

Appendix S1. Values of climatic, landscape and biological variables for each elevational site of Terceira's transect. Maximum and minimum temperatures are, respectively, the means of the warmest and coldest months, while maximum and minimum rainfall and relative humidity values are, in that order, the means of the rainiest and driest months.

Elevation (m)	Site name	Climatic data						Landscape data			Biological data
		Maximum rainfall (mm)	Minimum rainfall (mm)	Maximum relative humidity (%)	Minimum relative humidity (%)	Maximum temperature (°C)	Minimum temperature (°C)	Disturbance index (D)	Maximum canopy height (cm)	Average canopy height (cm)	Number of species per elevation
40	Serreta lighthouse	123.0	44.7	93.9	80.2	25.2	11.0	35.6	320.0	193.6	22
200	Canada das Covas	141.6	59.9	97.4	85.5	23.7	9.6	47.5	550.0	297.2	24
400	Pico Carneiro	172.4	74.6	99.4	89.9	22.3	8.3	35.2	500.0	285.6	40
600	Pico da Lagoinha	322.4	123.4	99.4	96.1	20.6	6.4	24.6	580.0	276.0	54
800	Trilho Lagoa do Pinheiro	353.7	133.0	99.5	97.9	19.8	5.2	16.7	330.0	209.2	49
1000	Santa Bárbara Mountain	325.6	124.5	99.8	99.7	19.0	4.4	16.1	165.0	100.6	49

Appendix S2. List of liverwort and moss taxa identified in Terceira's elevational gradient. Endemicity is categorized as EUR: European endemic; IB-MAC: Ibero-Macaronesian endemic; MAC: Macaronesian endemic, AZO: Azorean endemic and – if non-endemic.

Division	Endemicity	Taxa
Liverworts	AZO	<i>Bazzania azorica</i>
	–	<i>Blepharostoma trichophyllum</i>
	–	<i>Calypogeia arguta</i>
	–	<i>Calypogeia fissa</i>
	–	<i>Calypogeia muelleriana</i>
	–	<i>Cephalozia bicuspidata</i>
	–	<i>Cephaloziella baumgartneri</i>
	–	<i>Cephaloziella divaricata</i>
	–	<i>Cephaloziella hampeana</i>
	–	<i>Cephaloziella rubella</i>
	–	<i>Cephaloziella</i> sp.
	–	<i>Chiloscyphus</i> sp.
	–	<i>Cololejeunea azorica</i>
	–	<i>Cololejeunea microscopica</i>
	–	<i>Cololejeunea sintenisii</i>
	–	<i>Colura calyptrifolia</i>
	–	<i>Diplophyllum albicans</i>
	–	<i>Drepanolejeunea hamatifolia</i>
	EUR	<i>Frullania microphylla</i>
	–	<i>Frullania tamarisci</i>
	–	<i>Frullania teneriffae</i>
	–	<i>Fuscocephaloziopsis connivens</i>
	–	<i>Fuscocephaloziopsis crassifolia</i>
	–	<i>Geocalyx graveolens</i>
	–	<i>Harpalejeunea molleri</i>
	–	<i>Herbertus sendtneri</i>
	–	<i>Jubula hutchinsiae</i>
	–	<i>Kurzia pauciflora</i>
	–	<i>Lejeunea flava</i> subsp. <i>moorei</i>
	–	<i>Lejeunea lamacerina</i>
	–	<i>Lejeunea patens</i>
	–	<i>Lepidozia cupressina</i> subsp. <i>pinnata</i>
	–	<i>Lepidozia reptans</i>
	EUR	<i>Leptoscyphus porphyrius</i> subsp. <i>azoricus</i>
	–	<i>Lophocolea coadunata</i>
	–	<i>Lophocolea fragrans</i>
	–	<i>Lophocolea heterophylla</i>

Division	Endemicity	Taxa
	–	<i>Marchesinia mackaii</i>
	–	<i>Metzgeria furcata</i>
	–	<i>Microlejeunea ulicina</i>
	–	<i>Mnioloma fuscum</i>
	–	<i>Myriocoleopsis minutissima</i>
	–	<i>Nowellia curvifolia</i>
	–	<i>Odontoschisma denudatum</i>
	–	<i>Odontoschisma sphagni</i>
	–	<i>Pellia epiphylla</i>
	–	<i>Plagiochila bifaria</i>
	–	<i>Plagiochila exigua</i>
	–	<i>Plagiochila punctata</i>
	–	<i>Plagiochila</i> sp.
	–	<i>Porella canariensis</i>
	–	<i>Pseudomarsupidium decipiens</i>
	–	<i>Radula aquilegia</i>
	–	<i>Radula carringtonii</i>
	EUR	<i>Radula holtii</i>
	–	<i>Radula</i> sp.
	MAC	<i>Radula wichurae</i>
	–	<i>Riccardia chamedryfolia</i>
	EUR	<i>Saccogyna viticulosa</i>
	–	<i>Scapania gracilis</i>
	MAC	<i>Telaranea azorica</i>
	–	<i>Telaranea europaea</i>
Mosses	MAC	<i>Andoa berthelotiana</i>
	–	<i>Brachytheciastrum velutinum</i>
	–	<i>Brachythecium rutabulum</i>
	–	<i>Campylopus brevipilus</i>
	–	<i>Campylopus flexuosus</i>
	–	<i>Campylopus pilifer</i>
	–	<i>Campylopus pyriformis</i>
	–	<i>Campylopus shawii</i>
	–	<i>Cyclodictyon laetevirens</i>
	–	<i>Daltonia stenophylla</i>
	–	<i>Dicranum scottianum</i>
	–	<i>Eurhynchium</i> sp.
	–	<i>Fissidens dubius</i>
	–	<i>Fissidens taxifolius</i>
	–	<i>Hylocomium splendens</i>
	–	<i>Hypnum cupressiforme</i>
	EUR	<i>Hypnum uncinulatum</i>

Division	Endemicity	Taxa
	MAC	<i>Isothecium prolixum</i>
	–	<i>Kindbergia praelonga</i>
	–	<i>Leucobryum glaucum</i>
	–	<i>Leucobryum juniperoideum</i>
	–	<i>Myurium hochstetteri</i>
	–	<i>Polytrichastrum formosum</i>
	–	<i>Polytrichum commune</i>
	EUR	<i>Pseudotaxiphyllum laetevirens</i>
	–	<i>Ptychostomum capillare</i>
	–	<i>Rhytidiadelphus loreus</i>
	–	<i>Sematophyllum substrumosum</i>
	–	<i>Sphagnum palustre</i>
	–	<i>Sphagnum subnitens</i>
	IB-MAC	<i>Tetrastichium fontanum</i>
	IB-MAC	<i>Tetrastichium virens</i>
	–	<i>Thuidium tamariscinum</i>
	–	<i>Tortella flavovirens</i>
	–	<i>Trichostomum brachydontium</i>

Appendix S3. Observed and estimated bryophyte richness (with Jackknife 1, Jackknife 2 and Chao 2) and inventory completeness percentage for Terceira's gradient using: ALL – all samples; LIV – samples with liverworts; MOS – samples with mosses; HU – humicolous samples; TE – terricolous samples; RU – rupicolous samples; LI – lignicolous samples; T – epiphytic samples and LF – epiphyllous samples.

	<i>Divisions</i>		<i>Substrates</i>						
	ALL	LIV	MOS	HU	TE	RU	LI	T	LF
<i>No. samples</i>	636	613	475	106	73	54	96	253	54
<i>Observed richness</i>	92	58	34	64	62	44	53	64	23
<i>Estimated richness</i>									
Jackknife 1	99.0	36.0	63.0	73.9	76.8	58.7	63.9	73.0	28.9
Jackknife 2	96.0	34.0	62.0	76.9	86.6	66.6	68.8	73.0	31.8
Chao 2	93.9	34.2	59.4	69.6	79.5	57.1	60.9	67.6	26.8
<i>Completeness (%)</i>									
Jackknife 1	93	92	94	87	81	75	83	88	80
Jackknife 2	96	94	100	83	72	66	77	88	72
Chao 2	98	98	99	92	78	77	87	95	86
Mean	96	94	98	87	77	73	82	90	79

