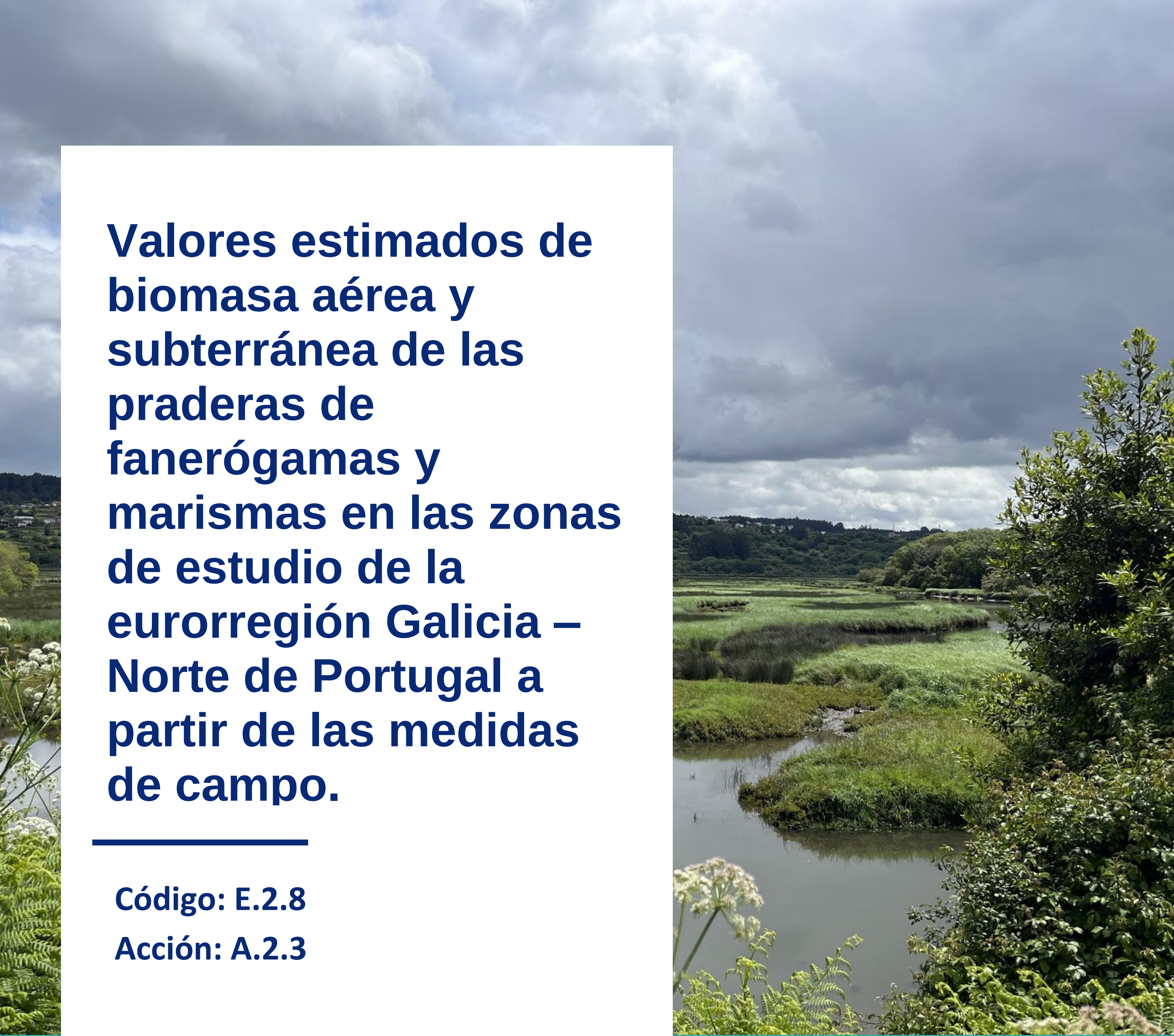

Valores estimados de biomasa aérea y subterránea de las praderas de fanerógamas y marismas en las zonas de estudio de la eurorregión Galicia – Norte de Portugal a partir de las medidas de campo.

Código: E.2.8

Acción: A.2.3

Interreg

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CAPTA

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Summary

1. Introduction

The sampling process for the CAPTA project involved collecting samples from six species (*Sporobolus pumilus, Juncus maritimus, Halimione portulacoides, Zostera noltii*, *Spartina maritima and Phragmites australis)* at three different sites in the areas of Ramallosa, Betanzos, and Viana do Castelo. The sampling process collected biomass from both above-ground and below-ground sources, as well as sediment, and aerial images from a multispectral camera mounted on a drone.

Sampling of the Betanzos salt marsh and seagrass meadow included estimates of above- and below-ground biomass for the four plant species listed in CAPTA for this ecosystem: *Sporobolus pumilus* (Roth) P.M.Peterson & Saarela (formerly Spartina patens), *Juncus maritimus* Lam., *Halimione portulacoides* (L.) Aellen, and *Zostera noltii* Hornem. The first three species were sampled in the marsh area at the mouth of the Mandeo (43.305552, -8.219075), while *Z. noltii* was sampled in the meadow at Sumiño Beach (43.350345, -8.211940), near the port of Miño (A Coruña).

Sampling of the Ramallosa salt marsh (42.115459, -8.819721) and seagrass meadow (42.119767, -8.816928) included estimates of above- and below-ground biomass for the four plant species listed in CAPTA for this ecosystem: *Juncus maritimus* Lam., *Halimione portulacoides* (Linnaeus) Aellen, *Spartina maritima* (Curtis) Fernald, and *Zostera noltii* Hornem. The first three species were sampled in the marsh zone at the mouth of the Miñor River, while *Z. noltii* was sampled in the adjacent meadow; both sites are located at the river's estuary (Ramallosa, Vigo).

Sampling of the Viana do Castelo salt marsh zones included estimates of above- and below-ground biomass for the three plant species listed in CAPTA for this ecosystem: *Sporobolus pumilus* (Roth) P.M.Peterson & Saarela (previously, *Spartina patens*), *Juncus maritimus* Lam. and *Phragmites australis* (Cav.) Trin. ex Steud. The species were collected in the north (41.699356, -8.799273) and south (41.692245, -8.772356) margins of the Lima River.

The objective was to obtain an estimate of biomass in terms of both dry weight and stocks of carbon (C) and nitrogen (N). This report presents the results obtained and provides a summary of the characteristic values for each plant. The drone image will be later used to train algorithms to generate a species distribution in the area and another 14 salt marshes of Galicia and northern Portugal, see Deliverable 2.5

2. Materials and Methods

In all three sites, for each species we collected 25 AGB cores (0.3×0.3 m quadrats) and 10 BGB cores (two 8 cm-diameter, 0–30 cm deep cores pooled in the first five quadrat sampling), following protocol E.2.7.". The sampling quadrats were arranged to encompass apparent variability in density within each vegetation species. The reason for this was that the data were collected with the intention of calibrating a model for analysing aerial imagery of the study area, for which it is more useful to have samples that cover the natural variability of each plant's above-ground biomass. This sampling arrangement means that the mean biomass values recorded for each vegetation species should be interpreted with caution, since obtaining a reliable estimate of the average biomass would have required randomly placed quadrats and, possibly, a larger number of samples.

For above-ground biomass, all the material growing within a 0.3 × 0.3 m^2 quadrat was harvested, while each below-ground biomass sample consisted of the roots and rhizomes contained in two 8 cm-diameter cores collected from within the same sampling quadrat after harvesting the above-ground material. The collected biomass was cleaned of sediment, dried and weighed. A sample of it was grinded and sent to an external laboratory for analysis of its carbon and nitrogen content. Analyses were performed on a FlashEA 1112 elemental analyser (ThermoFinnigan). Each sample was precisely weighed in a tin capsule on a Class I balance (minimum resolution 0.001 mg) and then subjected to flash combustion in a quartz tube containing WO_3 and Cu at 1020 °C.

The outcomes were then summarised by estimating mean values, standard errors and their 95 % confidence intervals for each species and biomass type using a general linear model. These summaries were produced using R 4.4.2 (R Core Team, 2024) in RStudio (Posit Team, 2025) with the glmmTMB, sjPlot packages (Brooks et al., 2017; Lüdecke, 2024), nlme (Pinheiro & Bates, 2025) and ggplot2 (Wickham, 2016). Depending on the response variable, different generalised linear models were fitted.

2. Results

2.1 Lima

At the Lima marsh site, above-ground (AGB) and below-ground biomass (BGB) were both quantified for three dominant halophytes—*Juncus maritimus*, *Sporobolus pumilus*, and *Phragmites australis*—using twenty-five AGB and five BGB cores per species.

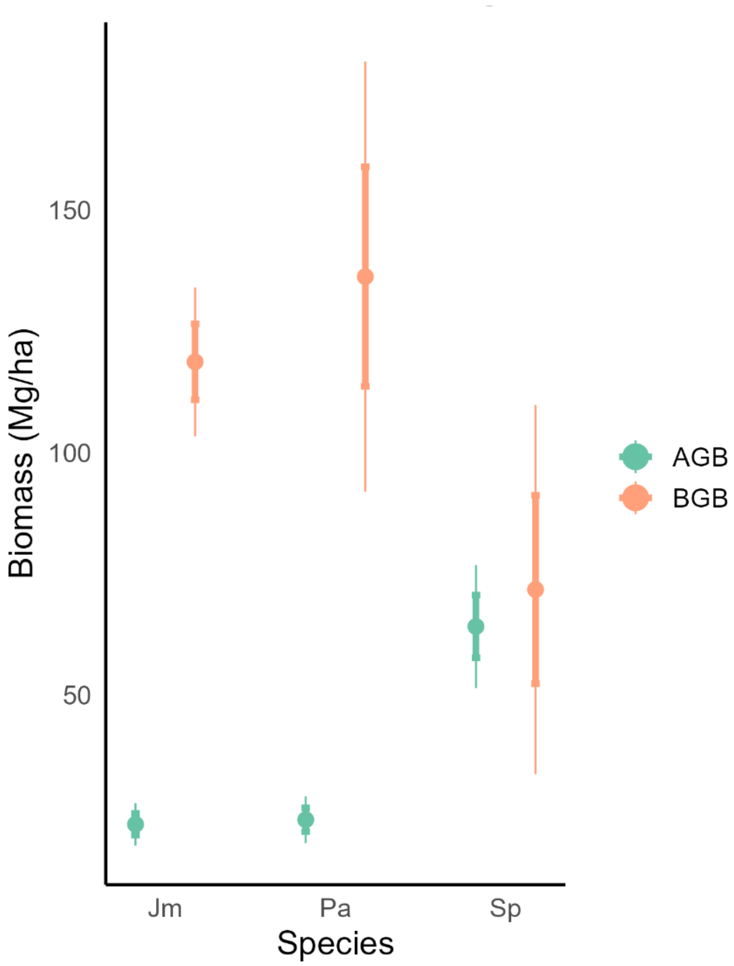

Figure. 1. Plot of mean biomass (AGB and BGB) for each species (Jm = *J. maritimus*, Pa = *P. australis*, Sp = *S. pumilus*) at Lima. Error bars are SE (thicker) and 95% confidence intervals from a generalised linear model with factors Species and Biomass type, allowing heterogeneous variances among species.

Mean dry weight AGB (±95% CI) ranged from 21.75 ± 4.38 Mg/ha (*J. maritimus*) to 63.69 ± 12.68Mg/ha (*S. pumilus*), while mean BGB was significantly larger, from 71.79 ± 38.07 Mg/ha (*S. pumilus*) up to 136.32 ± 44.33 Mg/ha (*P. australis*). In all species, BGB means exceeded AGB means, and the 95% Confidence interval for BGB was consistently higher, reflecting both greater absolute stocks and more heterogeneous root systems. For S. pumilus, there is a relevant overlap in AGB and BGB, which represents a distinct pattern from that of the other species. It is also important to consider the number of samples from each type, with twenty-five samples for AGB and only five for BGB, which can lead to larger standard errors.

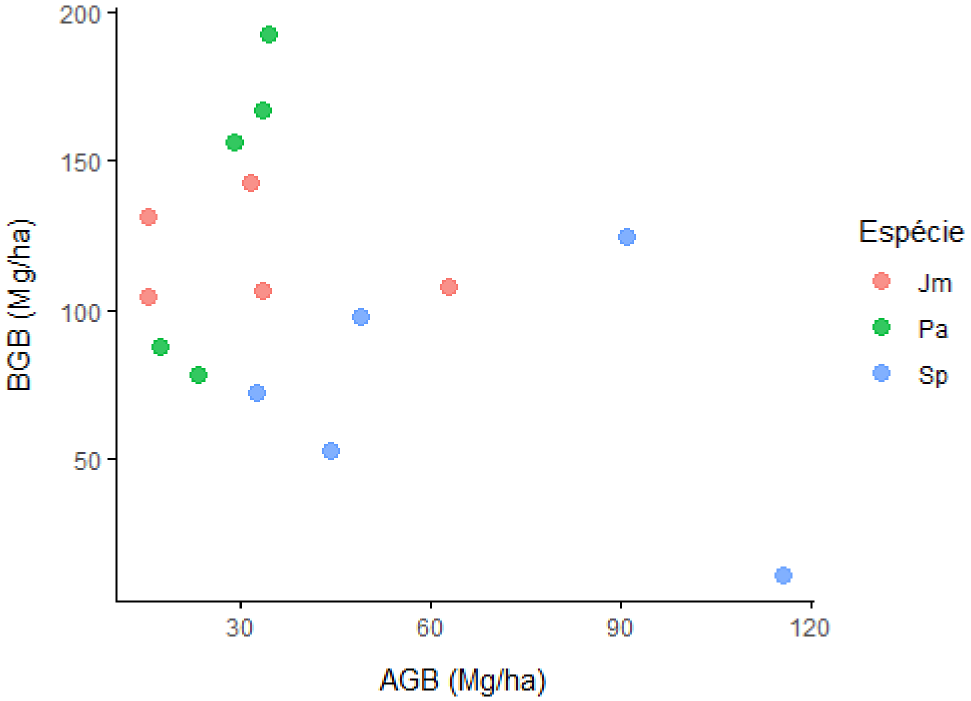

Figure. 2. Relationship between aboveground and belowground biomass of the three analysed plant species. Each point represents the estimates obtained from samples collected in the same sampling quadrat. Pa = *Phragmites australis*, Jm = *Juncus maritimus*, Sp = *Sporobolus pumilus*

To assess whether AGB could serve as a proxy for total biomass, AGB (x-axis) was plotted against each sampling unit's paired BGB (y-axis). Although BGB exceeds AGB for most of the samples, the strength of the correlation between AGB and BGB varied by species.

Taken together, these two graphical analyses reveal clear species-specific patterns in biomass at the Lima site. *Phragmites australis* and *Juncus maritimus* exhibit partially overlapping biomass values. However, the predictive relationship between aboveground (AGB) and belowground biomass (BGB) is highly species-dependent. While *P. australis* shows a possible positive association between AGB and BGB, *J. maritimus* does not seem to exhibit a discernible relationship. These findings highlight the limited applicability of remote sensing approaches for upscaling total biomass estimates across species, highlighting the need for species-specific AGB-to-BGB conversion factors in biomass modelling.

2.2 Ramallosa

The estimated carbon (C) content in the biomass of the four sampled plants ranged between 31.80% and 47.70%, and nitrogen (N) content ranged between 0.50% and 4.30% (Fig. 1). In general, there was a different relationship between the percentage of C and N in the aboveground and belowground biomass of all species, except for *J. maritimus*, which showed high %C and low %N values, resulting in a high C/N ratio—especially in the belowground biomass (Fig. 2). The belowground biomass of *Z. noltii* showed a higher %N, with moderate %C content (Fig. 1, Table S1), resulting in a lower C/N ratio compared to the other species (Fig. 2). *H. portulacoides* showed low %C values in the aboveground biomass compared to the belowground biomass, which had high %C values, with similar %N values in both components (Fig. 1).

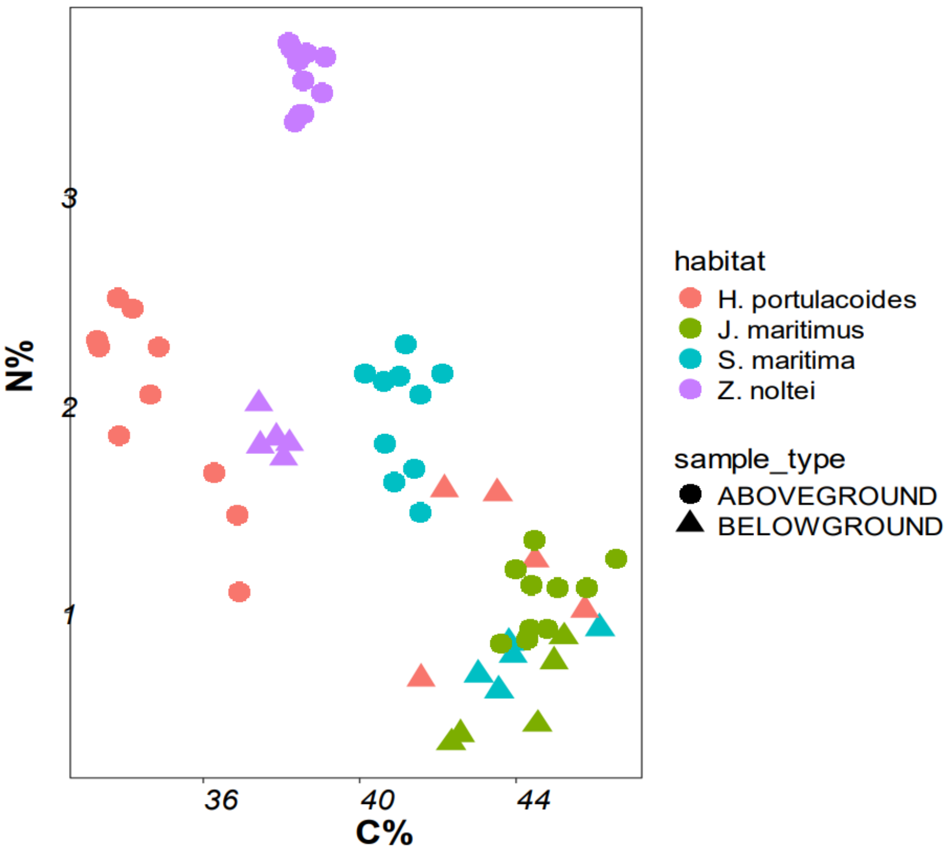

Figure 3. Relationship between %C and %N content in the four plants, both in the aboveground and belowground components. For each plant, estimates were made from 5 samples of belowground biomass and 10 samples of aboveground biomass.

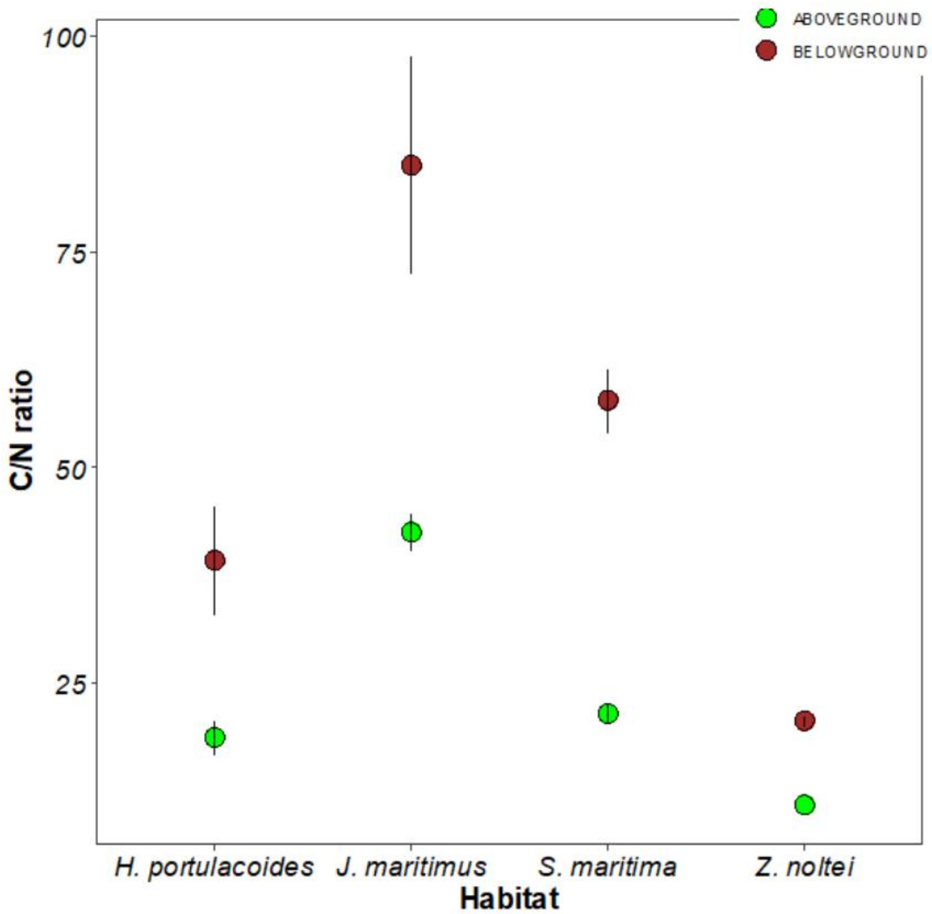

Figure 4. C/N ratio in the 4 plant species, both in the aboveground and belowground components. For each plant, estimates were made using 5 samples of belowground biomass and 10 samples of aboveground biomass.

If we compare the mean values of %C and %N of the four species in both biomass components, it is evident that there is a clear difference between the belowground and aboveground biomass compartments. In the case of %C, these differences between compartments are especially pronounced in *J. maritimus*, whose values were 91.96 % (± 15.70 SE) for the aboveground component and 14.98 % (± 5.72 SE) for the belowground component (Fig. 3a). The only exception was *Z. noltei*, which exhibited the lowest mean %C values but did not show large differences between the two biomass components.

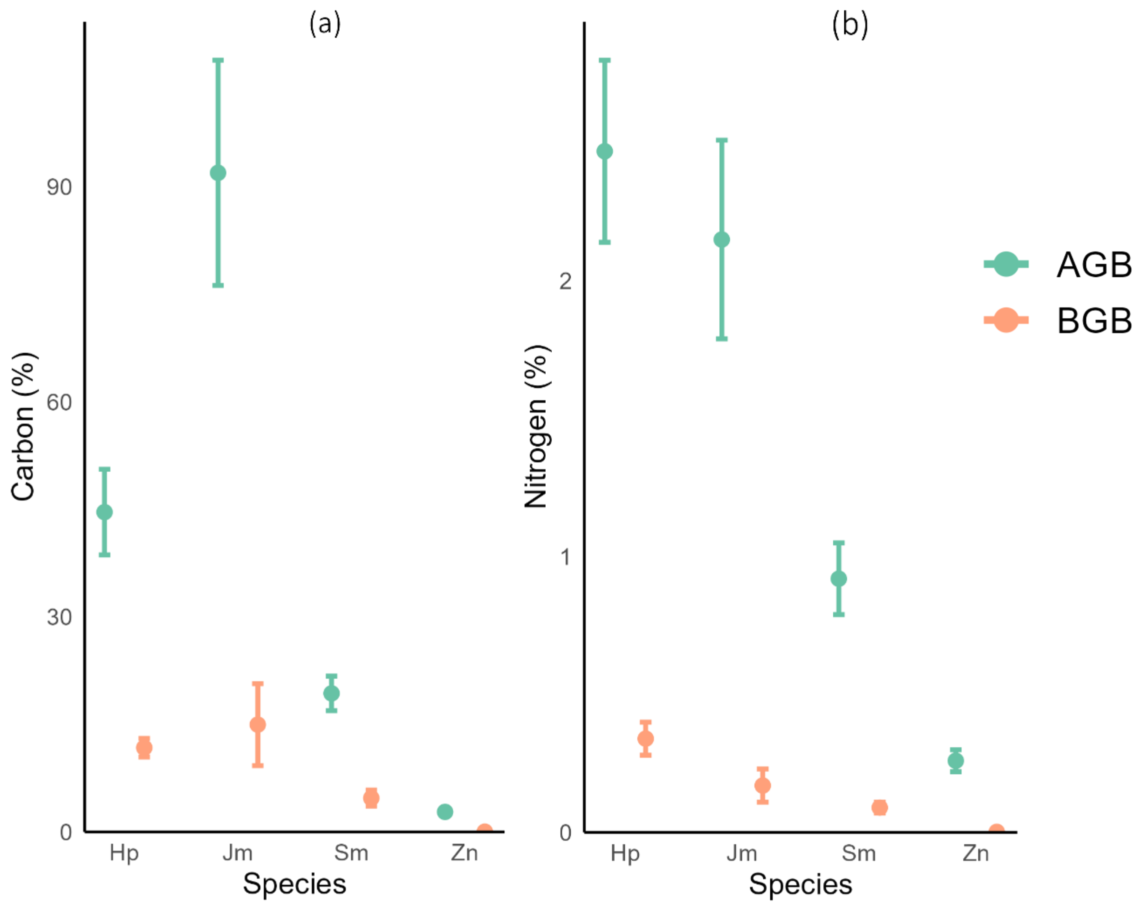

Figure 5. Mean values of %C (a) and %N (b) were estimated for each of the four plant species sampled in the aboveground and belowground biomass. All values are expressed as a percentage of dry weight. For each plant, estimates were made on 5 samples of belowground biomass and 10 samples of aboveground biomass.

The mean %N values also reflect differences between the aboveground and belowground biomass compartments (Fig. 3b). In this case, as well, *Z. noltei* shows the lowest mean values, although there are more pronounced differences between the aboveground biomass (0.26 ± 0.04 SE) and the belowground biomass (0.002 ± 0.0006 SE). Similar to the mean %C values, the highest mean %N values were found in *H. portulacoides* and *J. maritimus*.

The mean C and N contents of each biomass type were used to convert the dry-weight stock estimates per unit area (Fig. 4a) into C and N stock estimates (Fig. 4b, c; Table S2). The variability among samples in these stock estimates depended on the species and the biomass type. The lowest and least variable stock estimates were those of *Z. noltei*. In the marsh plants, belowground stock estimates varied considerably among samples in all three analysed species, which was not the case for the aboveground stock estimates. The most significant variability was observed in *J. maritimus*.

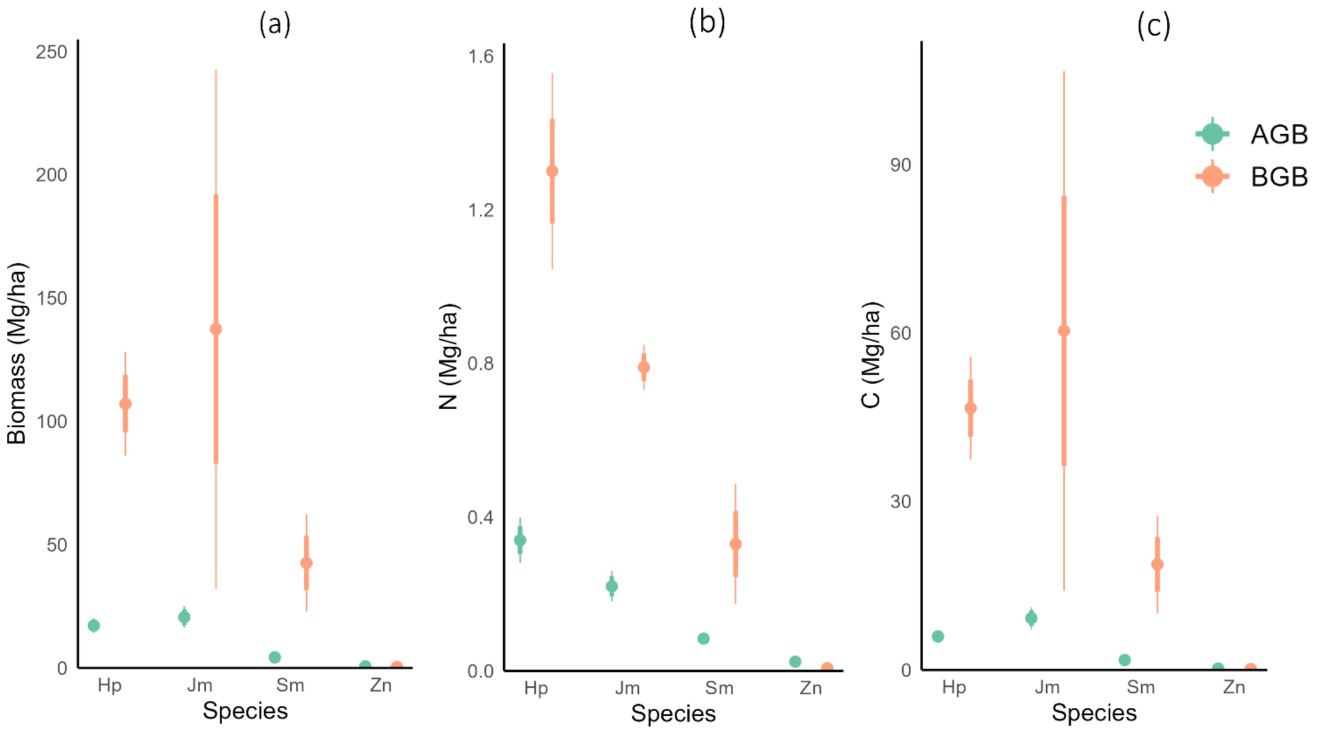

Figure 6. Stocks (in Mg/ha) of dry weight (a), nitrogen(b), and carbon (c) in the four sampled plants. In all cases, mean values are shown. Error bars represent the standard error (thicker), and the 95% confidence intervals predicted from a general linear model fitted with the factors Species and Biomass Type, assuming heterogeneous variances among species.

The stock estimates differed significantly among the four plant species analysed (Fig. 4), although the pattern of differences changed depending on whether the total stock per plant or the aboveground and belowground stocks were considered separately. The aboveground and belowground dry-weight stocks of the marine phanerogam *Z. noltei* (0.69 ± 0.08 Mg/ha and 0.41 ± 0.12 Mg/ha, respectively) were much lower than those of the marsh plants *J. maritimus* and *H. portulacoides*, which showed similar aboveground stocks (20.61 ± 2.14 Mg/ha and 17.18 ± 1.49 Mg/ha, respectively) and belowground stocks (137.43 ± 53.73 Mg/ha and 107.13 ± 10.70 Mg/ha, respectively). The plant *S. maritima* had significantly lower stock values than the other two marsh species, with its dry-weight stocks approximating those of *Z. noltei*, although still significantly higher (Fig. 4a).

The carbon stock also differed significantly among the species and was again much lower in the phanerogam *Z. noltei* than in the marsh species (Fig. 4b). The majority of the carbon stock was accumulated in the belowground biomass: in *J. maritimus*, the belowground component accounted for 86.95 % of the total carbon stock; in *H. portulacoides*, 88.64 %; and in *S. maritima*, 91.39 %. In the phanerogam, however, the aboveground biomass contained the larger share of carbon (63.41 % of the total), although this did not differ significantly from its belowground carbon stock.

Therefore, it appears that the greatest carbon reservoir is in the belowground biomass. The ratio between belowground and aboveground carbon stock can be used to convert estimates of aboveground carbon (obtained via satellite or drone imagery of aerial cover) into belowground carbon stock estimates for each species (Table 1).

Table 1. Ratio (± SE) between belowground and aboveground carbon stock for each of the analysed species. The standard error (SE) of the ratio was calculated by error propagation for division. BS: aboveground carbon stock; BA: belowground carbon stock.

BS/BA	Media	± ES
H. portulacoides	7,80	3,81
J. maritimus	6,55	6,74
S. marítima	10,6	7,29
Z. noltei	0,59	0,54

The nitrogen stock was much lower in the plants, although it followed a pattern similar to that of the carbon stock (Fig. 4c). The mean values ranged from 0.007 (± 0.002 SE) to 1.30 (± 0.13 SE) in *Z. noltei* and *H. portulacoides*, respectively.

2.3 Betanzos

The estimated C and N contents in the biomass of the four plants sampled for CAPTA in Betanzos ranged from 31.91 % to 44.66 % for C, and from 0.3869 % to 3.7210 % for N (Fig. 1a). Overall, the C content of belowground biomass was more variable than that of aboveground biomass, even when comparing samples of the same species. This was not the case for N, where both biomass types showed similar variability. The relationship between the two elements highlights the distinctly different composition of the aboveground biomass of the marine phanerogam *Zostera noltii*, which had high N but moderate C contents compared to the other samples. Consequently, the lowest C/N ratio was recorded in the aboveground biomass of *Z. noltii* (mean value 11.3) (Fig. S1). At the opposite extreme, the aboveground biomass of the invasive *Spartina pumilus* exhibited the highest C/N ratios of all the plant material analyzed (mean value 91.7). The other marsh plants, as well as the belowground biomass of *S. pumilus*, showed intermediate mean values ranging between 30 and 55.

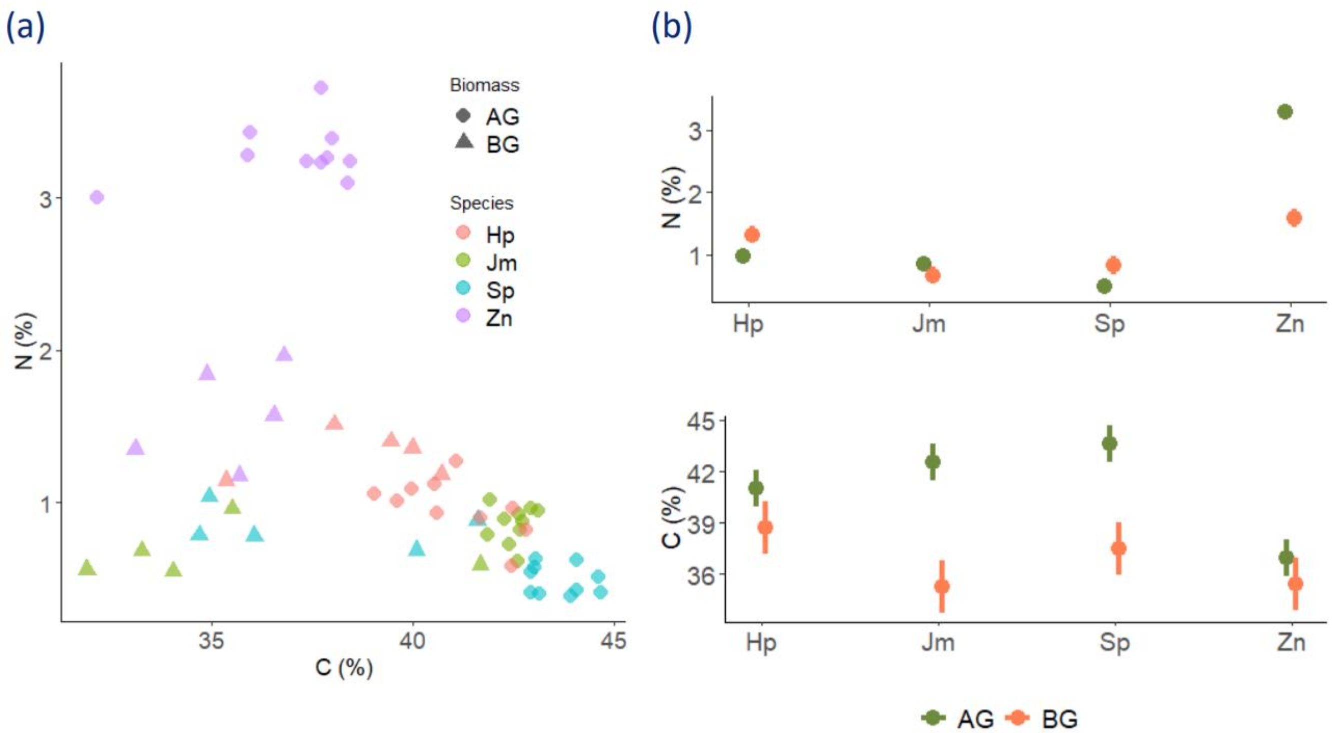

Figure 7. Relationship between C and N content (a) and mean values (± SE) estimated for each of the four plant species sampled for CAPTA in Betanzos (b). All values are expressed as a percentage of dry weight. AG = aboveground biomass; BG = belowground biomass. For each plant, estimates were made on five BG samples and ten AG samples. Hp = *Halimione portulacoides*, Jm = *Juncus maritimus*, Sp = *Sporobolus pumilus*, Zn = *Zostera noltii*.

Figure. 8. Mean values (with 95% confidence intervals) of the C/N ratio in aboveground (AG) and belowground (BG) biomass of the four plant species sampled for CAPTA in Betanzos. In all cases, the mean values are predictions from a general linear model fitted with the predictor variables species and biomass type. Hp = *Halimione portulacoides*, Jm = *Juncus maritimus*, Sp = *Sporobolus pumilus*, Zn = *Zostera noltii*

From the C and N analyses, the mean contents of both elements in the different biomass types were calculated (Fig. 1b and Table S1). For N, there is a clear distinction between the marine phanerogam and the marsh plants: mean values are markedly higher in the former (3.289 ± 0.0514 % for AG and 1.580 ± 0.0726 % for BG, mean ± SE) than in the latter (all mean values below 1.4 %). For C, belowground biomass consistently showed lower contents than aboveground biomass, although the largest differences between these two compartments occurred in *J. maritimus* and *S. pumilus*. Again, *Z. noltii* stood apart from the marsh species by its low C content in aboveground biomass.

The mean C and N contents of each biomass type were then used to convert the dry-weight stock estimates per unit area into C and N stock estimates (Fig. S2). The variability among samples in these stock estimates depended on species and biomass type. The lowest and least variable stocks were those of *Z. noltii*. Among the marsh plants, belowground stock estimates varied considerably across samples in all three species. Considerable variability was also observed in the aboveground stock estimates of the invasive *S. pumilus*. In contrast, the aboveground stock estimates for the two native species, *J. maritimus* and *H. portulacoides*, showed much less variability between samples.

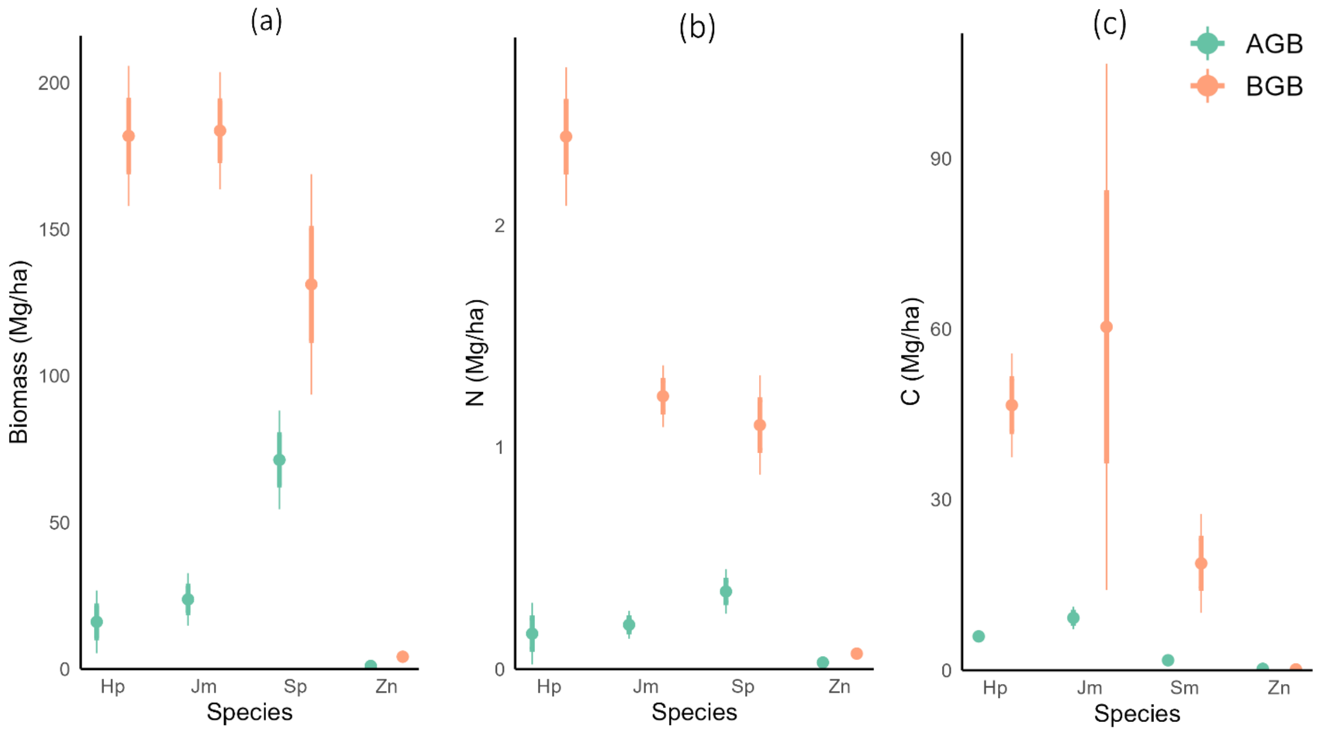

Figure 9. Stocks (in Mg ha^{-1}) of dry weight (a), nitrogen (b) , and carbon (c) in the four plant species sampled for CAPTA in Betanzos. In all cases, the mean values (with 95 % CI) are the predictions of a generalized linear model fitted with species and biomass type as predictors, allowing for heterogeneous variances among species. Hp = *Halimione portulacoides*, Jm = *Juncus maritimus*, Sp = *Sporobolus pumilus*, Zn = *Zostera noltii*.

The stock estimates differed considerably and were statistically significant among the four species analyzed (Fig. 2). The pattern of differences between species changes depending on whether total stock (i.e., above- plus belowground) is considered or each biomass compartment (above- or belowground) is compared separately (Table S2). The total stocks for the marine phanerogam *Z. noltii* (5.23 ± 0.23 Mg ha^{-1} of dry weight and 1.87 ± 0.08 Mg ha^{-1} of C) were an order of magnitude lower than those of the marsh plants. Among the marsh species, all three exhibited similar total stocks—around 190–200 Mg ha^{-1} dry weight and 75–80 Mg ha^{-1} C. Although total stocks were alike, the partitioning between above- and belowground differed markedly for the invasive species compared to the natives. In the native species, belowground biomass accounted for 91 % of the total C stock in *H. portulacoides* and 86 % in *J. maritimus*, whereas in *S. pumilus* it represented only 61 % of the total C stock. In fact, aboveground C stocks in the native species were just 6–10 Mg ha⁻¹, while the invasive *S. pumilus* retained three to five times more in its aerial biomass (31.13 ± 3.63 Mg ha^{-1}). Conversely, the invasive species accumulated 15–20 Mg ha^{-1} less C belowground than the natives (49.19 ± 8.12 Mg ha^{-1} vs. 70.40 ± 4.74 and 64.81 ± 3.70 Mg ha^{-1}).

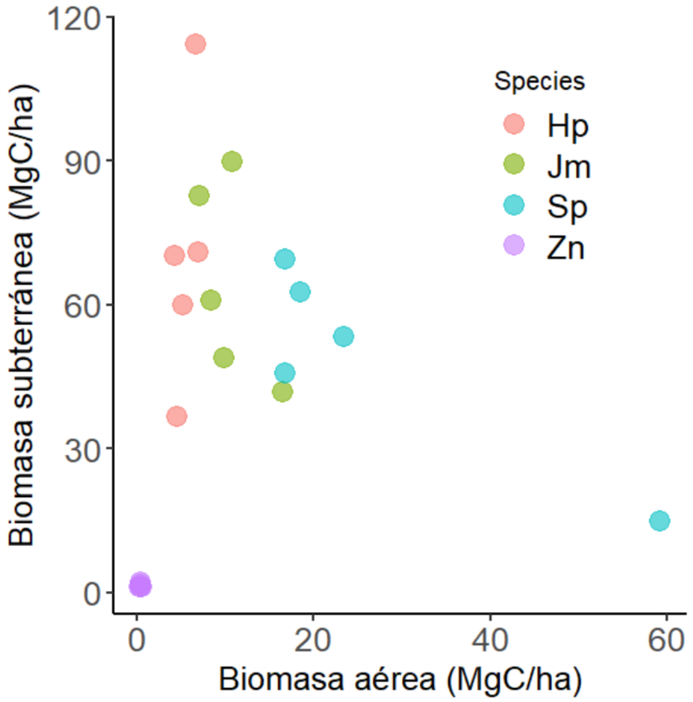

Figure 10. Relationship between aboveground and belowground C stock for the four plant species analyzed. Each point represents the estimates obtained from samples collected within the same sampling quadrat. Hp = *Halimione portulacoides*, Jm = *Juncus maritimus*, Sp = *Sporobolus pumilus*, Zn = *Zostera noltii*.

As expected, nitrogen accumulation was much lower overall. The marsh plants retained N at levels of one to two Mg ha^{-1} (mean values between 1.4 and 2.5), whereas the N stock of *Z. noltii* averaged only about 0.1 Mg ha^{-1}. Aboveground biomass samples were collected to calibrate a model that estimates total stock from aerial and satellite imagery. However, the main blue carbon reservoir in marshes is the soil, both as belowground plant biomass and as carbon directly accumulated in sediment particles (Howard et al., 2014). Therefore, it would be desirable for the analysis of aerial imagery to also allow assessment of belowground biomass. Unfortunately, the above- and belowground C stocks did not show a significant correlation in any of the four species analysed (Fig. 3). This lack of correlation may be due to the low variability in aboveground stock estimates, since these plants form very homogeneous vegetation patches with highly uniform aerial biomass.
As an alternative, we propose calculating the ratio between belowground and aboveground biomass using the mean stock values estimated for each species. This ratio can then be used to convert total aboveground stock estimates—obtained from aerial imagery—into belowground stock estimates. Table 1 presents these ratios, along with their corresponding standard errors.

Table 2. Ratio (± SE) between belowground (BG) and aboveground (AG) C stock for each of the species analysed. The standard error (SE) of the ratio was calculated by uncertainty-propagation for a division

	Relación BG/AG (± SE)
H. portulacoides	*10.7 ± 3.50*
J. maritimus	*6.4 ± 1.11*
S. pumilus	*1.6 ± 0.32*
Z. noltii	*3.8 ± 0.38*

3. Supplementary Material

3.1 Lima

Table S1. Estimated stocks (in Mg/ha) of dry weight for the three plant species sampled in Lima. Values are means (± SE) estimated using a general linear model fitted with the factors Species and Biomass Type.

	Dry Weight Stock (Mg/ha)		
	Aéreo	Subterráneo	Total
	Media ± ES	Media ± ES	Media ± ES
J. maritimus	23.39 ± 2.23	118.74 ± 7.83	142.13 ± 8.14
S. Pumilus	64.18 ± 6.47	71.79 ± 19.42	135.98 ± 20.47
P. australis	24.34 ± 2.47	136.32 ± 22.62	160.65 ± 22.75

3.2 Ramallosa

Table S2. Estimated stocks (in Mg/ha) of dry weight, carbon, and nitrogen for the four plant species sampled in Ramallosa. Values are means (± SE) estimated using a general linear model fitted with the factors Species and Biomass Type.

	Stock (Mg/ha)		
	Aérea	**Subterránea**	**Total**
	Media ± ES	**Media ± ES**	**Media± ES**
		Peso seco	
H. portulacoides	**17,18 ± 1,49**	**107,14 ± 10,70**	**124,32 ± 10,80**
J. maritimus	**20,62 ± 2,24**	**137,43 ± 53,73**	**158,02 ± 53,78**
S. maritima	**4,31 ± 0,38**	**42,62± 10,05**	**46,93 ± 10,06**
Z. noltei	**0,69 ± 0.09**	**0,41 ± 0,125**	**1,10 ± 0,15**
		Carbono	
H. portulacoides	**5,97 ± 0,52**	**46,61 ± 4,66**	**52,58 ± 4,69**
J. maritimus	**9,22 ± 1,00**	**60,38 ± 23,60**	**69,60 ± 23,62**
S. maritima	**1,77 ± 0,15**	**18,80 ± 4,43**	**20,57 ± 4,43**
Z. noltei	**0,26 ± 0,03**	**0,16 ± 0,05**	**0,42 ± 0,06**
		Nitrógeno	
H. portulacoides	**0,34 ±0,03**	**1,30 ± 0,13**	**1,64 ± 0,13**
J. maritimus	**0,22 ± 0,02**	**0,79± 0,03**	**1,01 ± 0,04**
S. maritima	**0,084 ± 0,007**	**0,33 ± 0,08**	**0,41 ± 0,08**
Z. noltei	**0,024 ± 0,003**	**0,007 ± 0,002**	**0,03 ± 0,002**

Table S3. Mean values of N and C content (in %) in the aboveground and belowground biomass of the four plant species sampled in Ramallosa. In all cases, the mean values are predictions from a general linear model fitted with the factors Species and Biomass Type. All values are expressed as a percentage of dry weight.

	Biomasa			
	Aérea		**Subterránea**	
	Media ± ES	**IC (95%)**	**Media ± ES**	**IC (95%)**
	Carbono (%)			
H. portulacoides	**44,63 ± 5,97**	**(32,93, 56,33)**	**11,76 ± 1,30**	**(9,21, 14,31)**
J. maritimus	**91,97 ± 15,71**	**(61,18, 122,76)**	**14,98 ± 5,72**	**(3,77, 26,19)**
S. maritima	**19,34 ± 2,41**	**(14,62, 24,06)**	**4,73± 1,11**	**(2,55, 6,91)**
Z. noltei	**2,80 ± 0.44**	**(1,94, 3,66)**	**0,04 ± 0,01**	**(0,002, 0,006)**
	Nitrógeno (%)			
H. portulacoides	**2,47 ± 0,33**	**(1,82, 3,12)**	**0,34 ± 0,06**	**(0,22, 0,46)**
J. maritimus	**2,15 ± 0,36**	**(1,44, 2,86)**	**0,17 ±0,06**	**(0,05, 0,29)**
S. maritima	**0,92 ± 0,13**	**(0,67, 1,17)**	**0,09 ± 0,02**	**(0,05, 0,13)**
Z. noltei	**0,26 ± 0,04**	**(0,18, 0,34)**	**0,002 ±0,00**	**(0,002, 0,002)**

3.3 Betanzos

Table S4. Estimated stocks (in Mg/ha) of Dry Weight, Carbon, and Nitrogen in the plant species sampled for CAPTA in Betanzos. Values are means (± SE) estimated using a general linear model fitted with the predictor variables species and biomass type, assuming heterogeneous variance among species. df = 111 for all means.

	Stock (Mg/ha)		
	Aéreo	*Subterráneo*	*Total*
		Peso Seco	
H. portulacoides	16.09 ± 5.46	181.86 ± 12.20	197.95 ± 13.37
J. maritimus	23.75 ± 4.57	183.68 ± 10.20	207.43 ± 11.18
S. pumilus	71.35 ± 8.59	131.22 ± 19.20	202.57 ± 21.03
Z. noltii	1.04 ± 0.09	4.19 ± 0.21	5.23 ± 0.23
		C	
H. portulacoides	6.60 ± 2.12	70.40 ± 4.74	77.00 ± 5.19
J. maritimus	10.09 ± 1.65	64.81 ± 3.70	74.90 ± 4.05
S. pumilus	31.13 ± 3.63	49.19 ± 8.12	80.32 ± 8.89
Z. noltii	0.39 ± 0.03	1.48 ± 0.07	1.87 ± 0.08
		N	
H. portulacoides	0.16 ± 0.071	2.40 ± 0.159	2.56 ± 0.174
J. maritimus	0.20 ± 0.032	1.23 ± 0.071	1.43 ± 0.077
S. pumilus	0.35 ± 0.051	1.10 ± 0.114	1.45 ± 0.125
Z. noltii	0.03 ± 0.002	0.07 ± 0.004	0.10 ± 0.005

Table S5. Mean values of N and C content (in %) in the aboveground (AG) and belowground (BG) biomass of the four plant species sampled for CAPTA in Betanzos. In all cases, the mean values are predictions from a general linear model fitted with the predictor variables species and biomass type. df = 51 for all means.

	Biomasa			
	Aérea		Subterránea	
	Media ± SE	IC (95%)	Media ± SE	IC (95%)
		N (%)		
H. portulacoides	0.975 ± 0.0514	(0.872, 1.078)	1.321 ± 0.0726	(1.175, 1.466)
J. maritimus	0.858 ± 0.0514	(0.754, 0.961)	0.669 ± 0.0726	(0.523, 0.815)
S. pumilus	0.493 ± 0.0514	(0.389, 0.596)	0.836 ± 0.0726	(0.690, 0.982)
Z. noltii	3.289 ± 0.0514	(3.186, 3.392)	1.580 ± 0.0726	(1.435, 1.726)
		C (%)		
H. portulacoides	41.0 ± 0.545	(39.9, 42.1)	38.7 ± 0.771	(37.2, 40.3)
J. maritimus	42.5 ± 0.545	(41.4, 43.6)	35.3 ± 0.771	(33.7, 36.8)
S. pumilus	43.6 ± 0.545	(42.5, 44.7)	37.5 ± 0.771	(35.9, 39.0)
Z. noltii	37.0 ± 0.545	(35.9, 38.1)	35.4 ± 0.771	(33.9, 37.0)

3.4 Lima Data

Espécie	Biomassa	Código	Margem	DW (Mg/ha)
Juncus maritimus	Aboveground	202409LIJMAGB01	Norte	15.16
Juncus maritimus	Aboveground	202409LIJMAGB02	Norte	15.23
Juncus maritimus	Aboveground	202409LIJMAGB03	Sul	62.71
Juncus maritimus	Aboveground	202409LIJMAGB04	Sul	33.47
Juncus maritimus	Aboveground	202409LIJMAGB05	Sul	31.47
Juncus maritimus	Aboveground	202409LIJMAGB06	Norte	17.62
Juncus maritimus	Aboveground	202409LIJMAGB07	Norte	16.50
Juncus maritimus	Aboveground	202409LIJMAGB08	Norte	15.24
Juncus maritimus	Aboveground	202409LIJMAGB09	Norte	19.35
Juncus maritimus	Aboveground	202409LIJMAGB10	Norte	13.82
Juncus maritimus	Aboveground	202409LIJMAGB11	Norte	18.14
Juncus maritimus	Aboveground	202409LIJMAGB12	Norte	8.77
Juncus maritimus	Aboveground	202409LIJMAGB13	Norte	19.27
Juncus maritimus	Aboveground	202409LIJMAGB14	Norte	8.33
Juncus maritimus	Aboveground	202409LIJMAGB15	Norte	12.90
Juncus maritimus	Aboveground	202409LIJMAGB16	Norte	18.84
Juncus maritimus	Aboveground	202409LIJMAGB17	Norte	15.45
Juncus maritimus	Aboveground	202409LIJMAGB18	Norte	20.40
Juncus maritimus	Aboveground	202409LIJMAGB19	Norte	10.84
Juncus maritimus	Aboveground	202409LIJMAGB20	Norte	10.27
Juncus maritimus	Aboveground	202409LIJMAGB21	Sul	36.98
Juncus maritimus	Aboveground	202409LIJMAGB22	Sul	32.61
Juncus maritimus	Aboveground	202409LIJMAGB23	Sul	35.11
Juncus maritimus	Aboveground	202409LIJMAGB24	Sul	30.75
Juncus maritimus	Aboveground	202409LIJMAGB25	Sul	42.64
Juncus maritimus	Aboveground	202409LIJMAGB26	Sul	29.83
Juncus maritimus	Aboveground	202409LIJMAGB27	Sul	26.01
Juncus maritimus	Aboveground	202409LIJMAGB28	Sul	28.30
Juncus maritimus	Aboveground	202409LIJMAGB29	Sul	39.52
Juncus maritimus	Aboveground	202409LIJMAGB30	Sul	16.14
Phragmites australis	Aboveground	202409LIPAAGB01	Norte	23.34
Phragmites australis	Aboveground	202409LIPAAGB02	Norte	17.13
Phragmites australis	Aboveground	202409LIPAAGB06	Norte	12.84
Phragmites australis	Aboveground	202409LIPAAGB07	Norte	17.71
Phragmites australis	Aboveground	202409LIPAAGB08	Norte	17.18
Phragmites australis	Aboveground	202409LIPAAGB09	Norte	13.84
Phragmites australis	Aboveground	202409LIPAAGB10	Norte	12.46
Phragmites australis	Aboveground	202409LIPAAGB11	Norte	8.14
Phragmites australis	Aboveground	202409LIPAAGB12	Sul	33.26
Phragmites australis	Aboveground	202409LIPAAGB13	Sul	28.85
Phragmites australis	Aboveground	202409LIPAAGB14	Sul	33.79
Phragmites australis	Aboveground	202409LIPAAGB15	Sul	29.01
Phragmites australis	Aboveground	202409LIPAAGB16	Sul	68.95

Espécie	Biomassa	Código	Margem	DW (Mg/ha)
Phragmites australis	Aboveground	202409LIPAAGB17	Sul	25.51
Phragmites australis	Aboveground	202409LIPAAGB18	Sul	23.04
Phragmites australis	Aboveground	202409LIPAAGB19	Sul	34.30
Phragmites australis	Aboveground	202409LIPAAGB20	Sul	26.81
Phragmites australis	Aboveground	202409LIPAAGB21	Sul	28.04
Phragmites australis	Aboveground	202409LIPAAGB22	Sul	53.23
Phragmites australis	Aboveground	202409LIPAAGB23	Sul	17.70
Phragmites australis	Aboveground	202409LIPAAGB24	Sul	22.39
Phragmites australis	Aboveground	202409LIPAAGB25	Sul	17.73
Phragmites australis	Aboveground	202409LIPAAGB26	Sul	19.90
Phragmites australis	Aboveground	202409LIPAAGB27	Sul	16.07
Phragmites australis	Aboveground	202409LIPAAGB28	Sul	24.31
Phragmites australis	Aboveground	202409LIPAAGB29	Sul	13.13
Phragmites australis	Aboveground	202409LIPAAGB30	Sul	18.52
Sporobolus pumilus	Aboveground	202409LISPAGB01	Norte	32.29
Sporobolus pumilus	Aboveground	202409LISPAGB02	Norte	115.68
Sporobolus pumilus	Aboveground	202409LISPAGB06	Norte	127.09
Sporobolus pumilus	Aboveground	202409LISPAGB07	Norte	70.38
Sporobolus pumilus	Aboveground	202409LISPAGB08	Norte	21.57
Sporobolus pumilus	Aboveground	202409LISPAGB09	Norte	93.97
Sporobolus pumilus	Aboveground	202409LISPAGB10	Norte	118.95
Sporobolus pumilus	Aboveground	202409LISPAGB11	Norte	15.04
Sporobolus pumilus	Aboveground	202409LISPAGB12	Norte	123.22
Sporobolus pumilus	Aboveground	202409LISPAGB13	Norte	53.71
Sporobolus pumilus	Aboveground	202409LISPAGB14	Norte	30.63
Sporobolus pumilus	Aboveground	202409LISPAGB15	Norte	47.27
Sporobolus pumilus	Aboveground	202409LISPAGB16	Sul	31.42
Sporobolus pumilus	Aboveground	202409LISPAGB17	Sul	71.47
Sporobolus pumilus	Aboveground	202409LISPAGB18	Sul	46.45
Sporobolus pumilus	Aboveground	202409LISPAGB19	Sul	50.37
Sporobolus pumilus	Aboveground	202409LISPAGB20	Sul	86.55
Sporobolus pumilus	Aboveground	202409LISPAGB21	Sul	90.81
Sporobolus pumilus	Aboveground	202409LISPAGB22	Sul	48.90
Sporobolus pumilus	Aboveground	202409LISPAGB23	Sul	44.22
Sporobolus pumilus	Aboveground	202409LISPAGB24	Sul	111.61
Sporobolus pumilus	Aboveground	202409LISPAGB25	Sul	54.34
Sporobolus pumilus	Aboveground	202409LISPAGB26	Sul	58.25
Sporobolus pumilus	Aboveground	202409LISPAGB27	Sul	43.94
Sporobolus pumilus	Aboveground	202409LISPAGB28	Sul	68.25
Sporobolus pumilus	Aboveground	202409LISPAGB29	Sul	60.09
Sporobolus pumilus	Aboveground	202409LISPAGB30	Sul	16.51
Juncus maritimus	Belowground	202409LIJMBGB01	Norte	104.84
Juncus maritimus	Belowground	202409LIJMBGB02	Norte	131.54
Juncus maritimus	Belowground	202409LIJMBGB03	Sul	107.69
Juncus maritimus	Belowground	202409LIJMBGB04	Sul	106.45
Juncus maritimus	Belowground	202409LIJMBGB05	Sul	143.16

Espécie	Biomassa	Código	Margem	DW (Mg/ha)
Phragmites australis	Belowground	202409LIPABGB01	Norte	78.46
Phragmites australis	Belowground	202409LIPABGB02	Norte	87.38
Phragmites australis	Belowground	202409LIPABGB12	Sul	167.03
Phragmites australis	Belowground	202409LIPABGB15	Sul	156.33
Phragmites australis	Belowground	202409LIPABGB19	Sul	192.38
Sporobolus pumilus	Belowground	202409LISPBGB01	Norte	72.02
Sporobolus pumilus	Belowground	202409LISPBGB02	Norte	11.18
Sporobolus pumilus	Belowground	202409LISPBGB21	Sul	125.00
Sporobolus pumilus	Belowground	202409LISPBGB22	Sul	97.90
Sporobolus pumilus	Belowground	202409LISPBGB23	Sul	52.86

3.5 Ramallosa Data

Espécie	Biomassa	Código	DW (Mg/ha)
Halimione portulacoides	ABOVEGROUND	RA17092024Hp01	*11.14*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp02	*14.78*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp03	*12.38*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp04	*13.47*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp05	*18.07*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp06	*10.92*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp07	*13.78*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp08	*17.63*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp09	*11.70*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp10	*21.82*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp11	*20.52*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp12	*24.81*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp13	*8.99*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp14	*6.61*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp15	*13.03*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp16	*18.90*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp17	*11.72*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp18	*18.32*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp19	*23.48*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp20	*8.95*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp21	*26.32*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp22	*14.76*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp23	*19.77*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp24	*40.86*
Halimione portulacoides	ABOVEGROUND	RA17092024Hp25	*26.91*
Juncus maritimus	ABOVEGROUND	RA17092024Jm01	*8.33*
Juncus maritimus	ABOVEGROUND	RA17092024Jm02	*0.39*
Juncus maritimus	ABOVEGROUND	RA17092024Jm03	*5.58*
Juncus maritimus	ABOVEGROUND	RA17092024Jm04	*6.33*
Juncus maritimus	ABOVEGROUND	RA17092024Jm06	*13.60*

Espécie	Biomassa	Código	DW (Mg/ha)
Juncus maritimus	ABOVEGROUND	RA17092024Jm07	*8.85*
Juncus maritimus	ABOVEGROUND	RA17092024Jm08	*10.08*
Juncus maritimus	ABOVEGROUND	RA17092024Jm09	*5.21*
Juncus maritimus	ABOVEGROUND	RA17092024Jm10	*7.65*
Juncus maritimus	ABOVEGROUND	RA17092024Jm11	*3.88*
Juncus maritimus	ABOVEGROUND	RA17092024Jm12	*11.90*
Juncus maritimus	ABOVEGROUND	RA17092024Jm13	*1.95*
Juncus maritimus	ABOVEGROUND	RA17092024Jm14	*5.08*
Juncus maritimus	ABOVEGROUND	RA17092024Jm15	*7.61*
Juncus maritimus	ABOVEGROUND	RA17092024Jm16	*15.43*
Juncus maritimus	ABOVEGROUND	RA17092024Jm17	*3.07*
Juncus maritimus	ABOVEGROUND	RA17092024Jm18	*10.42*
Juncus maritimus	ABOVEGROUND	RA17092024Jm19	*4.36*
Juncus maritimus	ABOVEGROUND	RA17092024Jm20	*12.84*
Juncus maritimus	ABOVEGROUND	RA17092024Jm21	*11.53*
Juncus maritimus	ABOVEGROUND	RA17092024Jm22	*8.91*
Juncus maritimus	ABOVEGROUND	RA17092024Jm23	*6.57*
Juncus maritimus	ABOVEGROUND	RA17092024Jm24	*9.64*
Juncus maritimus	ABOVEGROUND	RA17092024Jm25	*4.20*
Juncus maritimus	ABOVEGROUND	RA17092024Jm01	*8.70*
Juncus maritimus	ABOVEGROUND	RA17092024Jm02	*19.68*
Juncus maritimus	ABOVEGROUND	RA17092024Jm03	*42.24*
Juncus maritimus	ABOVEGROUND	RA17092024Jm04	*9.53*
Juncus maritimus	ABOVEGROUND	RA17092024Jm05	*37.94*
Juncus maritimus	ABOVEGROUND	RA17092024Jm06	*11.86*
Juncus maritimus	ABOVEGROUND	RA17092024Jm07	*16.28*
Juncus maritimus	ABOVEGROUND	RA17092024Jm08	*44.34*
Juncus maritimus	ABOVEGROUND	RA17092024Jm09	*20.43*
Juncus maritimus	ABOVEGROUND	RA17092024Jm10	*32.44*
Juncus maritimus	ABOVEGROUND	RA17092024Jm11	*19.86*
Juncus maritimus	ABOVEGROUND	RA17092024Jm12	*28.65*
Juncus maritimus	ABOVEGROUND	RA17092024Jm13	*13.23*
Juncus maritimus	ABOVEGROUND	RA17092024Jm14	*16.50*
Juncus maritimus	ABOVEGROUND	RA17092024Jm15	*13.64*
Juncus maritimus	ABOVEGROUND	RA17092024Jm16	*22.31*
Juncus maritimus	ABOVEGROUND	RA17092024Jm17	*19.89*
Juncus maritimus	ABOVEGROUND	RA17092024Jm18	*10.83*
Juncus maritimus	ABOVEGROUND	RA17092024Jm19	*4.65*
Juncus maritimus	ABOVEGROUND	RA17092024Jm20	*17.78*
Juncus maritimus	ABOVEGROUND	RA17092024Jm21	*12.75*
Juncus maritimus	ABOVEGROUND	RA17092024Jm22	*20.50*
Juncus maritimus	ABOVEGROUND	RA17092024Jm23	*7.91*
Juncus maritimus	ABOVEGROUND	RA17092024Jm24	*40.97*
Juncus maritimus	ABOVEGROUND	RA17092024Jm25	*22.51*
Spartina maritima	ABOVEGROUND	RA17092024Sm01	*4.84*
Spartina maritima	ABOVEGROUND	RA17092024Sm02	*5.47*

Espécie	Biomassa	Código	DW (Mg/ha)
Spartina maritima	ABOVEGROUND	RA17092024Sm03	*5.84*
Spartina maritima	ABOVEGROUND	RA17092024Sm04	*2.62*
Spartina maritima	ABOVEGROUND	RA17092024Sm05	*3.39*
Spartina maritima	ABOVEGROUND	RA17092024Sm06	*1.89*
Spartina maritima	ABOVEGROUND	RA17092024Sm07	*1.80*
Spartina maritima	ABOVEGROUND	RA17092024Sm08	*2.14*
Spartina maritima	ABOVEGROUND	RA17092024Sm09	*4.11*
Spartina maritima	ABOVEGROUND	RA17092024Sm10	*2.36*
Spartina maritima	ABOVEGROUND	RA17092024Sm11	*4.42*
Spartina maritima	ABOVEGROUND	RA17092024Sm12	*3.30*
Spartina maritima	ABOVEGROUND	RA17092024Sm13	*5.13*
Spartina maritima	ABOVEGROUND	RA17092024Sm14	*6.41*
Spartina maritima	ABOVEGROUND	RA17092024Sm15	*6.88*
Spartina maritima	ABOVEGROUND	RA17092024Sm16	*2.20*
Spartina maritima	ABOVEGROUND	RA17092024Sm17	*2.87*
Spartina maritima	ABOVEGROUND	RA17092024Sm18	*3.98*
Spartina maritima	ABOVEGROUND	RA17092024Sm19	*8.77*
Spartina maritima	ABOVEGROUND	RA17092024Sm20	*5.67*
Spartina maritima	ABOVEGROUND	RA17092024Sm21	*6.31*
Spartina maritima	ABOVEGROUND	RA17092024Sm22	*4.35*
Spartina maritima	ABOVEGROUND	RA17092024Sm23	*4.22*
Spartina maritima	ABOVEGROUND	RA17092024Sm24	*6.95*
Spartina maritima	ABOVEGROUND	RA17092024Sm25	*1.87*
Zostera noltei	ABOVEGROUND	RA17092024Zn01	*0.18*
Zostera noltei	ABOVEGROUND	RA17092024Zn02	*0.46*
Zostera noltei	ABOVEGROUND	RA17092024Zn03	*0.11*
Zostera noltei	ABOVEGROUND	RA17092024Zn04	*0.10*
Zostera noltei	ABOVEGROUND	RA17092024Zn05	*0.25*
Zostera noltei	ABOVEGROUND	RA17092024Zn06	*0.54*
Zostera noltei	ABOVEGROUND	RA17092024Zn07	*0.07*
Zostera noltei	ABOVEGROUND	RA17092024Zn08	*0.29*
Zostera noltei	ABOVEGROUND	RA17092024Zn09	*1.01*
Zostera noltei	ABOVEGROUND	RA17092024Zn10	*0.43*
Zostera noltei	ABOVEGROUND	RA17092024Zn11	*0.95*
Zostera noltei	ABOVEGROUND	RA17092024Zn12	*1.06*
Zostera noltei	ABOVEGROUND	RA17092024Zn13	*1.03*
Zostera noltei	ABOVEGROUND	RA17092024Zn14	*1.13*
Zostera noltei	ABOVEGROUND	RA17092024Zn15	*1.28*
Zostera noltei	ABOVEGROUND	RA17092024Zn16	*1.25*
Zostera noltei	ABOVEGROUND	RA17092024Zn17	*0.50*
Zostera noltei	ABOVEGROUND	RA17092024Zn18	*0.69*
Zostera noltei	ABOVEGROUND	RA17092024Zn19	*0.54*
Zostera noltei	ABOVEGROUND	RA17092024Zn20	*0.33*
Zostera noltei	ABOVEGROUND	RA17092024Zn21	*1.37*
Zostera noltei	ABOVEGROUND	RA17092024Zn22	*0.93*
Zostera noltei	ABOVEGROUND	RA17092024Zn23	*1.03*

Espécie	Biomassa	Código	DW (Mg/ha)
Zostera noltei	ABOVEGROUND	RA17092024Zn24	*0.40*
Zostera noltei	ABOVEGROUND	RA17092024Zn25	*1.35*
Halimione portulacoides	BELOWGROUND	RA17092024Hp05	*64.86*
Halimione portulacoides	BELOWGROUND	RA17092024Hp10	*54.69*
Halimione portulacoides	BELOWGROUND	RA17092024Hp15	*46.24*
Halimione portulacoides	BELOWGROUND	RA17092024Hp20	*64.68*
Halimione portulacoides	BELOWGROUND	RA17092024Hp25	*37.24*
Juncus maritimus	BELOWGROUND	RA17092024Jm05	*59.39*
Juncus maritimus	BELOWGROUND	RA17092024Jm10	*6.66*
Juncus maritimus	BELOWGROUND	RA17092024Jm15	*49.60*
Juncus maritimus	BELOWGROUND	RA17092024Jm20	*168.83*
Juncus maritimus	BELOWGROUND	RA17092024Jm25	*58.93*
Spartina maritima	BELOWGROUND	RA17092024Sm05	*23.20*
Spartina maritima	BELOWGROUND	RA17092024Sm10	*12.63*
Spartina maritima	BELOWGROUND	RA17092024Sm15	*9.78*
Spartina maritima	BELOWGROUND	RA17092024Sm20	*38.39*
Spartina maritima	BELOWGROUND	RA17092024Sm25	*22.47*
Zostera noltei	BELOWGROUND	RA17092024Zn05	*0.20*
Zostera noltei	BELOWGROUND	RA17092024Zn10	*0.35*
Zostera noltei	BELOWGROUND	RA17092024Zn15	*0.01*
Zostera noltei	BELOWGROUND	RA17092024Zn20	*0.15*
Zostera noltei	BELOWGROUND	RA17092024Zn25	*0.34*

3.5 Betanzos Data

Espécie	*Biomassa*	*Código*	*PS (Mg/ha)*	*N (Mg/ha)*	*sdN*	*C (Mg/ha)*	*sdC*
Halimione portulacoides	*Aboveground*	*BeHp1_AG*	*12.83*	*0.13*	*0.008*	*5.26*	*0.053*
Halimione portulacoides	*Aboveground*	*BeHp2_AG*	*16.82*	*0.16*	*0.010*	*6.90*	*0.069*
Halimione portulacoides	*Aboveground*	*BeHp3_AG*	*11.04*	*0.11*	*0.006*	*4.53*	*0.045*
Halimione portulacoides	*Aboveground*	*BeHp4_AG*	*10.34*	*0.10*	*0.006*	*4.24*	*0.043*
Halimione portulacoides	*Aboveground*	*BeHp5_AG*	*16.29*	*0.16*	*0.010*	*6.68*	*0.067*
Halimione portulacoides	*Aboveground*	*BeHp6_AG*	*11.66*	*0.11*	*0.007*	*4.78*	*0.048*
Halimione portulacoides	*Aboveground*	*BeHp7_AG*	*19.26*	*0.19*	*0.011*	*7.90*	*0.079*
Halimione portulacoides	*Aboveground*	*BeHp8_AG*	*10.71*	*0.10*	*0.006*	*4.39*	*0.044*
Halimione portulacoides	*Aboveground*	*BeHp9_AG*	*13.42*	*0.13*	*0.008*	*5.50*	*0.055*
Halimione portulacoides	*Aboveground*	*BeHp10_AG*	*9.89*	*0.10*	*0.006*	*4.06*	*0.041*
Halimione portulacoides	*Aboveground*	*BeHp11_AG*	*21.09*	*0.21*	*0.012*	*8.65*	*0.087*
Halimione portulacoides	*Aboveground*	*BeHp12_AG*	*20.22*	*0.20*	*0.012*	*8.30*	*0.083*

Espécie	Biomassa	Código	PS (Mg/ha)	N (Mg/ha)	sdN	C (Mg/ha)	sdC
Halimione portulacoides	Aboveground	BeHp13_AG	17.96	0.18	0.011	7.37	0.074
Halimione portulacoides	Aboveground	BeHp14_AG	17.00	0.17	0.010	6.97	0.070
Halimione portulacoides	Aboveground	BeHp15_AG	11.96	0.12	0.007	4.91	0.049
Halimione portulacoides	Aboveground	BeHp16_AG	12.70	0.12	0.007	5.21	0.052
Halimione portulacoides	Aboveground	BeHp17_AG	44.52	0.43	0.026	18.27	0.183
Halimione portulacoides	Aboveground	BeHp18_AG	19.40	0.19	0.011	7.96	0.080
Halimione portulacoides	Aboveground	BeHp19_AG	13.90	0.14	0.008	5.70	0.057
Halimione portulacoides	Aboveground	BeHp20_AG	16.05	0.16	0.009	6.58	0.066
Halimione portulacoides	Aboveground	BeHp21_AG	15.35	0.15	0.009	6.30	0.063
Halimione portulacoides	Aboveground	BeHp22_AG	13.16	0.13	0.008	5.40	0.054
Halimione portulacoides	Aboveground	BeHp23_AG	12.24	0.12	0.007	5.02	0.050
Halimione portulacoides	Aboveground	BeHp24_AG	16.03	0.16	0.009	6.58	0.066
Halimione portulacoides	Aboveground	BeHp25_AG	18.39	0.18	0.011	7.54	0.076
Halimione portulacoides	Belowground	BeHp1_BG	155.09	2.05	0.106	60.04	1.463
Halimione portulacoides	Belowground	BeHp2_BG	182.97	2.42	0.125	70.83	1.726
Halimione portulacoides	Belowground	BeHp3_BG	94.57	1.25	0.064	36.61	0.892
Halimione portulacoides	Belowground	BeHp4_BG	181.26	2.39	0.123	70.17	1.710
Halimione portulacoides	Belowground	BeHp5_BG	295.39	3.90	0.201	114.35	2.786
Juncus maritimus	Aboveground	BeJm1_AG	16.62	0.14	0.006	7.07	0.021
Juncus maritimus	Aboveground	BeJm2_AG	19.89	0.17	0.008	8.45	0.025
Juncus maritimus	Aboveground	BeJm3_AG	23.37	0.20	0.009	9.93	0.030
Juncus maritimus	Aboveground	BeJm4_AG	25.47	0.22	0.010	10.83	0.032
Juncus maritimus	Aboveground	BeJm5_AG	38.81	0.33	0.015	16.50	0.049
Juncus maritimus	Aboveground	BeJm6_AG	16.62	0.14	0.006	7.07	0.021
Juncus maritimus	Aboveground	BeJm7_AG	17.32	0.15	0.007	7.36	0.022
Juncus maritimus	Aboveground	BeJm8_AG	20.03	0.17	0.008	8.52	0.025
Juncus maritimus	Aboveground	BeJm9_AG	19.96	0.17	0.008	8.49	0.025
Juncus maritimus	Aboveground	BeJm10_AG	13.36	0.11	0.005	5.68	0.017
Juncus maritimus	Aboveground	BeJm11_AG	24.03	0.21	0.009	10.22	0.031
Juncus maritimus	Aboveground	BeJm12_AG	21.11	0.18	0.008	8.98	0.027
Juncus maritimus	Aboveground	BeJm13_AG	23.03	0.20	0.009	9.79	0.029
Juncus maritimus	Aboveground	BeJm14_AG	32.31	0.28	0.012	13.74	0.041
Juncus maritimus	Aboveground	BeJm15_AG	28.62	0.25	0.011	12.17	0.036
Juncus maritimus	Aboveground	BeJm16_AG	23.56	0.20	0.009	10.02	0.030
Juncus maritimus	Aboveground	BeJm17_AG	11.54	0.10	0.004	4.91	0.015
Juncus maritimus	Aboveground	BeJm18_AG	20.36	0.17	0.008	8.65	0.026
Juncus maritimus	Aboveground	BeJm19_AG	17.49	0.15	0.007	7.43	0.022
Juncus maritimus	Aboveground	BeJm20_AG	41.88	0.36	0.016	17.80	0.053
Juncus maritimus	Aboveground	BeJm21_AG	21.52	0.18	0.008	9.15	0.027
Juncus maritimus	Aboveground	BeJm22_AG	16.10	0.14	0.006	6.84	0.020
Juncus maritimus	Aboveground	BeJm23_AG	44.25	0.38	0.017	18.81	0.056
Juncus maritimus	Aboveground	BeJm24_AG	35.47	0.30	0.014	15.08	0.045

Espécie	*Biomassa*	*Código*	*PS (Mg/ha)*	*N (Mg/ha)*	*sdN*	*C (Mg/ha)*	*sdC*
Juncus maritimus	*Aboveground*	*BeJm25_AG*	*20.98*	*0.18*	*0.008*	*8.92*	*0.027*
Juncus maritimus	*Belowground*	*BeJm1_BG*	*234.02*	*1.56*	*0.179*	*82.57*	*3.978*
Juncus maritimus	*Belowground*	*BeJm2_BG*	*172.64*	*1.15*	*0.132*	*60.91*	*2.935*
Juncus maritimus	*Belowground*	*BeJm3_BG*	*138.74*	*0.93*	*0.106*	*48.95*	*2.358*
Juncus maritimus	*Belowground*	*BeJm4_BG*	*254.22*	*1.70*	*0.195*	*89.69*	*4.322*
Juncus maritimus	*Belowground*	*BeJm5_BG*	*118.80*	*0.79*	*0.091*	*41.92*	*2.020*
Sporobolus pumilus	*Aboveground*	*BeSp1_AG*	*135.76*	*0.67*	*0.041*	*59.24*	*0.302*
Sporobolus pumilus	*Aboveground*	*BeSp2_AG*	*38.58*	*0.19*	*0.012*	*16.84*	*0.086*
Sporobolus pumilus	*Aboveground*	*BeSp3_AG*	*53.77*	*0.27*	*0.016*	*23.46*	*0.120*
Sporobolus pumilus	*Aboveground*	*BeSp4_AG*	*38.34*	*0.19*	*0.012*	*16.73*	*0.085*
Sporobolus pumilus	*Aboveground*	*BeSp5_AG*	*42.27*	*0.21*	*0.013*	*18.45*	*0.094*
Sporobolus pumilus	*Aboveground*	*BeSp6_AG*	*43.98*	*0.22*	*0.013*	*19.19*	*0.098*
Sporobolus pumilus	*Aboveground*	*BeSp7_AG*	*28.49*	*0.14*	*0.009*	*12.43*	*0.063*
Sporobolus pumilus	*Aboveground*	*BeSp8_AG*	*40.72*	*0.20*	*0.012*	*17.77*	*0.091*
Sporobolus pumilus	*Aboveground*	*BeSp9_AG*	*46.34*	*0.23*	*0.014*	*20.22*	*0.103*
Sporobolus pumilus	*Aboveground*	*BeSp10_AG*	*50.95*	*0.25*	*0.015*	*22.23*	*0.113*
Sporobolus pumilus	*Aboveground*	*BeSp11_AG*	*53.13*	*0.26*	*0.016*	*23.19*	*0.118*
Sporobolus pumilus	*Aboveground*	*BeSp12_AG*	*77.80*	*0.38*	*0.024*	*33.95*	*0.173*
Sporobolus pumilus	*Aboveground*	*BeSp13_AG*	*56.38*	*0.28*	*0.017*	*24.60*	*0.125*
Sporobolus pumilus	*Aboveground*	*BeSp14_AG*	*58.67*	*0.29*	*0.018*	*25.60*	*0.130*
Sporobolus pumilus	*Aboveground*	*BeSp15_AG*	*50.64*	*0.25*	*0.015*	*22.10*	*0.113*
Sporobolus pumilus	*Aboveground*	*BeSp16_AG*	*115.18*	*0.57*	*0.035*	*50.26*	*0.256*
Sporobolus pumilus	*Aboveground*	*BeSp17_AG*	*107.53*	*0.53*	*0.033*	*46.92*	*0.239*
Sporobolus pumilus	*Aboveground*	*BeSp18_AG*	*104.93*	*0.52*	*0.032*	*45.79*	*0.233*
Sporobolus pumilus	*Aboveground*	*BeSp19_AG*	*54.13*	*0.27*	*0.016*	*23.62*	*0.120*
Sporobolus pumilus	*Aboveground*	*BeSp20_AG*	*58.44*	*0.29*	*0.018*	*25.50*	*0.130*
Sporobolus pumilus	*Aboveground*	*BeSp21_AG*	*181.41*	*0.90*	*0.055*	*79.16*	*0.403*
Sporobolus pumilus	*Aboveground*	*BeSp22_AG*	*166.54*	*0.82*	*0.051*	*72.67*	*0.370*
Sporobolus pumilus	*Aboveground*	*BeSp23_AG*	*98.02*	*0.48*	*0.030*	*42.77*	*0.218*
Sporobolus pumilus	*Aboveground*	*BeSp24_AG*	*21.61*	*0.11*	*0.007*	*9.43*	*0.048*
Sporobolus pumilus	*Aboveground*	*BeSp25_AG*	*60.01*	*0.30*	*0.018*	*26.19*	*0.133*
Sporobolus pumilus	*Belowground*	*BeSp1_BG*	*39.54*	*0.33*	*0.012*	*14.82*	*0.559*
Sporobolus pumilus	*Belowground*	*BeSp2_BG*	*185.35*	*1.55*	*0.056*	*69.48*	*2.621*
Sporobolus pumilus	*Belowground*	*BeSp3_BG*	*141.98*	*1.19*	*0.043*	*53.22*	*2.008*
Sporobolus pumilus	*Belowground*	*BeSp4_BG*	*122.03*	*1.02*	*0.037*	*45.74*	*1.725*
Sporobolus pumilus	*Belowground*	*BeSp5_BG*	*167.22*	*1.40*	*0.051*	*62.68*	*2.364*
Zostera noltii	*Aboveground*	*BeZn1_AG*	*1.21*	*0.04*	*0.001*	*0.45*	*0.007*
Zostera noltii	*Aboveground*	*BeZn2_AG*	*1.04*	*0.03*	*0.001*	*0.38*	*0.006*
Zostera noltii	*Aboveground*	*BeZn3_AG*	*1.48*	*0.05*	*0.001*	*0.55*	*0.009*
Zostera noltii	*Aboveground*	*BeZn4_AG*	*1.16*	*0.04*	*0.001*	*0.43*	*0.007*
Zostera noltii	*Aboveground*	*BeZn5_AG*	*0.79*	*0.03*	*0.000*	*0.29*	*0.005*
Zostera noltii	*Aboveground*	*BeZn6_AG*	*1.01*	*0.03*	*0.001*	*0.37*	*0.006*

Espécie	Biomassa	Código	PS (Mg/ha)	N (Mg/ha)	sdN	C (Mg/ha)	sdC
Zostera noltii	*Aboveground*	*BeZn7_AG*	*1.18*	*0.04*	*0.001*	*0.44*	*0.007*
Zostera noltii	*Aboveground*	*BeZn8_AG*	*1.50*	*0.05*	*0.001*	*0.56*	*0.009*
Zostera noltii	*Aboveground*	*BeZn9_AG*	*1.37*	*0.05*	*0.001*	*0.51*	*0.008*
Zostera noltii	*Aboveground*	*BeZn10_AG*	*0.91*	*0.03*	*0.001*	*0.34*	*0.005*
Zostera noltii	*Aboveground*	*BeZn11_AG*	*1.01*	*0.03*	*0.001*	*0.37*	*0.006*
Zostera noltii	*Aboveground*	*BeZn12_AG*	*1.23*	*0.04*	*0.001*	*0.46*	*0.007*
Zostera noltii	*Aboveground*	*BeZn13_AG*	*1.15*	*0.04*	*0.001*	*0.43*	*0.007*
Zostera noltii	*Aboveground*	*BeZn14_AG*	*1.22*	*0.04*	*0.001*	*0.45*	*0.007*
Zostera noltii	*Aboveground*	*BeZn15_AG*	*1.29*	*0.04*	*0.001*	*0.48*	*0.008*
Zostera noltii	*Aboveground*	*BeZn16_AG*	*0.84*	*0.03*	*0.001*	*0.31*	*0.005*
Zostera noltii	*Aboveground*	*BeZn17_AG*	*1.05*	*0.03*	*0.001*	*0.39*	*0.006*
Zostera noltii	*Aboveground*	*BeZn18_AG*	*0.73*	*0.02*	*0.000*	*0.27*	*0.004*
Zostera noltii	*Aboveground*	*BeZn19_AG*	*0.75*	*0.02*	*0.000*	*0.28*	*0.005*
Zostera noltii	*Aboveground*	*BeZn20_AG*	*0.78*	*0.03*	*0.000*	*0.29*	*0.005*
Zostera noltii	*Aboveground*	*BeZn21_AG*	*0.84*	*0.03*	*0.001*	*0.31*	*0.005*
Zostera noltii	*Aboveground*	*BeZn22_AG*	*0.70*	*0.02*	*0.000*	*0.26*	*0.004*
Zostera noltii	*Aboveground*	*BeZn23_AG*	*0.98*	*0.03*	*0.001*	*0.36*	*0.006*
Zostera noltii	*Aboveground*	*BeZn24_AG*	*1.05*	*0.03*	*0.001*	*0.39*	*0.006*
Zostera noltii	*Aboveground*	*BeZn25_AG*	*0.84*	*0.03*	*0.001*	*0.31*	*0.005*
Zostera noltii	*Belowground*	*BeZn1_BG*	*5.78*	*0.09*	*0.008*	*2.05*	*0.039*
Zostera noltii	*Belowground*	*BeZn2_BG*	*5.00*	*0.08*	*0.007*	*1.77*	*0.033*
Zostera noltii	*Belowground*	*BeZn3_BG*	*3.53*	*0.06*	*0.005*	*1.25*	*0.024*
Zostera noltii	*Belowground*	*BeZn4_BG*	*3.36*	*0.05*	*0.005*	*1.19*	*0.022*
Zostera noltii	*Belowground*	*BeZn5_BG*	*3.28*	*0.05*	*0.005*	*1.16*	*0.022*

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