

*Studies in the Canary Islands Flora:*  
*The Vegetation of Punta de Teno, Tenerife*

By David Bramwell \*

I n t r o d u c t i o n

The Punta de Teno is situated at the extreme north-west point of Tenerife, the largest of the Canary Islands (see fig. 1). The flora is very rich and interesting, comprising some 310 species, many of which are endemic and relict. There have not previously been any detailed studies of this flora although Salter (1918), Burchard (1928) and Sventenius (1948-9) briefly mention the area and Salter gives a short physical description.

Until recently the Punta de Teno was very isolated and difficult to get to but a tunnel has been constructed through the cliffs linking the area with the town of Buenavista del Norte. The area is scheduled for development as a tourist centre and agricultural area and the building of a small airport is planned. Work has already started on banana plantations, vineyards and tourist facilities so that it seemed worthwhile to make a survey of the natural plant communities and a floristic list for the area before the vegetation is altered or destroyed.

TOPOGRAPHY AND GEOLOGY

The area included in this study is a broad, flat coastal platform of fairly recent Quaternary origin (Hausen 1956) covering an area of some 24.5 square kilometres. It consists of a more or less level area of cinder (lapilli), scree and vol-

\* Department of Botany, University of Reading; Reading, U.K.

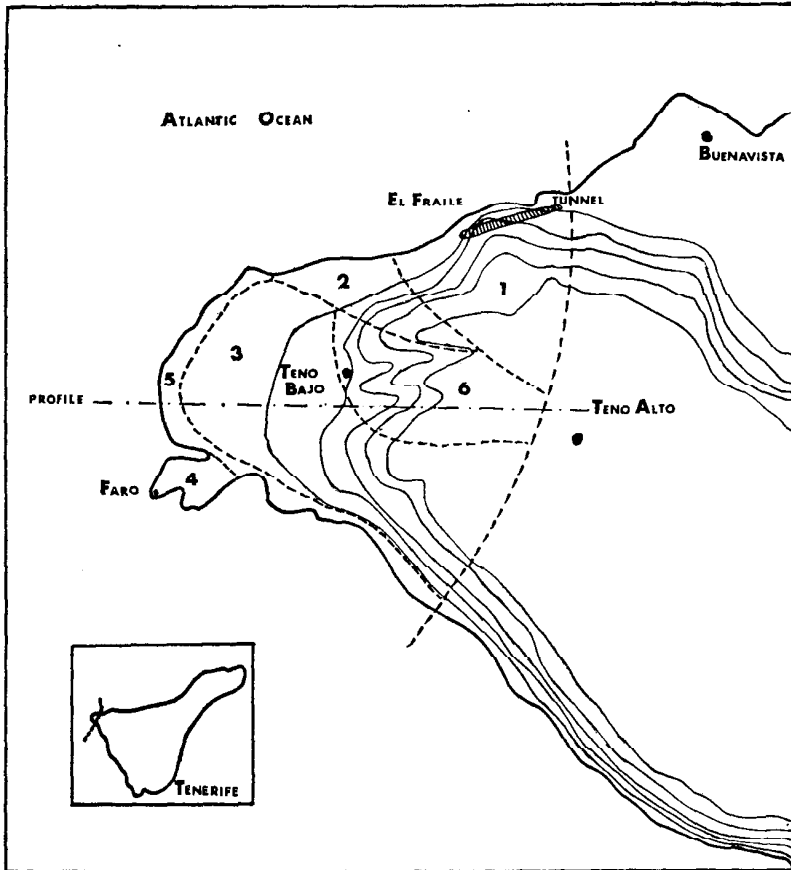


Figure 1: Sketch map of the Teno region showing area studied.

canic debris ranging from sea-level to c. 100 metres. The platform slopes gently to the sea to the west and north. The extreme point, the Faro de Teno, is a projection of lapilli and lava debris which has a very characteristic flora with a strong North African element.

To the east and south the area rises more steeply to rugged cliffs of over 700 m. These cliffs, of old Tertiary basalt, form the northern boundary of the Teno massif, a group of rugged, deeply eroded mountains making up one of the two

geologically ancient blocks which occur at either end of Tenerife. The cliffs have an endemic flora some of which is in danger of becoming extinct due to the destruction of critical habitats during road and tunnel construction.

## CLIMATE

Tenerife has a Mediterranean type of climate with a season of winter rain with a peak of about 40 mm. per month from November to February. Summer drought, i.e. less than 1 mm. of rainfall per month, usually occurs from July to September. The Teno cliffs harbour temporary streams during the winter months though these do not contribute a great deal to the water available for plant growth as they cascade quickly down the cliffs to the sea. The winter rainfall in the area is, however, supplemented by sea-mists which periodically engulf the whole area and this helps to explain the richness and density of the vegetation cover. During the summer months the Punta is very dry and only the succulent and other drought-resisting species manage to thrive. After the winter rains, many annual species of Mediterranean and North African affinity germinate and complete their life-cycle before the beginning of the dry summer season.

## VEGETATION

According to the major divisions of the vegetation of Tenerife given by various authors (Christ, 1885; Salter, 1918; Bannerman, 1922; Ceballos & Ortuño, 1951) the Punta de Teno lies within the African or Coastal zone (sub-division 2; Volcanic Desert of Salter). The phytosociology of this type of zone for the island of Gran Canaria, and to a limited extent Tenerife, has been discussed in detail by Rivas & Esteve (1964) and the phytosociological description of the Teno vegetation given in this paper will follow their system and nomenclature.

The vegetation of the Punta de Teno is of two basic types;

1. The cliff vegetation of El Fraile and the other basalt buttresses to the east and south; 2. The succulent-*Euphorbia* dominated communities of the coastal platform. Both types of vegetation come within the Order EUPHORBETALIA MACARONESICA Rivas & Esteve.

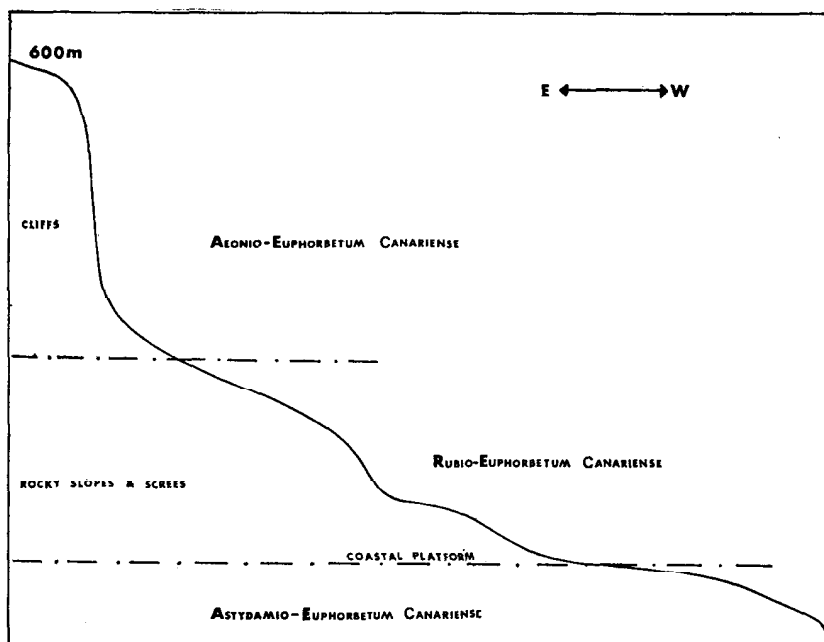


Figure 2: Profile showing vegetation types.

### 1. Cliff Vegetation

The vegetation of the basalt cliffs, particularly to the east (El Fraile, Roque Ardenne) contains many endemic species. The cliff communities correspond in many ways to the 'Tabaibal petrano' of Rivas & Esteve and fall within their association AEONIO-EUPHORBETUM CANARIENSE (see fig. 2) but because of the large number of rare local endemics the composition of the association is somewhat different from that described by these authors and a fairly complete list of the endemic species is given.

*Aeonio-Euphorbetum canariense* Rivas & Esteve, species list Cliffs cf. E. Fraile:

<i>Aeonium tabulaeforme</i> (Haw.) W. & B.	<i>Echium strictum</i> L.fil. var.
<i>A. haworthii</i> (Salm.Dyke) W. & B.	<i>exasperatum</i> Webb
<i>Monanthes silensis</i> (Praeger.) Svent.	<i>E. aculeatum</i> Poirer
<i>M. polyphylla</i> Haw.	<i>Sideritis argosphacelus</i> Clos.
<i>M. subcrassicaulis</i> (O. Ktze.) Praeg.	var. <i>tomentosa</i> Pitard.
<i>Polycarpaea carnosa</i> Chr. Sm.	<i>Centaurea canariensis</i> Brouss.
<i>Cheiranthus virescens</i> Webb ex Christ	var. <i>subexpinnata</i> Burchd
<i>Euphorbia aphylla</i> Brouss.	<i>Chrysanthemum frutescens</i> L.
<i>E. bourgeauana</i> Gay	<i>C. grandiflorum</i> Brouss.
<i>E. atropurpurea</i> Brouss.	<i>Sonchus radicans</i> Aiton
<i>Limonium fruticans</i> (Webb) O. Ktze.	<i>S. tuberifer</i> Svent.
<i>Lotus glaucus</i> Aiton.	<i>Tolpis crassiuscula</i> Svent.
<i>Lavatera acerifolia</i> Cav.	<i>Reichardia crystallina</i> (Webb & Berth)
<i>Ceropegia dichotoma</i> Haw.	<i>R. intermedia</i> (Sch. Bip) Asch.
<i>Dactylis smithii</i> Link	<i>Vieraea laevigata</i> Webb
	<i>Brachypodium arbuscula</i> Gay

## 2. Coastal Platform Vegetation.

The coastal platform vegetation comes within the alliance KLEINIO-EUPHORBION CANARIENSE Rivas & Esteve and can be sub-divided into two associations:— A. RUBIO-EUPHORBETUM CANARIENSE and B. ASTYDAMIO-EUPHORBETUM CANARIENSE, both of which are present in abundance in the area. The two associations form a scrub vegetation of stem-succulents and other drought resisting species.

### A. *Rubio-Euphorbetum canariense* Rivas & Esteve.

This association is closely related to the *Rubio-Euphorbetum* described by Rivas & Esteve from Gran Canaria but is here characterised by *Ceropegia dichotoma* Haw., an almost leafless stem-succulent which occupies a dominant position in the vegetation of the eastern part of the coastal platform. The following species are most commonly found in the association in this area:

<i>Ceropegia dichotoma</i> Haw.	<i>Rubia fruticosa</i> Ait
<i>Euphorbia aphylla</i> Brouss.	<i>Messerschmidia fruticosa</i> L.f
<i>E. balsamifera</i> Aiton	ssp. <i>angustifolia</i> (Lam.)
<i>E. regis-jubae</i> Webb & Berth.	<i>Withania aristata</i> (Aiton) Pers.
<i>E. atropurpurea</i> Brouss.	<i>Limonium pectinatum</i> (Aiton) O.Ktze.
<i>E. canariensis</i> L.	var. <i>solandri</i> (Webb & Berth.) O.Ktze.
<i>Neochamaelea pulverulenta</i> (Vent.) G.	<i>Sideritis argosphacelus</i> Clos
Erdtm.	<i>S. nervosa</i> Christ
<i>Echium aculeatum</i> Poirer	<i>Pallenis spinosa</i> (L.) Cass.
<i>Justicia hyssopifolia</i> L.	<i>Launaea arborescens</i> (Batt.) Murb.

## B. *Astydamia-Euphorbetum canariense* Rivas & Esteve

This association is found on the littoral fringe of the Punta de Teno below about 20 or 30 metres and also on the small promontory of the Faro de Teno, an area to which some very rare species appear to be more or less restricted on the north side of Tenerife (e.g. *Reseda scoparia*, *Gymnocarpus salsoloides*). This type of vegetation consists of an open, low-growing scrub which, in winter and spring, contains many ephemerals and therophytes. Many of the perennial species are halophytes and are always found near sea-level in the Canary Islands (*Astydamia latifolia*, *Euphorbia aphylla*, *Limonium pectinatum*). The following species are common:

*Astydamia latifolia* (L.f.) O.Kuntze  
*Aizoon canariensis* L.  
*Atriplex glauca* L.  
*Beta macrocarpa* Guss.  
*Salsola longifolia* Forsskal  
*Euphorbia balsamifera* Aiton  
*E. canariensis* L.  
*Polycarphaea teneriffae* Lam.

*Ononis dentata* Solander  
*Seseli webbii* Coss.  
*Frankenia laevis* L.  
*Echium bonnetii* Coincy  
*Limonium pectinatum* (Aiton) O.Ktze.  
var. *solandri* (Webb & Berth.) O.Ktze.  
*Asteriscus aquaticus* L.  
*Launaea arborescens* (Batt.) Murb.

## MATERIAL AND METHODS

I visited the Punta de Teno on many occasions during the period October 1968 — August 1969 and collected specimens there and recorded data for each month of the year during this period. By this method it has been possible to build up a fairly complete picture of the flora and vegetation as it exists today.

I was helped on many occasions by Dr. Eric R. Sventenius of the Jardín de Aclimatación de Plantas de la Orotava, Tenerife, both in the field at Teno and in discussions of the various aspects of the vegetation of the area concerned.

My complete set of Herbarium material from the Canary Islands and including voucher specimens from Teno will be deposited in the Herbarium of the Department of Botany, University of Reading (RNG) and duplicates will be placed in the Herbario del Laboratorio de Botánica, Universidad de Sevilla (SEV).

## CATALOGUE OF VASCULAR PLANTS

The catalogue consists of my own records and collections. I have also studied the literature in general and have added some well substantiated records from reliable sources. A number of species recorded and communicated to me from the area by Sventenius have also been included. The list has been made as complete as possible but there will certainly be additions and new records from time to time especially as agricultural expansion takes place and new weed species are introduced to the area.

For the purpose of the catalogue the area has been divided into six regions denoted by 1-6 in fig. 1. These regions are:

1. The cliff vegetation of El Fraile.
2. The *Rubio-Euphorbetum* vegetation of the eastern part of the coastal platform.
3. *Rubio-Euphorbetum* dominated by *Euphorbia canariensis* in the centre of the area.
4. The Faro promontory.
5. The littoral fringe.
6. Cliff and scrub vegetation of the southern boundary including Barranco de la Cueva.

## P T E R I D O P H Y T A

### SELAGINELLACEAE

#### SELAGINELLA Beauv.

*S. denticulata* (L.) Link. Common, areas 1 & 6, on rocks and cliffs in moist, shady places.

### ASPLENIACEAE

#### ASPLENIUM L.

*A. hemionitis* L. Rare, areas 1 & 6, in crevices on basalt cliffs especially in Barranco de la Cueva.

*A. onopteris* L. Very rare, single stations in areas 1 & 6 at 300m.

## DAVALLIACEAE

### DAVALLIA Sm.

*D. canariensis* (L.) Sm. Very common, areas 1, 2, 3 & 6, on dry, sunny rocks. Not found in the littoral zone.

## POLYPODIACEAE

### POLYPODIUM L.

*P. australe* Fee. Common, areas 1 & 6, in shady places often in association with *Monanthes* spp.

## ADIANTACEAE

### ADIANTUM L.

*A. reniforme* L. Common, areas 1 & 6, forming large colonies on the eastern slopes of El Fraile, generally on cliffs.

## GYMNOGRAMMACEAE

### ANOGRAMMA Link

*A. leptophylla* (L.) Link. Rare, areas 1 & 6, damp, shady places, in crevices or amongst boulders.

## SINOPTERIDACEAE

### CHEILANTHES Swartz

*C. pulchella* Bory. Rare, area 1, on the cliffs of El Fraile and Roque Ardenne.

*C. maderensis* Lowe. Very rare, area 6, a single specimen seen in Barranco de la Cueva.

### NOTHOLAENA R. Br.

*N. vellea* (Ait.) Desv. Occasional, area 6, in the higher part, 500 m. with *Campylanthus salsoloides*.

## G Y M N O S P E R M A E

## CUPRESSACEAE

### JUNIPERUS L.

*J. phoenicea* L. Very rare, area 6, shrub on the cliffs of Barranco de la Cueva.



## ANGIOSPERMAE

### RANUNCULACEAE

#### RANUNCULUS L.

*R. cortusifolius* Willd. Fairly common, areas 1, 2 & 6, on damp shady slopes below cliffs, less frequent in 2, where conditions are drier.

### PAPAVERACEAE

#### PAPAVER L.

Species of this genus are field and roadside weeds in this area and seem to be spreading quickly along the new road.

*P. dubium* L. Rare, area 1.

*P. rhoeas* L. Common along the road, spreading to other areas.

*P. somniferum* L. Very common, area 1 before the tunnel, area 3 at edge of new plantations.

### FUMARIACEAE

#### FUMARIA L.

All species of this genus are found in areas 1, 2, 3 & 6, on rocky ground and are somewhat weedy in their occurrence.

*F. capreolata* L.

*F. parviflora* Lam.

*F. muralis* Sonder ex Koch.

*F. montana* Schmidt.

### CRUCIFERAE

#### CHEIRANTHUS L.

*C. virescens* Webb ex Christ. Frequent, areas 1 & 6, on rocky slopes. The variety *latifolia* Pit. occurs on the eastern slopes of El Fraile.

#### CRAMBE L.

*C. scaberrima* Webb ex Christ. Frequent, area 1, on cliffs of El Fraile, limited endemic of the western mountains of Tenerife.

#### DESCURAINIA Webb & Berth.

*D. millefolia* (Jaq.) Webb & Berth. Frequent in areas 1 & 6. Widespread species of the western Canaries.

ERUCA Miller

*E. sativa* Miller. Roadside weed of areas 1, 2 & 3.

ERUCASTRUM C. Presl.

*E. canariense* Webb & Berth. Frequent, area 1, semi-cultivated ground and roadsides.

HIRSCHFELDIA Moench

*H. incana* (L.) Lagreze-Fossat. Common weed; 1 & 3

LEPIDIUM L.

*L. sativum* L. Roadside weed, areas 1 & 3.

LOBULARIA Desv.

*L. intermedia* Webb & Berth. Very common, areas 1, 2 & 6, on cliffs and rocks.

MATTHIOLA R. Br.

*M. parviflora* (Schousboe) R. Br. Very rare, area 1, a single specimen from the east slopes of El Fraile.

NOTOCERAS R. Br.

*N. bicornis* (Aiton) Amo. Weed of cultivated fields; 1

PAROLINIA Webb

*P. intermedia* Svent. & Bramwell. Frequent in the upper part of area 3. This is a recently discovered species endemic to the Punta de Teno.

RAPHANUS L.

*R. raphanistrum* L. Roadside weed, area 1.

SISYMBRIUM L.

*S. irio* L. Occasional weed 1 & 3, cultivated terraces.

CORONOPUS Haller

*C. didymus* (L.) Sm. Area 1, at edge of cultivated land.

RESEDACEAE

RESEDA L.

*R. luteola* L. Frequent, areas 1, 2 & 3, roadside weed.

*R. scoparia* Brouss. Very rare, area 4, prostrate, succulent-leaved form confined to the Faro rocks.

FRANKENIACEAE

FRANKENIA L.

The species of this genus are found in the coastal region but

occasionally spread a little higher into the **Rubio-Euphorbetum** community.

*F. laevis* L. var. *capitata* W. & B. Areas 3, 4 and 5.

*F. pulverulenta* L. Annual species, area 5, near the sea.

*F. ericifolia* Chr.Sm. Rare, areas 4 & 5, in communities with *Echium bonnetii*.

## CARYOPHYLLACEAE

### RHODALSINE Gay

*R. gayana* Webb ex Christ. Very rare in area 6. Recorded by Sventenius, this species was previously regarded as endemic to Fuerteventura.

### HERNIARIA L.

*H. hirsuta* L. Rare, area 6, in open, stony ground.

### GYMNOCARPOS Forsskal

*G. salsoides* Webb ex Christ. Rare, area 4. A linear, fleshy-leaved shrub found only on the Faro point, which might best be considered as a subspecies of the more widespread *G. decandrum* but the genus in the Canaries is in need of critical study.

### PARONYCHIA Miller

*P. canariensis* Juss. Common on the cliffs of areas 1 & 6, also occasionally in *Euphorbia* scrub.

### POLYCARPAEA Lam.

*P. carnososa* Chr.Sm. ex Buch. Rare, area 1 on cliffs of El Fraile. The population has been seriously depleted during road and tunnel construction.

*P. teneriffae* Lam. Very common species found in all areas. *P. teneriffae* is a very variable species and several ecological races occur. Especially notable are the succulent-leaved, dwarf form of the littoral fringe and the large-leaved form found on the screes formed in area 1 by the construction workings.

*P. aristata* Chr. Sm. Rare, area 4,  $\pm$  confined to the Faro point.

### POLYCARPON Loefl. ex L.

*P. tetraphyllum* (L.) L. Occasional, areas 1 & 6, in scree below cliffs.

## MOEHRINGIA L.

*M. trinervia* (L.) Clairv. Common, area 3, in upper part near the water canal.

## SAGINA L.

*S. maritima* G. Don fil. Common, area 5, ephemeral in herb layer of open *Astydamia* community.

## SILENE L.

*S. vulgaris* (Moench) Garcke. Common, areas 1, 2, 3 & 6, roadside weed.

*S. conoidea* L. Rare, area 3, amongst rocks in *Rubio-Euphorbetum* vegetation. Iberio-Mediterranean species found by Sventenius, new record for the Canary Island flora.

*S. gallica* L. Common, all areas, weed species.

*S. apetala* Willd. Rare, area 6, below cliffs in Bco. de la Cueva.

## SPERGULARIA (Pers.) J. & C. Presl.

*S. marginata* (DC.) Kittel. Common, areas 4 & 5, in the littoral fringe.

*S. fimbriata* Boiss. Occasional, areas 3 & 5, amongst rocks and scree.

## LINACEAE

### LINUM L.

*L. strictum* L. Very common, area 5, in *Launaea* scrub.

## MALVACEAE

### LAVATERA L.

*L. acerifolia* Cav. Locally common, area 1, on basalt cliffs of El Fraile.

### MALVA L.

*M. parviflora* L. Frequent weed species on cultivated slopes, area 1, between El Fraile and Buenavista.

### SIDA L.

*S. rhombifolia* L. ssp. *canariensis* Willd. Rare, area 1, roadside, somewhat weedy species.

## GERANIACEAE

### ERODIUM L'Hér.

*E. chium* (L.) Willd. Common weed, areas 1, 2 & 6.

*E. cicutarium* (L.) L'Hér. Common, areas 1 & 3, weed of cultivated ground and roadsides.

*E. malacoides* (L.) L'Hér. Frequent, area 6, xerophytic scrub in lower part of Bco. de la Cueva.

*E. moschatum* (L.) L'Hér. Frequent, area 1, in fields on east slope of El Fraile.

#### GERANIUM L.

*G. molle* L. Common, areas 1, 2, 3 & 6, weed of fields and roadsides.

*G. rotundifolium* L. Areas 3 & 6, weed in the Teno Bajo area.

### OXALIDACEAE

#### OXALIS L.

*O. pes-caprae* L. Common, areas 1 & 2, introduced weed common on the side of the road.

### ZYGOPHYLLACEAE

#### FAGONIA L.

*F. cretica* L. Common, areas 2, 3, 4 & 5, in *Rubio-Euphorbetum* and littoral zones.

### CNEORACEAE

#### NEOCHAMAELEA G. Erdtm.

*N. pulverulenta* (Vent) G. Erdtm. Widespread, all areas except 4. Dominant in parts of areas 3 & 6.

### RHAMNACEAE

#### RHAMNUS L.

*R. crenulata* Aiton. Frequent, areas 2, 3 & 6, shrub in *Rubio-Euphorbetum* community.

*R. integrifolia* DC. Rare, area 6, on cliffs in upper part of Barranco de la Cueva.

### LEGUMINOSAE

#### BISERRULA L.

*B. pelecinus* L. Area 1, weedy, on cultivated ground.

#### LATHYRUS L.

*L. sativus* L. Common, area 1, on abandoned terraces, east slopes of El Fraile.

*L. angulatus* L. Common; 1 & 3; on new terraces.

LOTUS L.

*L. glaucus* Aiton. Very common, all areas, on cliffs and amongst rocks.

*L. sessilifolius* DC. Frequent, areas 4 and 5, the variety *pentaphyllos* Link occurs in the upper region of area 3 on the cliffs.

MEDICAGO L.

Members of this genus are ephemerals in the herb layer of most communities and occur as weeds in the cultivated areas.

*M. polymorpha* L.

*M. laciniata* (L.) Miller.

*M. arabica* (L.) Hudson.

*M. littoralis* Rohde ex Loisel.

MELILOTUS Miller

*M. indica* (L.) All. Frequent, area 1, roadside weed.

ONONIS L.

*O. reclinata* L. Common; 4 & 5; in the littoral region.

PSORALEA L.

*P. bituminosa* L. Common, all areas, varying from compact, dwarf, short-lived perennial to a tall woody shrub over 1 m. tall.

SCORPIURUS L.

*S. muricatus* L. Frequent, areas 1 & 2, roadside weed.

TRIFOLIUM L.

Species occur in the herb layer of most communities in the area, many are weed of cultivated land.

*T. arvense* L.

*T. scabrum* L.

*T. dubium* Sibth.

*T. tomentosum* L.

*T. fragiferum* L.

*T. campestre* Schreber

VICIA L.

*V. cirrhosa* Chr.Sm. Frequent, areas 1, 3 & 6. Woody liana often covering other shrubs such as *Euphorbia canariensis* and *Withania aristata*.

The following *Vicia* species occur as weeds of cultivated land at the edges of terraces and roadsides in areas 1, 2, 3 & 6.

*V. sativa* L.

*V. lutea* L.

*V. bithynica* (L.) L.

## CRASSULACEAE

### AEONIUM Webb & Berth.

*A. canariense* (L.) Webb & Berth. Common, areas 1 & 6, on cliffs.

*A. tabulaeforme* (Haw.) Webb & Berth. Very common, areas 1, 3 & 6, cliff plant. A form with several basal rosettes is common in this area. In most other places the species is moncephalous.

*A. haworthii* (Salm.-Dyke) Webb & Berth. Common, area 1, in soil pockets on cliffs.

*A. urbicum* (Chr. Sm. ex Buch) Webb & Berth. Common in area 1, occasional in areas 2 & 3. Monocarpic species. AICHRYSON Webb & Berth.

*A. laxum* (Haw.) Bramwell. Abundant, areas 1 & 6, in dry places on cliffs and walls.

*A. parlatorei* Bolle. Common, areas 1 & 6, in dry beds of temporary streams and on cliffs.

### MONANTHES Haw.

*M. laxiflora* (DC.) Bolle. Very common, areas 1, 2, 3 & 6, hanging cliff plant.

*M. silensis* (Praeger) Svent. Common, areas 1, 2, 3 & 6, in crevices and under overhangs on cliffs.

*M. subcrassicaulis* (O. Kuntze) Praeger. Frequent, areas 1, 2 & 6, forming large clumps in sunny places on cliffs.

*M. polyphylla* Haw. Rare, areas 1, 2 & 6, less xerophytic places than the previous species, on cliffs.

*M. pallens* (Webb) Christ. Rare, area 2, on cliffs.

### UMBILICUS DC.

*U. horizontalis* (Guss.) DC. Rare, areas 1, 2 & 6, on cliffs mainly in deeper crevices.

## AIZOACEAE

### AIZOON L.

*A. canariense* L. Abundant, areas 2, 3, 4 & 5, usually near-level but also as a roadside weed.

### APTENIA N.E. Br.

*A. cordifolia* (L.fil) N.E.Br. Very common, all areas, dominant over large areas of the littoral area.

MESEMBRYANTHEMUM L.

*M. nodiflorum* L. Common, lower parts of all areas.

(CACTACEAE)

Two introduced species of the genus **Opuntia** occur in the Teno area but these have not yet become the weed problem they are in other areas of Tenerife.

OPUNTIA Miller

*O. dillenii* Haw.

*O. ficus-indica* (L.) Miller.

UMBELLIFERAE

AMMI L.

*A. majus* L. Occasional, area 1, roadside.

ASTYDAMIA DC.

*A. latifolia* (L.fil) O.Kuntze. Common, areas 1, 2, 3, 4 & 5, most frequent in the littoral fringe but also on the Fraile cliffs and in the *Euphorbia* vegetation up to 100 m.

CRITHMUM L.

*C. maritimum* L. Rare, coastal region of areas 3 & 5, generally replaced by the previous species in the Teno area.

DRUSA DC.

*D. glandulosa* (Poirlet) Bornm. Rare, area 1, cliffs of El Fraile in damp, shady places.

FOENICULUM Miller

*F. vulgare* Miller. Common, areas 1, 2 & 3, roadside.

SCANDIX L.

*S. pecten-veneris* L. Rare, area 6, lower part of Bco. de la Cueva in gravel patch in dry stream bed.

TINGUARRA Parl.

*T. cervariaefolia* Parl. Rare, areas 1 & 6, on cliffs.

TODAROA Parl.

*T. aurea* Parl. Occasional, area 2, in *Ceropegia* scrub.

TORILIS Adanson

*T. nodosa* (L.) Gaertner. Common, area 6, damp places near temporary stream.

SESELI L.

*S. webbii* Coss. Common, areas 1, 3, 4 & 5, generally in *Rubio-Euphorbetum*.



## RUBIACEAE

### GALIUM L.

*G. aparine* L. Occasional, areas 1 & 6, deep soil pockets on shady cliffs.

*G. ellipticum* Willd. Common, area 1, east slopes of El Fraile.

### PHYLLIS L.

*P. viscosa* Webb & Berth. Frequent, areas 1, 2, 3 & 6, on cliffs and in *Euphorbia canariensis* scrub.

### RUBIA L.

*R. fruticosa* Ait. Very common, areas 1, 2, 3, 5 & 6. Dominant over large areas.

On the cliffs of El Fraile the typical form is replaced by ssp. *melanocarpa*.

***R. fruticosa* ssp. *melanocarpa*** (Bornm.) Bramwell, **comb nov.**  
(*R. fruticosa* var. *melanocarpa* Bornm., Bot. Jahrb. 33: 390 (1904).

### SHERARDIA L.

*S. arvensis* L. Common, areas 2 & 6, weed at edges of terraces and in xerophytic scrub.

## VALERIANACEAE

### CENTRANTHUS DC.

*C. calcitrapa* (L.) Dufr. Rare, areas 1 & 6.

### VALERIANELLA Moench

*V. eriocarpa* Desv. Rare, area 6, gravel patch.

## COMPOSITAE

### ANDRYALA L.

*A. pinnatifida* Aiton. Frequent, found in all areas except 4 and the immediate littoral fringe. Very variable.

### ARTEMISIA L.

*A. canariensis* Less. Common, areas 1, 2, 3 & 6, sometimes dominant over areas of xerophytic scrub.

### ASTERISCUS Moench

*A. aquaticus* Moench. Common, areas 3 & 5, in *Astydamio-Euphorbetum*.

### ATRACTYLIS L.

*A. cancellata* L. Rare; 3; below cliffs in *Euphorbetum*.

### BIDENS L.

*B. pilosa* L. Common, areas 1, 2 & 3, roadside weed.

CALENDULA L.

*C. arvensis* L. Common, area 1, weed on east slopes of El Fraile spreading along the new road.

*C. suffruticosa* Vahl. Rare; 2; in scree below the cliffs.

CARDUUS L.

*C. clavulatus* Link. Common, areas 1, 2 & 6, roadside and in cliffs.

CARLINA L.

*C. salicifolia* Cav. Frequent; 1, 2, 3 & 6; shrub on cliffs.

CARTHAMUS L.

*C. lanatus* L. Frequent, area 1, roadside weed.

CENTAUREA L.

*C. melitensis* L. Rare, areas 1 & 3, roadside, probably in the process of invading the Area.

*C. canariensis* Brouss. Frequent, areas 1 & 2, basalt cliffs and screes occasionally also in *Euphorbia* scrub.

The variety *subexpinnata* Burchard with almost entire leaves is endemic to the Fraile region.

CHRYSANTHEMUM L.

*C. coronarium* L. Frequent, areas 1 & 2, roadside weed.

*C. foeniculaceum* (Brouss.) Willd. Rare, area 6, cliffs in Barranco de la Cueva.

*C. frutescens* L. Common, all areas, very variable species. The variety *parviflorum* Pit. generally considered to be a Gomeran endemic also occurs in the upper part of area 3.

*C. grandiflorum* Brouss. (*C. coronopifolium* Auct. Canar. non Vill.). Frequent on the cliffs of area 1. Hybridises with *C. frutescens* on the scree formed during tunnel construction.

CYNARA L.

*C. cardunculus* L. var. *ferocissima* Lowe. Occasional, areas 1, 2 & 3, roadside.

ERIGERON L.

*E. crispus* Pourr. Common, areas 1, 2 & 3, roadside weed.

FILAGO L.

*F. pyramidata* L. Frequent, areas 1, 2 & 6, on cliffs and in *Euphorbia* vegetation.

GALACTITES Moench

*G. tomentosa* Moench. Very common weed species, all areas except 4.

GONOSPERMUM Less.

*G. fruticosum* Less. Frequent, areas 1, 2, 3 & 6, shrub particularly common on the cliffs of El Fraile.

IFLOGA Cass.

*I. fontanesii* Cass. Locally common, areas 4 & 5, ephemeral herb of *Astydamio-Euphorbetum*.

INULA L.

*I. viscosa* Aiton. Occasional, areas 1, 2, 3 & 6, roadsides in *Euphorbia* scrub.

LACTUCA L.

*L. serriola* L. Occasional, areas 1 & 2, roadside weed.

LAUNAEA Cass.

*L. arborescens* (Batt.) Murb. Common, areas 2, 3, 4 & 5, dominant in dry areas near the sea.

*L. nudicaulis* (L.) Hook. fil. Frequent, areas 2, 3 & 6, stony roadside areas.

PALIFENIS Cass.

*P. spinosa* (L.) Cass. Rare, area 2, open areas in *Cerpegia* communities.

PHAGNALON Cass.

*P. purpurascens* Sch. Bip. Rare, areas 2 & 3, amongst rocks in dry areas.

*P. rupestre* DC. Rare, area 6, amongst rocks in Barranco de la Cueva.

*P. saxatile* Cass. Common, areas 1, 2, 3 & 6, in xerophytic scrub, a member of most communities.

REICHARDIA Roth.

*R. crystallina* (Sch. Bip. ex. W. & B.) Bramwell, **comb. nov.**

*Picridium Crystallinum* Sch. Bip. ex Webb & Berth., Phyt. Canar. II, 452 (1850).

Rare, area 5, littoral fringe.

*R. intermedia* (Sch. Bip.) Ascherson. Locally common areas 1, 2 & 6, basalt cliff plant.

*R. tingitana* (L.) Roth. Rare, area 5, single find near sea-level.

HEDYPNOIS Schreb.

*H. rhagadioloides* (L.) F.W. Schmidt. Common, areas 2, 3 & 6, weed.

SCHIZOGYNE Cass.

*S. sericea* Sch. Bip. Rare, areas 3 & 5, found only in the immediate coastal region.

SENECIO L.

*S. cf. echinatus* (L.fil) DC. Frequent, cliffs and slopes of El Fraile area 1. My material is being examined by Dr. Sventenius. The Teno plants differ from the normal form in several characters.

*S. kleinia* L. Common; 2, 3, 5 & 6; in *Rubio-Euphorbetum*

*S. teneriffae* Sch. Bip. ex Webb & Berth. Rare, area 1, cliffs of El Fraile. Member of the *S. vulgaris* complex with large leaves and distinctive achenes.

SILYBUM Adanson.

*S. marianum* (L.) Gaertn. Rare, area 3, with *Launaea arborescens*.

SOLIVA Ruiz & Pavon

*S. stolonifera* Loud. Locally common, area 1, recent introduction to the Teno area, spreading along the road.

SONCHUS L.

*S. jacquinii* DC. Frequent, areas 1, 2 & 6, cliffs and screes.

*S. acaulis* Dum. Cours. (*S. congestus* Auct. non Willd.). Rare, area 2, in *Rubio-Euphorbetum*.

*S. arboreus* DC. Very rare, area 3, in *Euphorbia canariensis* communities.

*S. capillaris* Svent. Frequent, areas 3 & 6, on cliffs in Bco. de la Cueva and occurring almost down to sea-level in area 3.

*S. radicans* Aiton. Frequent, area 1, cliffs of El Fraile, hybridises with *S. jacquinii* on screes below the tunnel.

*S. tenerrimus* L. Common, areas 1, 2 & 3, roadside weed.

*S. tuberifer* Svent. Rare, cliffs of regions 2 & 6, var. *latisepta* Svent. is frequent in Bco. de la Cueva.

TOLPIS Adanson

*T. crassiuscula* Svent. Rare; 1; wet cliffs of El Fraile.

*T. laciniata* Webb. Rare; 6; Bco. de la Cueva, on cliffs.

UROSPERMUM Scop.

*U. picroides* (L.) Desf. Frequent; 2; in *Euphorbia* scrub.

VIERAEA Webb

*V. laevigata* Webb & Berth. Rare, areas 1 & 3, basalt cliffs. *Vieraea* is an endemic, monotypic genus found only in the Teno mountains.



Figure 3: Area 1 — *Vieraea laevigata* Webb, cliffs of El Fraile.

VOLUTARELLA Cass.

*V. lippi* (L.) Cass. Frequent, areas 2 & 3, in *Rubio-Euphorbetum* communities.

PLUMBAGINACEAE

LIMONIUM Miller

*L. fruticans* (Webb) O. Kuntze. Extremely rare, area 1, species known only from two other localities on Tenerife. On the cliffs of El Fraile, its locus classicus, the small population has been further depleted during the construction of the tunnel and is in danger of extinction.

*L. pectinatum* (Ait.) O. Kuntze. Frequent, in all areas except 6, near sea-level. The Teno plants can be referred to the variety *solandri* (Webb & Berth.) O. Kuntze.

#### CAMPANULACEAE

##### CAMPANULA L.

*C. dichotoma* L. Frequent, areas 3 & 5, open sandy places near the sea.

##### WAHLENBERGIA Schrader ex Roth

*W. lobelioides* (L.) DC. Common, all areas except the extreme littoral fringe.

#### PRIMULACEAE

##### ANAGALLIS L.

*A. arvensis* L. Frequent, areas 1, 2 & 3, roadside weed.

##### ASTEROLINUM Hoffm. ex Link

*A. linum-stellatum* (L.) Hoffm. & Lk. Locally common, areas 4, 5 & 3, near sea-level.

#### OLEACEAE

##### JASMINUM L.

*J. odoratissimum* L. Rare, areas 1 & 6, cliffs of eastern side of El Fraile and upper part of La Cueva.

#### ASCLEPIADACEAE

##### CEROPEGIA L.

*C. dichotoma* Haw. Very common, areas 1, 2 & 3, dominant species over wide areas of region 2.

##### PERIPLOCA L.

*P. laevigata* Aiton. Common, areas 1, 2, 3 & 6, often twining in dense clumps of *Euphorbia balsamifera* and *E. canariensis*.

#### GENTIANACEAE

##### CENTAURIUM J. Hill

*C. pulchellum* (Sw.) Druce. Common, area 3, near sea-level.

#### CONVOLVULACEAE

##### CONVOLVULUS L.

*C. althaeoides* L. Rare, area 1, edges of fields on the east

slopes of El Fraile.

*C. floridus* L.fil. Rare, areas 1 & 2, shrub in *Rubio-Euphorbetum*.

*C. scoparius* L. fil. Rarc, arca 3, amongst *Euphorbia canariensis* clumps.

#### CUSCUTA L.

*C. planiflora* Ten. Common, areas 1 & 6, on *Chrysanthemum frutescens*, areas 4 & 5 on *Launaea arborescens*.

### BORAGINACEAE

#### ECHIUM L.

*E. aculeatum* Poiret. Frequent, areas 1, 2, 3 & 6, generally xerophytic scrub plant but also found on cliffs of El Fraile. Hybridises with *E.strictum* in Barranco de la Cueva and *E. bonnetii* near the Punta de Teno.

*E. bonnetii* Coincy. Areas 3 & 5, single large and variable population including variants which have been described as var. *pachycaulon* Lems (near sea-level) and *E. fuerteventurae* Lems. This species seems to be related to the Mediterranean and North African species complex centred on *E. sabulicolum* Pomel (*E. confusum* Coincy), *E. creticum* L., and *E. tuberculatum* Hoffm. & Link.

*E. lycopsis* L. Frequent, area 1, roadside weed.

*E. strictum* L. fil. Common, areas 1 & 6, on basalt cliffs, the Teno form is probably referable to var. *exasperatum* Webb.

#### MESSERSCHMIDIA L.

*M. fruticosa* L. Common, area 1, slopes below El Fraile. Including ssp. *angustifolia* (Lam.), which is frequent at Teno Bajo.

### SOLANACEAE

#### LYCIUM L.

*L. intricatum* Boiss. Areas 2 & 3, shrub in *Rubio-Euphorbetum*, rare.

#### NICOTIANA L.

*N. glauca* Graham. Frequent; 2, 3 & 6; naturalised shrub.

#### SOLANUM L.

*S. nigrum* L. Common, area 1, roadside below El Frai-

le, spreading.

WITTHANIA Pauquy.

*W. aristata* (Aiton) Pers. Frequent, areas 2 & 3, tall shrub dominant near Teno Bajo.

#### GLOBULARIACEAE

GLOBULARIA L.

*G. salicina* Lam. Rare, area 6, upper part of Barranco de la Cueva.

#### SCROPHULARIACEAE

CAMPYLANTHUS Roth.

*C. salsoloides* Roth. Rare, area 6, cliffs in Barranco de la Cueva.

KICKXIA Dumort.

*K. elatine* (L.) Dumort. Rare, area 3, single collection at edge of new banana terraces.

*K. spartioides* (Brouss.) Janchen. Rare, areas 3 & 6, in *Launaea* scrub.

SCROPHULARIA L.

*S. arguta* Sol. ex Aiton. Rare, area 3, upper region below cliffs.

#### OROBANCHACEAE

OROBANCHE L.

*O. purpurea* Jacq. Rare, area 3, parasitic on *Launaea arborescens*.

*O. ramosa* L. Rare, area 2, parasitic on *Andryala pinnatifida*.

#### LABIATAE

AJUGA L.

*A. iva* (L.) Schreb. var. *pseudiva* (Robill. et Cast.) Benth. Rare, area 3, xerophytic scrub.

BYSTROPOGON L'Hér.

*B. plumosus* L'Hér. Very rare, area 3, upper region below cliffs.

LAMIUM L.

*L. hybridum* Vill. Common, area 1, cliffs of El Fraile.



## LAVANDULA L.

*L. pinnata* L. fil. Frequent, area 1, 2, 3 & 6, shrub in *Rubio-Euphorbetum*.

## MICROMERIA Benth.

*M. cf. lasiophylla* Webb & Berth. Rare, area 3, plants collected on the dry slopes above the Punta de Teno seem to be referable to this species.

*M. ericifolia* (Roth.) Bornm. (*M. varia* Benth.) Common, all areas except 4, very variable species of wide ecological amplitude.

## SALVIA L.

*S. aegyptiaca* L. Common; 2 & 3; in xerophytic scrub.

*S. canariensis* L. Frequent, areas 1, 2, 3 & 6, shrub in *Euphorbia* scrub.

## SIDERITIS L.

*S. argosphacelus* (Webb & Berth.) Clos. Frequent, areas 1, 2 & 3, on cliffs especially on El Fraile, the Teno form with long hairs forming the indumentum is referable to var. *to mentosa* Pitard.

*S. nervosa* (Christ) Lindinger. Very rare, area 2, very restricted endemic of this area related to *S. dendro-chahorra* Bolle and *S. massoniana* Benth. This species occurs in communities dominated by *Euphorbia balsamifera* and *Ceropegia dichotoma*.

## TEUCRIUM L.

*T. heterophyllum* L'Hér. Very rare, area 3, shrub of *Euphorbia canariensis* scrub.

## ACANTHACEAE

### JUSTICIA L.

*J. hyssopifolia* L. Rare, area 2, in the same community as *Sideritis nervosa*.

## PLANTAGINACEAE

### PLANTAGO L.

*P. amplexicaulis* Cav. Rare, area 1, basalt cliffs in dry soil pockets.

*P. albicans* L. Rare, areas 1 & 2, roadside in gravel and debris.

*P. aschersonii* Bolle. Common, areas 1, 4 & 5, coastal cliffs, spreading rapidly on new screes near the Frailé tunnel.

*P. lagopus* L. Frequent, areas 1, 2, 3, 5 & 6, at the sides of roads and tracks.

*P. loeflingii* L. Frequent, distribution restricted to dry areas near the sea, 1, 4 & 5.

*P. indica* L. Rare, areas 3 & 5, coastal scrub with *Launaea arborescens*.

## AMARANTHACEAE

### ACHYRANTHES L.

*A. aspera* L. Frequent, areas 1, 2 & 3, roadside weed.

### AMARANTHUS L.

*A. deflexus* L. Rare, areas 1 & 3, roadside weed.

## CHENOPODIACEAE

### ATRIPLEX L.

*A. glauca* L. Area 5, common near sea-level.

*A. cf. parvifolia* Lowe. Area 5, seen only in the vegetative state, rare.

### BETA L.

*B. macrocarpa* Guss. Frequent, areas 3 & 5, shrub in coastal region.

*B. vulgaris* L. subsp. *maritima* (L.) Arc. Frequent, areas 2, 3 & 5, coastal region with *Limonium pectinatum*.

*B. patellaris* Moq. Rare, area 3, shrub in *Launaea* scrub.

### CHENOLEA Thunb.

*C. tomentosa* (Lowe) Maire. Frequent, areas 3 & 5, coastal scrub.

### CHENOPODIUM L.

*C. ambrosioides* L. Frequent, areas 1, 2, 3, 5 & 6, weed of cultivated areas and tracksides.

*C. murale* L. Common, areas 1, 2, 3, 5 & 6, weed of most areas, very variable.

### SALSOLA L.

*S. longifolia* Forssk. Frequent; 5; in the littoral region.

*S. kali* L. Rare, area 5, in spray zone.

SUAEDA Forsskal

*S. vera* Forssk. ex Gmel. Frequent, area near sea-level.

POLYGONACEAE

EMEX Campd.

*E. spinosa* (L.) Campd. Common, area 3, weed of plantations and roadsides.

POLYGONUM L.

*P. aviculare* L. Occasional; 3 & 6; in dry stream bed.

RUMEX L.

*R. bucephalophorus* L. ssp. *canariensis* (Steinh.) Rech. fil. Common, all areas, very abundant in herb layer.

*R. crispus* L. Frequent, areas 1 & 3, roadside weed.

*R. lunaria* L. Common, areas 1, 2, 3 & 6, shrub in Euphorbia communities.

EUPHORBIACEAE

EUPHORBIA L.

*E. aphylla* Brouss. Common, areas 1, 2, 4 & 5, often dominant near sea-level especially in area 2.

*E. atropurpurea* Brouss. Rare, regions 1 & 6, shrub in Euphorbia communities.

*E. balsamifera* Aiton. Common, areas 2, 3 & 5, the dominant species in area 2.

*E. bourgeauana* Gay. Locally common, areas 1 & 2, appears to be restricted to the vicinity of El Fraile which is its locus classicus, usually on basalt cliffs. (Records of this species from Gomera refer to *E. lambii* Svent.

*E. canariensis* L. Common, areas 1, 2, 3, 5 & 6, dominant in the upper part of 3.

*E. obtusifolia* Poiret. Common, areas 1, 2, 3, 5 & 6, the western Canary Island form with small inflorescence bracts and compound "umbels" seems to be referable to var. *regis-jubae* (Webb & Berth.) Maire (*E. regis-jubae* Webb & Berth.). Though both forms have been recorded from Teno. I have seen only the western island form in the area.

*E. segetalis* L. Occasional, area 1, roadside weed.

*E. terracina* L. Common, areas 1, 2 & 3, weed.

*E. x pettersonii* Svent. Very rare hybrid of *E. bourgeana* & *E. aphylla*, El Fraile.

*E. x jubae-aphylla* Svent. Rare hybrid of *E. regis-jubae* & *E. aphylla*, area 2, also recorded from Gran Canaria and the north coast of Gomera.



Figure 4: Area 4 — *Euphorbia balsamifera* Ait. Astydamio-Euphorbetum at El Faro.

## URTICACEAE

### FORSSKAOLEA L.

*F. angustifolia* Retz. Frequent, areas 1, 2, 3, 5 & 6;  
*Euphorbia* scrub.

### GESNOUINIA Gaudich.

*G. filamentosa* Webb. Rare, areas 1, 3 & 6, cliff plant.

### PARIETARIA L.

*P. mauritanica* Durieu. Rare, area 3, rocky slopes, new record for the Canary Islands.

*P. debilis* Forst. fil. Common, areas 1 & 2, roadside weed.

URTICA L.

*U. stachyoides* Webb. Rare, area 1, shady slopes of El Fraile.

ORCHIDACEAE

HABENARIA Willd.

*H. tridactylites* Lindl. Rare, areas 1 & 6, soil pockets on cliffs.

ORCHIS L.

*O. patens* Desf. var. *canariensis* Lindl. Rare, area 6, basalt cliff in Barranco de la Cueva.

IRIDACEAE

GLADIOLUS L.

*G. italicus* Miller. Common, area 1, edge of fields on east slopes of El Fraile.

ROMULEA Maratti

*R. columnae* S. & Maur. var. *grandiscapa* Gay. Rare, areas 2 & 6, on dry rocky slopes.

AMARYLLIDACEAE

(*Agave americana* L. is cultivated near Teno Bajo).

PANCRATIUM L.

*P. canariense* Webb & Berth. Frequent, areas 1, 2 & 6, abundant on the east slopes of El Fraile.

DIOSCOREACEAE

TAMUS L.

*T. edulis* Lowe. Rare, area 1, in *Aeonio-Euphorbetum* on El Fraile.

LILIACEAE

ALLIUM L.

*A. roseum* L. Frequent, areas 1, 2, 3, 5 & 6, rocky screes and roadsides.

*A. vineale* L. Occasional, area 1, slopes and rocks below El Fraile.

*A. ampeloprasum* L. Frequent, areas 2 & 3, roadside and terraces probably introduced for cultivation at the former village of Teno Bajo.

## ASPARAGUS L.

*A. arborescens* Willd. Rare, areas 3 & 6, in *Euphorbetum*.

*A. pastorianus* Webb. Occasional, areas 1 & 2, spiny shrub in *Euphorbetum*.

*A. scoparius* Lowe. Very rare, area 3, single find in centre of a large clump of *Euphorbia canariensis* plants.

*A. umbellatus* Link. Rare, areas 2 & 3, also in *Euphorbia canariensis* vegetation.

## ASPHODELUS L.

*A. microcarpus* Viv. Occasional, areas 1 & 2, screes and rocky slopes.

*A. tenuiflorus* Cav. Rare, area 3, cliffs in the upper part.

## SCILLA L.

*S. haemorrhoidalis* Webb & Berth. Frequent, areas 1, 2, 3, 5 & 6, geophyte on cliffs and in *Euphorbia* scrub.

## URGINEA Steinheil

*U. maritima* (L.) Baker. Frequent, areas 1, 2, 3 & 6, in *Euphorbetum*.

*U. maritima* (L.) Baker var. *hesperia* (Webb & Berth.) Svent. Rare, areas 3 & 5, dry places especially near sea-level.

## JUNCACEAE

### LUZULA DC.

*L. cf. pilosa* (L.) Willd. Rare, area 1, vegetative specimens collected from the ledges of El Fraile.

### JUNCUS L.

*J. capitatus* Weig. Occasional, areas 1, 2 & 6, shady places usually on cliffs.

## ARACEAE

### ARISARUM Targ.

*A. vulgare* Targ. var. *subexertum* Engl. Locally frequent, areas 1 & 6, slopes and screes below cliff.

## CYPERACEAE

### CAREX L.

*C. divulsa* Stokes. Rare, area 1, shady ledges on cliffs.

## GRAMINEAE

### AIRA L.

*A. caryophyllea* L. Abundant, areas 2, 3, 5 & 6, dry slopes and screes in xerophytic scrub.

### ARISTIDA L.

*A. coerulescens* Desf. Common, all areas except 4, in *Rubio-Euphorbetum* on rocky ground.

### BRACHYPODIUM Beauv.

*B. arbuscula* Gay. Very rare, area 1, occurs in a single, small area on the western cliffs of El Fraile.

### BRIZA L.

*B. maxima* L. Frequent, areas 1 & 2, roadside.

### BROMUS L.

*B. madritensis* L. Frequent; 2 & 3; edges of terraces.

*B. rigidus* Roth. Common, all areas, ground layer in most communities.

### CYNODON Rich.

*C. dactylon* (L.) Pers. Common, areas 1, 2, 3 & 5, probably introduced, roadside and on tracks and paths.

### DACTYLIS L.

*D. smithii* Link. Rare, area 1, eastern cliffs of El Fraile.

### ERAGROSTIS Host.

*E. poaeoides* PB. Rare, area 3, in *Launaea arborescens* scrub.

### HYPARRHENIA Anderss.

*H. hirta* (L.) Stapf. Very common, all areas, dominant in ground layer over wide areas.

### LAMARCKIA Moench

*L. aurea* (L.) Moench. Frequent, areas 1, 2, 4 & 5, especially in dry areas near sea-level.

### LOLIUM L.

*L. canariense* Steudel. Rare, area 1, roadside below the Fraile Cliffs.

*L. multiflorum* Lam. Abundant, areas 2 & 3, in xerophytic scrub.

### ORYZOPSIS Michx.

*O. miliacea* (L.) Asch. & Schweinf. Frequent, areas 2 & 3, edges of terraces and paths.

PHALARIS L.

*P. coerulescens* Desf. Rare, area 1, roadside near Fraile tunnel (Mirador de Pompeii).

POLYPOGON Desf.

*P. monspeliensis* (L.) Desf. Rare; 4 & 5; near sealevel.

SETARIA Beauv.

*S. glauca* (L.) PB. Abundant, areas 1, 2, 3, 5 & 6, weed along paths and edges of fields.

TRICHOLAENA Schrader

*T. teneriffae* (L. fil) Link. Frequent, areas 1, 2, 3 & 6, xerophytic scrub.

VULPIA C.C. Gmelin

*V. bromoides* (L.) S.F. Gray. Frequent, areas 1, 2 & 3, roadside and in Rubio-Euphorbetum.

*V. myuros* (L.) Gmel. Rare, area 3, roadside and in formerly cultivated ground.

HORDEUM L.

*H. murinum* L. Frequent; 1, 2, 3 & 5; roadside weed.

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## SUMMARY

The vegetation of the Punta de Teno, Tenerife, has been studied in relation to topography, geology and climate.

The vegetation is classified using the phytosociological system of Rivas Goday & Esteve Chueca (1964) and includes lists of important species especially rare endemics for each type of community.

A catalogue of all species of vascular plants known from the area has been compiled and contains some 310 species.

## RESUMEN

Se describe la vegetación y flora de la Punta de Teno, Tenerife, en relación con la topografía, geología y clima.

Se clasifican las asociaciones de plantas utilizando sistema y nomenclatura de Rivas Goday y Esteve Chueca (1964). Se cita listas de especies importantes, especialmente endémicas raras, para cada tipo de comunidad.

Se presenta un catálogo de todas las plantas vasculares (ca. 310 especies) encontradas en el área.

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