

Vegetation, nutrition and climate – data-tables

(1) Natural vegetation – ecomorphological characters

Co-ordinator: R.L. Specht

Contributors

D.H. Ashton, H.T. Clifford, L. Olsvig-Whittaker,
D. Robertson, N. Scarlett, R.L. Specht (Southeastern and
South Australia)
L. Atkins, K. Dixon, R.J. Hobbs, A.J.M. Hopkins,
B.B. Lamont, R.L. Specht, R. Struthers (Southwestern
Australia)
G.A. Scheid, C.A. Zammit, P.H. Zedler (California and
Arizona)
R.A. Gajardo, G. Montenegro (Chile)
L. Amandier, C. Martinez, R.L. Specht (Corsica)
C. Floret, F. Romane, L. Trabaud (France)
M. Arianoutsou, S. Kokkini (Greece)
G. Orshan, A. Rabinovitz-Vyn (Israel)
P. Quezel (Mediterranean Basin)
F.M. Catarino, A.I.V.D. Correia (Portugal)
E.J. Moll (South Africa)
C.A. Gracia, J. Merino (Spain)

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Table 39. Ecomorphological characters: Greece.

Location: Stavros, Halkidiki, Northern Greece ($40^{\circ}39'N$, $23^{\circ}43'E$, 20 m).

Vegetation structure: Maquis (low elevation), with evergreen sclerophyll tall shrubs.

Age since last fire: 25–30 years.

Nearest climate station: Vassiliki, Thermi, Greece.

Soil: pH slightly acid 5.0–5.5, on metamorphic rocks of biotite gneiss and amphiboles.

Reference: Arianoutsou, M. and Mardiris, T.A., 1987. Observations on the phenology of two dominant plants of the Greek maquis. In: Tenhunen, J.D., Catarino, F.M., Lange, O.L. and Oechel, W.C. (eds) Plant Response to Stress – Functional Analysis in Mediterranean Ecosystems. Springer-Verlag, Berlin.

Compiler: M. Arianoutsou, July 1986.

Character

	<i>Arbutus unedo</i> (Ericaceae)	<i>Quercus coccifera</i> (Fagaceae)	<i>Quercus ilex</i> (Fagaceae)	<i>Phillyrea media</i> (Oleaceae)	<i>Erica arborea</i> (Ericaceae)	<i>Erica verticillata</i> (Ericaceae)	<i>Olea europaea</i> var. <i>oleaster</i> (Oleaceae)	<i>Callicome villosa</i> (Fabaceae)
Foliage Projective Cover (%)	25	20	5	28	10	8	2	2
Density (mature plants ha ⁻¹)	3000	4000	1500	9000	5000	4000	1000	2000
Biomass (kg ha ⁻¹)	6270	13830		14210	3500	3000	2860	2500
1. Renewal buds	M	M	MM	MM	M	M	MM	M
2. Trophic type	1	1	1	1	1	1	1	2
3. Life duration (yrs)	5	5	5	4	4	4	6	4
4. Height (m)	5–6	5–6	8–9	8	5–6	5–6	8	6
5. Crown diameter (m)	5	5	5	4–5	5	5	5	5
6. Canopy density (%)	2	3	3	3–4	3	3	3	3
7. Photosynthetic organs	1	1	1	1	1	1	1	1
8. 'Leaf' size	5	3	4	3	1	1	3	3
9. 'Leaf' colour	1	1	1	1	1	1	2	1
10. 'Leaf' length (cm)	4	3	4	3	1	1	3	0.15–1.5
11. 'Leaf' width (mm)	7	6	7	6	3	2	5	4–6
12. 'Leaf' angle (°)	?	?	?	?	?	?	?	?
13. 'Lea?' margin	2	2	2	2	5	5	1	3
14. 'Leaf' surface resins	2	2	2	2	2	2	2	2
15. 'Leaf' glands	2	2	2	2	2	2	2	2
16. 'Leaf' consistency	2	3	3	3	3	3	3	2
17. 'Leaf' tomentosity	1	2	2	2	1	1	2	2
18. 'Leaf' stomata	2	2	2	2	2	2	2	2
19. 'Leaf' duration (yrs)	3	3	3	3	3	3	3	2 wl 1 sl
20. 'Lea?' seasonality	1	1	1	1	1	1	1	2
21. 'Leaf' area; assim. stem area	1:0	1:0	1:0	1:0	1:0	1:0	1:0	1:1
22. Organs periodically shed	4	4	4	4	4	4	4	4
23. Organs shed – seasonality	all the year; peak season June–July						Jn	
24. Shoot growth – seasonality	April–May						F–Ma	
25. Stem – number from base	2 (5–10)	2 (4–5)	2 (4–5)	2 (4–5)	2 (8–10)	2 (1–3)	2 (1–2)	
26. Stem – height (m)	–	–	–	–	–	–	–	
27. Stem – diameter (cm)	5	2.5	2.5	3.5	4	4	5	1.5
28. Stem lignification	1	1	1	1	1	1	1	1
29. Bark consistency	1↔2	1↔2	1	1	2	2	1↔2	1↔2
30. Bark thickness (mm)	?	?	?	?	?	?	?	1
31. Bark shedding	?	?	?	?	?	?	?	?
32. Bark shedding – seasonality	?	?	?	?	?	?	?	?
33. Spinescence	4	2	2	4	4	4	4	1
34. Underground stems	1 (?)	1 (?)	1 (?)	1 (?)	1 (?)	1 (?)	1 (?)	?
35. Root morphology	?	?	?	?	?	?	?	?
36. Root modification	?	?	?	?	?	?	?	?
37. Rootlet modification	?	?	?	?	?	?	?	?
38. Root depth (cm)	?	?	?	?	?	?	?	?
39. Root spread (cm)	?	?	?	?	?	?	?	?
40. Vcg. multiplication	1	1	1	1	1	1	1	1
41. Vcg. regen. after fire	3	3	3	3	3	3	3	3
42. Flowering – seasonality	Oc–D	Mr–Ma	Ap–Ma	Ap–Ma	Mr–Ma	Aug–D	Ma–Jn	F–Ap
43. Flowering – pyrogenic	2	2	2	2	2	2	2	2
44. Fruit dehiscence	3	1	1	3	2	2	3	2
45. Seed dissemination	1	1	1	1	1	1	1	1
46. Seedling – germ. type	2	3	3	2	2	2	2	2
47. Plumule position	1	3	3	1	1	1	1	1
48. No. leaves per 10 cm stem	11	8	6	9	> 300	> 300	30	18

Abbreviations: J – January; F – February; Mi – March; Ap – April; Ma – May; Jn – June; Jl – July; Aug – August; S – September; Oc – October; N – November; D – December / eJn – early June.

Code of Ecomorphological Characters: See Chapter 1.