

TABLE 1. Mediterranean bioclimatic altitudinal zones

Bioclimatic <i>étages</i>	Average annual temp	Average low winter temp	Average high winter temp	Thermic Index
Altimediterranean	<4°C	<-7°C	<0°C	<-30
Oromediterranean	4-8°C	-7--4°C	0-2°C	-30-60
Supramediterranean	8-13°C	-4--1°C	2-9°C	60-210
Mesomediterranean	13-17°C	-1-4°C	9-14°C	210-350
Thermomediterranean	17-19°C	4-10°C	14-18°C	350-470

After Rivas-Martinez (1987), cited in Vernet (1997).

TABLE 2. Some present-day trees and shrubs native to Portugal

Supra-Mediterranean vegetation			
	Latin name	English name	Portuguese name
trees	<i>Quercus pyrenaica</i>	Pyrenean oak	carvalho-negral
	<i>Q. robur</i>	common oak	carvalho-roble
	<i>Q. faginea</i>	Portuguese oak	carvalho-cerquinho
	<i>Pinus pinaster</i>	Maritime pine	pinheiro-bravo
	<i>Castanea sativa</i>	chestnut	castanheiro
	<i>Sorbus aucuparia</i>	Rowan ash	tramazeira
	<i>Alnus glutinosa</i>	alder	amieiro
	<i>Prunus avium</i>	wild cherry	cerejeira-brava
	<i>Betula celtiberica</i>	birch	videeiro
wetland trees	<i>Ulmus minor</i>	elm	ulmeiro
	<i>Fraxinus angustifolia</i>	ash	freixo
	<i>Salix</i> sp.	willow	salgueiro
	<i>Populus alba</i>	poplar	
shrubs	<i>Juniperus communis</i>	juniper	zimbros
	<i>Taxus baccata</i>	yew	teixo
	<i>Prunus spinosa</i>	sloe	
	<i>Corylus avellana</i>	hazel	aveiro
	<i>Ilex aquifolium</i>	holly	azevinho
	<i>Cytisus</i> sp.	broom	
	<i>Erica</i> sp.	heath	urze
	<i>Genista</i> sp.		piornais

Meso-Mediterranean vegetation			
	Latin name	English name	Portuguese name
trees	<i>Quercus ilex</i>	Holm oak	azinheira
	<i>Q. suber</i>	cork oak	sobreiro
	<i>Q. coccifera</i>	Kermes oak	carrasco
	<i>Q. faginea</i>	Portuguese oak	carvalho-cerquinho
	<i>Pinus pinaster</i>	Maritime pine	pinheiro-bravo
	<i>P. pinea</i>	Stone pine	pinheiro-manso
	<i>Phillyrea latifolia</i>	privet	pelo aderno
	<i>Acer monspessulanum</i>	Montpellier maple	zelha
	<i>Arbutus unedo</i>	wild strawberry	medronheiro
	<i>Olea europaea</i> var. <i>sylvestris</i>	wild olive	zambujeiro
	<i>Buxus sempervirens</i>	box	
	<i>Acer pseudoplatanus</i>	sycamore	bordo
<i>Laurus nobilis</i>	laurel	loureiro	
welland trees	<i>Salix</i> sp.	willow	salgueiro
	<i>Fraxinus angustifolia</i>	ash	freixo
	<i>Populus alba</i>	poplar	choupo
	<i>Ulmus</i> sp.	elm	ulmeiro
	<i>Sambucus nigra</i>	elderberry	
shrubs	<i>Juniper oxycedrus</i>	prickly juniper	cedro espanhol
	<i>Erica arborea</i>	tree heath	urze
	<i>Myrtus communis</i>	myrtle	murta
	<i>Rhamnus alaternus</i>	Mediterranean buckthorn	sanguinho-das-sebes
	<i>Pistacia lentiscus</i>	mastic	aroeira
	<i>Jasminum fruticans</i>	wild jasmine	jasmineiro-do-monte
	<i>Asparagus albus</i>	asparagus	estrepes
	<i>Rosmarinus officinalis</i>	rosemary	alecrim
	<i>Viburnum tinis</i>	laurustinus	folhado

TABLE 3. A sample of edible wild plants on the Iberian Peninsula

	Latin name	English name	edible part	nutritional value
Cruciferae	<i>Sisymbrium officinale</i>	hedge mustard	l.	essential oils
	<i>Cardaria draba</i>	hoary cress	l.	
Caryophyllaceae	<i>Silene vulgaris</i>	bladder campion	l., sh.	vitamins medicinal, vitamins
	<i>Stellaria media</i>	chickweed	df., l.	
Portulacaceae	<i>Portulaca oleracea</i>	purslane	l.	vitamins, fatty acids
Chenopodiaceae	<i>Chenopodium</i> sp.	goosefoot / fat hen	l., s.	vitamins
	<i>Beta maritima</i>	wild beet	l.	
	<i>Salicornia europaea</i>	glasswort	ep.	vitamins, minerals
Malvaceae	<i>Malva sylvestris</i>	common mallow	l.	essential oils
Rosaceae	<i>Rubus</i> sp.	blackberry	l., br.	Vitamin C, citric acid
	<i>Sorbus aucuparia</i>	Rowan ash	br.	Vitamin C
	<i>Prunus spinosa</i>	sloe	br.	sugars
Umbelliferae	<i>Coriandrum sativum</i>	coriander	f., s.	Vitamin C
	<i>Apium</i> sp.	wild celery	l.	
	<i>Petroselinum crispum</i>	parsley	l., st., r.	
	<i>Carum</i> sp.	caraway	l., r., s.	
	<i>Foeniculum vulgare</i>	fennel	rh., l., f.	
Polygonaceae	<i>Polygonum</i> sp.	knotgrass	s.	Vitamin C
	<i>Rumex crispus</i>	curly dock	l.	
Urticaceae	<i>Parietaria diffusa</i>	pellitory-of-the-wall	df.	medicinal
Ericaceae	<i>Calluna vulgaris</i>	heather	df.	medicinal
Verbenaceae	<i>Verbena officinalis</i>	vervain	df.	medicinal
Labiatae	<i>Salvia officinalis</i>	sage	l.	essential oils
	<i>Rosmarinus officinalis</i>	rosemary	l.	essential oils
	<i>Lavandula angustifolia</i>	lavender	df.	essential oils
Plantaginaceae	<i>Plantago major</i>	plantain	l.	Vitamin C
Caprifoliaceae	<i>Sambucus nigra</i>	elderberry	f.	essential oils, sugar
Compositae	<i>Sonchus oleraceus</i>	sow-thistle	l.	Vitamin C
Liliaceae	<i>Allium</i> sp.	wild onion, leek, shallot, garlic	bb., l.	Vitamin C
Typhaceae	<i>Typha latifolia</i>	cat-tail	rh., young sh., p.	starch
Phycophyta	<i>Phaeophyta</i>	seaweed	bl. or bc.	Vitamin C
	<i>Chlorophyta</i>	seaweed	bl. or bc.	vitamins, minerals
	<i>Rhodophyta</i>	seaweed	bl. or bc.	vitamins, minerals

Information from Guil *et al.*, 1996; Launert, 1981.

Key: bb. = bulbs; bc. = branches; bl. = blades; br. = berries; df. = dried flowers; ep. = entire plant; f. = fruits; l. = leaves; r. = roots; rh. = rhizomes; s. = seeds; sh. = shoots; st. = stems.

TABLE 4. Comparison of nutritional values (%) of different types of pine nuts

	Protein	Fat	Carbohydrate	kcal/100g
Old World				
<i>Pinus pinea</i>	33.9	48.2	6.5	614
<i>P. sibirica</i>	19	51-75	12	—
<i>P. gerardiana</i>	14	51	23	—
New World				
<i>Pinus monophylla</i>	8.3	57.0	22.0	634
<i>P. edulis</i>	14	62-71	18	—
<i>P. cembroides</i>	19	60	14	—
<i>P. quadrifolia</i>	11	37	44	—
<i>P. sabiniana</i>	30	60	9	—
<i>P. strobiformis</i>	28	52	7	—

Data from Howes (1948), Barlow and Metcalfe (1996), and Lanner (1981).

TABLE 5. Comparative nutritional values expressed in g/100g for selected nuts from Mediterranean woodlands

	Protein	Fat	Carbohydrate	kcal
<i>Pinus pinea</i> ¹	26.4	40	29.2	510
	24 ²	50.7	14.2	566
	33.2 ³	51.7	5.0	618
<i>Q. suber</i> ³	4.4	4.7	45.0	240
<i>Q. ilex</i> ³	3.0	10.5	53.0	319
<i>Castanea sativa</i> ²	8.2	3.5	75.3	350
<i>Juglans regia</i> ³	16.0	66.5	5.0	686
<i>Corylus avellana</i> ³	14.9	64.7	8.4	676

Data from USDA food composition database¹; Alce Ingeniería² (Spain); Tabela da Composição dos Alimentos Portugueses³ (Gonçalves Ferreira & da Silva Graça, 1963).

TABLE 6. Macronutrient values for oak acorns from the Mediterranean and California

Species	Fats	Carbohydrates	Proteins	kcal/g
Europe				
<i>Quercus ilex</i> ²	8.0	43.0	5.0	319 ³
<i>Q. suber</i>	–	–	–	240 ³
<i>Q. robur</i>	2.6	57.8	3.0	–
California				
<i>Q. lobata</i>	4.2-5.5	69.0	2.8-4.9	444
<i>Q. garryana</i>	4.5	68.9	3.9	–
<i>Q. douglassi</i>	4.8-8.1	65.5	3.0-5.5	441
<i>Q. chrysolepis</i>	8.7	63.5	4.1	451
<i>Q. agrifolia</i>	14.5-16.8	54.6	3.1-6.3	516
<i>Q. kelloggii</i>	11.1-18.0	55.5	3.4-4.6	501
barley	1.9	71.0	8.7	–
wheat	1.8	69.4	12.3	329

Data from Basgall (1987); FEDNA (Spain)²; Tabela da Composição dos Alimentos Portugueses³ (Gonçalves Ferreira & da Silva Graça, 1963).

TABLE 7. Pollen sites in Iberia with cores extending to the Late Pleistocene

Location	setting	elevation	basal age
NW Portugal			
Charco da Candieira	mountain pond	1409	12,060+/-100
Lagoa Comprida	mountain lake	1600	9,200+/-270
Lagoa Clarezza	mountain lake	1845	9050+/-50
Covão do Boieiro	mountain pond	1730	Late Glacial
Lagoa de Marinho	mountain lake	1150	11,180+/-400
SW Portugal			
Fernão Ferro	coastal lagoon	<100	9,800
NW Spain			
Laguna Lucenza	mountain lake	1440	8,540
Queixa Sierra	mountain	1360	8,000
Sanabria Marsh	mountain marsh	1050	12,580+/-100
Laguna de la Roya	mountain lake	1600	14,500
Mougás	coastal lagoon	0	14,100+/-200
Brañas de Lamela	mountain bog	1280	Late Glacial
Lago de Ajo	mountain	1570	14,270+/-180
Southern Spain			
Navarrés	flat valley	225	30,900+/-530
Siles	mountain lake	1320	17,030+/-80
Padul	mountain	785	29,300+/-600
El Asperillo	coastal bog	0-30	13,000

TABLE 8. Comparative return rates for plant and animal resources in the Great Basin

species	common name/type	kcal/hr
<i>Anabrus simplex</i>	grasshopper	41,598-714,409
<i>Odocoileus hemionus</i>	mule deer	17,971-31,450
<i>Ovis canadensis</i>	bighorn sheep	17,971-31,450
<i>Antilocapra americana</i>	pronghorn antelope	15,725-31,450
<i>Lepus</i> sp.	jackrabbit	13,475-15,400
<i>Thomomys</i> sp.	gopher	8,983-10,780
<i>Sylvilagus</i> sp.	rabbit	8,939-9,800
<i>Typha latifolia</i>	cattail (pollen)	2,750-9,360
<i>Spermophilus</i> sp.	squirrel	5,390-6,341
<i>Citellus</i> sp.	squirrel	2,837-3,590
<i>Anas</i> sp.	duck	1,975-2,709
<i>Quercus gambelli</i>	acorn	1,488
<i>Descurainia pinnata</i>	tansymustard seed	1,307
<i>Pinus monophylla</i>	piñon seed	841-1,408
<i>Lewisia rediviva</i>	bitterroot	1,237
<i>Elymus salinas</i>	wild rye seed	921-1,238
<i>Atriplex nuttalli</i>	shadscale seed	1,200
<i>Atriplex confertifolia</i>	shadscale seed	1,033
<i>Scirpus</i> sp.	bulrush seed	302-1,699
<i>Echinochloa crusgalli</i>	barnyard grass seed	702
<i>Lepidium fremontii</i>	peppergrass seed	537
<i>Helianthus annuus</i>	sunflower seed	467-504
<i>Poa</i> sp.	bluegrass seed	418-91
<i>Elymus salinas</i>	wild rye seed	266-473
<i>Oryzopsis hymenoides</i>	ricegrass seed	301-92
<i>Phalaris arundinacea</i>	reed canary grass seed	261-321
<i>Muhlenbergia asperfolia</i>	scratchgrass seed	162-294
<i>Hordeum jubatum</i>	foxtail barley seed	138-273
<i>Carex</i> sp.	sedge seed	202
<i>Typha latifolia</i>	cattail root	128-267
<i>Scirpus</i> sp.	bulrush root	160-257
<i>Distichlis stricta</i>	saltgrass seed	60-146
<i>Allenrolfea occidentalis</i>	pickleweed seed	90-150
<i>Sitanion hystrix</i>	squirreltail grass seed	91
<i>Gila bicolor</i>	minnow	750-7,514

Data from Simms (1987).

TABLE 9. Resource return rates suggested by Rowley-Conwy (1984) for Mesolithic Denmark

resource	kcal/hr
shellfish	1000-2000
acorns	>18,000
hazelnuts	>20,000
fruits	1000
terrestrial mammals	>14,000
sea mammals	?
waterfowl	?
fish	?

Return rates are based on collection rates only.
Handling time was not considered.

TABLE 10. Comparative nutritional values expressed in g/100g; mg/100g and µg/100g for selected nuts from Mediterranean woodlands

	<i>Pinus pinea</i> ¹	<i>Pinus pinea</i> ²	<i>Pinus pinea</i> ³	<i>Q. ilex</i> ³	<i>Q. suber</i> ³	<i>Castanea sativa</i> ²	<i>Corylus avellana</i> ³
Protein	26.4	24	33.2	3.0	4.4	8.2	14.9
Fat	40	50.7	51.7	10.5	4.7	3.5	64.7
Carbohydrate	29.2	14.2	5.0	53.0	45.0	75.3	8.4
kcal	510	566	618	319	240	350	676
Minerals (mg)							
calcium	26	80	54	33.0	23	98	205
phosphorus	508	400	350	95	118	230	253
iron	9.2	0	4.7	1.1	1.2	3.9	3.3
magnesium	233	-	-	-	-	-	-
potassium	599	600	-	-	-	1000	-
sodium	4	0	-	-	-	18	-
zinc	4.3	-	-	-	-	-	-
Vitamins							
C	1.9	3	1.0	6	-	30	0.4
Thiamin	0.81	0.48	0.39	0.15	0.10	0.38	.30
Riboflavin	0.19	0.13	0.03	0.14	0.20	0.39	.07
Niacin	3.6	-	-	-	-	-	-
Folate	57 µg	-	-	-	-	-	-
A	-	-	-	-	-	-	-
E	3.5	-	-	-	-	-	-
B-6	0.11	-	-	-	-	-	-
B-12	0	0	-	-	-	0	-

Data from USDA food composition database¹; Alce Ingeniería² (Spain); Tabela da Composição dos Alimentos Portugueses³ (Gonçalves Ferreira & da Silva Graça, 1963).

TABLE 11. Comparative nutritional values expressed in g/100g; mg/100g and $\mu\text{g}/100\text{g}$ for selected birds from Mediterranean wetlands/woodlands

Common name Portuguese name	Duck ¹ Pato	Duck ²	Partridge ² Perdiz
Protein	17.4	17.4	23
Fat	15.2	17.2	1.6
Carbohydrate	0	0	0
kcal	211	232	106
Minerals (mg)			
calcium	5	14	46
phosphorus	168	185	287
iron	4.16	3	7.7
magnesium	20	–	–
potassium	249	286	386
sodium	56	127	93
zinc	0.77	–	–
Vitamins			
C	5.2	7.8	0
Thiamin	0.35	0.13	0
Riboflavin	0.27	0.4	0
Niacin	3.3	–	–
Folate	21 μg	–	–
A (IU)	88	–	–
E	0.7	–	–
B-6	0.53	–	–
B-12	0.65 μg	0	0

Data from USDA food composition database¹; Alce Ingeniería² (Spain).

TABLE 12. Comparative nutritional values expressed in g/100g; mg/100g and µg/100g for selected game from Mediterranean woodlands

Common name Portuguese name	Red deer ¹ Veado	Red deer ² Corgo	Roe deer ² Corgo	Wild boar ¹ Javali	Wild boar ²	Rabbit ¹ Coelho	Rabbit ²	Goat ¹ Cabra	Goat ²	Horse ¹ Cavalo	Horse ²
Protein	30.2	18.2	18.3	28.3	16	33	23	27.1	19.3	28.1	21
Fat	1.9	4	4	4.9	11.2	3.51	4.6	3.03	4	6.05	1
Carbohydrate	0	0.6	0.4	0	0.4	0	0	0	0	0	0
kcal	146	116	116	160	158	173	133	143	113	175	93
Minerals (mg)											
calcium	5	20	14.8	16	20	18	22	17	9	8	12
phosphorus	180	193	240	134	240	240	145	201	200	247	123
iron	3.6	2.9	4.9	1.1	5	4.9	1	3.7	0.9	5.03	7
magnesium	24	-	-	27	-	31	-	0	-	25	-
potassium	328	331	320	396	300	343	215	405	150	379	156
sodium	61	203	83	60	60	45	32	86	20	55	22
zinc	3.2	-	-	3.0	-	2.4	-	5.3	-	3.8	-
Vitamins											
C	0	0	0	0	0	0	0	0	0	2	0
Thiamin	-	0.32	0.32	0.31	0	0.02	0.1	0.09	0.32	0.1	0.07
Riboflavin	-	0.32	0.18	0.14	0	0.07	0.19	0.61	0.1	0.1	0.1
Niacin	-	-	-	4.2	-	6.4	-	3.95	-	4.8	-
Folate	-	-	-	6 µg	-	8 µg	5 µg	5 µg	-	-	-
A (IU)	-	-	-	-	-	-	-	-	-	-	-
E	-	-	-	-	-	0.79	-	-	-	-	-
B-6	-	-	-	0.42	-	0.34	-	0	-	0.33	-
B-12	-	1 µg	1 µg	0.7 µg	1 µg	6.5 µg	10 µg	1.19 µg	1 µg	3.16 µg	1 µg

Data from USDA food composition database¹; Alce Ingeniería² (Spain).

TABLE 13. Comparative nutritional values expressed in g/100g; mg/100g and µg/100g for selected fish and from Iberian waters

Common name	Salmon ¹	Sardine ¹	Gilthead ²	Shad ³	Trout ¹
Portuguese name	Salmão	Sardinha	Dourada	Sável	Truta
Protein	18.4	18.9	17	20.9	20
Fat	5.6	6.8 (2.3-15.2)	1	15.8	2.5 (.7-4.6)
Carbohydrate	–	–	–	0.1	–
kcal	129	142	77	226	108
Minerals (mg)					
calcium	15	73	30	16	80
phosphorus	210	240	156	130	258
iron	1	2.3	0.9	0.2	1.4
magnesium	–	–	–	–	–
potassium	410	55	178	–	430
sodium	44	100	86	–	60
zinc	0.5	1	–	–	1.2
Vitamins					
C	–	–	0	–	–
Thiamin	0.16	0.08	0.06	0.19	–
Riboflavin	0.28	0.23	0.08	0.048	0.09
Niacin	8	8.2	–	–	–
Folate	–	–	–	–	–
A (IU)	40	229	–	–	–
E	–	–	–	–	–
B-6	0.82	–	–	–	–
B-12	8.2 µg	11.0 µg	2 µg	–	3.0 µg

Data from Nettleton (1985), Tables 9.1 & 9.2¹; Alce Ingeniería² (Spain); Tabela da Composição dos Alimentos Portugueses³ (Gonçalves Ferreira & da Silva Graça, 1963).

All analyses conducted on fresh fish.

TABLE 14. Comparative nutritional values expressed in g/100g; mg/100g and µg/100g for selected shellfish from Iberian waters

Common name Portuguese name	Cockle ² Berbigão	Clam ³ Amêijoia	Razor clam ³ Navalha	Mussel ¹ Mexilhão	Oyster ¹ Ostra	Scallop ¹ Vieira	Limpet ³ Lapa	Periwinkle ¹ Burrié
Protein	10.7	13.2	13.1	12	10.3	16.2	14.3	18.2
Fat	0.05	1.3	1.0	2.2 (1.2-2.1)	1.7 (1.3-1.8)	0.81 (2-1.0)	0.7	3.0 (1.2-4.5)
Carbohydrate	0	1.6	0.9	4.5	4.9	2.6	0.7	2.3
kcal	47	71	65	89	79	87	66	114
Minerals (mg)								
calcium	128	63	35	20	11	16	51	165
phosphorus	200	128	180	288	21	218	103	277
iron	24	10.5	8.0	7.3	3.5	0.6	5.6	1.5
magnesium	-	80	-	-	-	-	-	-
potassium	300	320	-	273	258	412	-	211
sodium	-	544	-	270	650	87	-	266
zinc	-	-	-	2.8	38.3	1.2	-	-
Vitamins								
C	0	-	-	-	0	-	-	-
Thiamin	0.04	0.04	0.05	0.16	0.15	-	-	-
Riboflavin	0.14	0.15	0.14	0.21	0.25	-	0.13	-
Niacin	-	-	-	-	-	-	0.04	-
Folate	-	-	-	-	-	-	-	-
A (IU)	-	-	-	-	15 µg	-	-	-
E	-	-	-	-	-	-	-	-
B-6	-	-	-	-	-	-	-	-
B-12	2 µg	-	-	12 µg	4.8 µg	-	-	-

Data from Nettleton (1985), Tables 9.1 & 9.2¹; Alce Ingeniería² (Spain); Tabela da Composição dos Alimentos Portugueses³ (Gonçalves Ferreira & da Silva Graça, 1963). All analyses conducted on fresh shellfish.

TABLE 15. Comparison of a number of caloric and non-caloric essential nutrients of various classes of foods. All values are based on 100g of food. (After Hockett and Haws, 2003)

Essential Nutrient	Terrestrial Mammals (muscle) ^a	Terrestrial Mammals (organs) ^b	Shellfish ^c	Birds ^d	Fish ^e	Plants ^f
Energy (kcal)	119	195	74	215	166	132
fat (g)	2.8	10.0	.97	14.1	8.1	2.5
protein (g)	22.0	20.0	12.8	21.7	21.7	8.3
carbs (g)	0	4.0	2.6	0	0	14.8
Non-Caloric						
C (mg)	.17	12.7	13.0	3.6	.17	32.5
Thiamin (mg)	.22	.16	.08	.19	.22	.13
Riboflavin (mg)	.26	2.4	.21	.20	.31	.19
Niacin (mg)	4.8	9.4	1.8	4.2	5.9	1.1
B-6 (mg)	.34	.50	.06	.53	.40	.07
B-12 (mg)	4.6	27.6	49.4	.65	6.6	0
A (IU)	0	9196 ^g	300	118	322	138
Folate (mg)	7.4	105.0	16.0	21.0	16.7	2.4
D (mcg)	0	.75	4.0	^h	8.0	0
E (mg)	.20	1.2	1.0	.70	.25	2.2
Calcium (mg)	9.5	10.8	46.0	22.5	145.7	110
Iron (mg)	3.4	4.1	14.0	5.4	1.7	3.0
Potassium (mg)	338	313	314	288	416	387

^a Based on average values of horse, bison, red deer, rabbit, wild boar, and reindeer.

^b Based on average values of beef liver, brains, and kidneys.

^c Based on *Lamellibranchia*.

^d Based on average values of grouse/partridge and duck.

^e Based on average values of Atlantic salmon, sea trout, and sardine.

^f Based on average values of over 200 edible plant foods found in the Mediterranean region¹³.

^g 100g of liver alone provides nearly 36,000 IU. A single daily serving of 35,000 to 50,000 IU may be lethal⁶⁸.

^h Egg yolks contain significant quantities of vitamin-D; one egg (the yolk) can supply. 60 mcg of vitamin-D, almost as much as 100g of beef liver.

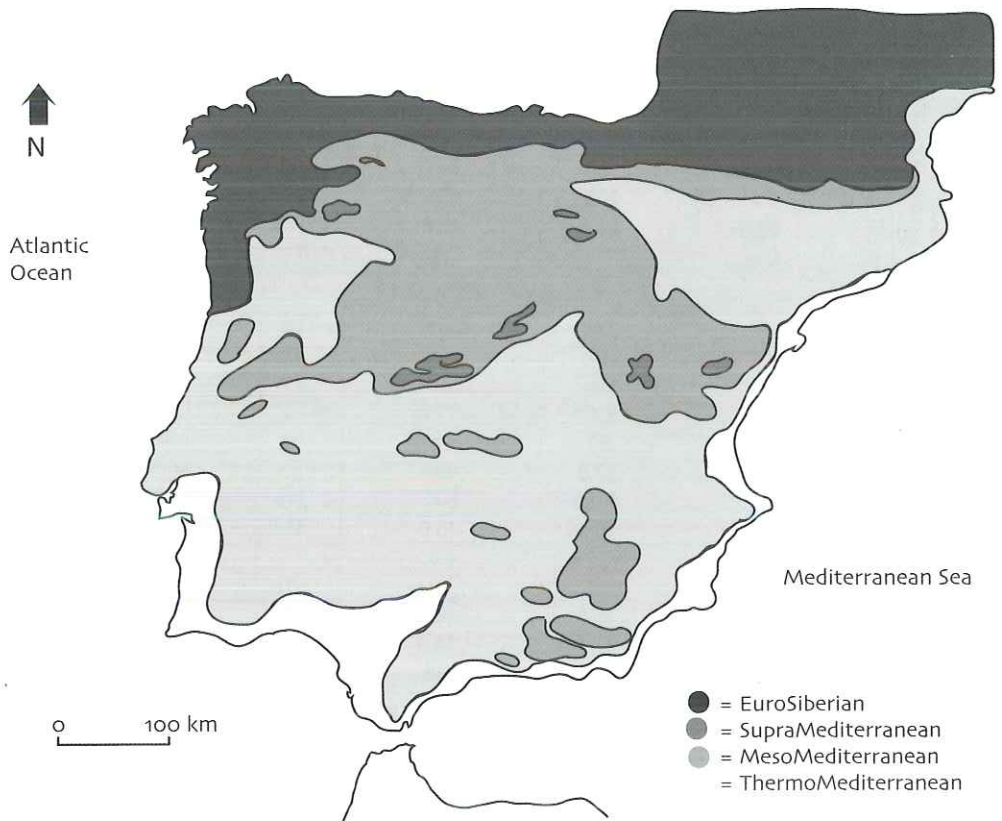


FIGURE 1. Map of bioclimatic zones in Iberia.

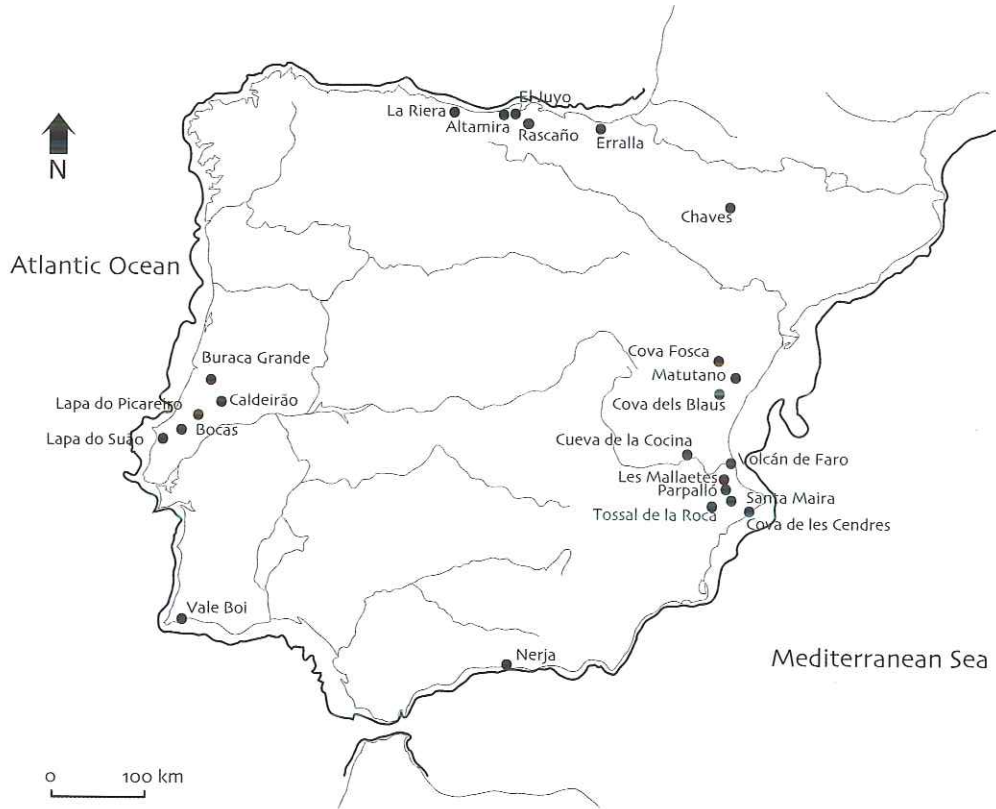


FIGURE 2. Map of Iberia showing the coastline (heavy line) during the Late Magdalenian. The faint line is the present coastline. Note the amount of lost land in central Portugal and Mediterranean Spain compared to Cantabria.

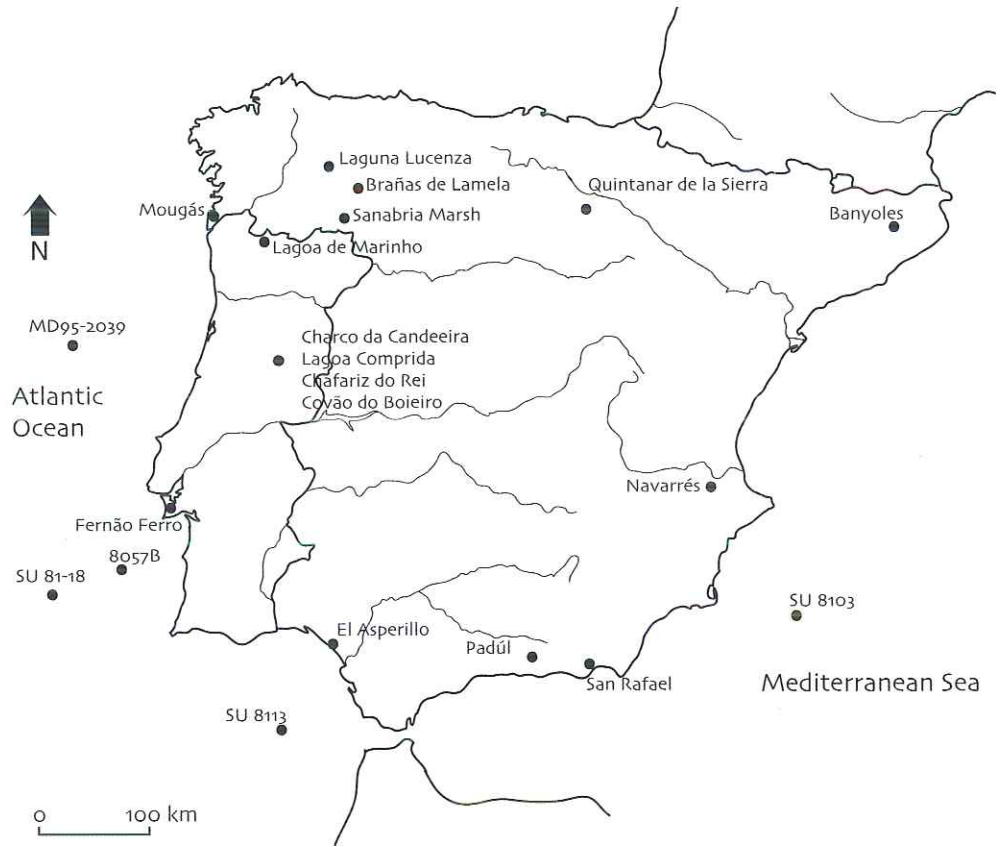


FIGURE 3. Map of Late Pleistocene pollen core locations mentioned in the text.