than other spe ing, it does not require it.	cies). Interesting in refor	estation and as a
·····			g				
							SPACING: 7-8 m
			PI ANTIN	G AND PLANT HEALTH			
Propagation by seed (a	autumn or spring)	and its varieties by	grafting. The seed doe	s not need previous treatments	to germinate (in some co	untries pre-germinated	seed in sand is used).
Transplanting is delicate	e (winter). This tree	is prone to the proce	essionary moth of the pine	e (Limantria monacha).			
		CUDOMATIC				COMMEDICALIZA	TION
		CHROMATIC	CALENDAR			COMMERCIALIZA	
	FOL	IAGE, FLOWERI	NG AND FRUIT SEAS	SON	Presentat	ion Height (cm) Topiary shape
JAN FEB	MAR ABR	MAY JUN	JUL AUG	SEPT OCT NOV	DEC	4	
					Year 1/	I /0 10/20	
		CULTIVATIO	ON CALENDAR		CT 4	20/30	
JAN FEB	MAR ABR	MAY JUN	JUL AUG	SEPT OCT NOV	DEC CT 5	30/40	

CHROMATIC CALENDAR	CO	MMERCIALIZATIO	N
FOLIAGE, FLOWERING AND FRUIT SEASON	Presentation	Height (cm)	Topiary shape
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC Sowing Planting Pruning X X X X X	Year 1/1 Years 2/0 CT 4 CT 5 CT 28 CT 40	10/20 20/30 30/40 100/125/150 150/175	
TREATMENT CALENDAR JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC H<			

Pinus pinaster Ait.

PINUS						Pinus pi	naster Ait.
CONIFER				PINO RESINERO SPANISH	PI RODENO VALENCIAN	CLUSTER PINE ENGLISH	PIN MARITIME FRENCH
S	STRUCTURE		DIVISION:	SPERMATOPHYTES		VARIETIES	
Shape	Height	Diameter	SUBDIVISION:	PINOPHYTAS			
ROUND/SPREADING	10-20 M	6-10 M	TYPE:	PINOPSIDA			
Texture	Shade	Root	ORDER:	PINALES			
COARSE	PARTIAL/FULL	TAPROOT/HORIZONTAL	FAMILY:	PINACEAE			
M	ORPHOLOGY	1			and the second s		
	Bark	Color	-347	STRUME LA			
Trunk	FISSURED	REDDISH BROWN	A Partie	AND AND	Same In		国新主义 (1998)
Loof	COMPOUND:	NO		S STORE AND	A A		ALL COLOR
Leai	HARDNESS:	CORIACEOUS					
EVERGREEN(2-3YEARS)	ARRANGEMENT:	FASCICULATE (X2)			AND VALS		12 Contraction
SIZE: 15-25x0.25CM	VENATION:	1 CENTRAL VEIN			HERRICH	and the second	
LEAFLETS:NO	SHAPE:	ACICULAR			11911 423		
COLOR: US:DARK GREEN	MARGIN:	ENTIRE					100 C
LS:DARK GREEN	APEX:	ACUTE					The start of
IS: GLOSSY	LEAF BASE: W	ITH BASAL SHEATH					NAME OF
LS: GLUSSY	PETIOLE:	Distribution		And and a second se	RAME RO		ALLIVIN TO
Strobilus	UNISEXUAL	MONOECIOUS	dia dal	E LA STA			X F NOAD / / L
SIZE AND &/M 10-20MM	YELLOW-SPIKE	Fragrant	24				ANNINGS
TYPE: Q/F 20MM	GREEN/RED-SOLITARY	NO	14 10 - 2-3	a char is a		THE IN IS	S S INF VILLE
	Туре	Color		A State of State of State			A SAMPLE AND
Fruit	CONE (2 YEARS)	REDDISH BROWN	CARLE D'LLE	The second second			1
	Edible	Fruiting season	States and states	A A A A A			
SIZE: 12-20x6-8CM	YES	SEPT-NOV	Sec. 2 de	ALL C	1000		
Growth	Rate	Longevity	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	State of		Ave	the start
orowin	MEDIUM/FAST	> 200 YEARS	1000	10 M	1.1		and the second second
	ECOLOGY	i	1000		1000	\$	an the second
Climate	Temperature	Drought resistant	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 - ME	570	-	A NORT
Climate	-5 to -10°C	MODERATE		a strate of the			11/2-
ALTITUDE: 0-1500M	Sun exposure	Frost resistant					
IRRIGATION: MODERATE	SUN	YES	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	The second second			Endland S
Soil	Texture	Salt resistant				States N	A Part and a part of the
-11- 075	LOAMIT/SANDT	NO					WANSON KAR
FERTILITY: MOD/POOR	Drainage	NO (GENERALLY)			1	N SUPER	VM MALLON
TERRIERT: MODIFOOR		HO (OEHEROLEET)					N N N N N
Desistances	USES				-		SA INA CHIERON BI
Resistances	Applic SLOPE: NO						A REAL PROPERTY
ROLLUTION: NO	RIVERBANK' NO	WINDBREAKER: YES					
WIND: YES	GROUPS: YES	S ISOLATED: YES				0	200 S M 10 M
Also known as Disus	aritima Nativa (~)	Noctors Maditares	PO	IN IS OF INTEREST		what asymmetrical training	d and attached to the
branch. Persistent scale	es with a pyramida	al and verv sharp umb	 o. Its seed has articulate 	ed wing used locally in bird feeding.	Verv ornate. Its wood	is heavy, hard, medium-le	ow quality and used for
construction, sleepers, p	paper pulp, an ex	cellent resinous spec	ies for obtaining turpenti	ne. The bark is used in tanning and	its tender shoots are for	odder and interesting in r	eforestation. The
subspieces Atlantica do	es not tolerate lime	e, while Mesogeensis	does. Care must be tak	en as its pollen causes allergies. Al	though this tree tolerate	es pruning, it does not re	quire it.
							0040000
							SPACING: 10m
Propagation by seed (p	referably in spring) and its varieties by	grafting. The seed must	t undergo previous treatment befor	e germination. Tranpla	anting is delicate (winter)	. In Spain, it is prone
to a large number of per	sis and diseases, s	some or which can be	uangerous. Bleeding (n	naking a small cut) from trunks sho	nens the life of the tree		
		CHROMATIC	CALENDAR			COMMERCIALIZ	ATION
	=						
	FOLIA	MAY HIN		SEDT OCT NOV	Present	ation Height (c	m) Topiary shape
JAN FEB	IVIAR ABR	IVIAY JUN	JUL AUG	SEPT UCT INUV	DEG		
		CULTIVATIO	N CALENDAR				
JAN FEB	MAR ABR	MAY JUN	JUL AUG	SEPT OCT NOV	DEC		

CHROMATIC CALENDAR	COMMERCIALIZATION
FOLIAGE, FLOWERING AND FRUITING SEASON	Presentation Height (cm) Topiary shape
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	

PINUS

Pinus pinea L

CONIFER				PINO PIÑONERO SPANISH	PÍ PINYONIER VALENCIAN	ITALIAN STONE PINE ENGLISH	PIN PARASOL, PIN PINIER FRENCH
5	STRUCTURE		DIVISION:	SPERMATOPHYTES		VARIETIES	
Shape	Height	Diameter	SUBDIVISION:	PINOPHYTAS			
SPREADING	15-25 M	8-10 M	TYPE:	PINOPSIDA			
Texture	Shade	Root	ORDER:	PINALES			
COARSE	FULL	TAPROOT/HORIZONTAL	FAMILY:	PINACEAE			
M	ORPHOLOGY		A Trade	NEL STR	the second second	220	- 14 6
Trunk	Bark	Color	16 16 16 A 11		No. Street	-	A States
ITUIK	RETICULATE	Reddish brown		MY Start		1	R. TUS
Leaf	COMPOUND:	NO	and the state of the				10 0 m
	HARDNESS:	CORIACEOUS	and the second second	The second	A CAL		N R PAR
EVERGREEN	ARRANGEMENT: F	ASCICULATE (X2)	4 H B	ASA South South			Star In the
SIZE: 15-20x0.15CM	VENATION:	1 CENTRAL VEIN	ALC: NOT THE	4 19/1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	See Mask		CO 12 7
COLOR: US MED OREEN	SHAPE:	ACICULAR	1111-21			101 A Co	
LS: MED GREEN	MARGIN.	ENTIRE	· 首下: 新公子				1
TEXTURE: US:GLOSSY	AFEA.		A 1 1		ALCON		
LS: GLOSSY	PETIOLE:	SESSILE				2//	
	Sex	Distribution	A F A				
Strobilus	UNISEXUAL	MONOECIOUS	1.12 32-3	The second second second second			
SIZE AND J/M 12 MM	YELLOW/SPIKE	Fragrant		THE PARTY NAMES		2 Salar	Contraction of the
TYPE: Q/F 20MM	GR.YELLOW-SOLITARY	NO		Carl State of the St	and the second s	date have	1 / Wat
	Туре	Color	1444	The second second	1000	NEW VIII	
Fruit	CONE (3 YEARS)	Reddish brown	1 2 2 2	and the second second			
	Edible	Fruiting season		A STATE	- de la		UP THREE
SIZE: 10-15x8-10CM	YES (THE SEED)	SEPT-NOV	- 10 C		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TIMT
Growth	Rate	Longevity	1232		1. 1. 1. 1.	N. 4 . (198)	
	MEDIUM	> 300 YEARS	1,000 20	12. 2.3	ale the State	1. 1. 1.	
	ECOLOGY						10 10 5
Climate	Temperature	Drought resistant	18 A. 8 A.	Carrier Participants	the max		S'a Call
Onnate	0 to -5°C	YES	ALC: NO		S. Sall	- M. C. M.	
ALTITUDE: 0-1000M	Sun exposure	Frost resistant			THE REAL PROPERTY AND		12/2/1
IRRIGATION: MOD/LOW	SUN	YES					
Soil	lexture	Salt resistant	TER	and the second second	We also	7 500	
-11- 0.575	LOAMY/SANDY	YES		Alash and	-	1 - 200	
EEPTILITY LOW	Drainage	Lime resistant	ADDITION OF THE OWNER	AND	Ann		
Terriert. con	- Horr	120	C - Comment				March
	USES			and the second second		- 24/34	
Resistances	Applic	ations	E 105-1				Phone Service
COASTAL: 1ST LINE	SLUPE: NO	WINDBREAKER: VEC				AV.	
POLLUTION: YES(URBAN)	GROUPS' VES	ISOLATED: VES					(all and the
VAIND: YES		LESENTED. TEO					
			PO	INTS OF INTEREST			
Native to Southwest Eu	rope. Scaly bark th	at detaches (in adult	specimens it forms char	acteristic plates). Oval-globose cor	es, almost attached to the	he branch with persistent	scales (the lower ones
are deciduous) with an i aesthetic value. Its wood	d is somewhat redd	ish, heavy, resinous	resistant to humidity but	difficult to work. Used for carpenting	and edible almond. Esse and ship building. It is a	erman in the mediterranea	r its resin (perfume).
Fruit tree for its "pine nu	ts" (dressings, past	ries, toast, raw, etc).	Protected species (fixing	g of dunes). Care must be taken as	its pollen can cause alle	rgies. It tolerates pruning	g but does not require it.
							SPACING: 10 m
			PLANTI	NG AND PLANT HEALTH			
Propagation by seed in	spring or by grafting	g. It can maintain its	germinative power for a	long time. The seed does not need	d previous treatment how	vever, if immersed in wat	er, they will be damaged.
Transplanting can be de	elicate (winter). This	species is prone to p	ests (processionary mot	h).			
L							
		CHROMATIC	CALENDAR			COMMERCIALIZA	TION

FOLIAGE, FLOWERING AND FRUITING SEASON	Presentation	Height (cm)	Topiary shape
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC			
	CT 2	20/40/60/80	
	CT 5	80/100	
COLITIVATION CALENDAR	CT 10	100/125	
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	CT 25	125/150/175	
	CT 28	175/200/250/300	
	Death all is much	050/000/250/300	
	Rootball in mesh	250/300/350/400	
I REALMENT CALENDAR			
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC			
Fungicides Pesticides Fertilizers			
	I		

Pinus sylvestris L.

PINUS						<u>Pinu</u> s sylv	<u>vestris</u> L.
CONIFER				PINO ALBAR, PINO SILVESTRE SPANISH	PÍ ROIG VALENCIAN	SCOTS PINE ENGLISH	PIN SYLVESTRE FRENCH
:	STRUCTURE		DIVISION:	SPERMATOPHYTES		VARIETIES	
Shape	Height	Diameter	SUBDIVISION:	PINOPHYTAS		AUREA	
OVOID/IRREGULAR	15-25 M	7-10 M	TYPE:	PINOPSIDA		FASTIGIATA	
Texture	Shade	Root	ORDER:	PINALES		GLAUCA	
MEDIUM	PARTIAL	TAPROOT/HORIZONTAL	FAMILY:	PINACEAE		NANA	
М	ORPHOLOGY		11230	A			
Trunk	Bark RETICULATE/SCALE	COIOF REDDISH BROWN	TIN			-	100
	COMPOUND:	NO			MIN 1		
Leaf	HARDNESS:	CORIACEOUS	the second second		WINE /		
EVERGREEN(3-4 YEARS)	ARRANGEMENT: F	ASCICULATE (X2)	Son and all all all all all all all all all al		WWW/	2.12	and and
SIZE: 3-8 x0.15 CM	VENATION:	I CENTRAL VEIN	81-12 . S			111	1221
LEAFLETS: NO	SHAPE:	ACICULAR	and the second second				- 200
COLOR: US: LIGHT GREEN	MARGIN:	ENTIRE				5711	1
LS: LIGHT GREEN	APEX:	ACUTE	CHS CHARLE			10	a second
EXTURE: US: GLOSSY	LEAF BASE: WI	TH BASAL SHEATH	A ANT			CALL I	
LS: GLOSSY	PETIOLE:	SESSILE			Rinds II and	H	
Strobilus	Sex	Distribution	1 9 A 11 A 11		1182	1. 10 1	
SIZE AND ARA COMM	UNISEXUAL	MONOECIOUS	L Contract	Sand alive They	100 92		
TYPE: 0/E CAMA	YELLOW/RED-SOLITARY	⊢ragrant	A State of the	Contraction of the Contract		W Date	
¥/F Οινιίνι	REDDISH - SOLITARY	Color					
Fruit	CONE (2 YEARS)	LIGHT YELLOW					-
Truit	Edible	Fruiting season		A	and a set of	100	
SIZE: 3-6x2-3 CM	NO	SEPT-NOV			A States	11	
	Rate	Longevity	100 21 23		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		CAL MAR
Growth	FAST	> 300 YEARS	AL STA		All and the second second	X	KAN SHE
	FCOLOGY				The second second	A Local State	
	Temperature	Drought resistant				A 800	SAL DO
Climate	-20°C	MODERATE/LOW	Sale Th	Contraction I I Town	CERTIFICATION N	A PACK	
ALTITUDE: 500-1500M	Sun exposure	Frost resistant		bers Sen 1118	A Contraction of the		
IRRIGATION: HIGH	SUN/PARTIAL SHADE	YES				SWA-	S. SAT
Call	Texture	Salt resistant				and and	Contraction of the second
501	INDIFFERENT	NO			AN ALL STATES		Charles Service
pH: 6.5-8	Drainage	Lime resistant				No State	2013年1月1月1月
FERTILITY: LOW	HIGH	MODERATE				224 0428	
	USES					1 2 3 1 3 0	16.231
Resistances	Applic	cations		A LANDAR DE LA LAND		A TRANS	Contraction of
COASTAL: NO	SLOPE: YES	LINE: YES			ANY THE .		
POLLUTION: YES(URBAN	RIVERBANK: NO	WINDBREAKER: YES			TANK STATE	A DEC	ALC: CO
WIND: YES	GROUPS: YES	ISOLATED: YES		and the second s	- Level	H Prove	- Martin
			PO	INTS OF INTEREST			
lative to Europe and A	sia. (In Spain in the	Pyrenees, Iberian a	nd Cenrtal Mountain Ran	ges). Its bark can be peeled off in str	ips. The cones ovate-co	onical, reflex, persistent s	cales with +/-
prominent and sometim	es bent umbo. It ha	s winged seeds. Thi	s tree is of great ornamer	tal value due to its elegant size and	it has some varieties of	interest. Its wood is dura	ble, easy-to-work,
eddish-brown wood, the	e best of the Spanis ffing and coarse we	sh pines; is used in aving Provides av	construction (including sh collept fuel. Of interest in r	ipbuilding), joinery, carpentry, plywoo	 It can be exploited to its pollen can cause allo 	or its resin. Pine needles	have been used as
runing.	ning and coarse we	aving. Thoracs exc	cilent fuel. Of interest in f	clorestation. Oure must be taken as	to polici can cause all	rigida. This species of pr	
-							
Propagation by said	lin opring or its u	ariation by graftin	PLANTIN Transplanting is dali	NG AND PLANT HEALTH	and incost pasts		
-ropagation by seed	a in spring or its v	arreues by grafting	y. Transplanting is deli	icate (winter). Prone to diseases	anu insect pests.		
		CHROMAT	IC CALENDAR			COMMERCIALIZA	
	FOLIA	GE, FLOWERING	G AND FRUITING SE	ASON	Presenta	tion Height (cm) Topiary shape

		-									
FOLIAGE, FLOWERING AND FRUITING SEASON											
JAN	FEB	MAR	ABR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
				CUL.	TIVATION	CALEN	DAR				
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC											
TIT											
Sowing		Plan	nting	P	runina	Х					
				TDE	ATMENIT						
				TRE	ATMENT	CALEND	DAR				
JAN	FEB	MAR	ABR	TRE MAY	ATMENT JUN	JUL	AR AUG	SEPT	OCT	NOV	DEC
JAN	FEB	MAR	ABR	TRE MAY	ATMENT JUN	JUL	AR AUG	SEPT	OCT	NOV	DEC
JAN	FEB	MAR	ABR	TRE MAY	JUN	JUL	AR AUG	SEPT	OCT	NOV	DEC
JAN	FEB	MAR	ABR	TRE MAY ies	ATMENT JUN	Fertilizers	AUG	SEPT	OCT	NOV	DEC

Years 2/0

CT 4

CT5

CT 7

CT 10

CT 12

CT 28

CT40

CT 100

10/20

20/30

30/40/50

60/80

50/60

60/80

80/100/125/150 175/200

150/175 175/200

PINUS					Pinus wa	llichiana	A.B. Jacks.
CONIFER				PINO LLORÓN DEL HIMALAYA SPANISH	P'I NEGRE VALENCIAN	BLUE PINE ENGLISH	PIN PLEUREUR DE L'HIMALAYA FRENCH
5	STRUCTURE		DIVISION:	SPERMATOPHYTES		VARIETIES	
Shape	Height	Diameter	SUBDIVISION:	PINOPHYTAS			
CONICAL/EXTENDED	15-20 M	4-6 M	TYPE:	PINOPSIDA			
Texture	Shade	Root	ORDER:	PINALES			
COARSE	PARTIAL	TAPROOT	FAMILY:	PINACEAE			
M	ORPHOLOGY		ALC: NO		are		
Trunk	Bark	Color	HAP BLY	The Colt		(Eller V	
	COMPOUND	NO	1/ / Light		1.10	111 45	
Leaf	HARDNESS	SOFT (FLEXIBLE)	1 1 2 4 4 4	FXIT FXIT			
EVERGREEN	ARRANCEMENT:		AL TO A	1 LT MASTIN	1 1- 11/1		
SIZE: 10-20x0.1CM	VENATION: 1	CENTRAL VEIN					
	SHAPE	ACICULAR	1 pada	2 - 20 - 10 - 1		MAN MANDALSE	
COLOR: US: BLUE/GREEN	MARGIN:	ENTIRE		mont the			
LS: BLUE/GREEN	APEX:	ACUTE					
TEXTURE: US: GLOSSY	LEAF BASE: WITH	SHEATH (NOT PERSISTENT)		4 Martin			SECANDARIAN (M
LS: GLOSSY	PETIOLE:	Sessile	14.4.5	1.335711			
Strobiluo	Sex	Distribution		COLO MAL			
Strobilus	UNISEXUAL	MONOECIOUS		CALL NAS	IS PART		
SIZE AND J/M	YELLOW/SPIKE	Fragrant	13 6				A STATE AND AN
Ç/F 20 MM	ROSE/GREEN	NO		AND DE CONTRA			ENGLISHER AND A
	Туре	Color	EL STA	Called States			ALL ANNA
Fruit	CONE (2 YEARS)	LIGHT BROWN	1. 1. 1. 1.	As a start to			CARRY AND AND AND A
0	Edible	Fruiting season	ALL		- and the	In a second an-	
Size: 13-20x2-4 GM	NU	SEP-NOV		Call	M. May	A Martin Com	
Growth	FAST	< 100 YEARS	(MAR)				angel
			and the literation	1100	All select	1.	Contractor A
	ECOLOGY		2.6	13/1/1/10	12/1.02	1	CANTELLE
Climate	Temperature	Drought resistant	and the second		1008.0	442100	THE REAL PROPERTY AND INCOMENTAL
	H-3	MODERATE	- 11	In a share	11 11 21 21	ELOX -	THE STATE
ALTITUDE: < 3000M	Sun exposure	Frost resistant		Carland Martin		1 AND I MAN	2 Contraction 11
IRRIGATION. HIGH	Toxturo	Solt registent	55 1 1.91	10 11 PH 26 State 181	2011 / / AS	1 Walt hadde	AN WARMAN'S C
Soil	SANDY	NO	Ser Marke		state and a state	MALABOR	I MORNAN IN
pH: 6-7.57	Drainage	Lime resistant	P 79	ALT HAR SHITT	Jernie All	We all and	E SHANNARAN IN
FERTILITY: MOD/HIGH	HIGH	NO	CHESCH.	AT A STOLLAR AND			A STATISMENT
	LISES		1111 1 1 119	Law Barata Me	1.1.1.1.1.1		AND BUILD OF
Resistances	Applic	ations	det a felle	S A REAL PROVIDENT	1 30.00		MARTINE AND
COASTAL: NO	SLOPES: NO	LINE: NO	1011-11	Section of the sectio	FE VENA I	A PARTY OF	H. LUNCH MARKED
POLLUTION: YES(URBAN)	RIVERBANKS: NO	WINDBREAKER: NO	41-2-1		AN A PERSON AND	E- E-E	A DECK
WIND: MODERATE	SLOPE: YES	ISOLATED: YES	Street Street			Contraction of the	A CONTRACTOR
·			POI	NTS OF INTEREST			
Alee known as Dinus ar	iffithii. Notivo to Mo	atam Himolouaa S	PUI		aing, generally hundle	d paraistant applac with	convey and alightly

Pinus wallichiana A.B. Jacks

Also known as Pinus griffithii. Native to Western Himalayas. Slightly curved cylindrical cones, attached to branches, hanging, generally bundled, persistent scales with convex and slightly protruding umbo. Its seeds are winged. Of great ornamental interest due to its long drooping bluish-green needles and its long drooping cones. Good quality wood, used for furniture, carpentry, etc. Bleeding the trunk can produce quality resin. In Spain, this tree has been used for reforestation. Care must be taken as its pollen can cause allergies. This species does not tolerate pruning.

SPACING: 6 m

PLANTING AND PLANT HEALTH

Propagation by seed (spring) or by graft. Transplanting can be delicate (winter). This species is prone to insect plagues.

CHROMATIC CALENDAR	COM	MERCIALIZATIO	N
FOLIAGE, FLOWERING AND FRUITING SEASON	Presentation	Height (cm)	Topiary shape
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC			
	CT 2.5	20/30	
CULTIVATION CALENDAR	CT 12	60/80	
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			

PLATICLADUS

Platycladus orientalis (L.) Franco

CONIFER				TUYA DE ORIENTE SPANISH	ARBRE D VALE	E LA VIDA NCIAN	ORIENTAL THUJA ENGLISH	ARE	BRE DE VIE RENCH
	STRUCTURE			SPERMATOPHYTES		-	VARIETIES		-
Shape	Height	Diameter	SUBDIVISION	PINOPHYTAS		ALIE	FA NANA - YELL	ow	
CONICAL/SPREADING	8-12 M	3-5 M	TYPE:	PINOPSIDA		PYRAMI	DALIS ALIREA - Y	FLIOW	
Texture	Shade	Root	ORDER:	PINALES	WAN	IGS GREEN	- GREEN AND VI	ERY CON	IPACT
FINE	FULL/PARTIAL	TAPROOT	FAMILY:	CUPRESSACEAE					
M			1397 S 112 D				11.000	10. M	1 10 M
IV	Bark	Color	and the second s	A CONTRACTOR		×/4			Parts 1
Trunk	FISSURED	LIGHT RED	S nither	A State of the second	and the second				1
Leaf	COMPOUND:	NO	- (192)a		and the second se	and the second second			
Leat	HARDNESS:		The second	A TO D		Sec. St.			語しる
EVERGREEN	ARRANGEMENT: OP	POSITE (TUYOIDE)	ALL AND	· 派 ???	1000	State Martin		a start a	
SIZE: 1.5x1.5MM	VENATION:		A State of the	West and	and the second	1100	State of the	-	
LEAFLET: NO	SHAPE:	SCALE	MAR.	161.2 1.6				1	
COLOR: US: LIGHT GREEN	MARGIN:	ENTIRE	A Start &	「日本」を たい		See. See	sort it	1 John	
LS: LIGHT GREEN	APEX:	ACUTE	States .	the tate with t	MER 21		Carlo and	Ser.	STR.
Le CLOSEY	LEAF BASE:		AL 174 647	The start of the	1. Jan Ma	1	all appendix the		(Alant
La. GLUGOT	Sex	Distribution		· · · · · · · · · · · · · · · · · · ·	W SIT	A-Dite.	R SHEEK	A Marson	AND STR
Strobilus	UNISEXUAL	MONOECIOUS	with the second	is at the set	A. S. B.C.	Contract (AN AN A		E ANSE
SIZE AND J/M 4-5 MM	YELLOW- SOLITARY	Fragrant	Carl Car		· Jakes	1 -1. 50		A.C.	ALL THE
TYPE:	BLUE/GREEN-SOLITARY	NO	matter to the	ALZ RATE TR		2 Bear	· 那些意义		
	Туре	Color	Real States of the		-EAS		See See See		10000
Fruit	CONE (1 YEAR)	BROWN/RED		ANT STATE IN	- CONTRACTOR	ALC: NO.	COLUMN AS OF	1000	1. 2. 1. 1. 1.
	Edible	Fruiting season	1 4 A 4			1.3.10			1.
SIZE: 1.5-2x1 CM	NO	SEPT-NOV	Alexandre Sta	10000	12.5.5	1	1 mila	1	18 N
Growth	Rate	Longevity	ANT ALL AND	12 Mar - 422	1 11 3	See	Contraction of the	A. 1.4	1. 1
	SLOW	> 300 YEARS			<u> 2. A</u> AA	Sec. Ma		6. BAR	S. 1988
	ECOLOGY			COLOR COLOR	6 M. M	202328	BAR MILLING	1	1. 1. 1. 18
Climate	Temperature	Drought resistant		State States		10.12	143 41 4	A.C.	230.0
onnate	-10 to-15°C	YES		10 M	2 . A. W	6 T - 2	and a second	MA.	1.5 1
ALTITUDE: 0-500 M	Sun exposure	Frost resistant			· 11	Real Providence	S. Alter	1.1	
IRRIGATION: MOD/HIGH	SUN/PARTIAL SHADE	MODERATE	Jul Sylte Martin		$m_{k,k} = j$		1201 120 2	1.2.1	12.2
Soil	I exture	Salt resistant	· · · · · · · · · · · · · · · · · · ·		A	16.6	San Ser	1.20	267 . 3
pH: 7,85	Drainage	Lime resistant			The seal	71 30 20	13、11日 3次	201	12 1 C
FERTILITY: MODERATE	HIGH	YES			Acres	12:35	asta Alta 12	1 . M	1. 1. 1.
-			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		a the a	2010	Mr. A. Con	20. B	S. S. Sta
Desistance	USES		A. 214 1		2. 18.14	100	Distanting and	201	
	SLOPES: YES	LINE YES		1. 调节 1. 平平	100 100	10 10 10 10	Platter Tel	UNEX.	10 2.5
POLLUTION: YES	RIVERBANKS: NO	WINDBREAKER: YES	AN CAR	6 1 5 0 22 1	1.0	Cartan .		19 18	N Section
WIND: YES	GROUPS: YES	ISOLATE: YES			1100	Lexel	1.2	100 21	N. Salar
Also known as Thuia	orientalis : Biota or	ientalis Native to	China and Korea. Its ha	VINTS OF INTEREST	trins Flatten	ed branchlet	s arranged in vertica	l planes o	dorless when
crushed. Leaves are in	mbricate, thuvoid,	with dorsal gland.	Its cones are ovoid, peo	dunculated, dehiscent: persisten	it scales, son	newhat fleshy	, not peltate, with be	nt umbo.	Its seeds do
not have wings. Of gre	eat ornamental inte	rest as it has num	erous varieties that vary	in appearance, size and color.	In the East i	t is considere	d a sacred tree. Wh	ite wood, I	ight, brittle,
aromatic and easy to	work. It can be use	d for furniture and	coffins. Occasionally us	sed in reforestation. Care must b	be taken with	its toxic leav	es as they can caus	e skin prol	blems. This
tree tolerates pruning	and trimming (topi	ary).				00100			
						SPACIN	. variable accord	ng to use	. u.4 m - 5 m.
			PLANTI	NG AND PLANT HEALTH					
Propagation by seed	(spring) or its va	rieties by cutting,	layering or grafting, o	n Platyclados, Thuja or Chan	naecyparis.	The seeds I	ose their germination	/e power	quickly but if
convenient to stratify	them in moist sand	to advance germ	iney are viable for 3 -4	properties and the weeks and the	percentage	is 50-60%	s, ance mey are not Seedlings should be	protected	from the sun
(summer) and cold (wi	nter). Transplanting	g is delicate (winte	er). This tree can occasi	onally present fungal and insect	attacks. Min	imal maintair	nance is required.	,	
		CHROMATI	CCALENDAR				COMMERCIALIZ	ATION	
				1001		Dec			
	FOLIA	GE, FLOWERIN	B AND FRUITING SE	ASUN	11	Presentat	ion Height (c	rm) T	opiary shape

FOLIAGE, FLOWERING AND FRUITING SEASON	Presentation	Height (cm)
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC		
	POT 9	Year 1/1
	CT3	20/30/40
	CT5	30/40
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	CT7	40/50/60/80
	CT10	50/60
Sowing Planting Pruning X	CT15	50/60-80/100
	CT22	100/125
TREATMENT CALENDAR	CT28	60/80/100/125/
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	11	/50/175
	CT40	80/100-175/200
Fungicides Pesticides Fertilizers		

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PODOCARPUS

Podocarpus macrophyllus (Thub.) D.Don

CONIFER				PODOCARPO SPANISH	VALENCIAN	BROAD LEAVED PODOCARPUS ENGLISH	PIN DES BOUDDHISTES FRENCH
	STRUCTURE		DIVISION:	SPERMATOPHYTES	1	VARIETIES	
Shape	Height	Diameter	SUBDIVISION:	PINOPHYTAS			
OBLONG/OVAL	15-20 M	8-10 M	TYPE:	PINOPSIDA			
Texture	Shade	Root	ORDER:	PINALES			
COARSE/FINE	FULL	OBLIQUE	FAMILY:	PODOCARPACEAE			
M	ORPHOLOGY			At the second			
Trunk	Bark	Color			1. 1. 1.	STOREN S	
TTUTK	FISSURED	LIGHT GRAY		1 3 1 3 1 A	the set of the set	AND BOX	
Leaf	COMPOUND:	NO		S CONTRACT OF IN	M LEENT.		Contraction of the second
Loai	HARDNESS:	CORIACEOUS		The NAV S	14 M		1.11: 1.1.
EVERGREEN	ARRANGEMENT:	ALTERNATE	A 364		Contraction of the	41120	STAN S
SIZE: 8-10x0.6 CM	VENATION:	1 CENTRAL VEIN	1 2 2 1		11		15 3 5 5 5
LEAFLET:NO	SHAPE: LAN	CEOLATE/FALCATE			ALC: NO	State 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
COLOR: US: DARK GREEN	MARGIN:	ENTIRE			ALL STRAN	No MA SAN	1
LS: MED. GREEN	APEX: AC	CUTE/ACCUMINATE				121	
TEXTURE: US: GLOSSY	LEAF BASE:	EXTENDED	- North		1. 1. 1.	A States	1 1 1 14
LS: SMOOTH	PETIOLE:	SHORT		THE REAL PROPERTY		MI MICH	State of the second
STROBILUS	Sex	Distribution DIOECIOUS		AND IN A			
SIZE AND J/M 2-3CM	YELLOW/GREEN-GROUP	Fragrant				A W A W	14 12 A. A. A.
TYPE: ♀/F 1CM	LIGHT GREEN -SOLITARY	NO		A States			AND AND AND
	Туре	Color		SAL ME SUSSE		MA PAK II IV	
Fruit	EPIMATIUM (1 YEAR)	RED/VIOLET	A LISU				1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
	Comestible	Fruiting season	1 1 T 1 1 1				ALCO MEAN
SIZE: 3.5-4 x 1.5 CM	NO	SEP-OCT		WALL AND	S 8 6 9 4	KA WALLEY	LL A A YES
Growth	Rate	Longevity	A stranger !!	Star In		CANALSON	11122003
Growth	MEDIUM/SLOW	< 150 YEARS		THE PARTING	3.1.1.1	N MARSON	
	ECOLOGY		All The A	一个人们的"你"	A HI I	ANCH BROOM	I NO WARD
Oliverate	Temperature	Drought resistant	345 1 C 107 10	and the second states of	1 ST 11	A KAOKEN	SAN PINA
Climate	H-4	MODERATE/LOW	TISTIC	and the Article		27 114 10 10 1100	
ALTITUDE : 0-600M	Sun exposure	Frost resistant					*
IRRIGATION: MODERATE	SUN	MODERATE		JAL NOK	42 - U. Korr		hen
Soil	Texture	Salt resistant	THE REAL PROPERTY	Revel N		A A A	
3011	INDIFFERENT	NO	Transfer and		CONTRACT OF	1 628	
pH: 6.5-8.5	Drainage	Lime resistant		Non-THAN IS		1111 26	2.4 25
FERTILITY: MOD/POOR	HIGH	YES	and the last			IN KON	11 22
	USES		and a logical in				
Resistances	Applic	ations	the the second	JAN Shink		10228	and the provent
COASTAL: 2ND LINE	SLOPES: NO	LINE: NO	A Bornk	MONTH M		Constant of the second	and all a
POLLUTION: YES(URBAN	RIVERBANKS: NO	WINDBREAKER: YES	The set lon	THE WAY AND			
WIND: MODERATE	GROUPS: YES	ISOLATED: YES		AVA SAVA	2 APR	2000 March	
		I					
Notice to Obiect and I	Transferration 1	at allowing Days 1	PC	JINTS OF INTEREST	to prove the second second	d The female starbill 1	and a second second second second
basal scales fused to th colored fleshy receptacl	e axis and a fertile a e. Some of its varie	at sinuous. Branches apical scale that bea ties are of ornament	s with pendulous tips. Le rs a single ovule. Ovoid al interest. Yellowish wo	seed with a somewhat fleshy out od, durable, easy to work. The w	ter shell and a woody inne	d. The female strobilus is m er shell (drupaceous appea t has a wide range of uses	rance) surrounded by a
pruning.							
							SPACING: L2
			PLANT	ING AND PLANT HEALTH			
Propagation by seed a	nd its varieties by	cutting (autumn). Gr	afting (on species that	root easily). Transplanting is de	elicate (spring, autumn a	nd winter). In Europe, it do	bes not have any
natural enemies.	i i i						

CHROMATIC CALENDAR	CO	MMERCIALIZATIO	N
FOLIAGE, FLOWERING AND FRUITING SEASON	Presentation	Height (cm)	Topiary shape
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	CT3	20/30	
CUL ΤΙΛΑΤΙΟΝ CALENDAP			
COLIMATION 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			

PSEUDOTSUGA

Fungicides

Pesticides

Fertilizers

Pseudotsuga menziesii (Mirb.) Franco

CONIFER				ABETO DE DOUGLAS SPANISH	AVET DE DOUGLAS VALENCIAN	DOUGLAS FIR ENGLISH	SAPIN DE DOUGLAS FRENCH
r :	STRUCTURE		DIVISION:	SPERMATOPHYTES	V Vicinia V capital and	VARIETIES	1 1 Mar 44
Shape	Height	Diameter	SUBDIVISON:	PINOPHYTAS			
CONICAL/IRREGULAR	20-25 M	6-10 M	TYPE:	PINOPSIDA			
Texture	Shade	Root	ORDER:	PINALES			
WEDIOM	FOLL	HORIZONTAL	FAMILT:	PINACEAE			
M	ORPHOLOGY Bark	Color	JAN STA			5	New
Trunk	RETICULATE	REDDISH GRAY	112-120			3	- the
Loof	COMPOUND:	NO	Mac 1	14 Days	Contraction of the second		
Lear	HARDNESS:	SOFT(FLEXIBLE)			S 25/1		21016
EVERGREEN	ARRANGEMENT: ALTE	RNATE(SUBDISTICHUOUS)					SPE
SIZE: 20-35X2 MM	SHAPE:	ACICULAR		Allow		3	
COLOR: US: DARK GREEN	MARGIN:	ENTIRE		- 4/28			
LS:GREENISH GRAY	APEX:	ROUND	State Des				31
TEXTURE: US: GLOSSY	LEAF BASE:	EXTENDED	State And				
LS: GLOSSY	PETIOLE:	SESSILE		111111			
Strobilus	UNISEXUAL	Distribution	Store 12 UP/	2. 1 . 21 . 11			
SIZE AND 3/M 15-20 MM	YELLOW/RED- SOLITARY	Fragrant	m St			100 C	
TYPE: Q/F 15 MM	GREENVELLOW- SOLITARY	NO	8	8 - C - C - C - C - C - C - C - C - C -	-		Sec. 1
	Туре	Color	the state				March
Fruit	CONE (1 YEAR)	REDDISH BROWN	Min .	烈 一	Contraction of the local division of the loc	Sec. 1	1000000
SIZE: 6-9 x 3-4 CM	Edible	Fruiting season		68 00		and the second	100000
	Rate	Longevity	and shares	All and a second		Service and the	Sector .
Growth	HIGH	> 300 YEARS			A Start	Sec. 1	A 10 10 10
	ECOLOGY		1 - 1 - F.F.	Kirta 🙀 📿	aller and	The second	and the second
Climata	Temperature	Drought resistant			a din la E	A ALL NE	- 1AT - 1
Cliniate	-15° to -20°C	NO	1	Statistic Cont			
ALTITUDE: 200-2000	Sun exposure	Frost resistant	- 63 m	and the South			
IRRIGATION: MOD/HIGH	Texture	Salt resistant	14月1日日前1月		The state	Nº.	an white
Soil	LOAMY/SANDY	NO	A Marine	ALC: A CONTRACT			CONTRACT OF
pH: 5.5 -7.5	Drainage	Lime resistant	- 10 (D (D (D (D (D (D (D (D (D (15		- Den W	diam and
FERTILITY: MODERATE	HIGH	NO	State 1 1			1 Cathlers	200 68
	USES						ASCALL AND
Resistances	Applic	ations		10 11. 1		1	Million
POLITION: VESUIPPAN	RIVERBANKS: NO	WINDBREAKER: YES					
WIND: NO	GROUPS: YES	ISOLATED: YES	Ser 1 Arth				N.
	8		POIN				
Also known as P. dougl	asii. Native to Nort	hwest America (Can	ada-Mexico). Up to 90 m a	nd a trunk diameter of 3 m. (origin	n area). Branchlets are so	mewhat pendulous. Flat	leaves with bands on
their undersides, with a	lemon or tangerine	fragrance when rub	bed. Its cones which are at	ached to the branches are conica	al, pendulous have persis	tent scales and exserted	I trifid bracts. Winged
species can be used in	regions with a humi	d climate since it giv	es more yield than Europe	an conifers. Yellowish wood, of go	nce that make them suita bod quality, hard, easy to	work. Used for construct	ion, carpentry, joinery
and paper pulp. This tre	e tolerates pruning,	trimming and topiar	у.				
							SPACING : 10 m
			PLANTING	G AND PLANT HEALTH			
Propagation by seed (in	spring if it is stratifi	ed or in autumn if no	ot), and its varieties by cut	ting or grafting. The seed has var	iable dormancy periods a	and should be treated wit	th sand and moist peat
prone to attack by aphie	ds and cryptogamic	diseases.	40-48 nours. Seedlings a	are delicate to develop. Germina	ation period about 20 da	lys. Transplanting is eas	sy (winter). This tree is
		CHROMATI	CALENDAR			COMMERCIALIZA	TION
	FOLIA	GE, FLOWERING	AND FRUITING SEAS	SON	Presenta	tion Height(cm)) Topiary shape
JAN FEB	MAR ABR	MAY JUN	JUL AUG	SEPT OCT NOV	DEC		
					Years 2	/0 15/30	
		CULTIVATI	ON CALENDAR		Year 1 Year 2	/1 20/40 /1 60/100	
JAN FEB	MAR ABR	MAY JUN	JUL AUG	SEPT OCT NOV	DEC Teal 2/		
Sowing	Planting	Pruning	x				
		TDEATMEN			=		
JAN FEB	MAR ABR		JUL AUG S		DEC		
					HHH I		

SEQUOIADENDRON

Sequoiadendron giganteum (Lindl.) Bucholz.

CONIFER				SEQUIOIA GIGANTE SPANISH	SEQUOIA GEGANT	BIG TREE/GIANT SEQUOIA	SEQUOIA GEANT
	STRUCTURE		DIVISION:	SPERMATOPHYTES	TALE TO BUT	VARIETIES	THE TOT
Shape	Height	Diameter	SUBDIVISION:	PINOPHYTAS		PENDULA	
CONICAL/COLUMNAR	20-30 M	4-7 M	TYPE:	PINOPSIDA			
Texture	Shade	Root	ORDER:	PINALES			
FINE	FULL	TAFROOT	FAMIL 1:	TAXUDIACEAS			
M	ORPHOLOGY			Schide		11	
Trunk	FIBEROUS	COIOF REDDISH BROWN		A CONTRACTOR	1	11 4	E M A A'
Leaf	COMPOUND:	NO		A A A A A A A A A A A A A A A A A A A	1.75	1	
Leat	HARDNESS:	CORIACEOUS		SE STAT	2.971	EN IS	
PERSISTENT	ARRANGEMENT: AL	TERNATE (SPIRAL)		Sec. Sec.	12748	151 14	
SIZE: LEAF:4-10x1MM	VENATION:	1 CENTRAL VIEN		Status and the	Sec.	A N	21 221 6.5
LEAFLET: NO	SHAPE: LA	NCEOLATE/SCALE			22481		
LS: LIGHT GREEN	APEX-	ACUTE		Seller 1. U.	6 A .		
TEXTURE: US: SMOOTH	LEAF BASE: EXT	ENDED/DECURRENT		Section and the	1123	A N	
LS: SMOOTH	PETIOLE:	SESSILE		State and and	ALC: N		
Strobilue	Sex	Distribution		North Contraction			
Strobitus	UNISEXUAL	MONOECIOUS			13.00	and the mainter	A Commence
TYPE:	LIGHT YELLOW -SOLITARY	Fragrance			530	TTO NO.	1.000
	GREENVIOLET -SOLITARY	Color	5 . 3	1 3 48 July		N. S. Star	1111
Fruit	CONE (2-3 YEARS)	LIGHT GREEN					ANN SEA
	Edible	Fruiting season	A. A. A.	No.	APR MAN	AN ALC: C	1
Size: 5-8x3-4 CM	NO	SEPT-NOV	HE We W	and the second			And All Street
Growth	Rate	Longevity			and a second	A REAL PROPERTY.	A SELL MENT
Growan	MEDIUM/FAST	> 1000 YEARS	N. A. A.		A1578		And the second
	ECOLOGY			and the the strends			Ter and
Climate	Temperature	Drought resistant	201823 S			A LORA M	Alor
Ginnate	-15º to -20ºC	NO	445 P 14 9				1 Maller
ALTITUDE: 1500-2500	Sun exposure	Frost resistant	Cast and Cast			AR AR	ALC: NE
Indioanon. Indi	Texture	Salt resistant		Windows in the at			
Soil	LOAMY/CLAYEY	NO	tentre s				
pH: 6-8	Drainage	Lime resistant		a cont the la	1000	AL.	Contraction of the second
FERTILITY: MOD/HIGH	HIGH	MODERATE	Contraction of the	1	32. X.	A 10 10	A Car
	USES		• P	Se Car		113 1	15 14
Resistances	Appli	cations			States -	STEV X C	
COASTAL: NO	SLOPES: NO	LINE: YES	Stand Services	HAR CHARLES	1984	A BUSS	A A A
POLLUTION: YES (URBAN	GROUPS: VES	ISOLATED: YES				- Stat	
WIND. TES	010010. 120	10004120. 120			and the second second		
Alex la sur es Osmuia		Eastern II.O.A. Ite	hands and has a set of a ff it	POINTS OF INTEREST	late and this and a solution	device according to the strength of	
trigone.) Its cones are o	blong, pedunculate	d. Its scales are pen	dulous, long and persis	n strips. Base generally wide. Branch stent with a rough umbo. It has a depr	essed back and decide	uous, rough to the touch. Li uous mucron; they rarely or	cur before the plant
reaches 100 years. See	ed with 2 wings. Of g	great ornamental val	ue due to its majestic siz	ze. It has some varieties of variable in	nterest in size and folia	r color. Its wood is fragile,	of little resistant and
poor quality. Used in the	e construction of roo	ofs and fences, Thi	s species of pine tolerat	tes pruning but does not require it.			
							SPACING: 4-6 m
							51 ACING: 4-0 III
Descention by seed (the burn the burn	PLANTIN	G AND PLANT HEALTH	d data and south and south		signation with such 16
it is stratified with moist	spring), or its varies sand, they will gerr	ties by cutting, layer minate faster. The se	edlings should be prote	ected from the sun in early stages. The	a does not need previ his species is resistant	ous treatments for its gern to pests and diseases.	nination, although if
			5 prote		,		
		CHROMATI	C CALENDAR			COMMERCIALIZA	TION
	FOLIA	GE, FLOWERING	AND FRUITING SE	EASON	Presen	tation Height(cm)	Topiary shape
JAN FEB	MAR ABR	MAY JUN	JUL AUG	SEPT OCT NOV [DEC		
					POT	9 Year1/1	
		CULTIVATIO	ON CALENDAR		CT	5 50/60	

CT7 JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC CT100 Planting Sowing Pruning X TREATMENT CALENDAR JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC Fungicides Pesticides Fertilizers

60/80 200/250

Planting

Pesticides

Sowing

Fungicides

Pruning X

 TREATMENT CALENDAR

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

Fertilizers

TAXODIUM

Taxodium distichum (L.) Rich.

STRUCTURE Concellegender Transfer Reference Reference Reference Standa Reference Reference Reference Standa Reference Referen	CONIFER				CIPRÉS DE LOS PANTANOS SPANISH	TAXODÍ VALENCIAN	SWAMP CYPRESS ENGLISH	CYPRÈS CHAUVE FRENCH
		STRUCTURE		DIVISION:	SPERMATOPHYTES		VARIETIES	
	Shape	Height	Diameter	SUBDIVISION:	PINOPHYTAS			
	CONICAL/EXPANDED	15-25 M	6-12 M	TYPE:	PINOPSIDA			
	Texture	Shade	Root	ORDER:	PINALES			
NORPHOLOGY Provide COUNT Presentation ount Presentation Count Pres	FINE	PARTIAL	PNEUMATOPHORES	FAMILY:	TAXODIACEAS			
	М	ORPHOLOGY					ANK A	
	Trunk	Bark	Color	A. Lalle				S. Mar
<image/>	Trainc	FIBEROUS	REDDISH BROWN		CONTRACTOR			
<image/>	Leaf	COMPOUND:				- 1075		and the second
	DECIDUOUS	ARDINESS.						
	SIZE: 13-2 x 0.1 CM	VENATION:						Att 1 Ats
	0122. 1.0 2 x 0.1 011	SHAPE:	LINEAR/SCALE	RIAN 12 JUN	ANKEL MARKED	See mean W.V.		
<image/>	COLOR: LIS:LIGHT GREEN	MARGIN	ENTIRE	15		Se Carlo		n
<image/>	LS: LIGHT GREEN	ADEY-	ACUTE			and the	1000 1000	And the second
	TEXTURE: LIS: GLOSSY	AFEA.	ACOTE				Cherry Cherry	
	Lei CLOSSV	DETIOLE:	ATTENOATE	the file	11 11		and the second	
Strobilus Unit	L0. 0LU331	Sov	Distribution					
Bit All	Strobilus	UNISEVUM	MONOECIOUS	AL TANK		and the second second		28 V
The image image is a start of the start	SIZE AND AMA 2-2444	DINISEAUAL	Fragrant		16	No.	- Sel- V	intel .
	TYPE: 0/E 2.3 MM	REDDISH - SPIKES	ragrant N0	*	T	and the second second	Cine Ha	
Fuilt User Purce Control Control 925 20.15.2.2.01 Edible Fuilty account with the properties its and the p	¥/F 2+3 MM	GREEN-SOLITARY	Color		2000	200	A PARTIE	1- 13
YINK OTHER INTERNATION OTHER STATES NET 2015 22:00 Rate Longeving How and the second of the second	Enc.14	iype	COIOF	1964	ARES I.	1000	STATES	122 - 203
No. Column of the second in the second i	Fruit	CONE (1 YEAR)	REDDISH BROWN	30.0	1 4 4 5	der 3	SAX V	
NEW NAME NO OUT NAME Growth Rate Longevity Sol Longevity Sol Sol <th< td=""><td>0.05</td><td>Edible</td><td>Fruiting season</td><td>The second</td><td>Part Ville</td><td>1000</td><td></td><td>C</td></th<>	0.05	Edible	Fruiting season	The second	Part Ville	1000		C
Growth Rate HEUMARKOW Job YEARS Image: Colore Colore Colore Colore Multicession ALTITUDE: 0.400 M. Sum exposure Frost resistant NOLOROW Sum exposure Fros	SIZE: 2-3x1.5-2.5CM	NO	OCT-DEC	and the second sec	SAME STOP	1000	Y YI	the x 1
VERT VERT VERT VERT E COLONEY E COLONEY	Growth	Rate	Longevity	A 1978	C. S. Brands	ALL COLOR	ALP .	1 Arm
EOLOGY Climate Coupt resistant ALTITUDE 0:000 M Sun exposure Frost resistant Soil Texture Salit resistant 0:000 M Salit resistant 0:000 M Soil Texture Salit resistant 0:000 M Salit resistant 0:000 M<		MEDIUM/SLOW	> 300 YEARS	DAY MAR	AR DEATE CA-	THE REAL	and l	S CONTRACTOR
Climate ALTTUDE: Temperature Support Torought resistant Support Temperature Support Support Resistances Costati No SUP Support		ECOLOGY		- A. A		A		The Lay
Windle Sore MORLOW ALTITUDE: 0-400 M Sure exposure Frost resistant Soil Texture Sure exposure Frost resistant Pett 64.5 Texture Sure exposure Frost resistant Pett 64.5 Texture Sure exposure Frost resistant CONSTAT: NO NO NO Desistante Desistante CONSTAT: NO NO NO Desistante De	Climata	Temperature	Drought resistant	S. C. Carrier	Ale and a second	100		the barrents
Attmutor: Guine proposite Frost resistant MODALOW Soil February Frost resistant LOMAY No PH 647 Drainage Line resistant LOMAY Drainage Line resistant NO CostTAL: NO Resistances (ROUPS: YES ISOLATE): YES Drainage Soil	Giinate	-20°C	MOD/LOW		A Real Providence of		Contraction of	156252
IBBIGATION: MODINION SUBPRIMUSTANCE MODIC/WI Soil Texture No No Texture No	ALTITUDE: 0-400 M	Sun exposure	Frost resistant	A CONTRACTOR OF THE OWNER	2 10 m 10 m			CHARLES AND
Soil Texture Salt resistant NO PERTLIP: MO Income NO Resistances Application SLOPES: NO Income NO Resistances SLOPES: NO Income NO Income NO POLITION: YESBURGHOM SLOPES: NO Income NO Income NO POLITION: YESBURGHOM SLOPES: NO Income NO Income NO Nob NO ROUPS: YES SQUARES NO Income NO Vinko NO ROUPS: YES SQUARES NO Income NO Vinko NO ROUPS: YES SQUARES NO Income NO Vinko NO ROUPS: YES SQUARES NO Income NO In	IRRIGATION: MOD/HIGH	SUN/PARTIAL SHADE	MOD/LOW		and the second states	R. Lawrence	A DESCRIPTION OF THE PARTY	and the second
Soli LOAMY NO PF: 6-7.5 Drainage Lime resistant. Resistances Application SLOPES: NO LOVE Description Descrin Description <td< th=""><th>0</th><th>Texture</th><th>Salt resistant</th><th>THE OF A PARTY OF</th><th>The local sector of the sector</th><th>All And I</th><th></th><th>Strange St.</th></td<>	0	Texture	Salt resistant	THE OF A PARTY OF	The local sector of the sector	All And I		Strange St.
pH: 67.5 FERTILITY: Drainage Line resistant Low Line resistant Low Line resistant Low Line resistant Low Display the provided of the	5011	LOAMY	NO	and the second		- Parti	Phillip Carlos	
FERTILITY: MODERATE LOW LOW USES Application SLOPES: NO SLOPES: SLOPES: <td>pH: 6-7.5</td> <td>Drainage</td> <td>Lime resistant</td> <td></td> <td>the same the second</td> <td>the Altraction</td> <td>1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1</td> <td></td>	pH: 6-7.5	Drainage	Lime resistant		the same the second	the Altraction	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
USES Resistances COASTAL: NO POLLUTION: YESURARU NOC: NO Application SUCPES: NO NO NNE NO SUCPES: NO NO NUME: NO ROUPS: YES BOLATED: YES Description Description Who: NO NO REVEBANKS: YES WREAKER: NO ROUPS: YES BOLATED: YES Description Description Name to Florida (U.S.A). Is back can be peeled off in strips. Branching with the appearance of a candelabumur (in older specimens). Persistent branches with scale-shaped spiral leaves. Ite feeduduus species have flat leaves. Its cones are subglobular, erect and attached to the branches. Its scales are deciduous, peltate and with a bet umbo. Slightly wingde seed. Very onamental the to its appearance with hickened base, presence of buttress roots and pneumatophores and the autumn color of its leaves (brown-reddish). They can be used to decorate lakes and water treas and wet ground. Yellow-reddish wood, light and elaste, easy to work and of excellent quality (carpentry, shipbuilding, warehouses). It has formed important deposits of brown coal (light), I. Ite is appearance with hickened base, presence of buttress to cutting (relatively easy) or grafting. The seed is dormant in winter and must be stratified in moist sand for 1-2 months at 4-5° C. It prouts from a stock. Transplanting is difficult (winter). This tree is prone to cryptogamic diseases. Very routs from a stock. Transplanting is difficult (winter). This tree is prone to cryptogamic diseases. NOV DEC JAN FEB MAR ABR MAY JUN JUL<	FERTILITY: MODERATE	LOW	LOW		and a second provide second	-	La Carton and	La La Can
Vores Application Supplication		LIEFE		and the second second		1 425		A south of
Resistances COASTAL: SUPER NO LINE: NO CASTAL: NO RIVERBANKS: YES YES NO INF O VIND: NO RIVERBANKS: YES WINDBREAKER: NO O	Desistances	USES	action	the states	and the second second			公开规则不
CDARSING: NO Devolution: NO Devolution: NO POLILITION: YESE, MINAREARKE: YES WIND: NO POINTS OF INTEREST VIND: NO DOULS A). Its bark can be peeled off in strips. Branching with the appearance of a candelabrum (in older specimens). Persistent branches with scale-shaped spiral leaves, the feeldous species have flat leaves. Its cones are subjobular, erect and attached to the branches. Its scales are decidous, peltate and with a bent umbo. Slightly winged seed. Very ormametrafter takes and wet ground. Yellow-reddish wood, light and elastic, easy to work and of excellent quality (carpentry, shipbuilding, warehouses). It has formed important deposits of brown coal (light). They can be used to decorate lakes and water are an attached to the prancing. PLANTING AND PLANT HEALTH POINT OF INTEREST Propagation by seed (mainly in autumn) or its varieties by cutting (relatively easy) or grafting. The seed is dormant in winter and must be stratified in moist sand for 1-2 months at 4-5° C. It provids from a stock. Transplanting is difficult (winter). This tree is prone to cryptogamic diseases. Very propagation by seed (mainly in autumn) or its varieties by cutting (relatively easy) or grafting. The seed is dormant in winter and must be stratified in moist sand for 1-2 months at 4-5° C. It provids from a stock. Transplanting is difficult (winter). This tree is prone to cryptogamic diseases. Presentation Presentation Presentation Year 1/0 30/50 Year 1/0 30/50 To 75/100/150 Year	Resistances	SLOPES: NO	LINE: NO	all a start		March 1	AN HERE AND	SKERE ST
PULLIDIM: TESLIDEARING INTERDENTION WIND: NO GROUPS: YES ISOLATED: POINTS OF INTEREST Value to Isopparation with thickned base, presence of but restricts. Branching with the appearance of a candelabrum (in older specimens). Persistent branches with scale-shaped spiral leaves, the feedduous species have flat leaves. Its cones are subglobular, erect and attached to the branches. Its scales are deciduous, peltate and with a bent umbo. Slightly winged seed. Very ornamental the to its appearance with thickned base, presence of buttress roots and pneumatophores and the autumn color of its leaves (frown-reddish). They can be used to decorate lakes and water areas and wet ground. Yellow-reddish wood, light and elastic, easy to work and of excellent quality (carpentry, shipbuilding, warehouses). It has formed important deposits of brown coal (light). It is eas need in a state does not tolerate pruning. PLANTING AND PLANT HEALTH Propagation by seed (mainly in autumn) or its varieties by cutting (relatively easy) or grafting. The seed is dormant in winter and must be stratified in moist sand for 1-2 months at 4-5° C. It is prouts from a stock. Transplanting is difficult (winter). This tree is prone to cryptogamic diseases. Very FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC Year 1/0 30/50 CLITIVATION CALENDAR Year 1/0 30/50 T T Year 1/0 30/50	COASTAL: NO		WINDBREAKEP NO				THAN SO	
WIND: NO Device if the second se	POLLUTION: YES(URBAN)	GROUPS: VES		and the second second				
POINTS OF INTEREST Value to Florida (U.S.A). Its bark can be peeled off in strips. Branching with the appearance of a candelabrum (in older specimens). Persistent branches with scale-shaped spiral leaves, the deciduous species have flat leaves. Its cones are subglobular, erect and attached to the branches. Its scales are deciduous, peltate and with a bent umbo. Slightly winged seed. Very omamental fue to its appearance with thickened base, presence of buttress roots and pneumatophores and the autumn color of its leaves (brown-reddish). They can be used to decorate lakes and water rreas and wet ground. Yellow-reddish vod. light and elastic, easy to work and of excellent quality (carpentry, shipbuilding, warehouses). It has formed important deposits of brown coal (lignite). It eas not stolerate pruning. SPACING:7-8 CHROMATIC CALENDAR COMMERCIALIZATION Planting SEASON JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC Very on astock. Transplanting is difficult (winter). This tree is prone to cryptogamic diseases. JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC Very on the set of the	WIND: NO		10051125. 120	- AND			Total Mary	0.48° 5.431.84
Value to Florida (U.S.A). Its bark can be peeled off in strips. Branching with the appearance of a candelaburm (in older specimens). Persistent branches with scale-shaped spiral leaves, the ideicidious species have fitte leaves. Its concess are subglobular, erect and attached to the branches. Its scales are decidious, peeded. The set unso. Subject is specimens). Persistent branches with scale-shaped spiral leaves, the intervent of the specimens). Persistent branches with scales and wet provide the specimens). Persistent branches with scale-shaped spiral leaves, the intervent with thickened base, presence of buttress roots and pneumatophores and the autumn color of its leaves (brown-reddish). They can be used to decorate lakes and water irreas and wet ground. Yellow-reddish wood, light and elastic, easy to work and of excellent quality (carpentry, shipbuilding, warehouses). It has formed important deposits of brown coal (lignite). It specifications are compared and wet ground. Yellow-reddish wood, light and elastic, easy to work and of excellent quality (carpentry, shipbuilding, warehouses). It has formed important deposits of brown coal (lignite). It specifications are compared and wet ground. Yellow and wet ground wet ground wet ground. Yellow-reddish wood, light and elastic, easy to work and of excellent quality (carpentry, shipbuilding, warehouses). It has formed important deposits of brown coal (lignite). It specifications are deposited by a set of the set of				PO	INTS OF INTEREST			
Item in the intervent back in the intervent optime is the intervent optime is and the automotion of its leaves and with a dent unit a bene unit	Native to Florida (U.S.A	 its bark can be p flat leaves. Its con 	peeled off in strips. B	ranching with the appearant erect and attached to the	nce of a candelabrum (in older spec branches, its scales are deciduous	cimens). Persistent b	ranches with scale-shaped	spiral leaves, the
CHROMATIC CALENDAR OPLING SEASON Year 1/0 30/50 CILTIVATION CALENDAR Year 1/0 30/50	due to its appearance w	with thickened base	presence of buttres	s roots and pneumatophor	res and the autumn color of its leave	s (brown-reddish). Th	hev can be used to decora	ate lakes and water
esin has medicinal interest. This tree does not tolerate pruning.	areas and wet ground. '	Yellow-reddish woo	d, light and elastic, e	asy to work and of excelle	nt quality (carpentry, shipbuilding, w	arehouses). It has fo	rmed important deposits of	í brown coal (lignite). Its
SPACING:7-8 PLANTING AND PLANT HEALTH Propagation by seed (mainly in autumn) or its varieties by cutting (relatively easy) or grafting. The seed is dormant in winter and must be stratified in moist sand for 1-2 months at 4-5° C. It provides from a stock. Transplanting is difficult (winter). This tree is prone to cryptogamic diseases. CHROMATIC CALENDAR COMMERCIALIZATION FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	resin has medicinal inte	rest.This tree does	not tolerate pruning.					
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PERMUMERATION PARTICIAL IT TOPPagation by seed (mainly in autumn) or its varieties by cutting (relatively easy) or grafting. The seed is dormant in winter and must be stratified in moist sand for 1-2 months at 4-5° C. It proves from a stock. Transplanting is difficult (winter). This tree is prone to cryptogamic diseases. CHROMATIC CALENDAR CHROMATIC CALENDAR COMMERCIALIZATION PollaGE, FLOWERING AND FRUITING SEASON Presentation Height (cm) Topiary shape JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC Year 1/0 30/50 CT SEPT OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC								
CHROMATIC CALENDAR COMMERCIALIZATION FOLIAGE, FLOWERING AND FRUITING SEASON Presentation Height (cm) Topiary shape JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	Propagation by seed (m	nainly in autumn) or	r its varieties by cutti	r LANTIN	ting. The seed is dormant in winter	and must be stratified	d in moist sand for 1-2 mo	oths at 4-5° C. It
CHROMATIC CALENDAR COMMERCIALIZATION FOLIAGE, FLOWERING AND FRUITING SEASON Presentation Height (cm) Topiary shape JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC CULTIVATION CALENDAR CULTIVATION CALENDAR JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	sprouts from a stock. Tr	ransplanting is diffic	cult (winter). This tree	e is prone to crvptogamic	diseases.	and must be stratilie	a molar autor for 1-2 III0	1.10 at + 0 0. It
CHROMATIC CALENDAR COMMERCIALIZATION FOLIAGE, FLOWERING AND FRUITING SEASON JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC VIENTIAL DECEMBER CULTIVATION CALENDAR CULTIVATION CALENDAR CULTIVATION CALENDAR JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	.,			,				
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JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC		FOUR			1001	Derre	totion Height (
JAIN FEB MAR ABR MAY JUN JUL AUG SEP1 OCT NOV DEC JAN FEB MAR ABR MAY JUN JUL AUG SEP1 OCT NOV DEC			GE, FLOWERING			Preser	nation Height (ch	i) i opiary shape
Cultivation calendar Oct NOV Dec JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	JAN FEB	IVIAK ABR	MAY JUN	JUL AUG	SEPT OUT NOV D		4/0	
CULTIVATION CALENDAR CT 5 75/100/150 JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC						Year	1/0 30/50	
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC			CULTIVATI	ON CALENDAR			5 75/100/15	U
	JAN FEB	MAR ABR	MAY JUN	JUL AUG	SEPT OCT NOV D	EC		
			+++++++++			FFF1		

Taxus baccata

TAXUS								Taxus	s bacc	ata	L.
CONIFER				:	TEJO SPANISH	VA	TEIX LENCIAN	COMMON Y ENGLISH	rew H	IF FRENCH	4
	STRUCTURE		DIVISION:	SPERMATO	OPHYTES		-	VARIETIE	s	-	
Shape	Height	Diameter	SUBDIVISION:	PINOPH	IYTAS		FA	STIGIATA RO	BUSTA		
	6-10 M Shade	4-6 M Root	TYPE: ORDER	PINOP	SIDA SALES			PIRAMI	JAL		
MEDIUM/FINE	FULL	TAPROOT/HORIZONTAL	FAMILY:	TAXAC	EAS						
м	ORPHOLOGY		the second	10 1 2 2 2 2 2		- 21		S 8 8 5 5		100	- 1
Trunk	Bark	Color		KA GE BA	1			117	2	1	-
	FISSURED COMPOUND:	LIGHT RED NO		The second	5-0	· that	E	11-A	- the	-	~
Leaf	HARDNESS:	CORIACEOUS	8 . 22	ALC: L		1	1 71		Gantin	-	-
EVERGREEN (8 YEARS)	ARRANGEMENT: ALT	ERNATE(SUBDISTICHUOUS)	1. 10 Ma	1-1-1-1	NZ.			11-1-	2 h	-	-
LEAFLETS: YES	SHAPE: LI	NEAR-LANCEOLATE	A MAR	Stor Market			1.15 4	1	541	Y	-
COLOR: US: DARK GREEN	MARGIN:	ENTIRE			TH	5	- 11	1210		5	1
LS: MED.GREEN	APEX: A	CUTE/MUCRONATE	A SE		× 3	-	121		FILA	10.0	
LS: OFF-WHITE	PETIOLE:	SHORT SESSILE					11 11	MAR	1ANS		5
Strobilus	Sex	Distribution			-12	100	1. 3		11-1		
	UNISEXUAL	DIOECIOUS	5	A STAN	15	STY	N/N	EVX.	12021	100	20
TYPE: 2/F 6 MM	GREEN- SOLITARY	Pragrant NO	10 and 10	1 A 7 .	Lin	00	A.	1.1	23-1	Va	
+	Туре	Color	1 . L. L.	· · ·		127		11-10	25%	- Y-	
Fruit	DRUPE (1 YEAR)	RED	a the set	1. A.		1.00	113	A Land	1		
SIZE: 9-11x 8-10 MM	Edible NO	Fruiting season		Sec. 1	and is		1 - E	3.1	1000	5 M	1.
Growth	Rate	Longevity	1. 1. 1.			Jul.		R.F.		3	1
Growth	SLOW	> 500 YEARS		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C SCNA	N MARY	an Ante	11 1000	2 4 5 1 1	AND R.	
	ECOLOGY		1	100 Sec.		See.		(学)学		A.C.	
Climate	Temperature	Drought resistant		1.	-		1 200 11	2014	1633		
ALTITUDE: 0-1800M	Sun exposure	Frost resistant	1.000	ALC: NO.	and the	10-2	201	Se line	A Gu	Tell's	1
IRRIGATION: MODERATE	PARTIAL SUN	YES	1.1	1			12	100	1-23	S.	1
Soil	Texture	Salt resistant	*	2000				220		6.2	347
pH: 6.5-8.5	Drainage	Lime resistant	1			1000	1		2 3 3	A.	1
FERTILITY: MOD/HIGH	HIGH	YES	S. 11		to dia	100	201	100 m			
	USES		<u>6.</u>		100	6		17-57	A AN	The Ca	
Resistances	Appli	cations		11				AL BE	1		\mathbf{T}
POLLUTION: YES	RIVERBANKS: NO	WINDBREAKER: YES	1		195 H			AL AN	1	ant	
WIND: YES	GROUPS: YES	ISOLATED: YES				ales 1	1			191	123
				POINTS OF INTER	EST						
Native to Europe, East	ern Asia and North	ern Africa. Its bark ca	an be peeled off in str	rips. Stems with freque	ent budding (d	ormant buds). Isolated seed	d, covered by a l	leshy aril that g	ives it the	and rot-
proof; of interest in cabi	netmaking, sculptu	re, imitation ebony, m	anufacture of bows.	Taxol can be obtained	d from its leav	es and has m	nedicinal intere	st in treatment of	of tumors. Care	must be ta	aken as
its branches, leaves and	d seeds are toxic (p	presence of taxin), bu	t not the aril. This tre	e tolerates pruning an	d trimming an	id is ideal for	topiary. It spro	uts well from the	stump.		
							SPA	CING: variable	e according to	o use: 0.5	5 - 3 m
			PI ANT	ING AND PLANT							
Propagation by seed (i	in autumn germina	ating in the 2nd/3rd s	spring or in spring w	ith treated seed, gern	ninating in th	at or the foll	owing spring)	or its varieties	by cutting (coll	ected in a	autumn
and stratified during the at 3-4 °C, or be sown, a	winter in moist sa and must be treate	nd and cold chamber d. with hot or sulfurio	and planted in sprir water, since it pres	ng), grafting or layering ents a delicate dorma	 The seed on ncv period. T 	nce dry, shou ransplanting	uld be devoid of can be done	of the aril should in the winter. T	be stored in ai his tree is pror	irtight cont ie to attact	tainers ked by
insects.		-,	, , , , , , ,		,						,
		CHROMATIC	CALENDAR					COMMER	CIALIZATION	1	
	FO	LIAGE, FLOWERI	NG FRUITING SE	ASON			Presenta	ation He	ight (cm)	Topiary	shape
JAN FEB	MAR ABR	MAY JUN	JUL AUG	S SEPT OCT	NOV	DEC	POT	9 Year/	s 1/1 - 15/20 0/30/40		
							CT 3	10/2	0/30/40/50		
JAN FEB	MAR ABR	MAY JUN	JUL AUG	S SEPT OCT	NOV	DEC	CT 5	5 40/	/50/60/80		
							CT 7	7 5 0	0/60/80		
Sowing	Planting	Pruning	х				Extra si	zes	60/80		
	Ŭ .						CT15	5 8	80/100		
						DEC	CT 2	8 125	5/150/175 75/200		
JAIN FED									10/200		

Fungicides

Pesticides

Fertilizers

TETRACLINIS

Fungicides

Pesticides

Fertilizers

Tetraclinis articulata (Vahl.) Masters

CONIFER				CIPRÉS DE CARTAGENA SPANISH	XIPRER DE CARTAGENA VALENCIAN	SANDARAC ENGLISH	THUYA ARTICULÉ FRENCH
5	STRUCTURE		DIVISION:	SPERMATOPHYTES		VARIETIES	
Shape	Height	Diameter	SUBDIVISION:	PINOPHYTAS			
CONICAL ± EXTENDED	6-10 M	4-5 M	TYPE:	PINOPSIDA			
Texture	Shade	Root	ORDER:	PINALES			
FINE	PARTIAL	TAPROOT	FAMIL 1:	CUPRESSCEAE			
м	ORPHOLOGY		A / 100				-
Trunk	Bark	Color		1			C (6)
	COMPOLIND	NO					
Leaf	HARDNESS:	110					
EVERGREEN	ARRANGEMENT: SUE	WHORLED (THUYOIDE)					- ALL
SIZE: 0.8-1 x 1.5 m	VENATION:		a second				
LEAFLETS: YES	SHAPE:	SCALE	Contraction of the				
COLOR: US:MED. GREEN	MARGIN:	SERRATE					
LS:MED.GREEN	APEX:	ACUTE/OBTUSE	the matter				ene Til
LS: GLOSSY	RETIOLE:	SESSILE				1 100 11.	1000
	Sex	Distribution	and the second	Ser The A	A.	NV SAL	K W
Strobilus	UNISEXUAL	MONOECIOUS		ALM THE COULT OF	State 1		ALL YEN
SIZE AND J/M 5-6 MM	YELLOW-SOLITARY	Fragrance	and the second of	The Martin of	esteriore N	2.61.00	No. SA
다면E: 우/F 5-6 MM	LIGHT GREEN-SOLITARY	NO	and the second	ALL DEPART		644	
	Туре	Color		All and a second second		TING	A AND A
Fruit	CONE (2 YEARS)	GRAY OCHER	Although the			1.000	
SIZE: 10 10 0 10	Edible	Fruiting season	2 CT 12		AND REAL	the state of the second	TO TO THE
0.22. 10-12x8-10MM	Rate	Longevity	1.52			a say in the other	ST. DATE
Growth	SLOW	> 300 YEARS		S. 183 8 4	And Call	CACLASIC	The state of the second
	500L00Y		and Rich			A Cont	SSE AL
	Tomporatura	Drought registrant			2 2 - 2 - 1 - 6		State Deale
Climate	remperature	YES	5.1		1 Arvent	All Carrow	
ALTITUDE: 0-1800 M	Sun exposure	Frost resistant		A TA MAR	and the second second	Sel at 2	Carl Al
IRRIGATION: LOW	SUN	NO	100 T		8 T 4 8 4		and the second
Soil	Texture	Salt resistant		HALL ALL AND A		A TON	
0011	LOAMY	NO		and seal and seal			
pH 6.5-8	Drainage	Lime resistant	- T 64	Mar Alexan		1411-1420	L. Carrier
FERTILITY MOD/POOR	HIGH	TES			CARACTER STOR	CELLY AN	M. A. F.
	USES		A DECEMBER OF		Store -	102 100	
Resistances	Applic	ations		10 ma	RUB	1.4%	Sec. Martine
COASTAL: 2ND LINE	RIVERBANKS: NO	WINDBREAKER: YES				1. 沙、湖	S. Sugar Start
WIND: YES	GROUPS: YES	ISOLATED: YES			COLUMN STATE	115 3	1、11日(水)、
1110						2.84	ALS ALL ALL
			POI	INTS OF INTEREST			/ // // // //
dorsal gland. Its cones	a and Cartagena. E are subglobose, so	rect-like branches; f	lexible branchiets in flatte ilked, with 4 cordate scale	ened groups, appearing to be jointe es, 2 of them with longitudinal depr	ed. Opposite adult leaves w ression on their back. Seed	with a whorled appeara	nce (x4), thuyoid, with Interesting in
Mediterranean gardens.	Hard, resistant and	d very durable wood	, rich in resin; It is used in	joinery and marquetry. By bleedir	ng, the sandarac can be ext	racted and is used to	make varnishes. It can
also be used in pharma	cuetical industry an	d in ancient times it v	was used as an imbalming	g agent. Vine sprouts from the stu	ump. This species can be us	sed for reforestation in	temperate and arid
zones. This tree tolerate	s pruning and unni	ning (topiary).					0040000 0 4
							SPACING: 3-4 m
			PLANTING	AND PLANT HEALTH			
Propagation by seed (n 2-3 years It does not	nainly in autumn an	nd spring) or its vari	eties by cutting, grafting	or layering. The seed loses its g	ermination power quickly a	nd if properly preserve a dermination time is	red it can be viable for 15-30 days and the
seedlings do not need t	to be protected. Tra	ansplanting is delicat	e (autumn and spring). T	This species is very resistant to de	struction agents (fires, muti	lations, etc.), as well a	is pests and diseases.
Minimal maintenance is	required.						
		CHROMATIC	CALENDAR			COMMERCIALIZ	ATION
	FOLIA	GE, FLOWERING	AND FRUITING SEA	ASON	Presentati	on Height (cr	n) Topiary shape
JAN FEB	MAR ABR	MAY JUN	JUL AUG	SEPT OCT NOV	DEC	- `	
		CULTIVATIO	ON CALENDAR				
JAN FEB	MAR ABR	MAY JUN	JUL AUG	SEPT OCT NOV	DEC		
Sowing	Planting	Pruning	х				
		TREATMEN	IT CALENDAR				
JAN FEB	MAR ABR	MAY JUN	JUL AUG	SEPT OCT NOV	DEC		
			++++++++				

X CUPPRESOCYPARIS

X Cupressocyparis leylandii Dallin

CONIFER				CIPRES DE LEYLAN SPANISH	ID XIPRER DE LEYLAND LEYLAND CYPRESS CYPRES DE LEYLAND VALENCIAN ENGLISH FRENCH
	STRUCTURE		DIVISION:	SPERMATOPHYTES	VARIETIES
Shape	Height	Diameter	SUBDIVISION:	PINOPHYTAS	CASTLEWELLEN GOLD - GOLDEN YELLOW GOLD RIDER - YELLOW
CONICAL-COLUMNAR	9-12 M	4-6 M	TYPE:	PINOPSIDAS	NAYLOR'S BLUE and PIRAMIDALIS - BOTH GREENISH GRAY
Texture	Shade	Root	ORDER:	PINALES	SILVER DUST DARK GREEN WITH WHITE SPOTS
FINE	FULL	TAPROOT	FAMILY:	CUPRESSACEAE	HERCULEA - DARK GREEN
M	ORPHOLOGY				
Trunk	Bark	Color	ale - St	STIER LAN	
	COMPOUND:	LIGHT RED	All all all		
Leaf	COMPOUND:	NO	10 C 10 C	1 1 1 1	
EVERGREEN	ARDINESS.				
SIZE: 4*2MM	VENATION:				
LEAFLETS: YES	SHAPE:	SCALE	- Carto -		
COLOR: US: DARK GREEN	MARGIN:	DENTATE		ALSA .	
LS:DARK GREEN	APEX:	ACUTE	1111	SALVEN G	
TEXTURE: US: GLOSSY	LEAF BASE:	DECURRENT	The start	Sec. 18 Cane	
LS : GLOSSY	PETIOLE:	SESSILE	A PROPERTY.	Distances Interview	
Ctrabilus	Sex	Distribution	- 3	1	1 - PACELON CONTRACTOR OF A DECK
Strobilus	UNISEXUAL	MONOECIOUS		Y ALL ALL	
SIZE AND J/M 3-4 MM	YELLOW-SOLITARY	Fragrant		L'Engle Mich	
₽/F 4-5MM	GREEN-SOLITARY	NO	and the second s		「「「」」、「」」、「「」、「「」、「」、「」、「」、「」、「」、「」、」、「」、」、「」、」、「」、」、「」、」、「」、「
	Туре	Color	1 N N N	AND AND AND	STATE FOR THE ALC: CALL IN THE ALC: NO ALC: SALES
Fruit	CONE (1YEAR)	BROWN			
0.75	Edible	Fruiting season	and a state of the	Real - In a	
SIZE: 1.5-2 x2-1.5CM	NO	OCT-NOV	1. 22	FRANK MAN	A THE REPORT OF THE REPORT OF
Growth	Rate	Longevity		ALL PROPERTY OF	
	FAST	> 100 YEARS	and the state	A VIEW	A A A A A A A A A A A A A A A A A A A
	ECOLOGY		N I SHARE	Start Product &	
Climato	Temperature	Drought resistant	in the second	and a property of	
Ginnate	-10° to 15°C	MODERATE	Contraction of the second	Sec. Splate	State State State State
ALTITUDE:	Sun Exposure	Frost resistant	1 9 20	A CONTRACT	ALL AND THE SHORE THE
IRRIGATION: MODERATE	SUN	YES		P to A strong	
Soil	Texture	Frost resistant	See And	1. 1	a state which the state of
	INDIFFERENT	NO		1999 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	a second to be at
pH: 6.5-8	Drainage	Lime resistant	State Pres		
FERTILITY: MOD/POOR	HIGH	YES		A LAND THE	
	USES		ALC: NOTE: N		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Resistances	Applic	ations	and the second	All and a second	
COASTAL: 1ST LINE	SLOPES: NO	LINE: YES			
POLLUTION: YES (URBAN)	RIVERBANKS: NO	WINDBREAKER: YES	A		
WIND: YES	SLOPES: YES	ISOLATED: YES	700 00		H MARDER F C
			PO	INTS OF INTEREST	
Coosifie to Herticultural	(huderid hotugon Cu		and Champan maria na	othetensie) Elet brenches arre	mand in hundles. Its locuses are rough and release a frequence when rubbed

Specific to Horticultural (hybrid between Cupressus macrocarpa and Chamaecyparis noorkatensis). Flat branches arranged in bundles. Its leaves are rough and release a fragrance when rubbed The cones are spherical or oblong, pedunculate, woody, with peltate and persistent scales. This species is widely outlivated as an omamental and it has a large number of varieties of interest. It is used to build hedge rows but should be restricted to a minimum height (2.5 m minimum) since it is too vigorous. This tree tolerates pruning and trimming (topiary).

SPACING: 4-5 m /0.4 m (on hedge rows

PLANTING AND PLANT HEALTH

Propagated by soft cutting in spring (easy) or by graft. As it is a species of hybrid origin, it cannot be propagated by seed. Transplanting is delicate (winter). This species is resistant to pests and diseases.

CHROMATIC CALENDAR	COMMERCIALIZATION				
FOLIAGE, FLOWERING AND FRUITING SEASON	Presentation	Height (cm)	Topiary shape		
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC					
	POT 9	30/40			
	CT1.5	40/60/80/100			
	CT3	80/100/125			
JAN PED WAR ADR WAT JUN JUL AUG SEFT OCT NOV DEC	CT10	125/150/175/200			
	CT28	175/200/250			
Sowing Planting Pruning X	CT40	200/250			
	CT50	250/300			
TREATMENT CALENDAR	CT70	300/350			
JAN FEB MAR ABR MAY JUN JUL AUG SEPT OCT NOV DEC	CT240	300/400			
Fungicides Pesticides Fertilizers					

Subchapter 3.3

Commercialization

TYPOLOGY OF CONIFERS

Conifers can be classified according to its final size and shape in:

- TYPE A: Conifers of great development and conical shape. Ex: Cedrus deodara
- TYPE B: Highly developed conifers with a well-differentiated crown. Ex: Pinus canariensis
- TYPE C: Conifers of great development and columnar shape. Ex: Cupressus sempervirens
- TYPE D: Medium-sized conifers with globose growth. Ex: Juniperus x media
- TYPE E: Medium-sized conifers with columnar growth. Ex: Taxus bacata 'Fastigiata'
- TYPE F: Small conifers. Ex: Juniperus communis 'Green Carpet'

CULTIVATION CONDITIONS IN THE GREENHOUSE

Conifers can be grown in the field or in a container.

Field grown conifers

As displayed in Table 3.3.1, the spacing between plants will be proportional to the needs of the individuals, according to species and variety.

ТҮРЕ	Height (cm)	Spacing Minimal Surface (m²)	Recommended spacing (Distance between plants by rows in cm)
	200/300	2.25	150 x 150
A	300/400	4.50	150 x 300
	>400	9.00	300 x 300
	200/300	2.25	150 x 150
В	300/400	4.50	150 x 300
	>400	9.00	300 x 300
	200/300	2.25	150 x 150
С	300/400	2.25	150 x 150
	>400	4.50	150 x 300
	Width (cm)		
	50/100	0.55	75 x 75
D	100/150	2.25	150 x 150
	Height (cm)		
-	100/150	0.35	50 x 75
	150/200	1.25	100 x 125
-	< 40	0.25	40 x 60
	> 40	0.80	80 x 100

 Table 3.3.1: Spacing for conifers grown in the field (this may vary depending on the machinery used).

 NT07C of the Technical Standards for Gardening and Landscaping, COITAPAC.

The minimum dimensions of the root ball, depending on the height of the plant, for adequate stability when being lifted can be consulted in Table 3.3.2 (NTJ-07C).

ТҮРЕ	HEIGHT (cm)	RECOMMENDED ROOT BALL DIMENSIONS (*) (Depth x Diameter, in centimeters)
	200/250	45 x 40
	250/300	50 x 45
A	300/400	65 x 45
	400/600	75 x 55
	200/250	45 x 40
P	250/300	50 x 45
В	300/400	65 x 45
	400/600	75 x 55
	200/300	40 x 35
C	300/400	50 x 40
L L	400/500	60 x 45
	500/600	70 x 55
	Width	
	50/100	25 x 25
D	100/150	30 x 30
	Height	
	100/150	25 x 25
E	150/200	30 x 30
	< 40	22 x 22
F	> 40	25 x 25

Table 3.3.2: Recommended root ball dimensions for field-grown conifers. NT07C of the Technical Standards for Gardening and Landscaping, COITAPAC. (*) Not applicable to conifers for hedges

Conifers cultivated in containers

Container-grown conifers should have been transplanted into and grown in a container big enough for their new roots to develop so that the root system retains its shape and remains compact when the plant is removed.

The size of the container will be proportional to the size of the plant and will be at least 2 liters according to Table 3.3.3. In either case the plants will need to be moved to a larger container before root spiraling occurs.

MINIMUM VOLUME OF CONTAINER						
GROUP * MINIMUM VOLUME (liters)						
1 (> 80 cm)	4.0					
2 (between 60-80 cm) and 3 (between 40-80 cm)	3.0					
4 (between 25-60 cm)	2.5					
5 (between 25-30 cm)	2.0					

Table 3.3.3: Minimum volume of container. NT07C of the Technical Standards for Gardening and Landscaping, COITAPAC. In Annex II of the NTJ-07C, the species included in each group are listed, as well as their maximum size.

Rootstocks

Rootstocks for conifers such as Abies alba, Picea abies, Cedrus deodara, Pinus spp, Cupressus sempervirens, Platycladus orientalis, Thuja occidentalis, Chamaecyparis lawsoniana, Juniperus virginiana, Taxus baccata and similar, will depend on the species, straight plants, transplanted from two, three or four years and with a minimum length of 5 cm above the neck of the plant.

Root pruning and transplants

Conifers will be transplanted or root pruned according to their needs, species or variety, age, and location.

Conifers not grown in a nursery cannot be commercialized until they have taken new root. The plant from nursery cultivation will be root pruned a month and a half before its sale, at least, ensuring the creation of new roots.

The conifers grown in containers will be transplanted or planted at intervals of time, which will not exceed those listed in Table 4 (NTJ 07C), variables depending on the group, the cultivar, and their dimensional features.

	DURATION (years)			
*GROUP 1 and 2	GROUP 3	GROUP 4 GROUP 5		
< 100	<100	< 80	< 30	2
100-200	100-200	80-150	35-80	3
200-300	200-300	150-250	80-150	4
>350	>300	>250	>150	5

Table 3.3.4: Maximum duration of container crops without transplanting. NT07C of the Technical Standards forGardening and Landscaping, COITAPAC

Dimensions and proportions

Conifers will be measured according to the total height measured from the ground level to the top as shown in Figure 3.3.1. The base to its height is classified according to its height as shown in Table 3.3.5. (NTJ07C).



Figure 3.3.1: Measurements to classify conifers in height NT07C of the Technical Standards for Gardening and Landscaping, COITAPAC

		STANDARD	HEIGHTS (cm	ı)	
12/15	30/40	60/80	100/125	200/250	* 600/700
15/20	40/50	80/100	125/150	250/300	
20/25	50/60		150/175	300/350	
25/30	60/70		175/200	350/400	
				400/450	
				450/500	
				500/550	
				550/600	

Table 3.3.5: Measurements to classify conifers in height above 600 cm. They will be measured every 100 cm). NT07C of the Technical Standards for Gardening and Landscaping, COITAPAC

Conifers whose main dimensional characteristic is its width will be measured as shown in Figure 3.3.2 and will be classified according to the sections shown in Table 3.3.6. NTJ 07C.



Figure 3.3.2: Dimensions to classify conifers in width. NT07C of the Technical Standards for Gardening and Landscaping, COITAPAC

WIDTH (cm)
40/50
50/60
60/80
80/100
100/125
125/150
150/175
175/200
200/250
250/300

Table 3.3.6: Measurements to classify conifers in width. NT07C of the Technical Standards for Gardening and Landscaping, COITAPAC

For conifers with a regular shape, it's width will correspond to the largest measurement and for irregularly shaped ones to the median of the widths at the level of the largest section.

SUPPLY

Specific and varietal authenticity

Conifers intended for sale must have the appropriate identification and purity in relation to the species or cultivar to which they belong (if they are marketed with reference to the latter). This means that they must respond to both the features that determine the species and those that determine the cultivar. In general, conifers will be fully branched from the base according to the growth habit of the species or variety. The leaves will also have the typical color of the species or variety depending on the time of year.

Presentation

Conifers may be commercialized with a root ball, in a container or in other types of containers, as long as they are capable of developing new roots within the root ball.

- Conifers supplied in root ball:

The root ball should be solid and have a well-developed root system.

The root ball must be protected with non-galvanized wire mesh, with a basket of the same material, with degradable organic fabric, or with reinforced plaster and must be tied with suitable degradable material. In the case of specimen trees, the root ball must be protected with non-galvanized wire mesh, a basket of the same material, reinforced plaster, or in a wooden bucket and must be tied with suitable degradable material. The protective materials must not be damaged during delivery.

- Conifers supplied in containers:

A containerized conifer should have been transplanted and grown long enough for new roots to develop in such a way that the root ball will hold its shape inside the container and remain compact when removed. Roots should not show symptoms of spiraling and should not protrude significantly through drainage holes.

Container-grown conifers should be sold based on plant size and container volume. The container should be rigid enough to support the shape of the root ball, protecting the root mass during transport. The tree should be centered in the container and have enough substrate in the container relative to the volume of the container.

Particular specifications

Conifers for hedges will be fully branched from the base, with full foliage and, if necessary, must be cut back during the growing season. Conifers taller than 3 m will be trimmed annually to compensate for their growth.

Strong-growing conifers will be fully branched to the last annual branch. Both the length of the last annual branch and the set of leaves will be harmoniously proportioned to the growth habit of the species-variety.

The species that present forms of vertical growth will be delivered with the central branch intact, except for *Taxus* spp., *Thuja* spp., *Tsuga* spp.

Supply period

The appropriate planting time depends on the type of supply (root ball or container), the species of conifer, the climate in both the planting site and the nursery, the weather and the type of maintenance that is planned to be carried out.

Planting should be carried out preferably when the roots of the tree are dormant, avoiding the critical period of sprouting, which depends on the species and the climatic conditions of the place. It is also not recommended to plant in unfavorable weather conditions, such as frost, heavy rain, snowfall, or on days with strong winds or excessively high temperatures.

Supplying conifers in containers or plastered root balls facilitates handling and the possibility of planting throughout the year.

Plant health

The conifer trees must be healthy, mature, and sufficiently hardened so that their roots and future development are not compromised.

Trees cannot show defects caused by diseases, pests, physiopathology, nutritional deficiencies, or phytotoxicity due to phytosanitary treatments that reduce the value or qualification for use.

The trees should not have any burns or injuries in the bark, apart from the normal ones produced during formative pruning. There should be no broken branches or twigs and the foliage should not be damaged or dry. The twigs as well as the roots must present a good turgidity.

The substrates of the plants, both those supplied in containers and in root balls, must be free of weeds, especially for perennial plants.

Labelling

Once the vegetative material has left the nursery, each lot must have a durable label that is correctly and solidly attached to the tree, with clearly visible characters, recording:

- Name of variety and/or cultivar. If the variety has been registered, the certificate of origin must be supplied and [®] after it's registered name
- Group or type conifer
- Size: height or width
- Volume of container
- Total weight
- NTJ 07C: 1995

Reviewing the last treatment, the plant was subjected to is recommended, indicating the active material, the date of the treatment, as well as the production system.

When the plant material is marketed between countries of the European Union, it will be accompanied by a document, issued by the supplier, where the following data should be recorded:

- Indication: "CEE quality"
- Member State Code
- Name or identification code of the responsible official body
- Name and registration or authorization number
- Name of supplier
 - · Individual serial or batch number
 - · Date of issued document.
 - · Where applicable, Phytosanitary Passport number
- Where applicable, Ornamental Label
- Quantity
- In the case of imports from third countries, the name of the country of production

Verifications

- *Compliances:* Those who produce and import conifer trees will appear registered in an Official Register of Producers, Traders and Importers and will comply with the obligations to which they are subject.

- Control:
 - The application of softwood quality standards is checked individually and visually for compliance with the proposed standards. It is possible to require the test of 2% of the plants of the different batches.
 - Five percent (5%) of the conifers may have dimensions that are 10% smaller than the specifications indicated for each type, group, and category in the previous sections.

PLANTING CONIFERS (trees and shrubs)

The planting project, soil preparation and opening of planting pits was already studied in Chapter 1 so only the specificities related to conifers will be outlined below.

For the planting of trees supplied with a ball or in a container, the diameter of the pit should be as large as possible, see Table 3.3.7 (NTJ08C).

TYPE OF SUPPLY	MINIMUM DIAMETER	RECOMMENDED DIAMETER	MINIMUM DEPTH			
ROOT BALL	2 x DIAMETER OF ROOT BALL	3 x DIAMETER OF ROOT BALL	= ROOT BALL DEPTH			
CONTAINER	2 x DIAMETER OF CONTAINER	3 x DIAMETER OF CONTAINER	= CONTAINER DEPTH			

Table 3.3.7: Size of planting pits. NT07C of the Technical Standards for Gardening and Landscaping, COITAPAC

As already outlined in Chapter 1, the shape of the pit can be cylindrical, truncated conical, cubic, parallelepiped or a truncated pyramid. In compact soils, it is convenient that the volume excavated in the upper part is considerably greater than that of the lower part.

The opening of planting pits will be carried out by excavating the ground in a volume proportional to the requirements of the planting. This excavation reveals the different horizons of the soil and subsoil. The different properties of the materials that form these horizons in relation to the future planting should be considered individually and be given a separate treatment.

In the case of non-sandy soils, the walls and bottom of p its must be scarified to favor the action of atmospheric agents as well as root penetration.

Drainage

- *Check:* Once the pits have been excavated, verify that there is sufficient drainage. To carry this out, a representative number will be filled halfway with water and then check if it seeps through. If the soil has adequate drainage, the water will seep through without difficulties. If within 2 hours this has not occurred, corrective measures must be taken to avoid radical suffocation problems.

- Installation: The same procedure outlined in Chapter 1 will be followed.

When under a layer of poorly drained soil there is another layer with good drainage, vertical perforations or vertical drains must be made, which allows water to drain towards deeper layers. These drains will be filled with washed gravel or porous material and will connect with the deep draining layer.

Planting period

The most appropriate time to plant will depend on the type of supply (root ball or container), the species, the climate (both in the place of planting and in the nursery of origin), the weather, and the maintenance needs. See Table 3.3.8. (NTJ 08 C).

Planting should be carried out preferably in the dormant stage avoiding the critical sprouting period, which naturally depends on the species and the climatic conditions of the place. Unfavorable weather situations, such as frost, heavy rain, snowfall, or strong winds, or on days with excessively high temperatures should be avoided.

FACTORS TO CONSIDER							PL	ANTI	NG					
Origin	Climatic conditions	Supply	J	F	м	Α	м	J	J	Α	s	0	Ν	D
Trees from Mediterranean or warm climates.	Mediterranean	Root ball												
		Container												
From subtropical climates	Mediterranean	Root ball												
		Container												
From Mediterranean or subtropical climates	Subtropical	Root ball												
		Container												

Preferred period:

Complementary period:

Table 3.3.8: Approximate time for planting conifers depending on the climate where it will be grown, the climate of its origin and within the new location. NT08C of the Technical Standards for Gardening and Landscaping, COITAPAC

Planting procedure

The same indications outlined in Chapter 1 will be followed:

- Conifers with root ball:

- fill in the planting pit with topsoil and tap it down until the root collar of the tree is level with the ground
- Accessory elements will be removed: metal mesh (the upper part must be removed, and enough cuts made in the wire collar) or plaster protection (this must be broken and the plaster will be removed only from the lower part, making sure that the sides are perforated).
- The plant will be positioned in the pit ensuring: that it is centered, in a vertical position and that the root collar s not buried.
- If necessary, tutors or underground anchors will be placed.
- The pit will be filled with filler soil, plugging it every 30 cm deep. Settle the soil with a stick to eliminate air pockets thus facilitating the contact of the roots with the soil.
- It will be leveled, and an irrigation hole will be created to retain water or rainwater.
- A settlement irrigation will be carried out.

- Soil will be added, if necessary, up to the root collar to the neck of the plant and a second settlement irrigation can be carried out. The collar must be flush with the ground level, neither buried nor bare.

- Conifers in containers: The process is similar, except that here the accessory element is the container (not mesh or plaster).

In all cases, the work must be carried out with caution to avoid disintegrating the root ball or damaging the roots, trunk, branches, and foliage.

Filling the planting pits

The process is similar to what has been outlined in Chapter 1.

Preferably, the extracted soil should be used if it has a sandy/loamy or sandy texture, both to optimize resources and to avoid stress to the plant when its root system develops outside the planting hole.

In any case, soils of good agronomic quality should be used, suitable for a correct development of the root system.

Creating a tree pit

It consists of making a watering basin around the tree that will hold the irrigation or rainwater, and possibly the contribution of fertilizer. The height of the basin should be about 20 cm and the width of the pit equivalent to that of the projection of the crown at the time of planting. See figure 3.3.3 (NTJ 08 C).



Figure 3.3.3: Making a planting pit. NT08C of the Technical Standards for Gardening and Landscaping, COITAPAC

If planting on a slope, the pit must be made so that it is completely below the original slope. The bottom of the pit will also be flat or slightly inclined in the opposite direction to that of the slope. See Illustration 3.3.4 NT08C.



Figure 3.3.4: Making a tree pit on a slope. NT08C of the Technical Standards for Gardening and Landscaping, COITAPAC

Irrigation after planting

Once the planting has been carried out, the pit should be filled with a large amount of water so that the root system is completely wet. The soil must be at field capacity. Watering must be done at low pressure to ensure no loss of soil.

Mulching

Follow the recommendations outlined in Chapter 1

Complementary works

- Artificial support

Trees that do not have their stability assured must be properly supported until they are rooted. The use of stakes, guying systems, and other supports can anchor the tree and keep newly planted trees upright, preventing them from being uprooted or blown over by the wind, or from losing root contact with the ground.

The aim of artificial support in a new plant is:

- to avoid movements that can break roots
- to keep the tree upright until they are able to support themselves

The trees, with a root ball or in a container, can be supported by 1-4 stakes, with underground anchoring or with guy lines or cables.

The underground anchoring gives greater guarantees of security for pedestrians in public areas since aerial guy lines can be dangerous. It can also protect the tree itself from the scratches.

The stakes and other fastening elements must be maintained for a minimum of 2 years, and both the position of the newly planted trees and the condition of the guying elements must be periodically verified, especially after strong winds or very heavy rains.

- Staking

- Prevents movements that can break the root
- Stabilizes plants that need time to take root
- It must resist strong winds
- Elastic and non-abrasive straps must be used if attaching to the trunk and branches
- The material, the height and the thickness of staking will be determined by the average size of the tree and the conditions of the place
- The aerial part of the plant nor the roots must not be damaged (especially the root ball)
- It must not put people or urban furniture at risk
- It must be resistant to vandalism, hits and pulling that may occur in the planting area
- Stakes must be placed prior to filling the planting pit
- It will be fastened at least 50 cm below the bottom of the planting pit. If only one stake is used, it will be placed on the side where dominant winds prevail
- In adverse situations up to 4 stakes can be used
- Stakes will be placed in vertical and at a distance of 20 cm from the trunk
- Stakes will support the plant in such as a way that it does not move at ground level but allows the crown to sway freely in the wind
- Only one guy line should be used and will be placed at maximum one-third of the total height of the tree
- Trunk or branch guying system must be of elastic and non-abrasive materials and must not cause damage to the trees
- Stakes should not remain longer than 2 years (enough for the tree to take root and support itself)

An example of staking can be found in Chapter 1

- Underground anchoring

The following steps should be taken into consideration: See Figure 3.3.5 (NT08C):

- The root ball will be supported by a cable or an underground structure that is secured to 3 to 4 anchor points to the subsoil
- The upper part of the root ball will be protected by the wooden framework
- The guying system should be very tight
- Wires

In special cases when conifers branch from the base, the placement of stakes is not adequate and although it is always better to use underground anchoring, especially in pedestrian traffic areas, wiring or support by means of cables or guy lines can be used.

The following should be taken into consideration:

- The wiring will consist of 3 galvanized cables equidistant according to an angle of 120º.
- Before tensioning, it must be verified that the guy lines have the expected resistance and will be done in such a way that the tree does not move at ground level but allows the crown to sway freely with the wind.

- The cables will have galvanized turnbuckles, anchors to the ground and have protections in the area where the tree is fixed so that they do not cause injuries to passers-by.
- The cables will carry signaling plates, with a clearly visible color to warn of their presence, placed between 1 and 2 m above the ground. See Figure 3.3.6
- The aerial part of the anchors must be marked with a highly visible colored tube.
- The installation of cables and turnbuckles will allow pedestrians to pass under them, so they must be anchored to supports, struts or other elements at a minimum height of 2 m from the ground.
- The anchoring or supporting system must be removed 2 years after planting.



Figure 3.3.5: Examples of underground anchoring. NT08C of the Technical Standards for Gardening and Landscaping, COITAPAC



Figure 3.3.6: Example of cable anchoring system NT08C of the Technical Standards for Gardening and Landscaping, COITAPAC

- Plant protection

Tree protectors will aim to minimize the risks of blows or friction produced by vehicles, machines, work that can be carried out in the crown, trunk or that can be produced by rodents in the bark or neck of the tree.

These protectors will be placed so that they do not damage the trunk, root collar system, and must be replaced before their presence damages the plant (due to its growth) or be removed when they are no longer required.

Protective sleeves will serve to protect against low intensity blows, in areas with strong insolation, or to protect against frost in young plants.

- Anti root barriers

They will be used to deter or limit root penetration, minimizing damage to pavements, foundations, subterranean utility networks, etc.

To be effective, a barrier must block root growth and suppress any root activity on the other side, avoiding the possibility that any roots could pass over, under, around or through it and proliferate on the other side of it. Otherwise, it will provide a false sense of security.

To install these barriers, the project specifications and the manufacturer's instructions must be followed. In any case, they should not hinder the stability of the tree.

The use of chemical root barriers, with inhibitors of root growth, must be made based on their technical knowledge, obtained from the study of their performance, their durability, their possible phytotoxicity and their possible toxicity for people and the environment.

- Aeration tubes

The placement of tubes will help to aerate the soil in the root zone. Emission points from irrigation systems may not be installed in them.

They will be placed in a vertical position, going from the surface to the bottom of the planting pit and will be filled with washed gravel or porous and consistent material, its surface covered with a perforated lid. Often, they can serve as a drain.

Subchapter 3.4

Maintenance

3. CONIFERS

INTRODUCTION

The general objectives of the maintenance of any plant species, and in this case, conifers, are as follows:

- Achieve and maintain a proper structure and development of the plants, arboreal or shrub.
- Achieve a satisfactory state of the plants
- Provide greater beauty to plants and their environment

Prior to taking any steps, the objectives must be clearly determined and previously defined by the technical manager within a maintenance program or plan that considers the specific requirements of the included plants (coniferous in this case). The various operations as well as its management and costs will be taken into consideration.

MAINTENANCE OPERATIONS

For the correct maintenance of coniferous trees, the following operations must be completed:

a) Technical inspection, whose objectives will be:

- Outline the necessary maintenance operations
- Detect possible unforeseen maintenance needs, such as: pathologies, failures in the irrigation and drainage system, etc.
- Determine singular actions
- Update the technical inventory

b) Pruning. In most conifers, the pruning of a branch without leaving foliage, generally causes its death as they lack dormant buds on old wood located below the foliage area.

The following forms of pruning are possible:

- **b.1)** FORMATIVE PRUNING and must be carried out on young specimens, already planted in their final place. This will prevent larger cuts and promote better healing. Conifers generally need little or no formative pruning, as most have a dominant central leader.

Formative pruning can be:

• For trunk formation, and will consist of maintaining a single dominant stem, reducing, or eliminating those secondary branches that compete with the guide or that are damaged.

• For structure formation, which will establish a strong trunk provided with sufficiently robust structural branches and suitably oriented and spaced along the trunk. It must help to achieve the natural form of the species or direct it towards artificial forms more appropriate to the situation or intended use (architecturalized pruning).

• **Thinning out/lifting the crown**, which will consist of the progressive elimination of the lower branches of the arrowed trees (with central leader and lateral branches). Only small diameter branches should be removed, also considering that the part removed does not exceed one third of the total crown height. This is the case of coniferous trees used for alignments or in pedestrian areas. The free height of the trunk will ultimately depend on its location: on public roads it will be 4.5 m and in pedestrian areas 2.5-3 m



· For security of overhead networks and other utilities

Figure 3.4.1: Thinning out/lifting the crown

- **b.2)** ADULT TREES. Pruning can be carried out for different purposes:

• Cleaning or sanitation. which will consist in eliminating dead, weak, poorly oriented, codominant, crossing, cracked or broken branches, non-recoverable branches due to disease and suckers Likewise, cleaning will be carried out of whatever remains on the tree without reason or justified cause.

• **Security**. This will eliminate everything that could pose a potential risk (detachment of branches, damage to facilities or buildings) or that could hinder certain activities (pedestrian and vehicle traffic).

• **Thinning**. This step consists of selectively removing branches or parts of them in order to: reduce the density and weight of the crown, allow light to penetrate in the inner part of the tree crown, reduce the resistance of the tree to the wind and enhance more balanced internal sprouting. Thinning must be balanced and not excessive, so as not to reduce the photosynthesis capacity and avoid the formation of branches with excessive apical weight.

• **Crown reduction**. The aim will be to reduce its volume (height and width), create security spaces around buildings and service networks, increase the stability of the tree or branch and reduce shading to homes and solar panels. The English method consists of eliminating terminal branches, leaving a lateral branch in each cut, thick enough and facing outwards, so that it assumes the role of central leader.

• **Restoration and reform pruning**. This process will improve the structure, shape, and appearance. It should only be applied to large specimens with great heritage value. Only some species admit it.

- **b.3) HRUBS.** Cleaning, thinning, and reduction pruning is mainly carried out.

• Architectural pruning. This will be based on a previous formative pruning and will try to obtain geometric designs, regular maintenance being very important. Due to its high cost, it only makes sense in parks and historical gardens of certain styles. Examples of architectural pruning are trimmed hedges, arches, topiary art, etc. Associated with this type of architectural pruning is the interweaving which consists in creating crisscross patterns sometimes accompanied by grafting, of branches from different trees. Examples are arches, gazebos, tunnels, etc. Not all conifers admit this type of pruning.



Figure 3.4.2: Topiary pruning in Taxus baccata

c) Soil operations. Regardless of other special or improvement works that the technicians could determine, the most common operations are:

- c.1) CARIFICATION. This consists of breaking the soil crust, favoring both aeration and the
 penetration of water and fertilizers into the soil. The scarification depth should be 3-7 cm,
 depending on the needs of the soil.
- c.2) DE-COMPACTING OF THE SOIL. The aim here is to improve the aeration conditions of a soil.
- c.3) VERTICAL AERATION of the soil through holes (depth: 30-50 cm; diameter: 5-10 cm., distance between holes: 0.5-2 m) that will later be filled with gravel or porous material. Solid bars of porous material or corrugated plastic tubes filled with gravel can also be placed.
- c.4) PARTIAL SUBSTITUTION OF THE SOIL. In the case of compacted, salinized, and contaminated soils, it will be replaced with ones that are in good agronomic condition. It can be more or less deep and must be done in such a way that it affects the roots as little as possible. See NTJ 14C (3rd part).
- c.5) FERTILIZATION. This must be carried out based on a diagnosis and according to real needs, determined by corresponding analyzes (soil, foliar, water) or by the deficiency symptoms presented.

• **Requirements.** Systematic fertilization should be done only in impoverished or highly washed soils. In the case of cultivation in containers or in gardens on protected spaces, a periodic contribution of fertilizers will be advisable since they are frequently made to grow in soils with not too many available nutrients or even with limited volume of soil.

• **Type of fertilization**. preferably with slow-release organic or chemical fertilizers; generally, with N-P-K compounds and sometimes with fertilizers rich in micronutrients. Fertilization will be more effective when applied with organic mulches.

• **Dose**. This will be calculated according to the needs of each plant, the deficiencies shown in the analyzes. The dose will vary according to species, age and the physiological state of the plant, the characteristics of the soil (pH, organic matter, etc.) and the weather. Generally, it is enough to make 1-2 annual contributions (slow-release fertilizers), small amounts and more frequent contributions (soluble fertilizers) or as a background fertilizer in the planting phase (organic fertilizers).

• **The fertilized area**. This should be slightly larger than the irrigated zone and somewhat away from the trunk so as not to damage emerging young roots (mineral or chemical fertilizers) or in small holes (slow-release organic and mineral fertilizers).

· Application. Superficial, in holes (depth 20-50 cm; diameter 5-10 cm, distance 30-90 cm), in

irrigation (fertigation) or by foliar application.

• **Period**. Preferably when the plant is beginning its active growth (soluble fertilizers), or at any other time (slow-release fertilizers). The soil should humid, or the rainy season should be in process.



Figure 3.4.3: Granulated or pellet fertilizers

d) Mulching. mulch should surround the trunk of the plant, expanding it, if necessary, as the plant grows. The layer of mulch should be 5-10 cm thick, watering afterwards to pack it down slightly and thus avoid losses due to wind or rain. In humid areas, and to avoid possible rotting due to excess humidity, the mulch will be separated from root collar NTJ 05 A. The purpose of mulching is:

- to protect the roots from the cold
- to preserve moisture in the soil
- to increase water infiltration and aeration
- to increase the % of organic material on the ground
- to promote mycorrhization
- to reduce the presence of weeds
- to reuse residues from pruning and cleaning



Figure 3.4.4: Mulching

e) Weeding. Can be manual, mechanical, or chemical.

f) Irrigation. The following must be taken into consideration:

- Although urban trees are not usually irrigated, except for newly established ones, they sometimes require emergency irrigation.
- Regular irrigation will cause a reduced or very superficial root system, mainly in those plants located in tree pits.
- The water used must meet the appropriate physical, chemical and biological requirements as irrigation water; In the case of using reused wastewater, its chemical composition will be considered.
- Irrigation may be manual, based on hoses connected to hydrants, with a tanker truck or similar used exclusively for this purpose and provided with an irrigation perch, automatic (by flooding dripping nozzles, sprinkler).
- Manual irrigation will be carried out promptly and with little pressure to avoid dragging and formation of gullies
- Sprinkler irrigation is not recommended as it causes damage to the neck and bark of the plants and causes the appearance of fungi.

g) Phytosanitary treatments.

- Preventive or curative. Carried out by a qualified technician who must always comply with the current legislation on phytosanitary treatments and the instructions that appear on the labels. These professionals must pay special attention to the phytosanitary treatments that are carried out on public roads, using formulations and active materials of low toxicity both for humans and for terrestrial and aquatic fauna.
- Sometimes the use of growth inhibitors may also be used.

h) Treatment of wounds will be carried out with products that are innocuous for the cambium and with a bactericidal-fungicidal nature. In general, the use of healing paints or mastics will not be recommended, as they promote the appearance of rot. Nor is it recommended to fill the cavities in the trunk.

i) Maintenance of artificial support for which periodic reviews will be carried out, especially after situations that may alter it (storms, gales, works, etc.) and make necessary the implementation of appropriate measures (remove friction, readjust the tensioners, etc.).

j) Elimination of dead plants and stumps, which will be decided by the technical staff. These operations might be recommended when dealing with:

- Dead individuals or those with a serious infectious disease
- Plants that represent an irreparable danger
- Plants that affect buildings, roads and other urban furniture.
- Excessive plant densities that lead to over competition and mutual damage between plants

In the case of stumps, they may be cut at ground level, buried or removed (if they were arranged in planting pits) by various methods.


Figure 3.4.5: Stump chopper

k) Replacement of dead plants. This should be done using others of the same species or cultivar, provided that their death has not been due to adaptive problems, diseases, or serious pests, or when the technician proposes to replace it with another more suitable species.

I) Cleaning the planting pits

RECOMMENDED MAINTENANCE PROGRAMS

The maintenance operations will depend on the species, its situation, the function it performs, its age, etc. Standard maintenance guidelines are given in the following sections, which should be followed whenever possible. Sometimes it will be necessary to establish the requirements of a single specimen or group to specify the operations as well as the periodicity of the same.

The frequency of maintenance is a variable that will depend on the species, the determinants corresponding to the location of the plants (climate, microclimate, soil, etc.) and the planting conditions. Specific maintenance programs must be developed that adapt to different species, establishing the appropriate period to carry out each operation.

RECOMMENDED MAINTENANCE PROGRAM		
	Maintenance Procedure	Frequency guidelines
1.	Technical inspection	Annual or immediately after one incident, biannual in case of shrubs
2.	Pruning	According to NTJ.
3.	Soil intervention Scarification Fertilizing Replacing organic mulch Weeding Other interventions in the soil	When determined by technical inspection When determined by technical inspection Annual Biannual or according to needs When determined by technical inspection
4.	Watering	According to needs and location, especially during the first years and after planting
5.	Preventive phytosanitary treatments	According to location and treatment
6.	Corrective and curative phytosanitary treatments	When determined by technical inspection and depending on the treatment
7.	Treating injuries	When determined by technical inspection
8.	Maintaining artificial foundations	Annual and after incidents
9.	Removing dead or dangerous trees	When determined by technical inspection
10.	Removing stumps	When it is necessary

Table 3.4.1: Recommended maintenance, according to NTJ

Subchapter 3.5

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