

Aliens to the Canary Flora

Part. I. Trees and Shrubs

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RESUMEN

La enumeración presente, tratando los árboles y arbustos naturalizados en las Islas Canarias, intenta de sumarizar todos los hallazgos de tales plantas, mencionadas en publicaciones anteriores. Se cita 57 especies, originalmente introducidas y cultivadas, ahora perfectamente establecidas en las islas. Algunas de las especies, hoy en día, forman parte de nuestra flora, algunas son notables por su carácter invasor y se extienden por medio de renuevos y semillas. Se da consideración especial a las especies encontradas en la isla de Gran Canaria.

INTRODUCTION

The present enumeration of trees and shrubs that have been introduced and cultivated, and that have now become naturalized in the Canary Islands, summarizes various previously published records (see literature). Most of the species mentioned are now too well established to be overlooked any longer by phytologists; some plants are spreading fast, by rootshoots or seeds, and are now covering areas formally occupied by native Canary elements. Special consideration is given to their occurrence on Gran Canaria.

*) Hortus Acclimatationis "Llano de la Piedra", Santa Lucía de Tirajana, Gran Canaria. Comunicación N.º 2.

REFERENCES :

- KUNKEL, G.: Plantas Vasculares Nuevas para la Flora de Gran Canaria.
Cuad. Bot. I: 3-23; 1967.
- Plantas Vasculares: Nuevas Adiciones para la Flora de Gran Canaria.
Cuad. Bot. II: 23-27; 1967.
- Nuevas Plantas para la Flora Canaria.
Cuad. Bot. III: 57-58; 1968.
- LEMS, K.: Floristic Botany of the Canary Islands.
Sarracenia 5: 1-94; 1960.
- LID, J.: Contributions to the Flora of the Canary Islands.
Skr. Norske Vidensk.—Akad. Oslo, I. Mat.—naturv. Kl., N.S. 23: 1-212
(1967) 1968.

Enumeration of Genera and Species

PINACEAE

Pinus halepensis Mill.

Origin: Mediterranean

Names: Pino Carrasco, Alepo Pine

Planted in higher mountain areas such as Tamadaba where it grows freely and now self-sown (KUNKEL Cuad. 1:6).

Pinus nigra Arnold

Origin: Southern Europe

Names: Pino, Austrian Pine

Distribution same as *P. halepensis*.

Pinus pinea L.

Origin: Mediterranean

Names: Pino piñonero, Italian Pine

Self-seeding occasionally in the forest region of Pajonales, Gran Canaria (KUNKEL Cuad. I:6).

GRAMINAE

Arundo donax L.

Origin: Mediterranean?

Names: Caña, Cane, Giant Reed

Mentioned by LEMS (:83) from the Central and Western islands, LID (:21) recalls it as commonly cultivated and often naturalized. To be honest I had the same opinion, until a geologist friend (Dr. H.—U. SCHMINCKE, Heidelberg) found on Gran Canaria the fossil prints of a cane which much resembles *Arundo*. The record still needs verification and, therefore, remains unpublished; but it could come to pass that *Arundo* has to be considered as native to the Canary flora.

PALMAE

Phoenix dactylifera L.

Origin: North Africa?

Names: Datilera, Date palm.

According to LEMS (:88) on Lanzarote, Fuerteventura and Tenerife. Mentioned for Gran Canaria by KUNKEL (Cuad. I:10), but these data still refer to originally introduced specimen which are now regenerating from seeds; the species is quite common near Gran Tarajal on Fuerteventura. It has been found (unpublished record) perfectly naturalized at Maspalomas, Gran Canaria, or it might even be considered as native to this area.

ACERACEAE

Acer campestre L.

Origin: Europa/Asia

Names: Arce, Field Maple

I have not seen this species growing in the wild but LID

(:116) mentioned it from Tenerife: A small tree in the Mercedes Forest 950 m.

ASCLEPIADACEAE

Gomphocarpus fruticosus (L). R. Br.

Origin: Africa

Name: Mata de la seda

Mentioned by LEMS (:15) from Gran Canaria, Tenerife and Gomera. I found several plants, forming bushy communities, on Gomera (La Laja) and in some northern barrancos of Lanzarote. Naturalized in the Canary Islands since the 18th century or earlier.

CAESALPINIACEAE

Calliandra tweedii Benth.

Origin: South América

Names: Mimosa, Plumerillo

Found at several localities northwest of San Sebastián, Gomera (KUNKEL Cuad. III:58), where it spreads from seeds in tomatoe plantations.

Cassia bicapsularis L.

Origin: South America

Name: Cassia

This species and 3 others are mentioned by LEMS (:54). Localities on Gomera, Tenerife and Gran Canaria are given by LID (:87).

Ceratonia siliqua L.

Origin: Mediterranean

Names: Algarrobo, Carob tree

Cultivated tree, from the eastern Mediterranean and common in gardens and fields of all islands. LEMS (:54) mentioned the species from Gran Canaria, Tenerife and Gomera. Spreading by seeds especially on some farms near Agate, Gran Canaria.

CAPRIFOLIACEAE

Sambucus canadensis L.

Origin: North America

Names: Sauco, Elder

Found spreading from rootshoots on Gran Canaria (KUN-
KEL Cuad. II:24).

EUPHORBIACEAE

Ricinus communis L.

Origin: East Africa?

Names: Ricino, Castor-oil plant.

Reported as "common weed" by LEMS (:47) for Lanzarote, Fuerteventura, Tenerife and Palma. LID (:115) named various localities on Hierro and Gomera and mentioned it as rather common on Palma, Tenerife and Gran Canaria. It has been previously mentioned for Gran Canaria in Cuad. I:14. The species spreads rapidly from seeds, especially along road sides and waterchannels.

FAGACEAE

Castanea sativa Mill.

Origin: Mediterranean/Asiatic

Names: Castaño, Chestnut

Can be found in large plantations especially on Gran Canaria, Palma and Tenerife. LEMS (:47) records is as common in the forest climate regions. LID (:51) says "rather com-

mon and in some places forming forest". He also write's on "the trunk of the big castaña tree in Aguamansa, pictured by Pitard et Proust (1908), was measured 14. April 1954. The girth of the bole 1.5 m above the ground, amounted to 11.75 m."

Quercus ilex L.

Origin: Mediterranean and Southwest Asia

Names: Encina, Holm Oak

According to LEMS (:47) "always escaped from plantings" (Tenerife). Occasionally occurring on Gran Canaria (unpublished record), in the Angostura valley.

Quercus lusitanica DC.

LEMS (:47) reported this species from Tenerife, without giving localities.

Quercus robur L.

Origin: Europe, Western Asia

Names: Roble, Common Oak

Growing from seeds and rootshoots in the forest region of Northern Gran Canaria, i.e. Barranco los Tiles, Barranco la Virgen, near to Teror etc., where very old specimens exist.

Quercus suber L.

Origin: Mediterranean

Names: Alcornoque, Cork Oak.

Always spreading in and near to existing plantations, i.e. near to Teror on Gran Canaria (KUNKEL Cuad. I:14) where it grows from rootshoots and, occasionally, from seeds. LEMS (:47) reported the species from Tenerife.

MALVACEAE

Abutilon grandifolium (Willd.) Sweet

Origin: South America

Name: Abutilon

Originally planted in gardens and along roadsides, the plant escapes easily and is now a well established alien to the Canary flora (KUNKEL Cuad. I:15). LID records it from Tenerife and Gran Canaria, as *A. cf hirtum* G. Don.

MELIACEAE

Melia azedarach L.

Origin: Southern Asia

Names: Paraíso, Persian Lilac

Spontaneous regeneration has been reported by KUNKEL (Cuad. II:27) from Gran Canaria; several plants, up to 1 m tall were found in 1967 around old (and planted) trees of this species towards San Roque.

MIMOSACEAE

Acacia cyanophylla Lindl.

Origin: Australia

Names: Mimosa, Acacia azul, Blue-leaved Wattle

Cultivated tree, useful for reforestation. Occasionally escaping, seeding itself and establishing itself to form little communities on Gran Canaria (KUNKEL Cuad. I:16). A presumed natural hybrid (*A. cyanophylla* x *A. saligna*) has been found at the northwestern edge of the golf course, Bandama.

Acacia farnesiana Willd.

Origin: South America

Names: Espino, Sweet Acacia

Spiny bush or bushy tree, planted in various parts in the islands. LEMS (:54) mentioned the species from Lanzarote, Gran Canaria, Tenerife and Gomera. On Gran Canaria it is spreading by seeds, especially in the lower part of the valley of Mogan.

Acacia retinodes Schlecht.

Origin: Australia

Name: Mimosa

Found well established on Gran Canaria in the Tamadaba region (Finca del Cortijo, towards Agaete valley; KUNKEL Cuad. I:16) where it grows freely from seeds.

Acacia saligna Wendl.

Origin: Australia

Names: Mimosa, West Australian Weeping Wattle.

Although mentioned very briefly in Cuad. I: 16, a considerable number of self-seeded young plants were found on the slopes of Cerro San Cristóbal (Las Palmas), below the original plantations.

Albizia lophantha (Willd.) Benth.

Origin: Australia

Names: Albizia, Mimosa.

Originally planted in gardens and along roadsides. In the moister climate of the North this species escapes easily (by seeds) and may form dense stands. Recorded from Gran Canaria (KUNKEL Cuad. I:16) from the bushland on roadside above Moya, towards Fontanales.

MORACEAE

Ficus carica L.

Origin: Mediterranean

Names: Higuera, Common Fig

Although LEMS (:61) mentioned this species as “common throughout the dry areas” of all islands, I failed to find the common fig truly naturalized and distributing itself. However older specimens survive on abandoned farmland.

Morus alba L.

Origin: East Asia

Names: Morera, White Mulberry

Occasionally surviving on abandoned farmland (KUNKEL Cuad. I:16). Frequently planted and observed as roadside species.

Morus nigra L.

Origin: Southwestern Asia

Names: Moral, Black Mulberry

Reported from Tenerife and Palma by LEMS (:61) as “planted and escaped in the lower areas”.

MYOPORACEAE

Myoporum laetum Forst. f.

Origin: New Zealand

Names: Transparente, Ngaio

LID (:162) reported from Hierro: A tree 2 km north of Valverde 600 m.—As this species is commonly planted along roadsides and on fields, the finding surely refer to a cultivated specimen. On Gran Canaria, however, *M. acumina-*

tum was found growing epiphytically on *Phoenix canariensis* which seems to be a truly spontaneous phenomena.

MYRTACEAE

Eucalyptus camaldulensis Dehn.

Origin: Australia

Names: Eucalipto, Murray Red Gum

Commonly cultivated as a roadside tree at several localities on the Central and Western islands. Escaped specimens, self-sown, were found in the Barranco la Mina, 900 m, on Gran Canaria (KUNKEL Cuad. I:17).

Eucalyptus globulus Lab.

Origin: Australia

Names: Eucalipto, Blue Gum

LEMS (:61) mentioned "plantations of *Eucalyptus* (especially *E. globulus*) replace the laurel forests in part of T(enerife), and on G(omera) in small areas. Often naturalized". On Gran Canaria, too, such naturalization has occurred as published (KUNKEL) in Cuad. I:17.

Eucalyptus spp.

Origin: Australia ?

Larger plantations of 2 other species of *Eucalyptus*, still unidentified, on Monte Doramas 800 m, Gran Canaria (Cuad. I:17).

Myrtus communis L.

Origin: Mediterranean

Names: Mirto, Myrtle

Reported by LEMS (:61) from Gran Canaria, I fail to find

true wild and self-distributing specimens; it is planted in several places, i.e. slopes of Monte Lentiscal.

OLEACEAE

Ligustrum vulgare L.

Mentioned by LEMS (:62) from Tenerife, I wonder if this species should not be referred to *L. lucidum*, commonly planted along roadside on the Central islands.

PAPILIONACEAE

Robinia pseudo-acacia L.

Origin: North America

Names: Falsa Acacia, Robinia, Locust

Occasionally germinating from seeds but frequently spreading by rootshoots. On Gran Canaria found at Finca los Osorios near Teror.

Spartium junceum L.

Origin: Mediterranean

Names: Retama amarilla, Spanish Broom.

According to LEMS (:58) "common along roadsides", on Gran Canaria, Tenerife and Hierro. LID (:97) mentioned the obviously planted row of this species "outside the eastern ridge of Caldera Bandama" on Gran Canaria, where it germinates occasionally on lapillis. The Spanish Broom spreads freely on the drier slopes near to San Mateo, towards Teror.

Ulex europaeus L.

Origin: Europe

Names: Tojo, Gorse, Furze

Spreading fast in the open heaths on Tenerife (LEMS: 59). According to LID (:103): Pico Inglés, near Herjos, Caldera Rula ab. Icod, on Tenerife. — I found this species, already rather aggressive, invading the more open pine forest south-west of Realejo Alto y La Guancha.

PITTOSPORACEAE

Pittosporum undulatum Vent.

Origin: Australia

Names: Azarero, Mock Orange.

This species, occasionally grows as an epiphyte on *Phoenix canariensis*. Seeds distributed by birds, i e. at the Vivero Forestal de Tafira, on Gran Canaria.

PUNICACEAE

Punica granatum L.

Origin: Mediterranean

Names: Granado, Pomegranate

Reported by LEMS (:67) from Tenerife, and by LID (:126) from Tenerife and Hierro, as a “small subsponaneous shrub”. Mentioned for Gran Canaria by KUNKEL (Cuad. I:21), spreading freely from runners and rootshoots, forming roadside hedges i.e. between Tafira and Atalaya.

RHAMNACEAE

Rhamnus alaternus L.

Origin: Mediterranean

Names: Alaterno, Buckthorn

Found at Several places (ex-hort.) near to La Calzada and San Mateo on Gran Canaria (KUNKEL Cuad. I:21), and seen growing wild in the barranco below Madroñal of the same island.

ROSACEAE

Cydonia oblonga Mill.

Origin: Southwestern Asia

Names: Membrillo, Quince

Bushy tree, favoured in Canarias for its fruits (“dulce de membrillo”). Reported by LEMS (:69), as *C. vulgaris* Pers. from Hierro. LID (:85) mentioned it from Tenerife, as spontaneous at several places.

Prunus amygdalus Stokes

Origin: Southeast Europe to Southwest Asia

Names: Almendro, Almond tree

According to LEMS (:70) “sometimes escaped from cultivation”. - It forms a perfectly natural looking parkland in the upper region of Gran Canaria, between Tejeda and San Bartolomé (KUNKEL, Cuad. I:21).

Prunus avium L.

Mentioned by LEMS (:70), without further localities. It might have been mistaken for *P. cerasus* L. which spreads easily from rootshoots.

Prunus domestica L.

Origin: Europe and Southwest Asia

Names: Ciruelo, Plum tree

Recorded from Gran Canaria (KUNKEL Cuad. I:21) from Barranco Barbusanos and near to Tenteniguada where it is cultivated and spreading from rootshoots. Presumably also common on Tenerife and the Western islands.

Pyrus communis L.

Origin: Eastern Europe

Names: Peral, Pear tree

Reported by LEMS (:70) from Tenerife.

Rubus ulmifolius Schott

Origin: Southern Europe?

Names: Zarzamora, Blackberry

Common on all islands except the drier eastern islands where only smaller patches have been found, spreading easily from rootshoots, natural layering and from seeds distributed by wandering men, larger animals and birds. Mentioned by LID (:85) for the five western islands. LEMS (:70) noticed that "the species of *Rubus* have not been critically collected in the islands. Several other forms were seen."

Sorbus aria Crantz

Reported by LEMS (:70) from Tenerife.

RUTACEAE

Citrus aurantium L.

This species has been mentioned by LEMS (:71) from La Palma. As this name refers to the Bitter or Seville Orange, rare in cultivation in the Canaries, the record mentioned above may refer to *C. sinensis* (L.) Osbeck the common orange.

SALICACEAE

Populus alba L.

Origin: Europe/Asia

Names: Chopo blanco, White Poplar

Reported by LEMS (:71) from "around villages" on Gran Canaria, Tenerife and Palma. LID (:50) mentioned it, too, from Gomera and the other islands, as introduced and na-

turalized. The species is common in certain localities on Gran Canaria where it spreads from rootshoots and may form a dense bushy community.

Populus nigra L. var.

Origin: Europe/Asia

Names: Chopo, Alamo negro, Black Poplar

Planted and growing wild from rootshoots on Gran Canaria (KUNKEL, Cuad. I:21). A young seedling was found below Fontanales.

Salix fragilis L.

Origin: Europe/Asia

Names: Sauce mimbre, Crack Willow

Reported by LEMS (:71) "in more ruderal places below villages" on Tenerife, and KUNKEL (Cuad. II:27) near to San Mateo, Gran Canaria, in moist valleys. Sometimes surely mistaken for the endemic *S. canariensis* Chr. Sm.

SIMAROUBACEAE

Ailanthus glandulosa Desf.

Origin: East Asia

Names: Arbol del Cielo, Tree of Heaven

Slender tree of invading character, found in several localities on Gran Canaria (KUNKEL Cuad. I:22), spreading by seeds or rootshoots, especially near to Arucas and Teror.

SOLANACEAE

Nicotiana glauca Grah.

Origin: South America

Names: Several names in the Canary islands = Tabaco moro, mimo, venenero, bobo, malgusto; Tree tobacco.

This alien must be accepted as the most successful naturalized newcomer to the Canary flora. According to LEMS (:74) it is thoroughly naturalized in the desert regions, dunes, etc. (of all islands). LID (:157) mentioned it as "common in the five western islands, and observed at several places in Lanzarote". Described from Fuerteventura by KUNKEL (Willdenowia 4: 79-88, 1965) as successfully established. The species, on Gran Canaria, is common in barrancos and on abandoned fields where it forms open stands (with *Mesembryanthemum crystallinum* as groundcover).

Solanum jazminoides Paxt.

Origin: South America

This species has been planted in gardens and along roadsides (La Calzada, Angostura) where it spreads from rootshoots and seeds. Specimens det.: P. SUNDING, Oslo.

Solanum marginatum L.

Origin: East Africa

Name: Hierbamora

LID (:175) mentioned the species for Tenerife and Gran Canaria. Recorded by LEMS (:75) for Gran Canaria, as *S. sodomaeum* L. It grows from seeds, especially near to Valleseco and in the Barranco Los Tiles.

ULMACEAE

Celtis australis L.

Origin: Mediterranean

Names: Almez, Nettel tree, European Hackberry

A colony, without doubt originally planted but now spreading by rootshoots, can be found above Valsendero, in a laurel relict in the Barranco la Virgen, Gran Canaria.

Cork Oak = *Quercus suber*
 Crack Willow = *Salix fragilis*
 Date palm = *Phoenix dactylifera*
 Datilera = *Phoenix dactylifera*
 Elder = *Sambucus canadensis*
 Encina = *Quercus ilex*
 Espino = *Acacia farnesiana*
 Eucalipto = *Eucalyptus* spp.
 European Hackberry = *Celtis australis*
 Falsa Acacia = *Robinia pseudo-acacia*
 Field Maple = *Acer campestre*
 Furze = *Ulex europaeus*
 Giant Reed = *Arundo donax*
 Gorse = *Ulex europaeus*
 Granado = *Punica granatum*
 Hierbamora = *Solanum marginatum*
 Higuera = *Ficus carica*
 Holm Oak = *Quercus ilex*
 Italian Pine = *Pinus pinea*
 Lantana = *Lantana camara*
 Locust = *Robinia pseudo-acacia*
 Malgusto = *Nicotiana glauca*
 Mata de la seda = *Gomphocarpus*
 Membrillo = *Cydonia oblonga*
 Mimo = *Nicotiana glauca*
 Mimosa = *Acacia, Albizia, Calliandra*
 Mirto = *Myrtus communis*
 Mock Orange = *Pittosporum undulatum*
 Moral = *Morus nigra*
 Morera = *Morus alba*
 Murray Red Gum = *Eucalyptus camald.*
 Myrtle = *Myrtus communis*
 Nettle tree = *Celtis australis*
 Ngaio = *Myoporum laetum*
 Olmo = *Ulmus minor*
 Paraíso = *Melia azedarach*
 Pear tree = *Pyrus communis*
 Peral = *Pyrus communis*
 Persian Lilac = *Melia azedarach*
 Pino = *Pinus nigra* et spp.
 Pino Carrasco = *Pinus halepensis*
 Pino piñonero = *Pinus pinea*
 Plumerillo = *Calliandra tweedii*
 Plum tree = *Prunus domestica*
 Pomegranate = *Punica granatum*
 Quince = *Cydonia oblonga*
 Retama amarilla = *Spartium*
 Ricino = *Ricinus communis*
 Robinia = *Robinia pseudo-acacia*
 Roble = *Quercus robur*
 Sauce mimbre = *Salix fragilis*
 Sauco = *Sambucus canadensis*
 Smooth-leaved Elm = *Ulmus minor*
 Spanish Broom = *Spartium junceum*
 Sweet Acacia = *Acacia farnesiana*
 Tabaco moro = *Nicotiana glauca*
 Tojo = *Ulex europaeus*
 Transparente = *Myoporum laetum*
 Tree of Heaven = *Ailanthus gland.*
 Tree tobacco = *Nicotiana glauca*
 Venenero = *Nicotiana glauca*
 West Australian Weeping Wattle =
Acacia saligna
 White Mulberry = *Morus alba*
 White Poplar = *Populus alba*
 Zarzamora = *Rubus ulmifolius*