



Trends of the seagrass *Cymodocea nodosa* (Magnoliophyta) in the Canary Islands: population changes in the last two decades

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Summary: Seagrass meadows perform essential ecosystem functions and services. Though the meadows are globally deteriorating, numerous regressions remain unreported as a result of data fragmentation. *Cymodocea nodosa* is the most important seagrass in shallow coastal waters of the Canary Islands. No study has so far investigated temporal population trends at the entire archipelago scale. Using data collected in the past 23 years by local companies, public authorities and research groups, the population trends of *Cymodocea nodosa* were analysed over the past two decades at the scales of islands, island sectors and meadows. During this period, a prevalence of negative trends was revealed for three seagrass demographic descriptors (seagrass shoot density, coverage and leaf length) at the three scales, evidencing an overall deterioration in seagrass meadow integrity. These results suggest the need to develop correct management strategies to guarantee the conservation of this seagrass and the meadows it creates.

Keywords: seagrass; population trend; temporal patterns; change rates; Canary Islands; Atlantic Ocean.

Tendencias de la fanerógama marina *Cymodocea nodosa* (Magnoliophyta) en las Islas Canarias: cambios poblacionales en las dos últimas décadas

Resumen: Las praderas de fanerógamas marinas suministran funciones y servicios esenciales para los ecosistemas. A pesar de que dichas praderas están globalmente deteriorándose, numerosas regresiones son aún desconocidas como resultado de la falta de datos. *Cymodocea nodosa* es la fanerógama marina más importante en aguas someras de las costas del Archipiélago Canario. No obstante, ningún estudio ha analizado las tendencias temporales de sus poblaciones a escala de todo el archipiélago. Utilizando datos recogidos durante los últimos 23 años por empresas, administraciones públicas y grupos de investigación, se analizaron las tendencias de las poblaciones de *Cymodocea nodosa* durante las últimas dos décadas en el Archipiélago Canario a la escala de islas, sectores insulares y praderas individuales. A lo largo de este período, se observa una prevalencia de tendencias negativas para tres descriptores demográficos (densidad de haces, cobertura y longitud de hoja), evidenciando un deterioro general en la integridad de las praderas. Estos resultados sugieren la necesidad de desarrollar estrategias de gestión correctas para garantizar la conservación de las praderas constituidas por esta planta marina.

Palabras clave: fanerógamas marinas; tendencia poblacional; patrones temporales; tasa de cambio; islas Canarias; Océano Atlántico.

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INTRODUCTION

Seagrass meadows perform essential ecosystem functions and services at a global scale; seagrasses sink C and support food webs (Duarte et al. 2008), provide shelter for associated fauna (Pollard 1984, Bell and Pollard 1989, Espino et al. 2011), produce O₂ (Peduzzi and Vukovic 1990), stabilize sediments and protect coastlines from turbulence (Hemminga and Nieuwenhuize 1990, Cabaço et al. 2010). However, seagrass meadows are experiencing a rapid decline worldwide (Orth et al. 2006). Waycott et al. (2009) estimated a global loss of 29% of their coverage between 1879 and 2006, with an increasing trend of annual loss of 7% since 1990. The function of seagrasses as habitat-formers or ecological engineers (sensu Jones et al. 1994) suggests that their conservation is a primary issue for preserving a healthy marine environment.

Coastal ecosystems are among those subjected to the largest human pressures in the world (Halpern et al. 2008). Anthropogenic pressures on the coast are a fundamental reason for the global deterioration of seagrasses (Orth et al. 2006, Waycott et al. 2009). Human activities are responsible for many disturbances of seagrass meadows, such as water contamination (Waycott et al. 2009), increased turbidity and eutrophication (Burkholder et al. 2007), mechanical damages on the seabed (Francour et al. 1999, Milazzo et al. 2004, Ceccherelli et al. 2007), including boat anchoring (Montefalcone et al. 2008), and alterations of the habitat due to coastal works (Pérez-Ruzafa et al. 1991).

Cymodocea nodosa (Ucria) Ascherson is a seagrass distributed across the Mediterranean Sea and along the nearby eastern Atlantic coasts, including the Macaronesian oceanic archipelagos of Madeira and the Canary Islands (Mascaró et al. 2009, Oliva et al. 2012). This marine spermatophyte plays a fundamental role as a result of its function as ‘habitat engineer’, particularly in the Canary Islands (Reyes et al. 1995, Tuya et al. 2014a, b). It is generally located along the eastern and southern coasts of the islands, sheltered from the dominant oceanic swells from the north and northwest (Reyes et al. 1995, Pavón-Salas et al. 2000). This seagrass forms extensive, but often fragmented, subtidal meadows (Barberá et al. 2005, Espino et al. 2008, Tuya et al. 2013a). In the Canary Islands, *C. nodosa* shows a seasonal pattern in vitality, with a summer peak in shoot density and biomass (Reyes et al. 1995, Tuya et al. 2006, 2013a), similar to what has been observed for the Mediterranean Sea (Terrados and Ros 1993, Rismondo et al. 1997).

Two previous studies have reported a declining trend of *Cymodocea nodosa* meadows at Gran Canaria Island (Tuya et al. 2013a, 2014a). The present study aims to extend the results of these studies by determining the temporal trends (from 1991 to 2013) of *C. nodosa* meadows across the entire Canary Islands archipelago through the analysis of three structural (demographic) descriptors of *C. nodosa* meadows: seagrass shoot density, coverage and leaf length. This study is important from a conservation perspective. The Canary Islands autonomous Government recently

introduced a new environmental law that reduced the protection status of *C. nodosa* (BOC n° 112, Law 4/2010 of the Canary Islands Catalogue of Protected Species) to the category: “species of interest for Canarian ecosystems”. At present, this seagrass is only protected within marine protected areas, i.e. “Areas of Special Conservation” under the EU ‘Natura 2000’ network. Our analysis therefore contributes to a critical appraisal of this recent legislative decision.

MATERIALS AND METHODS

Data source

We compiled all published data including any of the following three seagrass structural descriptors: seagrass shoot density, cover and leaf length of *Cymodocea nodosa* at any place in the Canary Islands between 1991 (first record) and 2013 (last record). A variety of sources were used, including scientific publications and above all grey literature, mainly reports carried out by local environmental and public bodies (see supplementary material, Table S1). Each datum corresponded to a sampling within a particular geo-referenced area at a specific depth and time. Coverage was estimated as the percentage of the area in which the presence of *C. nodosa* was detected, typically through 25- or 50-m-long transects. Shoot density was expressed as number of shoots per area (m²). Leaf length corresponds to the mean height (in cm) of leaves. It is worth noting that for each data source the available records did not always include the three demographic descriptors.

Data analysis

Collected data were analysed at three different spatial scales: “island”, “island sector” and “meadow”. Firstly, data were temporally analysed separately for each island, resulting in 6 data sets: El Hierro, La Gomera, Tenerife, Gran Canaria, Fuerteventura and Lanzarote (including meadows around La Graciosa Islet as well). La Palma was excluded due to the lack of records of *Cymodocea nodosa* after the renovation of the Santa Cruz port, the only location on the island where the presence of *C. nodosa* was recorded (Pavón-Salas et al. 2000). This corresponds to the analysis at the scale of islands by pooling all data within each island according to the date (year) of collection.

Secondly, the coastal perimeter of each island was divided according to its geographic orientation (Fig. 1); data sets were therefore temporally analysed independently for each sector within each island, excluding El Hierro, where the presence of *C. nodosa* was recorded only to the northeast of the island. It should be noted that in several cases entire areas of the coastal perimeter were excluded from the study due to the absence of records. This represents the “island sector scale” analysis.

Thirdly, meadows with the largest time data sets at each island were analysed separately. The meadows included had to meet at least one of the following two criteria: the presence of records collected over more

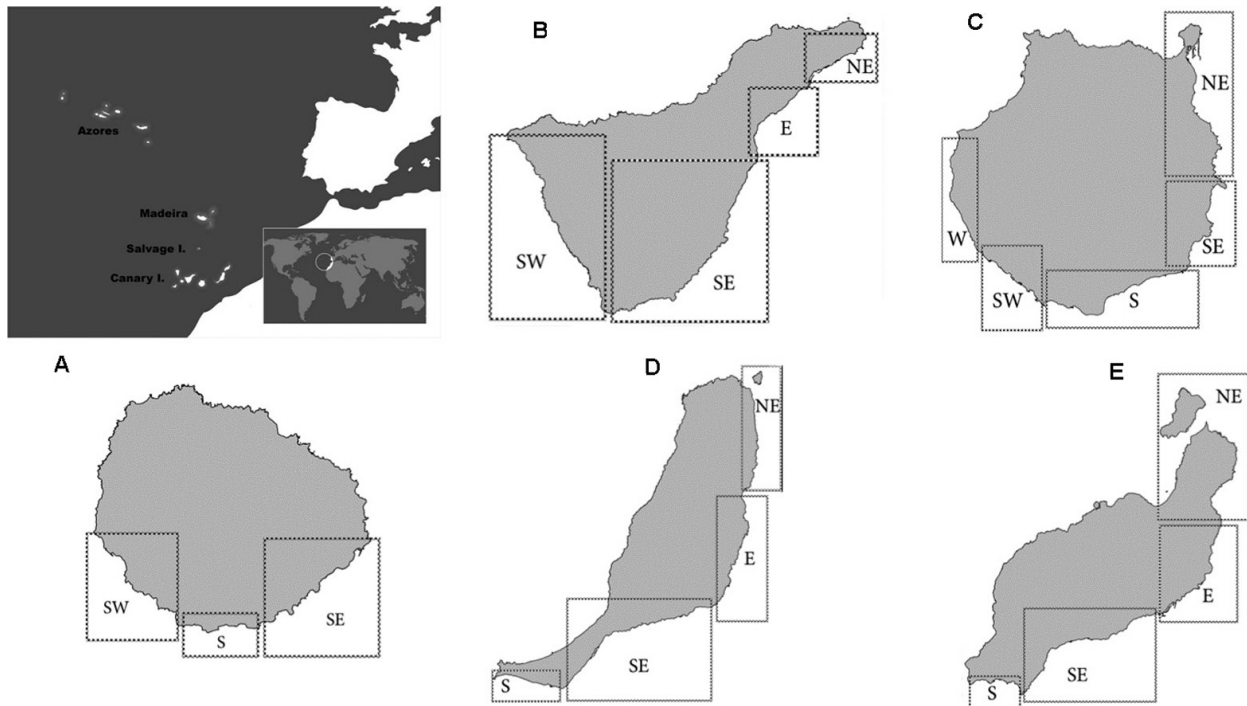


Fig. 1. – Location of the study area and division of each island into sectors of different orientation at La Gomera (A), Tenerife (B), Gran Canaria (C), Fuerteventura (D), and Lanzarote (E).

Table 1. – Summary of data compilation for each island.

	Time period	Studies	Surveys	Sectors	Meadows
Gran Canaria	1994-2013	19	231	NE-SE-S-SW-W	22
Tenerife	1991-2012	14	178	E-SE-SW	21
Lanzarote	2001-2013	5	109	NE-E-SE-S	19
Fuerteventura	2003-2013	3	128	NE-E-SE-S	19
La Gomera	2004-2009	4	25	SE-S-SW	4
El Hierro	2005-2009	4	13	-	2

than 3 years and a total amount of at least 20 records over time. Following this criterion, 3 meadows were selected for Tenerife (Granadilla, El Médano and Igueste), 5 for Gran Canaria (Pasito Blanco, Maspalomas, Playa del Inglés, Gando and Arinaga) and 2 for both Fuerteventura (Gran Tarajal and Playa Blanca) and Lanzarote (Playa Quemada and Guasimeta). In El Hierro and La Gomera, no meadows met these criteria, so no analysis was carried out. A total of 12 meadows were thus examined.

Since data sets were recorded at different annual seasons and *Cymodocea nodosa* naturally shows maximum vitality and senescence seasons during spring/summer and autumn/winter, respectively (Reyes et al. 1995, Tuya et al. 2006), data were standardized to prevent potential confounding seasonal changes from influencing the results. Data from two studies describing the intra-annual monthly variation in the vitality of *C. nodosa*, Tuya et al. (2006) and Reyes et al. (1995), were used for this purpose: the former reported seasonal patterns of shoot density and leaf length in a meadow from Lanzarote Island, while the latter reported annual patterns of shoot density in a meadow from Tenerife Island. The patterns identified by Tuya et al. (2006) were used to standardize data from the eastern islands (Gran Canaria, Fuerteventura and Lanzarote), while the patterns by Reyes et al. (1995) were used to standardize

data from the western islands (Tenerife, La Gomera, El Hierro). For each structural descriptor, a relative value on a scale from 0 to 1 was established for each month, assigning 1 to the month with the highest value and, subsequently, attributing a proportional value to the remaining months. To standardize descriptors for a given meadow according to the month of collection, each datum was then multiplied by the corresponding relative value (0-1). For the three seagrass structural descriptors, at each of the three spatial scales a regression line was adjusted to statistically test the trends over time (i.e. over the last two decades).

RESULTS

The analysis compiled 684 records from 49 studies carried out during a period of 23 years, between 1991 and 2013. A total of 87 meadows at 6 islands of the Canary Archipelago were considered (Table 1 and Table S1).

Island scale

The linear regressions that tested the significance of the temporal trends of the three structural descriptors at each island indicated that linear adjustments were statistically significant in 9 of the 18 cases (Fig. 2). For

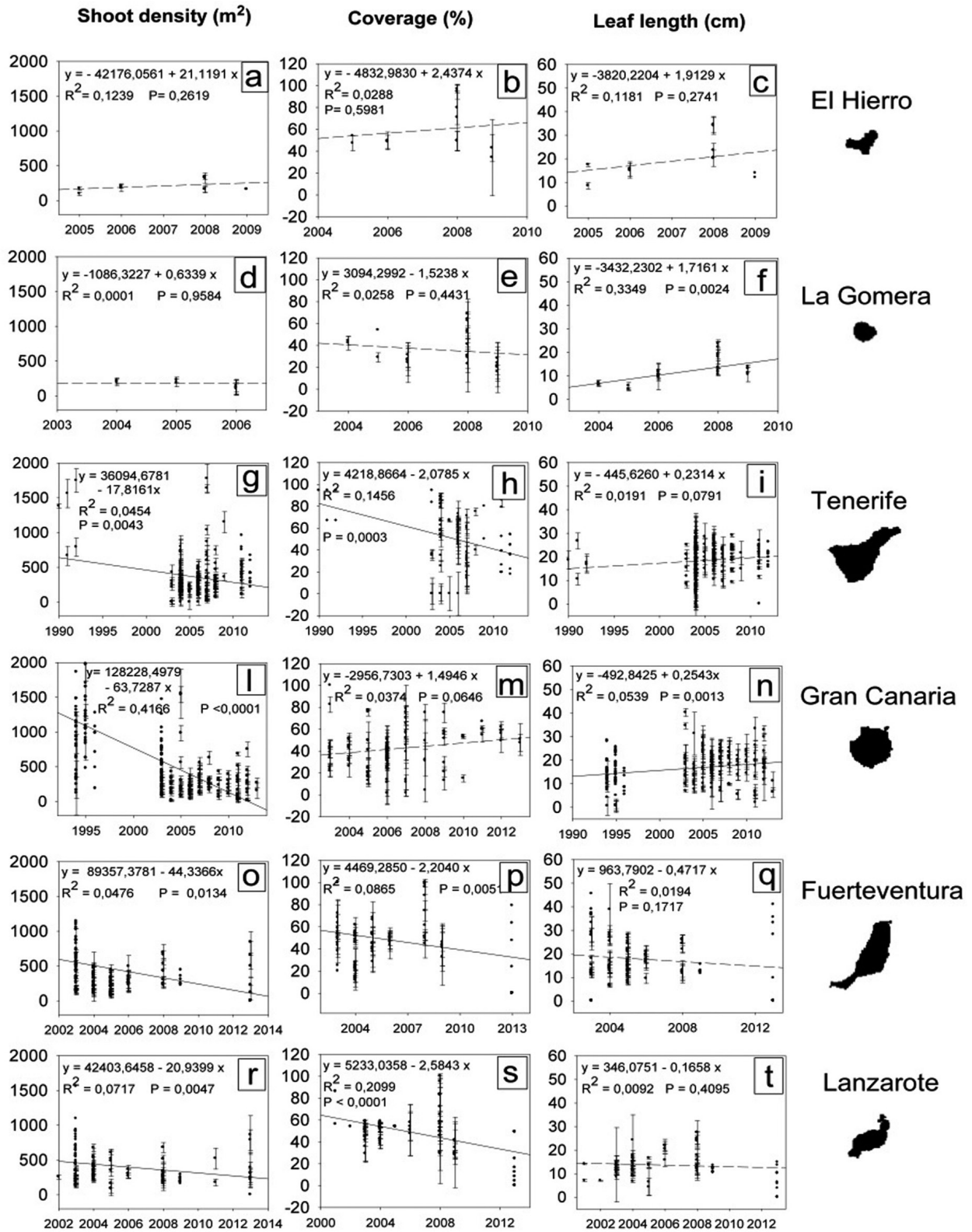


Fig. 2. – Changes over time of *C. nodosa* seagrass shoot density, coverage and leaf length in the Canary Islands. Linear regression equations are included (the R² coefficient was included to indicate the precision of the adjustment) for each structural descriptor and island. Solid lines denote statistically significant (P<0.05) adjustments, while dotted lines correspond to statistically non-significant adjustments (P>0.05).

these 9 significant cases, 2 corresponded to increasing trends over time, while 7 corresponded to decreasing trends over time.

At El Hierro, all regressions were statistically non-significant (Figs 2A, B, C), i.e. no temporal pattern was evidenced. For La Gomera, shoot density (Fig. 2D) and

Table 2. – Summary of significant results ($P < 0.05$) for the analysis of temporal changes of the structure of *C. nodosa* seagrass meadows at the island sector scale.

Island	Sector	Shoot density (m ²)	Coverage (%)	Leaf length (cm)
Gran Canaria	NE	Decreasing	No trend	No trend
	SE	Decreasing	No trend	No trend
	S	Decreasing	No trend	Increasing
	SW	Decreasing	No trend	No trend
	W	No trend	No trend	No trend
Tenerife	E	Increasing	No trend	No trend
	SE	Decreasing	Decreasing	No trend
	SW	Increasing	Increasing	No trend
Lanzarote	NE	Decreasing	Decreasing	Decreasing
	E	No trend	No data	No data
	SE	No trend	No trend	No trend
	S	No trend	Decreasing	No trend
Fuerteventura	NE	No trend	No trend	No trend
	E	No data	No data	No data
	SE	Decreasing	Decreasing	No trend
La Gomera	S	No trend	No trend	No trend
	SE	No trend	No trend	Increasing
El Hierro	SW	No data	No data	No data
El Hierro	-	-	-	-

Table 3. – Summary of significant results ($P < 0.05$) for the analysis of temporal changes of the structure of *C. nodosa* meadows at the scale of meadows.

Island	Meadow	Shoot density (m ²)	Coverage (%)	Leaf length (cm)
Gran Canaria	Pasito Blanco	No trend	No trend	No trend
	Maspalomas	No trend	No trend	No trend
	Playa del Ingles	Decreasing	No trend	Increasing
	Gando	Decreasing	No trend	No trend
	Arinaga	Decreasing	No trend	No trend
Tenerife	Granadilla	No trend	Decreasing	No trend
	El Medano	Decreasing	Decreasing	No trend
	Iguete	No trend	No data	No trend
Lanzarote	Playa Quemada	No trend	No trend	No trend
	Guasimeta	No trend	No trend	Decreasing
Fuerteventura	Gran Tarajal	No trend	No trend	No trend
Fuerteventura	Playa Blanca	No trend	No trend	No trend
La Gomera	-	-	-	-
El Hierro	-	-	-	-

coverage (Fig. 2E) showed no particular trend, i.e. regressions were statistically non-significant, while leaf length (Fig. 2F) showed an overall increase over time. At Tenerife, both seagrass shoot density (Fig. 2G) and coverage (Fig. 2H) were found to be decreasing over time, while leaf length (Fig. 2I) showed a statistically non-significant pattern. At Gran Canaria, seagrass shoot density (Fig. 2L) decreased over time, while leaf length (Fig. 2N) increased; seagrass coverage (Fig. 2M) showed no significant trend. At both Fuerteventura and Lanzarote, seagrass shoot density and coverage (Fig. 2O, P, R, S, respectively) decreased significantly over time, while leaf length (Fig. 2Q, T, respectively) showed no statistically significant temporal pattern.

Island sector scale

Of the 20 sectors examined at 5 of the 6 islands (Table 2), seagrass shoot density was found to be significantly decreasing in 7 cases, increasing in 3, and not showing any trend in 10 cases; seagrass coverage was found to be significantly decreasing in 4 cases, increasing in 1 case and not showing any trend in 15. Leaf length was found to be significantly decreasing in 1 case, increasing in 2, and not showing any trend in 17 cases.

Meadow scale

Of the 12 meadows examined at 4 of the 6 islands (Table 3), seagrass shoot density was found to be significantly decreasing at 4 meadows and not showing any trend at 8 meadows. Seagrass coverage was found to be significantly decreasing at 2 meadows and not showing any trend at 10 meadows; leaf length was found to be significantly decreasing and increasing at only 1 meadow, and not showing any trend at 10 meadows.

DISCUSSION

Our results identified important changes in the demographic structure of *Cymodocea nodosa* seagrass meadows in the Canary Islands over the last 23 years. Specifically, we have identified a prevalence of decreasing trends in the overall state of *C. nodosa* meadows in the Canary Islands by considering several structural descriptors of seagrass abundance. These results somehow support previous observations of many other studies worldwide (Orth et al. 2006, Waycott et al. 2009, Short et al. 2011) that point towards a deterioration in the state of conservation of seagrass meadows. In addition, these results are in concordance with temporal patterns observed for *C. nodosa* meadows at

some of the Canary islands, such as Gran Canaria (Tuya et al. 2013a, 2014a), where a decline in the vitality of *C. nodosa* has been demonstrated in the last decade.

It is worth noting, however, that the capacity to reveal ecological trends considerably differed among the three structural descriptors that we selected to describe temporal changes in the structure of *Cymodocea nodosa* meadows. In turn, we believe there are noteworthy differences in the ability of each descriptor to reflect the status of *C. nodosa* seagrass meadows, in particular between seagrass shoot density and the other two, coverage and leaf length. First of all, seagrass coverage and leaf length can largely vary in the way data are gathered from study to study, while shoot density, on the other hand, is often taken following more standard procedures, i.e. by deploying a quadrat on the marine bottom and counting the number of shoots within. Seagrass coverage corresponds to the percentage of the bottom covered by *C. nodosa*, normally taken along 25-m transects, so it does not take into account the density of seagrass shoots and, most importantly, the overall area occupied by the seagrass. In other words, this descriptor measures the percentage of surface covered by the seagrass, but not the state of the meadow, a condition that, at least in the particular case of *C. nodosa*, is better explained by shoot density (Oliva et al. 2012, Tuya et al. 2014a). Consequently, even if a meadow has undergone regression by reducing its overall area and shoot density and then its integrity, this may not be revealed by the analysis of the coverage. With respect to the leaf length, this biometrical attribute represents a morphological response to prevailing environmental conditions (i.e. water turbidity and hydrodynamics); this parameter can change considerably regardless of a deterioration or improvement of meadow conditions. For example, under increased turbidity and sedimentation, *C. nodosa* may experience a temporal increase in leaf length (Tuya et al. 2002, Tuya et al. 2013b). At Gran Canaria, a densely populated island of the archipelago, seagrass shoot density decreased over time, whereas leaf length increased; this disparity shows the different response of these two descriptors to environmental variability. As a result, at local scales, the most representative structural attribute of *C. nodosa* to describe seagrass meadow integrity, at least from the perspective of temporal variation, is seagrass shoot density. This result apparently contrasts with those obtained by Oliva et al. (2012), who selected alternative structural descriptors of *C. nodosa* to assess the quality of coastal waters. However, the scale of both studies is different. On the one hand, Oliva et al. (2012) aimed at selecting seagrass structural attributes across spatial gradients in coastal water quality. The effect of pollution was better predicted by structural attributes that reflect the consequences of pollution, e.g. above to below-ground ratios). Our study, on the other hand, focused on long-term tendencies, which seemed to be better predicted by seagrass shoot density.

The Canary Islands are densely populated (over 2 million inhabitants [www.ine.es]), including a large tourist pressure (ca. 10 million tourists per year, www.gobiernodecanarias.org/istac/temas_estadisticos/sec-torservicios/hosteleriaturismo/demanda). The largest

decreases in seagrass shoot density and coverage were observed at Gran Canaria, Tenerife, Lanzarote and Fuerteventura, i.e. the most populated islands of the archipelago, with more than 90% of the overall population. In contrast, the islands with the lowest population density (El Hierro and La Gomera) showed stable temporal patterns for all seagrass structural descriptors. Somehow, this outcome points out towards a connection between human pressure and seagrass meadow vitality, as previously reported for Gran Canaria (Tuya et al. 2014a, b). The correspondence between highly populated islands of the Canarian Archipelago and decreased shoot density of the meadows over time strengthens or, at least, does not disprove the observation already indicated by other studies (Orth et al. 2006, Duarte et al. 2008, Waycott et al. 2009, Short et al. 2011) of a negative correlation between the intensity of environmental pressures and seagrass conservation. In the particular case of Gran Canaria, the main human-mediated impacts that correlated with seagrass meadow deterioration were the number of outfalls (mainly sewage discharges) and ports (Tuya et al. 2014a). Moreover, in the last years, blooms of the cyanobacteria *Lyngbya majuscula* have been frequently observed in seagrasses to the south of Gran Canaria, Fuerteventura and Lanzarote (Martín-García et al. 2014). *Lyngbya* is considered an important risk for seagrasses due to its epiphytic growth on seagrass leaves and the production of allelopathic substances. Hence, negative interactions between *C. nodosa* and *L. majuscula* should be considered with caution, particularly within the framework of eutrophized environments.

While the analysis at the island scale somehow revealed clear temporal trends, the analyses at the sector and meadow scales showed a large number of statistically non-significant results. This is most likely connected with the replication level of the analyses at the three scales: larger data availability at the island scale lead to higher statistical power for detecting significant patterns. At the sector and meadow scales, however, the smaller amount of data corresponds with a lower statistical power. Despite this, significant patterns had a prevalence of decreasing trends over time at both the sector and meadow scales. These results reinforce the impression of a prevalence of negative trends of *Cymodocea nodosa* in the Canary Islands. The dimension of this study, including a large data set of records (684), different sources (49), and the temporal scale (over two decades), support the reliability of our interpretations. The overall decline experienced by *C. nodosa* meadows represents a further warning and an incentive to encourage research on *C. nodosa* conservation, particularly as a result of the importance of this species as a 'habitat engineer' and its sensitivity to deteriorating environmental conditions, which may be indicative of the state of the marine environment (Oliva et al. 2012).

In summary, this work is another step towards filling the somehow sparse information about seagrass distribution and their temporal patterns, particularly on the western coast of Africa. The deterioration of *Cymodocea nodosa*, the main seagrass species in the study area, that we have reported herein is further evidence of the urgent need for better management of the coastal areas.

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SUPPLEMENTARY MATERIAL

The following material is available through the online version of this article and at the following link:
<http://www.icm.csic.es/scimar/supplm/sm04165esm.pdf>

Table S1. – Compiled demographic data of *C. nodosa* at each meadow and island, including shoot density, coverage and leaf length. The name of the study/project correspond to the official name, while the name of the enterprise/Administration that provided the data is in parenthesis, whenever appropriate.

**Trends of the seagrass *Cymodocea nodosa*
(Magnoliophyta) in the Canary Islands: population
changes in the last two decades**

Federico Fabbri, Fernando Espino, Rogelio Herrera, Leopoldo Moro, Ricardo Haroun,
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Supplementary material

Table S1. – Compiled demographic data of *C. nodosa* at each meadow and island, including shoot density, coverage and leaf length. The name of the study/project correspond to the official name, while the name of the enterprise/Administration that provided the data is in parenthesis, whenever appropriate.

El Hierro												
Study/Project	Meadow	Site	Latitude	Longitude	Depth (m)	Date	Coverage (%)	SE	Shoot density (shoot m ⁻²)	SE	Leaf length (cm)	SE
Proyecto “Canarias Costa Viva”	La Caleta	A	27°47'57.78”	17°53'15.81”	15	20/03/2005	87.5	6.71	179	22.7	12.7	1.3
Proyecto “Canarias Costa Viva”	La Caleta	B	27°47'57.78”	17°53'15.81”	11	20/03/2005	100	0	315	20.5	26.1	0.7
Plan de Conservación <i>C. nodosa</i> (Gobierno de Canarias)	La Estaca	Fuera Espigón	27°46.969	17°53.973	12	02/02/2006	94.6	8.12	396.15	26.61	28.2	2.99
Plan de Conservación <i>C. nodosa</i> (Gobierno de Canarias)	La Estaca	Fuera Espigón	27°46.969	17°53.973	21	02/02/2006	92.8	6.18	346.18	52.18	26.9	3.15
Caracterización DMA (Ecos Consulting)	La Estaca	Fuera Espigón	27°46.969	17°53.973	12	26/02/2008	94.4	8.76	305.07	47.91	24.93	2.89
Caracterización DMA (Ecos Consulting)	La Estaca	Fuera Espigón	27°46.969	17°53.973	18.6	26/02/2008	94.4	8.74	302.93	42.4	21.4	3.45
Reconocimiento aguas superficiales (Elittoral)	La Estaca	A	214270	3076516	11	01/08/2008	79.6	15.2	334.93	-	36	-
Reconocimiento aguas superficiales (Elittoral)	La Estaca	B	214270	3076516	18	01/08/2008	70.8	30.5	322.13	-	36.46	-
Caracterización DMA (Ecos Consulting)	La Estaca	Fuera Espigón	27°46.969	17°53.973	11	29/08/2008	94.4	6.69	334.93	32.31	36	3.58
Caracterización DMA (Ecos Consulting)	La Estaca	Fuera Espigón	27°46.969	17°53.973	18	29/08/2008	96.8	3.34	322.13	74.91	36.46	3.47
Reconocimiento aguas superficiales (Elittoral)	La Estaca	A	214270	3076516	11	01/02/2009	82	12.5	305.07	-	24.93	-
Reconocimiento aguas superficiales (Elittoral)	La Estaca	B	214270	3076516	18	01/02/2009	65.2	34.8	302.93	-	21.4	-
La Gomera												
Study	Meadow	Site	Latitude	Longitude	Depth (m)	Date	Coverage (%)	SE	Shoot density (shoot m ⁻²)	SE	Leaf length (cm)	SE
Proyecto “Canarias Costa Viva”	Playa Guancha	A	28°4'16.06”	17°7'39.54”	8	11/10/2004	75.2	4.1	332	51.2	7.75	0.6
Proyecto “Canarias Costa Viva”	Playa Guancha	B	28°4'16.06”	17°7'39.54”	8	11/10/2004	71.8	6.3	366	41.6	9.1	1
Proyecto “Canarias Costa Viva”	Playa Guancha	A	28°4'12.24”	17°7'34.70”	15	12/03/2005	100	0	346	56.8	8.5	1.45
Proyecto “Canarias Costa Viva”	Playa Guancha	B	28°4'16.06”	17°7'39.54”	7	12/03/2005	53.7	4.2	422	39.3	6.3	0.6
Plan de Conservación <i>C. nodosa</i> (Gobierno de Canarias)	El Cabrito	Playa del Cabrito	28°3.432	17°8.154	9.2	05/02/2006	59.6	11.52	275.28	86.31	17	1.53
Plan de Conservación <i>C. nodosa</i> (Gobierno de Canarias)	El Cabrito	Playa del Cabrito	28°3.432	17°8.154	16	05/02/2006	52.1	9.8	236.16	106.21	17.6	5.69
Caracterización DMA (Ecos Consulting)	El Cabrito	Playa del Cabrito	28°3.432	17°8.154	9.8	27/02/2008	58.4	15.39	215.47	35.25	18.93	2.1

Caracterización DMA(Ecos Consulting)	El Cabrito	Playa del Cabrito	28°3,432	17°8.154	16.6	27/02/2008	55.2	22.16	220.8	44.59	21.86	2.92
Reconocimiento aguas superficiales (Elitoral)	Playa de El Cabrito	A	289455	3103789	10	01/08/2008	52	13.2	341.33	-	20.8	-
Reconocimiento aguas superficiales (Elitoral)	Playa de El Cabrito	B	289455	3103789	17	01/08/2008	53.6	16.8	360.53	-	24.2	-
Caracterización DMA(Ecos Consulting)	El Cabrito	Playa del Cabrito	28°3,432	17°8.154	10	27/08/2008	64	18.11	341.33	48.14	20.8	1.57
Caracterización DMA(Ecos Consulting)	El Cabrito	Playa del Cabrito	28°3,432	17°8.154	16.8	27/08/2008	68.8	11.09	360.53	65.16	24.2	3.01
Reconocimiento aguas superficiales (Elitoral)	Playa de El Cabrito	A	274609	3101242	9	01/02/2009	45.6	14.5	215.47	-	18.9	-
Reconocimiento aguas superficiales (Elitoral)	Playa de El Cabrito	B	274609	3101242	15	01/02/2009	40.8	14	220.8	-	21.8	-
Plan de Conservación <i>C. nodosa</i> (Gobierno de Canarias)	Cala de La Negra	Cala de La Negra	28°1,751	17°16.796	9	06/02/2006	46.2	18.15	202.64	96.2	19	3
Plan de Conservación <i>C. nodosa</i> (Gobierno de Canarias)	Cala de La Negra	Cala de La Negra	28°1,751	17°16.796	14.8	06/02/2006	51.5	7.18	192.18	72.96	23.46	2.35
Caracterización DMA(Ecos Consulting)	Cala de La Negra	Cala de La Negra	28°1,751	17°16.796	9	27/08/2008	62.4	6.06	273.07	44.21	19.87	5.74
Caracterización DMA(Ecos Consulting)	Cala de La Negra	Cala de La Negra	28°1,751	17°16.796	15	27/08/2008	40.8	5.93	334.93	46.4	25	1.61
Caracterización DMA(Ecos Consulting)	Cala de La Negra	Cala de La Negra	28°1,751	17°16.796	8.7	27/02/2008	58.4	11.86	208	26.4	20.2	2.02
Caracterización DMA(Ecos Consulting)	Cala de La Negra	Cala de La Negra	28°1,751	17°16.796	14.6	27/02/2008	44	25.79	218.67	40.97	23.4	1.39
Reconocimiento aguas superficiales (Elitoral)	Cala de La Negra	A	289455	3103789	9	01/02/2009	53.6	14.8	273.07	-	19.8	-
Reconocimiento aguas superficiales (Elitoral)	Cala de La Negra	B	289455	3103789	16	01/02/2009	38.8	1.9	334.93	-	25	-
Reconocimiento aguas superficiales (Elitoral)	Cala de La Negra	A	274609	3101242	9	01/02/2009	38	22.9	208	-	20.2	-
Reconocimiento aguas superficiales (Elitoral)	Cala de La Negra	B	274609	3101242	14	01/02/2009	30	13.7	218.67	-	23.4	-
Plan de Conservación <i>C. nodosa</i> (Gobierno de Canarias)	Playa de Santiago	Playa de Santiago			12	06/02/2006	49.3	13.6	240	108.91	19	3.08

Tenerife

Study	Meadow	Site	Latitude	Longitude	Depth (m)	Date	Coverage (%)	SE	Shoot density (shoot m ⁻²)	SE	Leaf length (cm)	SE
Barberá et al. 2005	Las Américas	A	28°04'.547'	16°44.379'	14	08/03/2003	73.7	9.4	241.6	57.6	20.9	1.2
Barberá et al. 2005	Las Américas	B	28°04'.547'	16°44.379'	15	08/03/2003	62.7	14.4	249.6	25.6	18.9	0.9
Proyecto "Canarias Costa Viva"	Las Américas	A	28°04'.547'	16°44.379'	12	12/10/2003	-	-	168	24.8	30	0
Proyecto "Canarias Costa Viva"	Las Américas	B	28°04'.547'	16°44.379'	12	12/10/2003	-	-	402	21.5	30	0
Proyecto "Canarias Costa Viva"	Las Américas	A	28°04'.547'	16°44.379'	12	06/03/2004	52.7	9.1	320	54.2	19.6	2.7
Proyecto "Canarias Costa Viva"	Las Américas	B	28°04'.547'	16°44.379'	11	06/03/2004	77.5	6.7	276	37.3	22.8	1.4
Proyecto "Canarias Costa Viva"	Las Américas	A	28°04'.547'	16°44.379'	11	02/10/2004	43	5.1	114	23.6	13	0.7
Proyecto "Canarias Costa Viva"	Las Américas	B	28°04'.547'	16°44.379'	11	02/10/2004	59.5	5.6	145	21.5	12.3	0.8
Reyes et al. (1995)	El Médano	A	28RCS4801	28RCS4802	6	01/07/1991	100	0	1460	30	28.2	3.8
Reyes et al. (1995)	El Médano	A	28RCS4801	28RCS4802	6	01/02/1991	100	0	1001	138	15.1	2.4
Reyes et al. (1995)	El Médano	A	28RCS4801	28RCS4802	6	01/07/1991	100	0	1652	202	26.7	3.4
Reyes et al. (1995)	El Médano	A	28RCS4801	28RCS4802	6	01/02/1992	100	0	1186	130	27.1	3.5
Reyes et al. (1995)	El Médano	A	28RCS4801	28RCS4802	6	01/07/1992	100	0	1850	170	32.2	3.7
Barberá et al. 2005	El Médano	A	28°2'33.99"	16°32'9.97"	2	29/03/2003	67.7	4.1	396	41.4	21.9	1.4
Barberá et al. 2005	El Médano	B	28°2'33.99"	16°32'9.97"	3	29/03/2003	65.0	4.6	479	41.9	19.4	2.6
Proyecto "Canarias Costa Viva"	El Médano	A	28°02'24.6"	16°32.21.6	8	12/10/2003	100	0	454	102.5	16.3	1.8
Proyecto "Canarias Costa Viva"	El Médano	B	28°02'24.6"	16°32.21.6	6	12/10/2003	100	0	360	51.9	14.25	0.5
Proyecto "Canarias Costa Viva"	El Médano	A	28°02'24.6"	16°32.21.6	6	04/05/2004	100	0	548	59.8	18.2	1.3
Proyecto "Canarias Costa Viva"	El Médano	B	28°02'24.6"	16°32.21.6	6	04/05/2004	100	0	290	24.5	19.5	1.6
Proyecto "Canarias Costa Viva"	El Médano	A	28°02'24.6"	16°32.21.6	5	03/10/2004	92.2	0.4	396	41.9	17.75	1.7
Proyecto "Canarias Costa Viva"	El Médano	B	28°02'24.6"	16°32.21.6	5	03/10/2004	98.2	0.2	250	15.4	21	1.5
Proyecto "Canarias Costa Viva"	El Médano	A	28°02'24.6"	16°32.21.6	5	04/04/2005	100	0	362	40.3	13	1.65
Proyecto "Canarias Costa Viva"	El Médano	B	28°02'24.6"	16°32.21.6	5	04/04/2005	98.6	0.6	220	38.2	18.7	2.4
Plan de Conservación <i>C. nodosa</i> (Gobierno de Canarias)	El Médano	Bahía del Médano	28°2.352	16°32.276	8.6	19/04/2006	94.3	3.18	694.54	142.16	28.7	1.87
Granadilla 2011 (CIMA)	El Médano	TGr19	28°2'20.285"	16°32'2.451"	12 m	10/10/2011	66	-	680	-	22.3	-
Granadilla 2012 (CIMA)	El Médano	TGr19	28°2'20.285"	16°32'2.451"	12 m	29/04/2012	66	-	624	-	19.4	-
CIMA	Iguete	IG-4	28°5'173	16°1'612	15	20/04/2005	-	-	320	22.56	29.8	8.34
CIMA	Iguete	IG-5	28°5'152	16°1'667	15	20/04/2005	-	-	211.2	66.4	23.6	5.72
CIMA	Iguete	IG-7	28°5'155	16°1'519	23.5	20/04/2005	-	-	227.2	83.36	22	5.57
CIMA	Iguete	IG-9	28°5'316	16°1'303	13.5	21/04/2005	-	-	348.8	51.2	29	5.57
CIMA	Iguete	IG-4	28°5'173	16°1'612	15	apr-06	-	-	297.6	24.28	19.5	3.39

CIMA	Igueste	IG-5	28°5152	16°1667	15	apr-06	-	-	211.2	28.64	26	7.33
CIMA	Igueste	IG-7	28°5155	16°1519	23.5	apr-06	-	-	390.4	56.32	26	4.09
CIMA	Igueste	IG-9	28°5316	16°1303	13.5	apr-06	-	-	544	56.48	31.48	3
CIMA	Igueste	IG-4	28°5173	16°1612	15	dec-06	-	-	179.2	25.76	9.4	1.67
CIMA	Igueste	IG-5	28°5152	16°1667	15	dec-06	-	-	211.2	35.76	10.2	1.79
CIMA	Igueste	IG-7	28°5155	16°1519	23.5	dec-06	-	-	316.8	33.6	8.8	1.3
CIMA	Igueste	IG-9	28°5316	16°1303	13.5	dec-06	-	-	595.2	63.12	5.8	0.84
CIMA	Igueste	IG-4	28°5173	16°1612	15	apr-07	-	-	328	54	16.2	5.3
CIMA	Igueste	IG-5	28°5152	16°1667	15	apr-07	-	-	251.2	15.4	16.6	5.3
CIMA	Igueste	IG-7	28°5155	16°1519	23.5	apr-07	-	-	395.2	11.9	19.2	4.4
CIMA	Igueste	IG-9	28°5316	16°1303	13.5	apr-07	-	-	891.2	57.2	19.8	6
CIMA	Igueste	IG-4	28°5173	16°1612	15	dec-07	-	-	125.92	14.12	6.74	2.62
CIMA	Igueste	IG-5	28°5152	16°1667	15	dec-07	-	-	164	28.16	6.74	2.62
CIMA	Igueste	IG-7	28°5155	16°1519	23.5	dec-07	-	-	124	14.6	7.49	5.15
CIMA	Igueste	IG-9	28°5316	16°1303	13.5	dec-07	-	-	368	59.6	5.04	1.85
Plan de Conservación C. nodosa (Gobierno de Canarias)	San Andrés	Espigón norte Terresitas	28°30.379	16°10.818	10.6	17/04/2006	82.8	9.42	416.46	96.15	32.6	2.98
OAG2010 (CIMA)	San Andrés	TSA11 (S Andrés)	383703.545	3153380.185	11	ago-09	80	-	1150	150	33	5
OAG2010 (CIMA)	San Andrés	TSA12 (Organos)	384525.655	3153799.33	20	ago-09	50	-	360	50	36	5
Seguim. Aut Port. Tfe	San Andrés	San Andrés	28°30.379	16°10.818	12	16/08/2011	85.5	6.4	465.6	137.32	32.63	6.29
Seguimiento de ZECs	Las Terresitas	Las Terresitas	384971	3154053	13	08/06/2011	-	-	643.2	81.11	-	-
CIMA	Los Gigantes	LG-8	28°2706	16°8519	14.6	giu-08	-	-	236	11.19	17.15	4.56
CIMA	Los Gigantes	LG-8	28°2706	16°8519	14.6	dec-08	-	-	612	64.55	17.5	5.31
CIMA	Caletillas	CAL-2	28°3840	16°3512	19	giu-07	-	-	30.4	1.2	11	2.1
CIMA	Caletillas	CAL-5	28°3762	16°3590	12	lug-07	-	-	14.4	0.6	5.9	0.5
CIMA	Caletillas	CAL-2	28°3840	16°3512	19	21/11/2007	-	-	24	22.24	5.7	1.86
CIMA	Caletillas	CAL-5	28°3762	16°3590	12	21/11/2007	-	-	112	23.56	8.4	4.37
CIMA	San Blas (San Miguel)	M1	342873	3100621	26	11/10/2004	-	-	179.2	45.21	27.42	1.4
CIMA	San Blas (San Miguel)	M2	342751	3100986	11	12/10/2004	-	-	473.6	55.4	29.9	2.43
CIMA	San Blas (San Miguel)	M4	342916	3100549	27	13/10/2004	-	-	236.8	52.1	20.22	2.05
CIMA	San Blas (San Miguel)	M5	342830	3101011	11.8	13/10/2004	-	-	569.6	77.2	26.6	2.84
CIMA	San Blas (San Miguel)	M7	342970	3100789	20.7	12/10/2004	-	-	499.2	66.4	31.2	3.27

CIMA	San Blas (San Miguel)	M8	342658	3101033	10.5	12/10/2004	-	-	339.2	34.5	18.6	2.48
Plan de Conservación <i>C. nodosa</i>	Granadilla	Punta del Camello	28°4.552	16°29.304	12.7	19/04/2006	92.6	6.45	714.45	98.16	29.5	1.56
CIMA	Granadilla	BU5-inicio	343569	3101246	8	18/05/2004	-	-	332.8	52.3	32.79	10.1
CIMA	Granadilla	BU5-centro	343652	3101134	12.4	18/05/2004	-	-	702.4	77.6	27.15	5.4
CIMA	Granadilla	BU5-final	343719	3101022	21	18/05/2004	-	-	268.8	42.7	30.12	8.7
CIMA	Granadilla	BU6-inicio	346696	3101491	6.7	18/05/2004	-	-	297.6	50.1	28	12.5
CIMA	Granadilla	BU6-centro	346691	3101211	15.6	18/05/2004	-	-	523.2	43.5	34.64	12.23
CIMA	Granadilla	BU6-final	346696	3100909	24.4	18/05/2004	-	-	262.4	55.5	17.92	6.8
CIMA	Granadilla	BU7-inicio	348659	3102770	3.3	18/05/2004	-	-	502.4	66.7	30.17	8.92
CIMA	Granadilla	BU7-centro	349203	3102410	14.6	18/05/2004	-	-	603.2	50.8	23.69	5.8
CIMA	Granadilla	BU7-final	349266	3102365	21.6	18/05/2004	-	-	464	41.9	34.11	10.12
CIMA	Granadilla	BU8-inicio	350013	3103542	7.6	18/05/2004	-	-	460.8	33.8	21.84	7.5
CIMA	Granadilla	BU8-centro	350103	3103461	13.3	18/05/2004	-	-	580.8	100.1	21.41	6.9
CIMA	Granadilla	BU8-final	350236	3103333	24.3	18/05/2004	-	-	377.6	75.7	26.04	7.8
CIMA	Granadilla	BU9-inicio	350387	3103944	10.3	17/05/2004	-	-	384	62.3	34.48	7.98
CIMA	Granadilla	BU9-centro	350506	3103905	14.3	17/05/2004	-	-	382.4	66.8	26.72	9.13
CIMA	Granadilla	BU9-final	350674	3103815	24.8	17/05/2004	-	-	467.2	73.2	26.24	12.9
CIMA	Granadilla	BU10-inicio	350945	3104677	6	17/05/2004	-	-	307.2	55.3	29.85	12.3
CIMA	Granadilla	BU10-centro	351254	3104558	14.1	17/05/2004	-	-	844.8	103.9	23.36	7.23
CIMA	Granadilla	BU10-final	351424	3104351	20.6	17/05/2004	-	-	259.2	34.5	17.22	6.89
CIMA	Granadilla	BU11-inicio	351478	3105112	8	17/05/2004	-	-	512	98.9	26.04	8.7
CIMA	Granadilla	BU11-centro	351727	3104984	13	17/05/2004	-	-	657.6	88.3	26.66	12.12
CIMA	Granadilla	BU11-final	351926	3104699	19.6	17/05/2004	-	-	204.8	23.9	19.92	6.6
CIMA	Granadilla	BU12-inicio	352327	3106277	8.3	17/05/2004	-	-	326.4	58.2	25.33	9.9
CIMA	Granadilla	BU12-centro	352488	3105870	16.2	17/05/2004	-	-	510.4	46.8	21.96	7.66
CIMA	Granadilla	BU12-final	352839	3105212	26.6	17/05/2004	-	-	147.2	34.4	12.44	5.5
CIMA	Granadilla	BU13-inicio	353718	3107054	12	12/05/2004	-	-	387.2	70.9	33.12	8.99
CIMA	Granadilla	BU13-centro	353799	3106967	16.5	12/05/2004	-	-	347.2	62.2	20.98	8.7
CIMA	Granadilla	BU13-final	353899	3106834	20.3	12/05/2004	-	-	505.6	56.3	22.32	8.77
CIMA	Granadilla	BU14-inicio	354002	3108141	7	12/05/2004	-	-	364.8	66.7	15.36	7.9
CIMA	Granadilla	BU14-centro	354154	3107985	12.5	12/05/2004	-	-	412.8	45.8	20.4	12.1
CIMA	Granadilla	BU14-final	354360	3107766	19.3	12/05/2004	-	-	278.4	33.2	22.32	7.5
CIMA	Granadilla	BU15-inicio	355322	3109193	15.7	12/05/2004	-	-	230.4	45.5	15.06	7.34

CIMA	Granadilla	BU15-centro	355307	3109233	14	12/05/2004	-	-	340.8	40.9	16.73	5.4
CIMA	Granadilla	BU15-final	355549	3108900	26.8	12/05/2004	-	-	195.2	34.4	19.32	10.01
Caracterización Granadilla	Granadilla	Extremo norte Pta. Camello	28°4.552	16°29.304	6.1	20/08/2004	62.6	6.8	469.44	97.42	22.27	2.45
Caracterización Granadilla	Granadilla	Extremo norte Pta. Camello	28°4.552	16°29.304	8.9	20/08/2004	58.1	9.1	540.28	80.18	23.52	2.58
Caracterización Granadilla	Granadilla	Extremo norte Pta. Camello	28°4.552	16°29.304	12.6	20/08/2004	51.3	8.6	583.33	138.44	23.10	3.55
Caracterización Granadilla	Granadilla	Zona media	28°3.956	16°30.051	6.8	21/08/2004	79.2	12.5	723.61	30.47	23.56	3.19
Caracterización Granadilla	Granadilla	Zona media	28°3.956	16°30.051	9.2	21/08/2004	81.8	3.4	795.83	162.82	22.74	2.53
Caracterización Granadilla	Granadilla	Zona media	28°3.956	16°30.051	14.8	21/08/2004	86.3	2.8	720.83	186.84	22.90	3.41
Caracterización Granadilla	Granadilla	Zona sur - Mña Pelada	28°3.293	16°30.858	5.9	22/08/2004	82.6	3.8	725.00	126.68	23.84	6.74
Caracterización Granadilla	Granadilla	Zona sur - Mña Pelada	28°3.293	16°30.858	8.8	22/08/2004	88.5	3.0	498.61	78.47	21.24	2.17
Caracterización Granadilla	Granadilla	Zona sur - Mña Pelada	28°3.293	16°30.858	15.4	22/08/2004	89.3	3.0	741.67	148.14	22.54	3.20
CIMA	Granadilla	A1	352969	3106027	21.2	set-07	18	14.4	451.2	56.6	-	-
CIMA	Granadilla	A2	353195	3106253	19	set-07	18	12.54	441.6	66.8	-	-
CIMA	Granadilla	A3	353422	3106479	14	set-07	42	25.88	899.2	104.9	-	-
CIMA	Granadilla	A4	353648	3106705	15	set-07	48	13.04	1097.6	59.4	-	-
CIMA	Granadilla	A8	353112	3105415	30	set-07	21	12.3	160	55	-	-
CIMA	Granadilla	A14	351534	3104627	16.5	set-07	34	20.43	566.4	101.8	-	-
CIMA	Granadilla	B1	351210	3104949	4.8	set-07	25	13.23	428.8	88.5	-	-
CIMA	Granadilla	B3	352742	3106557	6	set-07	44	8.94	1312	65.7	-	-
CIMA	Granadilla	B4	352789	3106587	5.3	set-07	38	13.04	851.2	77.2	-	-
CIMA	Granadilla	B5	352894	3106090	13	set-07	76	5.48	2070.4	50.8	-	-
CIMA	Granadilla	B6	352956	3106107	18	set-07	78	8.37	2246.4	205.9	-	-
CIMA	Granadilla	BU5-inicio	343569	3101246	8	set-08	-	-	284.8	41.12	14.64	0.81
CIMA	Granadilla	BU5-centro	343652	3101134	12.4	set-08	-	-	944	62.08	18.31	0.57
CIMA	Granadilla	BU5-final	343719	3101022	21	set-08	-	-	304	52.32	24.82	0.77
CIMA	Granadilla	BU6-inicio	346696	3101491	6.7	set-08	-	-	435.2	53.28	19.56	0.79
CIMA	Granadilla	BU6-centro	346691	3101211	15.6	set-08	-	-	702.4	72.16	25.03	0.54
CIMA	Granadilla	BU6-final	346696	3100909	24.4	set-08	-	-	86.4	10.88	9.2	0.49
CIMA	Granadilla	BU7-inicio	348659	3102770	3.3	set-08	-	-	377.6	8.16	14.32	0.45
CIMA	Granadilla	BU7-centro	349203	3102410	14.6	set-08	-	-	590.4	30.4	24.23	0.43
CIMA	Granadilla	BU7-final	349266	3102365	21.6	set-08	-	-	233.6	39.68	23.16	0.85

CIMA	Granadilla	BU8-inicio	350013	3103542	7.6	set-08	-	-	275.2	21.6	19.34	0.41
CIMA	Granadilla	BU8-centro	350103	3103461	13.3	set-08	-	-	348.8	16.32	22.93	0.35
CIMA	Granadilla	BU8-final	350236	3103333	24.3	set-08	-	-	105.6	8.16	14.26	0.53
CIMA	Granadilla	BU9-inicio	350387	3103944	10.3	set-08	-	-	470.4	33.76	23.72	0.61
CIMA	Granadilla	BU9-centro	350506	3103905	14.3	set-08	-	-	460.8	23.52	20.95	0.49
CIMA	Granadilla	BU9-final	350674	3103815	24.8	set-08	-	-	387.2	37.6	23.5	0.69
CIMA	Granadilla	BU10-inicio	350945	3104677	6	set-08	-	-	160	12.96	29.02	0.56
CIMA	Granadilla	BU10-centro	351254	3104558	14.1	set-08	-	-	470.4	19.04	22.82	0.58
CIMA	Granadilla	BU10-final	351424	3104351	20.6	set-08	-	-	256	18.24	15.68	0.67
CIMA	Granadilla	A-Unelco	355634	3109326	23	04/11/2011	-	-	190.4	10.81	17.54	0.6
CIMA	Granadilla	B-Unelco	354085	3107178	17	04/11/2011	-	-	302.4	52.32	21.26	0.59
CIMA	Granadilla	C-Unelco	353696	3106584	20	04/11/2011	-	-	179.2	15.52	20.18	0.39
Seguimiento de ZECs	Granadilla	Granadilla	351627	3104556	16	19/05/2011	-	-	574.4	170.57		
Plan de Conservación <i>C. nodosa</i>	Abades	Bahía de Abades	28°8.409	16°26.348	12.9	18/04/2006	81.9	12.54	396.66	152.45	29.8	2.56
Mruiz	Abades	Abades	28°8.409	16°26.348	18	19/07/2006	64.50	2.12	424.12	5.9	26.6	1.05
Mruiz	Abades	Abades	28°8.409	16°26.348	6	19/07/2006	71.50	12.73	318.16	19.6	24.3	2.6
DEA Mruiz	Abades	Abades	28°8.409	16°26.348	10.8	09/09/2006	92.25	5.45	458.60	2.14	26.8	0.9
DEA Mruiz	Abades	Abades	28°8.409	16°26.348	10.6	02/02/2007	60.00	6.12	296.00	6.56	21.6	2.5
DEA Mruiz	Abades	Abades	28°8.409	16°26.348	11.1	12/09/2007	90.00	6.50	458.00	3.68	29.9	3.2
DEA Mruiz	Abades	Abades	28°8.409	16°26.348	10.9	04/02/2008	76.25	4.15	330.00	21.02	25.4	1.1
DEA Mruiz	Abades	Abades	28°8.409	16°26.348	10.8	02/08/2008	75.00	3.54	304.00	7.27	31.2	1.2
Jacumar Alc. Esp. Vert Org	La Caleta	Adeje	28°5.633	16°45.586	12.6	14/06/2005	67.1	15.5	480.56	101.26	28.6	2.6
Plan de Conservación <i>C. nodosa</i>	La Caleta	La Caleta	28°5.633	16°45.586	14.5	24/04/2006	85.4	9.84	452.8	89.46	26.8	1.87
Mruiz	La Caleta	Adeje	28°5.633	16°45.586	22.5	18/07/2006	50.63	14.70	392.56	6.18	28.13	1.5
Mruiz	La Caleta	Adeje	28°5.633	16°45.586	10.8	18/07/2006	81.13	19.80	478.15	45.26	24.6	1.61
Granadilla 2011	La Caleta	TGr04	28°5'55.008"	16°28'20.274"	16 m	30/09/2011	100		539		21.1	
Granadilla 2012	La Caleta	TGr04	28°5'55.008"	16°28'20.274"	16 m	04/04/2012	33		437		15.8	
Plan de Conservación <i>C. nodosa</i>	El Porís	Bahía del Porís	28°9.386	16°25.793	7.8	18/04/2006	76.4	6.51	522.18	26.18	23.3	3.01
Plan de Conservación <i>C. nodosa</i>	Montaña pelada	Montaña Pelada	28°3.293	16°30.858	9.1	19/04/2006	96.5	5.91	762.63	67.12	31.5	1.68
Plan de Conservación <i>C. nodosa</i>	La Tejita	La Tejita	28°1.593	16°33.331	9.7	20/04/2006	89.7	8.46	604.56	100.1	24.6	2.63
Seguimiento de ZECs	La Tejita	La Tejita	346692	3101158	18	19/05/2011			848	64.99		
Granadilla 2011	Tejita	TGr22	28°1'39.817"	16°33'36.018"	12 m	14/10/2011	66		592		29.6	
Granadilla 2012	Tejita	TGr22	28°1'39.817"	16°33'36.018"	12 m	27/03/2012	66		505		26.7	
Plan de Conservación <i>C. nodosa</i>	Los Abrigos	Los Abrigos	28°1.588	16°35.742	11.3	20/04/2006	78.4	13.33	471.16	123.5	26.6	3.52

Plan de Conservación <i>C. nodosa</i>	Los Cristianos	Fuera muelle	28°2.724	16°43.304	12.8	24/04/2006	71.4	21.66	422.15	84.33	31.5	2.45
Plan de Conservación <i>C. nodosa</i>	Playa San Juan	Playa San Juan	28°10.610	16°48.800	12.4	24/04/2006	74.1	13.43	326.66	79.8	25.9	1.27
Plan de Conservación <i>C. nodosa</i>	Masca	Masca	28°17.182	16°51.934	18.6	25/04/2006	69.4	14.16	358.58	92.16	32.1	2.56
Plan de Conservación <i>C. nodosa</i>	Teno	Teno	28°19.753	16°54.076	17.5	25/04/2006	66.6	17.16	329.16	90.1	30.6	2.06
Granadilla 2011	Tarajales	TGr05	28°5'17.482 N"	16°29'9.075 O"	12 m	30/09/2011	66		536		21.6	
Granadilla 2012	Tarajales	TGr05	28°5'17.482 N"	16°29'9.075 O"	12 m	26/04/2012	66		320		22.3	
Granadilla 2011	Lajón	TGr08	28°4'53.592 N"	16°29'5.641 O"	13 m	10/10/2011	33		509		27.6	
Granadilla 2012	Lajón	TGr08	28°4'53.592 N"	16°29'5.641 O"	13 m	23/03/2012	66		768		23.4	
Granadilla 2011	Medio	TGr10	28°4'17.543 N"	16°30'2.731 O"	14 m	30/09/2011	33		1213		24.9	
Granadilla 2012	Medio	TGr10	28°4'17.543 N"	16°30'2.731 O"	14 m	13/03/2012	66		768		16	
Granadilla 2011	Abejera	TGr13	28°3'45.529 N"	16°30'32.604 O"	11 m	01/10/2011	33		1338		41.6	
Granadilla 2012	Abejera	TGr13	28°3'45.529 N"	16°30'32.604 O"	11 m	27/03/2012	100		1242		30.4	
Granadilla 2011	Charcón	TGr14	28°3'38.779 N"	16°30'31.596 O"	14 m	01/10/2011	33		1280		32.8	
Granadilla 2012	Charcón	TGr14	28°3'38.779 N"	16°30'31.596 O"	14 m	23/03/2012	100		1104		27.8	
Granadilla 2011	Jaquita	TGr18	28°2'46.776 N"	16°31'29.094 O"	17 m	01/10/2011	33		669		19.9	
Granadilla 2012	Jaquita	TGr18	28°2'46.776 N"	16°31'29.094 O"	17 m	29/03/2012	33		624		15.1	
Seguimiento de ZECs	Armeñime	Armeñime	326069	3110911	12	21/05/2011			520.89	71.16		
Seguimiento de ZECs	Antequera	Antequera	389213	3156620	13	07/06/2011			643.2	81.11		

Gran Canaria

Study	Meadow	Site	Latitude	Longitude	Depth (m)	Date	Coverage (%)	SE	Shoot density (shoot m ⁻²)	SE	Leaf length (cm)	SE
Perez1996	Gando	interna	27°55'90	15°22'30	4	ago-94			1510		15.8	
Perez1996	Gando	castillo	27°55'70	15°22'50	7	set-94			1282		15.8	
Perez1996	Gando	piscina	27°55'65	15°21'80	14	set-94			2069		16.6	
Perez1996	Gando	media	27°55'60	15°22'10	20	set-94			1200		16.6	
Javier Pérez	Gando	A	463434	3089688	5	01/12/1994	-	-	1980	299	12.1	1.7
Perez1996	Gando	piscina	27°55'65	15°21'80	17	mag-95			2971		13.7	
Perez1996	Gando	castillo	27°55'70	15°22'50	11	mag-95			1968		15	
Perez1996	Gando	media	27°55'60	15°22'10	18	mag-95			1498		14	
Perez1996	Gando	Interna	27°55'90	15°22'30	4	mag-95			2145		6	
Perez1996	Gando	piscina	27°55'65	15°21'80	16	ago-95			2196		20.4	
Perez1996	Gando	interna	27°55'90	15°22'30	4	ago-95			1676		11.29	
Perez1996	Gando	media	27°55'60	15°22'10	20	ago-95			1345		18.25	
Perez1996	Gando	castillo	27°55'70	15°22'50	9	ago-95			1447		24.9	

Perez1996	Gando	interna	27°55'90	15°22'30	feb-96	1650	12	1650	12
Javier Pérez	Gando	A	463434	3089688	01/05/1995	-	424	424	17.6
Barberá et al. 2005	Gando	A	27°52.284'	15°23.159'	11/03/2003	46.2	44	438	14.6
Barberá et al. 2005	Gando	B	27°52.284'	15°23.159'	11/03/2003	42.5	33.6	276	10.4
Espino	Gando	"	27°52.284'	15°23.159'	01/07/2003	-	-	750	-
Proyecto "Canarias Costa Viva"	Gando	A	27°52.284'	15°23.159'	17/10/2003	79.2	2.8	494	16.7
Proyecto "Canarias Costa Viva"	Gando	B	27°52.284'	15°23.159'	17/10/2003	66.2	5.3	648	107.56
Proyecto "Canarias Costa Viva"	Gando	A	27°52.284'	15°23.159'	14/04/2004	38.7	9.7	314	45.8
Proyecto "Canarias Costa Viva"	Gando	B	27°52.284'	15°23.159'	14/04/2004	46.25	2.65	536	66.6
Pollifrone et al. 2006	Gando		27°56'04.92"	15°22'34.44"	03_06/2004			166.7	15.9
Proyecto "Canarias Costa Viva"	Gando	A	27°52.284'	15°23.159'	22/10/2004	76.2	9.1	470	24.2
Proyecto "Canarias Costa Viva"	Gando	B	27°52.284'	15°23.159'	22/10/2004	87.5	5.11	376	10.9
Proyecto "Canarias Costa Viva"	Gando	A	27°52.284'	15°23.159'	09/03/2005	44.5	2.62	158	19
Proyecto "Canarias Costa Viva"	Gando	B	27°52.284'	15°23.159'	09/03/2005	32	7.34	179	18.8
Plan de Conservación <i>C. nodosa</i>	Gando	Bahía de Gando	27°55.755	15°22.340	07/03/2006	46.3	12.8	265.6	84.8
Tuya et al. 2013 (Aq Bot)	Gando	A	27°52.284'	15°23.159'	01/02/2011	-	-	28	21
Tuya et al. 2013 (Aq Bot)	Gando	A	27°52.284'	15°23.159'	01/08/2011	-	-	42	7
Seguimiento de ZECs	Gando	Bahía de Gando	464227	3089417	07/09/2011			392	174.61
CCV (Barberá et al. 2005)	Maspalomas	A	27°43.713	15°36.056	01/03/2003	66.2	7.5	180	27.3
CCV (Barberá et al. 2005)	Maspalomas	B	27°43.713	15°36.056	01/03/2003	77.5	8.2	164	15
Espino	Maspalomas	17	28R 441478	3067446	01/07/2003			513.6	15.1
Espino	Maspalomas	18			01/07/2003			846.4	
Espino	Maspalomas	19			01/07/2003			848	
Proyecto "Canarias Costa Viva"	Maspalomas	A	27°43.713	15°36.056	18/07/2003	-	-	275	10.2
Proyecto "Canarias Costa Viva"	Maspalomas	B	27°43.713	15°36.056	18/07/2003	-	-	429	37.52
Proyecto "Canarias Costa Viva"	Maspalomas	A	27°43.713	15°36.056	18/10/2003	57.5	8	406	53.4
Proyecto "Canarias Costa Viva"	Maspalomas	B	27°43.713	15°36.056	18/10/2003	75	6	426	50.4
Proyecto "Canarias Costa Viva"	Maspalomas	A	27°43.713	15°36.056	02/05/2004	65	2	22	7.4
Proyecto "Canarias Costa Viva"	Maspalomas	B	27°43.713	15°36.056	02/05/2004	75	2	6	4.2
Proyecto "Canarias Costa Viva"	Maspalomas	A	27°43.713	15°36.056	23/10/2004	56.2	4.6	236	49.5
Proyecto "Canarias Costa Viva"	Maspalomas	B	27°43.713	15°36.056	23/10/2004	72.5	6.7	164	32
Plan de Conservación <i>C. nodosa</i>	Maspalomas	Maspalomas	27°43.938	15°35.257	14/03/2006	71.1	4.36	452.1	115.4
Seguimiento de ZECs	Maspalomas		441318	3065897	25/08/2011			110.22	56.25
Proyecto "Canarias Costa Viva"	El Águila	A	27°46'18.83"	15°31'46.85"	15/07/2003	25	5.2	250.6	17.54
									23.7
									0.8

Proyecto "Canarias Costa Viva"	Melenara	A	27°59'11.36"	15°22'22.78"	9	14/08/2003	100	0	136	15.8	20	7.7
Proyecto "Canarias Costa Viva"	Melenara	B	27°59'11.36"	15°22'22.78"	7	14/08/2003	82.5	7.2	136	14.6	19.2	8.5
DEA Mruiz	Melenara	Melenara	27°59.280	15°22.286	6.8	04/04/2008	73	7.483	256	5.245	21.5	1.2
DEA Mruiz	Melenara	Melenara	27°59.280	15°22.286	7.1	12/08/2008	75	7.472	290	6.561	22.6	0.86
DEA Mruiz	Melenara	Melenara	27°59.280	15°22.286	7.2	02/02/2009	56	5.831	246	9.116	24.8	2.4
DEA Mruiz	Melenara	Melenara	27°59.280	15°22.286	6.9	15/08/2009	75	8.81	342	7.91	20.56	1.1
Perez1996	Pasito Blanco	200	27°44'60	15°37'00	5	giu-94			1161		23.8	
Perez1996	Pasito Blanco	400	27°44'37	15°36'85	12	set-94			698		19.9	
Perez1996	Pasito Blanco	300	27°44'40	15°36'90	11	set-94			723		19.9	
Perez1996	Pasito Blanco (0)		27°44'65	15°37'09	8	dic-94			323		10.9	
Perez1996	Pasito Blanco (50)		27°44'63	15°37'07	8	dic-94			895		23.3	
Perez1996	Pasito Blanco (100)		27°44'61	15°37'05	9	dic-94			666		18.2	
Perez1996	Pasito Blanco (150)		27°44'59	15°37'03	10	dic-94			495		20	
Perez1996	Pasito Blanco	300S	27°44'40	15°36'90	8	mag-95			914		26.4	
Perez1996	Pasito Blanco	50	27°44'63	15°37'07	8	ago-95			698		20	
Perez1996	Pasito Blanco	50	27°44'63	15°23'07	8	mar-96			380		24.5	
Javier Pérez	Pasito	A	439109	3068979	8	01/12/1994	-	-	629	268	23	4.3
Javier Pérez	Pasito	A	439109	3068979	8	01/05/1995	-	-	856	263	21.2	2.2
Espino	Pasito Blanco	21	28R 439393	3068620	5	01/07/2003			840			
Proyecto "Canarias Costa Viva"	Pasito	A	28R 439393	3068620	4	08/03/2005	46.2	8.7	426	79.5	24.5	1.45
Proyecto "Canarias Costa Viva"	Pasito	B	28R 439393	3068620	4	08/03/2005	-	-	364	23.4	25	2.7
Proyecto "Canarias Costa Viva"	Pasito	C	28R 439393	3068620	4	08/03/2005	-	-	420	50.8	24.7	2.4
Plan de Conservación C. nodosa	Pasito Blanco	Detrás espigón	27°44.664	15°37.429	12.8	14/03/2006	70.8	4.5	451.23	63.6	34.2	1.18
Tuya et al. 2013 (Aq Bot)	Pasito	A	439109	3068979	8	01/02/2011	-	-	57	55	12.1	3
Tuya et al. 2013 (Aq Bot)	Pasito	A	439109	3068979	8	01/08/2011	-	-	81	33	13.7	1
Elitoral (PVA Sur)	Pasito	Seba_6	439386	3068552	-	01/09/2012	-	-	498	62.9	23.8	2.5
Elitoral (PVA Sur)	Pasito	Seba_8	438441	3069002	-	01/09/2012	-	-	834	103.6	29.8	1.7
Elitoral (PVA Sur)	Pasito	Seba_corr	438861	3068965	-	01/09/2012	-	-	405	76.1	32.8	1.9
Tuya 2a Metodología	Pasito blanco	seba 6	43°93.86'	30°68.552'	8	01/12/2012			30.833	3.995	29.333	0.843
Tuya 2a Metodología	Pasito blanco	seba 8	43°84.41'	30°69.002'	8	01/12/2012			31.5	7.242	27.667	2.108
Tuya 2a Metodología	Pasito blanco	seba corr	43°88.61'	30°68.965'	8	01/12/2012			28	2.243	27.5	0.784
Perez1996	Santa Agueda		27°45'10	15°39'30	6	giu-94			1168		11.9	
Espino	Santa Agueda	24	28R 434031	3070028	15	01/07/2003			352			

CCV	S. Agueda	A	27°45'10.61"	15°40'1.17"	10	10/06/2005	94.5	0.8	198	25.4	32	4.3
CCV	S. Agueda	B	27°45'10.61"	15°40'1.17"	11	10/06/2005	92.5	3.4	257	27.7	35.4	5.1
Perez1996	Inglès	Em N 400			7	lug-95			1450		17	
Perez1996	Inglès	Em N 800			12	lug-95			1100		18	
Perez1996	Inglès	Em N 1200			17	lug-95			600		20	
Espino	El Inglés		28R 444360	3069479	10	01/07/2003			1116.8			
Plan de Conservación <i>C. nodosa</i>	Playa del Inglés	Playa del Inglés	27°44.959	15°33.884	7.2	13/03/2006	75.6	7.9	526.6	78.8	23	3.15
PN Indicadores	Playa del Inglés	Playa del Inglés	27°44.959	15°33.884	7.6	10/06/2007	85.9	3.5	571.14	98.6	24.6	1.18
PN Indicadores	Playa del Inglés	Playa del Inglés	27°44.959	15°33.884	8.1	22/11/2007	82.6	8.7	492.5	102.6	25.8	3.05
PVA Emisarios Cochinos	Playa del Inglés	Playa del Inglés	27°47.092	15°33.844	6.8	20/10/2010	88.6	9.8	348.44	77.1	30.26	7.45
PVA Emisarios Cochinos	Playa del Inglés	Playa del Inglés	27°47.092	15°33.844	6.9	03/11/2011	96.13	0.6	609.48	44.73	27.7	0.57
Afección Playa del Veril	Playa del Inglés	El Veril	27°45.622	15°33.596	4.2	04/05/2009	82.8	2.9	328.4	26.6	24.2	6.8
Proy. Venturi	Playa del Inglés	Playa del Inglés	27°45.777	15°33.586	5.6	12/05/2009	86.8	2.9	428.3	32.1	26.2	2.8
Proy. Venturi	Playa del Inglés	Playa del Inglés	27°45.777	15°33.586	5.8	06/11/2009	82.1	6.2	392.3	69.2	24.6	6.2
Afección Playa del Veril	Playa del Inglés	El Veril	27°45.622	15°33.596	4.6	26/05/2010	22.2	3.1	112.4	36.3	17.3	3.2
Proy. Venturi	Playa del Inglés	Playa del Inglés	27°45.777	15°33.586	6.1	16/06/2010	92.4	7.9	492.6	52.4	29.1	2.63
Proy. Venturi	Playa del Inglés	Playa del Inglés	27°45.777	15°33.586	5.8	12/11/2010	83.8	0.9	398.4	81.6	26.5	5.2
Tuya et al. 2013	Playa del Inglés	A	27°44.923	15°33.855	8	05/05/2011	100	0	310	20	40	5
Proy. Venturi	Playa del Inglés	Playa del Inglés	27°45.777	15°33.586	6.7	28/05/2011	89.6	2.92	684.4	28.8	31.5	2.2
Seguimiento de ZECs	Playa del Inglés	Playa del Inglés	444682	3070082	8	25/08/2011			392	174.61		
Proy. Venturi	Playa del Inglés	Playa del Inglés	27°45.777	15°33.586	5.9	29/11/2011	87.2	6.51	454.66	41.6	27.2	6.9
PVA Emisarios Cochinos	Playa del Inglés	Playa del Inglés	27°47.092	15°33.844	7.1	06/11/2012	89.33	4.07	433.19	13.46	27.7	3.1
Perez1996	Arinaga	enfilación	27°50'90	15°23'70	9	lug-94			2571		17.7	
Perez1996	Arinaga	interna	27°51'20	15°23'80	5	lug-94			4609		17.1	
Perez1996	Arinaga	media	27°51'05	15°23'85	7	set-94			2577		14.5	
Javier Pérez	B. Arinaga	A	460946	3081019	5	01/12/1994	-	-	1586	441	19.6	3.9
Perez1996	Arinaga	media	27°51'05	15°23'85	6	gen-95			1390		15.6	
Perez1996	Arinaga	enfilación	27°50'90	15°23'70	9	gen-95			1809		17.8	
Perez1996	Arinaga	INTERNA	27°51'20	15°23'80	4	gen-95			1752		18.3	
Javier Pérez	B. Arinaga	A	460946	3081019	5	01/05/1995	-	-	3078	1349	18.6	2.1
Perez1996	Arinaga	Interna	27°51'20	15°23'80	4	mag-95			2704		16.5	
Perez1996	Arinaga	enfilación	27°50'90	15°23'70	9	mag-95			1701		28.7	
Perez1996	Arinaga	media	27°51'05	15°23'85	5	giu-95			1536		27.6	
Perez1996	Arinaga	enfilación	27°50'90	15°23'70	9	ott-95			1485		32	

Perez1996	Arinaga	interna	27°51'20	15°23'80	4	ott-95	1523	18.8
Perez1996	Arinaga	media	27°51'05	15°23'85	5	ott-95	1498	18
Perez1996	Arinaga	enfilación	27°50'90	15°23'70	9	feb-96	2120	24
Perez1996	Arinaga	media	27°51'05	15°23'85	7	feb-96	812	14.9
Perez1996	Arinaga	interna	27°51'20	15°23'80	5	feb-96	1638	27.2
Espino	Arinaga	9	28R 460944	3080980	5	01/07/2003	1326.4	
Espino	Arinaga	10			10	01/07/2003	859.2	
CIMA	Arinaga	S1M1	27°8525	15°3958	8	29/05/2005	1536	115.52
CIMA	Arinaga	S1M2	27°8538	15°3945	9	29/05/2005	1552	355.48
CIMA	Arinaga	S3M2	27°8344	15°4116	17	29/05/2005	984	111.2
CIMA	Arinaga	S4M1	27°8328	15°4126	15.5	30/05/2005	560	85.4
CIMA	Arinaga	S4M2	27°8135	15°4127	19	30/05/2005	305.92	58.6
Plan de Conservación <i>C. nodosa</i>	Arinaga	Bahía de Arinaga	27°51.186	15°23.790	7.2	08/03/2006	621.12	59.15
PN Indicadores	Arinaga	Bahía de Arinaga	27°45.152	15°40.079	7.3	11/06/2007	569.17	67.1
PN Indicadores	Arinaga	Bahía de Arinaga	27°45.152	15°40.079	6.9	23/11/2007	582.32	58.9
PVA Manc. Sureste	Arinaga	Arinaga	27°51.186	15°23.790	8.9	15/11/2012	284.8	82.54
PVA Manc. Sureste	Arinaga	Arinaga	27°51.186	15°23.790	8.7	18/03/2013	536.88	68.41
Perez1996	Risco Verde		27°51'32	15°23'10	10	lug-94	1853	22.9
Perez1996	Risco Verde		27°51'32	15°23'10	8	mar-95	1942	15.5
Perez1996	Risco Verde		27°51'32	15°23'10	10	ago-95	1612	25.4
Perez1996	Risco Verde		27°51'32	15°23'10	10	feb-96	1790	9.6
Tuya et al. 2013 (Aq Bot)	Risco Verde	A	462095	3081237	9	01/02/2011	76	19
Tuya et al. 2013 (Aq Bot)	Risco Verde	A	462095	3081237	9	01/08/2011	66	60
Perez1996	Roque Arinaga		27°51'50	15°22'80	14	ago-94	1193	30.1
Javier Pérez	Roque Arinaga	A	462589	3081567	12	01/12/1994	777	581
Perez1996	Roque Arinaga		27°51'50	15°22'80	14	gen-95	1041	20.2
Javier Pérez	Roque Arinaga	A	462589	3081567	12	01/05/1995	1294	101
Perez1996	Roque Arinaga		27°51'50	15°22'80	14	mag-95	1650	22
Perez1996	Roque Arinaga		27°51'50	15°22'80	14	ago-95	1396	27.1
Perez1996	Roque Arinaga		27°51'50	15°22'80	14	feb-96	1180	15.4
Tuya et al. 2013 (Aq Bot)	Roque Arinaga	A	462589	3081567	12	01/02/2011	164	18
Tuya et al. 2013 (Aq Bot)	Roque Arinaga	A	462589	3081567	12	01/08/2011	108	36

Elitoral (PVA Sur)	El Veril	A	-	-	-	01/08/2008	31	37.6	698.4	92.8	10.2	0.32
Elitoral (PVA Sur)	El Veril	B	-	-	-	01/08/2008	32	15.2	329.2	41.3	26.6	1.6
Elitoral (PVA Sur)	El Veril	C	-	-	-	01/08/2008	4	-	179.2	31.4	10.4	0.2
Espino	Las Canteras	1	-	-	5	01/07/2003	-	-	1833.6	-	-	-
Espino	Las Canteras	2	-	-	5	01/07/2003	-	-	1080	-	-	-
Plan de Conservación <i>C. nodosa</i>	Las Canteras	Las Palmas	28°8.655	15°26.090	3.6	03/03/2005	36.1	2.6	183.18	23.4	15.1	2.6
Espino	Salinetas	3	28R 463076	3095352	10	01/07/2003	-	-	299.2	-	-	-
Espino	Salinetas	4	-	-	15	01/07/2003	-	-	137.6	-	-	-
Espino	El Burrero	6	28R 462130	3087725	10	01/07/2003	-	-	912	-	-	-
Espino	Vargas	7	-	-	10	01/07/2003	-	-	552	-	-	-
Espino	El Cabrón	8	28R 462204	3082857	10	01/07/2003	-	-	969.6	-	-	-
Pollifrone et al. 2006	Playa del Cabrón		27°52'14.27"	15°23'03.14"		03_06/2004			337	25.7	21.6	3.3
Plan de Conservación <i>C. nodosa</i>	Playa del Cabrón	Playa del Cabrón	27°52.221	15°23.108	8.6	08/03/2006	86.3	6.8	712.56	126.23	29.8	1.56
PN Indicadores	Playa del Cabrón	Playa del Cabrón	27°52.221	15°23.108	9.2	11/06/2007	92.5	5.2	697.89	76.8	28.8	1.4
PN Indicadores	Playa del Cabrón	Playa del Cabrón	27°52.221	15°23.108	8.6	23/11/2007	89.9	3.4	618.23	87.4	29.5	2.7
Espino	Formas	11	28R 459275	3080107	10	01/07/2003	-	-	1240	-	-	-
Espino	Formas	12	-	-	5	01/07/2003	-	-	1569.6	-	-	-
Plan de Conservación <i>C. nodosa</i>	Formas	Bahía de Formas	27°50.216	15°24.596	16.1	08/03/2006	75.2	12.3	456.32	69.45	25.6	3.68
PVA Manc. Sureste	Bahía de Formas	Bahía de Formas	27°50.216	15°24.596	16.9	15/11/2012	98.4	2.79	489.6	110.65	23	4.32
PVA Manc. Sureste	Bahía de Formas	Bahía de Formas	27°50.216	15°24.596	16.7	18/03/2013	88	7.75	316.44	110.78	9.5	2.04
Espino	El Cardón	13	28R 451496	3073756	10	01/07/2003	-	-	548.8	-	-	-
Espino	El Cochino	14	28R 444853	3070828	5	01/07/2003	-	-	995.2	-	-	-
Espino	El Cochino	15	-	-	10	01/07/2003	-	-	947.2	-	-	-
Plan de Conservación <i>C. nodosa</i>	El cochino	El Cochino	27°45.797	15°33.199	5.8	13/03/2006	75.5	2.4	458.5	89.6	26.6	2.89
Espino	Meloneras	20	-	-	10	01/07/2003	-	-	411.2	-	-	-
Espino	Anfi del Mar	25	-	-	15	01/07/2003	-	-	484.8	-	-	-
Plan de Conservación <i>C. nodosa</i>	Anfi del Mar	Anfi del Mar	27°46.253	15°41.643	6.7	16/03/2006	76.6	6.6	428.6	26.6	24.3	2.97
PN Indicadores	Anfi del Mar	Anfi del Mar	27°46.253	15°41.643	6.9	10/06/2007	69.6	6.4	451.8	151.6	24.3	2.96
PN Indicadores	Anfi del Mar	Anfi del Mar	27°46.253	15°41.643	7.2	22/11/2007	62.5	7.1	421.8	47.8	20.5	2.45
Espino	Balito	26	-	-	15	01/07/2003	-	-	377.33	-	-	-
Espino	Puerto Rico	27	28R 430234	3072775	15	01/07/2003	-	-	835.2	-	-	-

Plan de Conservación <i>C. nodosa</i>	Tufia	Bahía de Tufia	27°57'636	15°22'745	8.6	06/03/2006	58.4	4.9	284.1	26.16	21.6	1.15
CIMA	Tufia (Este)	SEB-3	27°57'36"	15°22'47"	3	06/12/2006	28	22	240	24.3	25.6	12.3
CIMA	Tufia (Este)	SEB-3	27°57'36"	15°22'47"	3	25/02/2007	26	15	208	18.7	24.4	6.8
Perez1996	Taliarte	50	27°59'20	15°22'10	7	ago-94			914		4.44	
Perez1996	Taliarte	100	27°59'20	15°22'10	8	ago-94			1371		12.61	
Perez1996	Taliarte	150	27°59'20	15°22'10	9	ago-94			1409		29.54	
Plan de Conservación <i>C. nodosa</i>	Taliarte	Exterior M. Taliarte	27°59'334	15°22'186	6.9	06/03/2006	62.4	6.8	223.5	53.1	24.2	3.96
CIMA	Puerto Taliarte (Este)	SEB-2	27°59'20"	15°22'10"	5.5	06/12/2006	23	20	176	28.5	15.2	5.7
CIMA	Puerto Taliarte (Este)	SEB-2	27°59'20"	15°22'10"	5.5	25/02/2007	22	7	192	23.4	14.8	5.9
Perez1996	C. Romeral	V	27°46'52	15°30'70	12	dic-94			247		12.6	
Est. Preoperacional PCR	Castillo del Romeral	Castillo del Romeral	27°47'311	15°29'705	6.6	06/07/2005	57.45	16.94	376	26.39	26.6	2.9
Plan de Conservación <i>C. nodosa</i>	Castillo del Romeral	Punta de Tarajalillo	27°47'031	15°29'952	6.9	10/03/2006	66.8	6.8	425.25	25	24.8	2.5
EIA Jaulas Castillo	Central Térmica	Castillo del Romeral	27°41'231	15°29'797	6	06/02/2009	25	8.66	96	32	9.6	2.08
EIA Jaulas Castillo	Central Térmica	Castillo del Romeral	27°41'231	15°29'797	12	06/02/2009	40	4.61	160	24.4	10	2
PVA Procría	Castillo del Romeral	Castillo del Romeral	27°41'231	15°29'797	7	08/06/2010	84	7.88	373.3	85.8	26.6	2.82
PVA Procría	Castillo del Romeral	Castillo del Romeral	27°41'231	15°29'797	7.5	10/11/2010	86	1.08	311.1	77.4	27.56	3.17
Plan de Conservación <i>C. nodosa</i>	Playa del Cura	Playa del Cura	27°47'477	15°43'967	11.3	16/03/2006	81.5	15.3	356.68	96.4	29.16	2.8
PVA emisorio Bahía Feliz	Bahía Feliz	Bahía Feliz	27°46'639	15°31'286	4.8	09/11/2012	78.8	10.51	211.2	78.67	20.32	4.93
Plan de Conservación <i>C. nodosa</i>	Bahía Feliz	Bahía Feliz	27°46'639	15°31'286	4.9	10/03/2006	58.4	8.9	356.6	64.2	29	3.12
Plan de Conservación <i>C. nodosa</i>	Arguineguín	Bahía de Santa Agueda	27°45'152	15°40'079	5.4	16/03/2006	62.5	9.91	324.2	58.8	28.8	1.6
Perez1996	Montaña Arena	Montaña Arena	27°44'75	15°38'20	6	lug-94			1104		14.24	
Perez1996	Pta.Tenefé	Pta.Tenefé	27°47'52	15°26'24	21	dic-94			698		15.2	
Seguimiento de ZECs	ZEC ES7010017 Franja Marina de Mogán	Medio Almud	426611	3075515	14	24/08/2011			187.2	129.78		

Fuerteventura

Study	Meadow	Site	Latitude	Longitude	Depth (m)	Date	Coverage (%)	SE	Shoot density (shoot m ⁻²)	SE	Leaf length (cm)	SE
CCV (Barberá et al. 2005)	Corralejo	A	28°40'08.7"	13°49'47.4"	16	17/03/2003	99	1	230	32.3	18.1	1.3
CCV (Barberá et al. 2005)	Corralejo	B	28°40'08.7"	13°49'47.4"	16	17/03/2003	100	0	260	33.1	16.6	1
Espino	Corralejo	40	614346	3172040		01/07/2003			660.8			
Espino	Corralejo	41	614374	3172051		01/07/2003			632			
Espino	Corralejo	42	614390	3172050		01/07/2003			705.6			
CCV	Corralejo	A	28°40'08.7"	13°49'47.4"	14	14/10/2003	100	0	264	24.8	19.5	1
CCV	Corralejo	B	28°40'08.7"	13°49'47.4"	14	14/10/2003	100	0	358	35.2	15.6	0.7
CCV	Corralejo	A	28°40'08.7"	13°49'47.4"	13	09/03/2004	100	0	408	22	9.5	0.5
CCV	Corralejo	B	28°40'08.7"	13°49'47.4"	14	09/03/2004	100	0	400	26.9	10	0.5
CCV	Corralejo	A	28°40'08.7"	13°49'47.4"	13	16/03/2005	100	0	226	24.7	16.8	1.2
CCV	Corralejo	B	28°40'08.7"	13°49'47.4"	13	16/03/2005	100	0	230	27.8	16.5	0.6
CCV (Barberá et al. 2005)	Gran Tarajal	A	28°12'19.6"	14°01'34.2"	14	18/03/2003	84.7	10.4	290	27.4	27.0	1.3
CCV (Barberá et al. 2005)	Gran Tarajal	B	28°12'19.6"	14°01'34.2"	14	18/03/2003	80	10.8	290	37.1	19.2	3.1
Espino	Gran Tarajal	55	595981	3120657	5	01/07/2003			1141.7			
Espino	Gran Tarajal	56	595973	3120459	10	01/07/2003			1094.4			
Est. Preop. GT	Gran Tarajal	Espigón muelle	28°12.316	14°1.595	12.6	20/08/2003	63.26	16.18	828.12	298.13	30.51	7.12
Est. Preop. GT	Gran Tarajal	Bocaina puerto	28°12.397	14°1.417	8.8	20/08/2003	55.48	15.84	526.52	108.5	31.12	6.18
Est. Preop. GT	Gran Tarajal	Playa Gran Tarajal	28°12.509	14°1.303	7.8	21/08/2003	68.32	16.12	568.16	192.3	29.6	2.9
Est. Preop. GT	Gran Tarajal	Playa Aceituno	28°12.353	14°1.936	10.5	21/08/2003	72.11	11.16	628.8	163.5	29.4	3.1
CCV	Gran Tarajal	A	28°12'19.6"	14°01'34.2"	6	16/10/2003	65	11	228	17.1	16.8	1.1
CCV	Gran Tarajal	B	28°12'19.6"	14°01'34.2"	6	16/10/2003	76.2	3.9	276	29.4	15	0.5
Herrera-Perèz	Gran Tarajal		595973	3120459	11	2003	50		1094.4		36.48	
Herrera-Perèz	Gran Tarajal		595981	3120657	6	2003	50		1141.7		0	
PVA Muelle GT	Gran Tarajal	Espigón muelle	28°12.316	14°1.595	12.6	18/02/2004	52.56	12.94	657.94	304.98	26.01	6.93
PVA Muelle GT	Gran Tarajal	Bocaina puerto	28°12.397	14°1.417	8.8	18/02/2004	45.44	5.92	636.11	153.84	27.41	5.2
PVA Muelle GT	Gran Tarajal	Playa Gran Tarajal	28°12.509	14°1.303	7.8	19/02/2004	48.56	15.18	458.33	214.15	30.59	3.8
PVA Muelle GT	Gran Tarajal	Playa Aceituno	28°12.353	14°1.936	10.5	19/02/2004	42.11	6.35	544.44	158.1	25.98	2.32
PVA Muelle GT	Gran Tarajal	Espigón muelle	28°12.316	14°1.595	12.1	03/03/2004	42.32	2.63	436.11	108.1	22.2	3.12
PVA Muelle GT	Gran Tarajal	Bocaina puerto	28°12.397	14°1.417	8.3	03/03/2004	25.15	7.82	505.56	98.6	21.12	2.1
PVA Muelle GT	Gran Tarajal	Playa Gran Tarajal	28°12.509	14°1.303	7.2	03/03/2004	28.12	5.5	233.67	124.15	20.32	1.8
PVA Muelle GT	Gran Tarajal	Playa Aceituno	28°12.353	14°1.936	9.8	03/03/2004	22.11	8.9	208.33	36.2	19.08	1.16

PVA Muelle GT	Gran Tarajal	Espigón muelle	28°12.316	14°1.595	11.6	12/08/2004	61.6	6.8	512.6	56.8	26.8	1.8
PVA Muelle GT	Gran Tarajal	Bocaina puerto	28°12.397	14°1.417	7.8	12/08/2004	55.8	3.5	428.4	101.6	28.4	2.6
PVA Muelle GT	Gran Tarajal	Playa Gran Tarajal	28°12.509	14°1.303	6.9	13/08/2004	45.8	1.6	456.8	86.3	30.5	1.5
PVA Muelle GT	Gran Tarajal	Playa Aceituno	28°12.353	14°1.936	9.1	13/08/2004	52.1	10.5	395.6	26.8	29.6	3.9
Polifrone et al. 2006	Gran Tarajal		28°12'38.80"	14°01'33.00"		03_06/2004			611.1	54	46.5	11
CCV	Gran Tarajal	A	595973	3120459	12	06/03/2004	90	2.9	322	43.9	20.5	3.2
CCV	Gran Tarajal	B	595981	3120657	6	06/03/2004	95	3.5	284	23.8	20.3	1.9
CCV	Gran Tarajal	A	595973	3120459	10	14/03/2005	100	0	510	39.4	32	1.3
CCV	Gran Tarajal	B	595973	3120459	10	14/03/2005	100	0	424	38.1	25.9	3.8
PVA Muelle GT	Gran Tarajal	Espigón muelle	28°12.316	14°1.595	12.5	04/04/2005	61.8	18.3	373.33	140.26	20.1	3.09
PVA Muelle GT	Gran Tarajal	Bocaina puerto	28°12.397	14°1.417	8.7	04/04/2005	55.6	17.5	405.45	85.8	26.3	3.12
PVA Muelle GT	Gran Tarajal	Playa Gran Tarajal	28°12.509	14°1.303	7.8	05/04/2005	58.5	6.5	433.36	96.3	25.8	2.9
PVA Muelle GT	Gran Tarajal	Playa Aceituno	28°12.353	14°1.936	10.3	05/04/2005	42.11	9.8	398.5	29.8	24.8	2.16
PVA Muelle GT	Gran Tarajal	Espigón muelle	28°12.316	14°1.595	12.6	05/08/2005	66.13	6.8	492.5	73.2	28.2	2.5
PVA Muelle GT	Gran Tarajal	Bocaina puerto	28°12.397	14°1.417	8.9	05/08/2005	45.2	11.2	305.6	65.1	29.5	0.8
PVA Muelle GT	Gran Tarajal	Playa Gran Tarajal	28°12.509	14°1.303	7.7	06/08/2005	68.11	14.4	438.12	46.8	26.7	3.1
PVA Muelle GT	Gran Tarajal	Playa Aceituno	28°12.353	14°1.936	10.8	06/08/2005	52.6	6.8	364.16	102.5	25.8	1.6
Plan de Conservación C. nodosa	Gran Tarajal	Espigón muelle	28°12.268	14°2.123	9.8	28/03/2006	89.6	10.6	498.6	112.4	28.7	2.75
Caracterización DMA	Gran Tarajal	Espigón muelle	28°12.268	14°2.123	7.6	23/02/2008	97.6	3.58	398.93	60.27	21.93	3.65
Caracterización DMA	Gran Tarajal	Espigón muelle	28°12.268	14°2.123	13.2	23/02/2008	85.6	12.84	370.13	19.45	20.8	3.87
Elitoral -Reconocimiento aguas superficiales	Gran Tarajal	A	611446	3150937	7	01/08/2008	88	12.2	767	-	27.2	-
Elitoral -Reconocimiento aguas superficiales	Gran Tarajal	B	611446	3150937	12	01/08/2008	61.2	13.8	475	-	25.7	-
Caracterización DMA	Gran Tarajal	Espigón muelle	28°12.268	14°2.123	7.8	25/08/2008	100	0	766.93	117.66	27.66	1.81
Caracterización DMA	Gran Tarajal	Espigón muelle	28°12.268	14°2.123	13.6	25/08/2008	74.4	9.21	475.73	84.44	25.73	3.63
Elitoral -Reconocimiento aguas superficiales	Gran Tarajal	A	594666	3120230	8	01/02/2009	81.2	17.6	399	-	21.9	-
Elitoral -Reconocimiento aguas superficiales	Gran Tarajal	B	594666	3120230	13	01/02/2009	62.8	25.5	370	-	20.8	-
Herrera-Pérez	Gran Tarajal		595973	3120459	11	15/09/2013	60		728	199.45	33.08	
Herrera-Pérez	Gran Tarajal		595981	3120657	6	15/09/2013	0		0	0	0	
Espino	Guinijamar	57	590860	3119679	5	01/07/2003	411.2					
Espino	Guinijamar	58	590603	3119336	10	01/07/2003	913.6					
CCV	Guinijamar	A	590860	3119679	5	14/03/2005	100	0	396	35.8	15.5	1.6
CCV	Guinijamar	B	590603	3119336	10	14/03/2005	100	0	524	40.2	18.5	1.6

Elitoral -Reconocimiento aguas superficiales	Playa Blanca	A	611446	3150937	7	01/02/2009	82.4	18.2	592	-	27.8	-
Elitoral -Reconocimiento aguas superficiales	Playa Blanca	B	611446	3150937	12	01/02/2009	88	8.2	736	-	23.1	-
Elitoral -Reconocimiento aguas superficiales	Playa Blanca	A	611446	3150937	7	01/02/2009	78.8	21.5	418	-	22.4	-
Elitoral -Reconocimiento aguas superficiales	Playa Blanca	B	611446	3150937	12	01/02/2009	84	11.4	506	-	22.4	-
Espino	Jablito	43	614740	3164962	5	01/07/2003			1286.4			
Espino	Puerto Lajas	44	613786	3157237	5	01/07/2003			5086.4			
Espino	Puerto Lajas		613786	3157237	4	2003	20		5086.4		0	
Plan de Conservación <i>C. nodosa</i>	Bahía Puerto Lajas		28°32.191	13°50.217	3.6	27/03/2006	98.8	2.8	986.12	156.3	14.2	2.1
Herrera-Pérez	Puerto Lajas		613786	3157237	4	20/09/2013	0		0	0	0	
Espino	Puerto Rosario	45	612305	3152815	10	01/07/2003			1400			
Espino	Jacomar	48	606974	3126811	20	01/07/2003			849.6			
Espino	Gran Valle	49	606214	3125315	10	01/07/2003			1086.4			
Espino	Gran Valle	50	605990	3125361	15	01/07/2003			849.6			
Espino	Entallada	51	604045	3123099	10	01/07/2003			1315.2			
Espino	Entallada	52	601954	3122764	5	01/07/2003			1025.6			
Espino	Entallada	53	602018	3122713	10	01/07/2003			1073.6			
Espino	La Entallada		604045	3123099	12	2003	50		1025.6		45.46	
Espino	La Entallada		604045	3123099	12	15/09/2013	80		934.4	154.61	40.87	
Espino	Las Playitas	54	599459	3122750	5	01/07/2003			616.64			
Espino	Las Playitas		599459	3122750	5.5	2003	100		616.64		0	
Plan de Conservación <i>C. nodosa</i>	Las Playitas		28°13.503	13°59.079	8.4	27/03/2006	85.2	5.9	512.3	115.8	24.8	2.56
Herrera-Pérez	Las Playitas		599459	3122750	5.5	15/09/2013	0		0	0	0	
Espino	Risco del Paso	62	572241	3108832	10	01/07/2003			394.08			
Herrera-Pérez	Risco del Paso		572241	3108832	10	2003	100		520		33.2	
Herrera-Pérez	Risco del Paso		572241	3108832	10	13/09/2013	100		251.2	111.38	35.43	
Espino	Punta Jandía	69	549917	3105106	10	01/07/2003			851.2			
Plan de Conservación <i>C. nodosa</i>	Jandía		28°5.499	14°16.473	10.5	29/03/2006	96.4	2.6	692.56	97.6	29.5	3.53
Plan de Conservación <i>C. nodosa</i>	Tarajalejo		28°11.181	14°7.431	8.8	28/03/2006	80.5	12.4	458.3	96.4	26.6	1.96
Herrera-Pérez	Playita del Poris		614390	3172050	11	2003	100		660.8		36.75	
Herrera-Pérez	Playita del Poris		614346	3172040	15	2003	100		632		0	
Herrera-Pérez	Playita del Poris		614390	3172050	11	19/09/2013	30		553.6	157.53	28.13	
Herrera-Pérez	Playita del Poris		614346	3172040	15	19/09/2013	0		0	0	0	

Lanzarote

Study	Meadow	Site	Latitude	Longitude	Depth (m)	Date	Coverage (%)	SE	Shoot density (shoot/m ²)	SE	Leaf length (cm)	SE
Barberá et al. 2005	Caleta de Sebo	A	29°13.640'	13°29.986'	10	01/03/2003	99.05	0.5	710	64.3	22	2.9
Barberá et al. 2005	Caleta de Sebo	B	29°13.640'	13°29.986'	10	01/03/2003	90	2	592	53.7	21.6	1.4
Espino	Caleta de Sebo	70	645199	3233301	10	01/07/2003			1368			
Proyecto "Canarias Costa Viva"	Caleta de Sebo	A	29°13.640'	13°29.986'	10	10/10/2003	87.5	2.3	260	78.9	15.1	0.7
Proyecto "Canarias Costa Viva"	Caleta de Sebo	B	29°13.640'	13°29.986'	10	10/10/2003	100	0	362	128.5	18	1.6
Proyecto "Canarias Costa Viva"	Caleta de Sebo	A	29°13.640'	13°29.986'	10	12/03/2004	100	0	726	61.1	16.9	0.9
Proyecto "Canarias Costa Viva"	Caleta de Sebo	A	29°13.640'	13°29.986'	10	16/10/2004	100	0	758	53.6	31.1	10.8
Proyecto "Canarias Costa Viva"	Caleta de Sebo	B	29°13.640'	13°29.986'	10	16/10/2004	90.2	0.4	598	46.8	22.7	2.1
Proyecto "Canarias Costa Viva"	Caleta de Sebo	A	29°13.640'	13°29.986'	12	18/03/2005	100	0	1033	140.6	20.2	1.1
Proyecto "Canarias Costa Viva"	Caleta de Sebo	B	29°13.640'	13°29.986'	11	18/03/2005	100	0	968	160.3	20.7	1.2
Espino	Caleta de Sebo		645199	3233301	8	(01/06/2013)	5		272.00	116.36	12.38	
Barberá et al. 2005	El Río	A	29°13'02	13°30'08.2"	8	01/03/2003	66.2	14.3	438	53.8	17.5	2.1
Barberá et al. 2005	El Río	B	29°13'02	13°30'08.2"	8	01/03/2003	54.0	6.7	588	69.3	22	2.9
Barberá et al. 2005	El Río	A	29°12.974'	13°30.262'	14	12/10/2003	75	3.8	318	55.4	17.7	15.8
Proyecto "Canarias Costa Viva"	El Río	B	29°12.974'	13°30.262'	14	12/10/2003	76.2	1.7	278	44.9	18.8	0.6
Proyecto "Canarias Costa Viva"	El Río	A	29°12.974'	13°30.262'	8	18/05/2004	72.5	5.3	250	35.74	11.3	0.6
Proyecto "Canarias Costa Viva"	El Río	B	29°12.974'	13°30.262'	8	18/05/2004	60	6.5	338	73	17.1	1.1
Proyecto "Canarias Costa Viva"	El Río	A	29°12.974'	13°30.262'	7	16/10/2004	97.2	0.2	620	61.2	16.8	1.1
Proyecto "Canarias Costa Viva"	El Río	B	29°12.974'	13°30.262'	9	16/10/2004	93.7	1.7	622	104.7	19.3	1.6
Barberá et al. 2005	Playa Blanca	A	28°51'41.0"	13°49'49"	8	01/03/2003	95.0	5	584	54	19	2.8
Barberá et al. 2005	Playa Blanca	B	28°51'41.0"	13°49'49"	7	01/03/2003	94.2	4.8	692	60.3	12.7	0.8
Espino	Playa Blanca	95	28R 0614168	3193170	5	01/07/2003			1132.8			
Espino	Playa Blanca	96	28R 0614232	3192496	10	01/07/2003			700.8			
Espino	Playa Blanca	97	28R 0613951	3192751	15	01/07/2003			564.8			
Proyecto "Canarias Costa Viva"	Playa Blanca	A	28°51'.586'	13°49.640	8	14/10/2003	100	0	322	57	15.5	1.7
Proyecto "Canarias Costa Viva"	Playa Blanca	B	28°51'.586'	13°49.640	8	14/10/2003	95	2	514	21.5	14.3	0.6
Proyecto "Canarias Costa Viva"	Playa Blanca	A	28°51'.586'	13°49.640	7	10/03/2004	77.5	4.5	528	84.5	13.1	0.6
Proyecto "Canarias Costa Viva"	Playa Blanca	B	28°51'.586'	13°49.640	6	10/03/2004	80	5.8	508	40.6	10	0.4
Proyecto "Canarias Costa Viva"	Playa Blanca	A	28°51'.586'	13°49.640	6	10/10/2004	98.2	0.3	784	122.9	15.5	0.8
Proyecto "Canarias Costa Viva"	Playa Blanca	B	28°51'.586'	13°49.640	6	10/10/2004	90	4.1	966	51.6	14.6	0.5
Polifrone et al. 2006	Playa Blanca		28°52'00.00"	13°50'00.00"		03_06/2005			751.9	22.8	19.9	0.5

Espino	Playa Blanca	Playa Blanca 1	614168	3193170	6	(01/06/2013)	60	984.00	146.69	6.77	
Espino	Playa Blanca	Playa Blanca 2	614232	3192496	15	(01/06/2013)	15	382.40	161.67	7.52	
Tuya et al. 2006	Playa Dorada	A	28°51.5'	15°49.4'	6	01/01/2001	100	390	25	11.5	0.4
Tuya et al. 2006	Playa Dorada	A	28°51.5'	15°49.4'	6	01/07/2001	100	805	40	15.8	0.3
Tuya et al. 2006	Playa Dorada	A	28°51.5'	15°49.4'	6	01/03/2002	100	510	30	10.5	0.2
Espino	Playa Dorada	94	613977	3193210	5	01/07/2003		1168			
Barberá et al. 2005	Playa Quemada	A	28°54'15.3''	13°44'12.2''	8	01/03/2003	94.0	384	26.2	15.9	1.4
Barberá et al. 2005	Playa Quemada	B	28°54'15.3''	13°44'12.2''	6	01/03/2003	76.2	282	24.9	15.6	1.1
Espino	Playa Quemada	88	28R 0623226;	3198058	10	01/07/2003		721.6			
Espino	Playa Quemada	89	28R 0622889	3197668	10	01/07/2003		896			
Proyecto "Canarias Costa Viva"	Playa Quemada	A	28°54.265'	13°44.085'	9	14/10/2003	100	248	24.4	18.3	0.7
Proyecto "Canarias Costa Viva"	Playa Quemada	B	28°54.265'	13°44.085'	8	14/10/2003	100	344	26.1	17.12	0.8
Proyecto "Canarias Costa Viva"	Playa Quemada	A	28°54.265'	13°44.085'	8	10/03/2004	95	520	44.7	13.8	0.3
Proyecto "Canarias Costa Viva"	Playa Quemada	B	28°54.265'	13°44.085'	9	10/03/2004	100	444	18.1	16.8	0.7
Proyecto "Canarias Costa Viva"	Playa Quemada	A	28°54.265'	13°44.085'	6	11/10/2004	95	432	107.4	21	1
Proyecto "Canarias Costa Viva"	Playa Quemada	B	28°54.265'	13°44.085'	7	11/10/2004	65	582	42.5	22	1.36
Proyecto "Canarias Costa Viva"	Playa Quemada	A	28°54.265'	13°44.085'	6	15/03/2005	100	324	64.2	-	-
Proyecto "Canarias Costa Viva"	Playa Quemada	B	28°54.265'	13°44.085'	6	15/03/2005	100	696	80.9	-	-
Plan de Conservación <i>C. nodosa</i>	Playa Quemada	Playa Quemada	28°54.321	13°44.093	9.8	04/04/2006	75.2	384.6	72.5	26.1	1.86
Caracterización DMA	Playa Quemada	Playa Quemada	28°54.321	13°44.093	6.7	22/02/2008	94.4	392.53	30.31	22.66	3.18
Caracterización DMA	Playa Quemada	Playa Quemada			12.4	22/02/2008	56	300.8	20.51	24.13	3.59
Elitoral -Reconocimiento aguas superficiales	Playa Quemada	A	623339	3198157	7	01/08/2008	83.6	569.6	-	29.06	-
Elitoral -Reconocimiento aguas superficiales	Playa Quemada	B	623339	3198157	13	01/08/2008	52.8	297.6	-	25.66	-
Caracterización DMA	Playa Quemada	Playa Quemada	28°54.321	13°44.093	7	23/08/2008	95.2	569.6	54.96	29.06	4.98
Caracterización DMA	Playa Quemada	Playa Quemada	28°54.321	13°44.093	12.8	23/08/2008	58.4	297.6	66.55	25.66	3.68
Elitoral -Reconocimiento aguas superficiales	Playa Quemada	A	623339	3198157	7	01/02/2009	79.2	392.53	-	18.73	-
Elitoral -Reconocimiento aguas superficiales	Playa Quemada	B	623339	3198157	12	01/02/2009	53.2	300.8	-	18.66	-
Plan de Conservación <i>C. nodosa</i>	Arrieta	Arrieta	29°7.440	13°27.516	11.5	03/04/2006	80.2	369.12	63.3	26.3	2.63
Caracterización DMA	Arrieta	Arrieta	29°7.440	13°27.516	8.7	21/02/2008	87.2	263.47	26.01	19.6	2.97
Caracterización DMA	Arrieta	Arrieta	29°7.440	13°27.516	12	21/02/2008	95.2	481.06	54.05	22.13	1.89
Elitoral -Reconocimiento aguas superficiales	Arrieta	A	649962	3222706	9	01/08/2008	56	377	-	26.3	-

Elitoral -Reconocimiento aguas superficiales	Arrieta	B	649962	3222706	13	01/08/2008	82.8	19.3	755	-	25.3	-
Caracterización DMA	Arrieta	Arrieta	29°7.440	13°27.516	9.2	22/08/2008	83.2	15.34	377.6	50.09	26.33	2.53
Caracterización DMA	Arrieta	Arrieta	29°7.440	13°27.516	13	22/08/2008	100	0	755.2	71.01	25.26	2.48
Elitoral -Reconocimiento aguas superficiales	Arrieta	A	649962	3222706	8	01/02/2009	58	32.2	263.47	-	19.6	-
Elitoral -Reconocimiento aguas superficiales	Arrieta	B	649962	3222706	12	01/02/2009	78	16.1	481.06	-	22.13	-
Espino	Guasimeta	81	636253	3202367	5	01/07/2003			165.76			
Espino	Guasimeta	82	636189	3201961	10	01/07/2003			990.4			
Espino	Guasimeta	83	636194	3201720	15	01/07/2003			737.6			
Espino	Guasimeta	84	636233	3201562	20	01/07/2003			144			
Plan de Conservación <i>C. nodosa</i>	Guasimeta	Guasimeta	28°56.302	13°36.159	12.3	03/04/2006	85.6	16.8	458.25	54.8	24.5	1.95
Caracterización DMA	Guasimeta	Guasimeta	28°56.302	13°36.159	8	21/02/2008	58.4	28.65	419.2	190.46	21.33	2.59
Caracterización DMA	Guasimeta	Guasimeta	28°56.302	13°36.159	15	21/02/2008	87.2	7.69	342.4	105.28	22.46	5.22
Caracterización DMA	Guasimeta	Guasimeta	28°56.302	13°36.159	7.6	22/08/2008	64.8	32.42	365.86	145.69	18.73	2.72
Caracterización DMA	Guasimeta	Guasimeta	28°56.302	13°36.159	14.8	22/08/2008	72	18.11	310.4	57.86	16.66	2.69
Elitoral -Reconocimiento aguas superficiales	Guacimeta	A	636189	3201961	8	01/02/2009	55.6	3.2	419	-	21.33	-
Elitoral -Reconocimiento aguas superficiales	Guacimeta	B	636189	3201961	15	01/02/2009	79.6	9.5	324	-	22.46	-
Elitoral -Reconocimiento aguas superficiales	Guacimeta	A	636189	3201961	7	01/02/2009	55.2	9.5	365.86	-	22.66	-
Elitoral -Reconocimiento aguas superficiales	Guacimeta	B	636189	3201961	14	01/02/2009	66.4	4.8	310.4	-	24.13	-
Seguimiento de ZEC's	ZEC ES7010021 Sebadales de Guacimeta	Guasimeta	638473	3203422	8	08/04/2011			650.18	150.65		
Espino	El Salado	71	645098	3233474	10	01/07/2003			1947.2			
Espino	La Graciosa	Playa EL Salado	645098	3233474	8	(01/06/2013)	10		488.00	219.54	4.44	
Espino	Franceses	72	642973	3233030	10	01/07/2003			1081.6			
Espino	Franceses	73	642883	3232925	15	01/07/2003			838.4			
Espino	La Graciosa	Playa Los Franceses 1	642973	3233030	8	(01/06/2013)	0		0.00	0.00	0.00	
Espino	La Graciosa	Playa Los Franceses 2	642883	3232925	12	(01/06/2013)	0		0.00	0.00	0.00	
Espino	Playa Risco	74	655963	3222343	5	01/07/2003			547.2			
Espino	Punta Mujeres	75	651926	3225159	15	01/07/2003			1137.6			
Espino	Punta Mujeres	76	651833	3224747	20	01/07/2003			795.2			
Espino	Ancones	77	648665	3210474	10	01/07/2003			801.6			

Espino	Ancones	78	648755	3210455	15	01/07/2003	1150.4
Espino	Ancones	79	648793	3210373	20	01/07/2003	808
Espino	Ancones	80	648829	3210290	25	01/07/2003	611.2
Espino	Pocillos	85	633499	3200442	5	01/07/2003	678.4
Espino	Pocillos	86	633276	3200220	10	01/07/2003	881.6
Espino	Pocillos	87	633061	3199944	15	01/07/2003	1033.6
	Playa de Los Pocillos		633276	3200220	10	(01/06/2013)	1075.20
					60		277.31
							16.20
Espino	La Juradita	90	619256	3191413	5	01/07/2003	689.6
Espino	La Juradita	91	619399	3191423	10	01/07/2003	544
Espino	La Juradita	92	619466	3191320	15	01/07/2003	577.6
Espino	Papagayo	93	617977	3191327	5	01/07/2003	550.4
Espino	La Mulata	98	611788	3193097	5	01/07/2003	870.4
Espino	La Mulata	99	611852	3193054	10	01/07/2003	425.6
	Playa de La Mulata 2		611852	3193054	10	(01/06/2013)	392.00
					30		54.52
							17.78
CIMA	Puerto Calero	M3	28°9'153	13°7'083	8.5	17/03/2005	185.6
							nd
							67
							9.54
							5.7
Plan de Conservación <i>C. nodosa</i>	Teguiise		28°59.725	13°28.753	10.6	04/04/2006	328.9
							20.2
							26.3
							18.8
							2.63
Seguimiento de ZECs	ZEC ES7010020 Sebadales de La Graciosa		647982	3234997	18	21/10/2011	250.67
							47.1
Seguimiento de ZECs	La Graciosa	Pta. Los Fariones	647982	3234997	18	(01/06/2013)	310.40
							135.60
							11.95