

Vegetation, nutrition and climate – data-tables

(I) Natural vegetation – ecomorphological characters

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Table 38. Ecomorphological characters: Greece.

Location: Hymettus, Athens, Central Greece (37° 57' N, 23° 49' E, 400 m).

Vegetation structure: Phrygana (low elevation), with seasonal dimorphic shrubs (*Sarcopoterium*, etc.) (Cover 43%) (Number of woody spp. 21 m⁻²).

Age since last fire: c. 25 years.

Nearest climate station: Hellinikon, Greece.

Soil: pH alkaline 7-8, on limestone.

References: Arianoutsou-Faraggitaki, M. and Diamantopoulos, J., 1985. Comparative phenology of five dominant plant species in maquis and phrygana ecosystems in Greece. *Phyton* (Austria) 25: 77-85.

Margaris, N., 1976. Structure and function in a phryganic ecosystem. *J. Biogeogr.* 3: 249-259.

Compiler: M. Arianoutsou and S. Kokkini, July 1986.

Character	<i>Anhyllis hermanniae</i> (Fabaceae)	<i>Baileia acedubalosa</i> (Lamiaceae)	<i>Cistus incanus</i> (Cistaceae)	<i>Euphorbia acanthothamnos</i> (Euphorbiaceae)	<i>Gentia acantholoba</i> (Fabaceae)	<i>Helianthemum nummularium</i> (Cistaceae)	<i>Phagnolon graecum</i> (Asteraceae)	<i>Philomis fruticosa</i> (Lamiaceae)	<i>Sarcopoterium spinosum</i> (Rosaceae)	<i>Teucrium polium</i> (Lamiaceae)	<i>Teucrium divaricatum</i> (Lamiaceae)	<i>Thymus capitatus</i> (Lamiaceae)	<i>Hypericum emperifolium</i> (Hypericaceae)
Foliage Projective Cover (%)	001	03	441	12.86	0.01	045	0.32	13.31	6.22	0.13	0.09	190	0.01
Density (mature plants ha ⁻¹)		400	15600	14800		12400	800	8400	16000	400	2800	3200	400
Biomass (kg ha ⁻¹)			R31	27W		803		3665	1435			360	
1. Renewal buds	Ch	Ch	N	N	N	Ch	Ch	N	N	Ch	Ch	Ch	H
2. Trophic type	2	1	1	1	2	1	1	1	1	1	1	1	1
3. Life duration (yrs)	4	4	4	5	5	4	4	6	5	4	4	4	1
4. Height (m)	3	4	4	4	3	3	3	4	4	2	2	3	2
5. Crown diameter (m)	3	3	4	3	3	2	3	4	3	2	3	3	3
6. Canopy density (%)	3	2	1	3	3	2	3	3	2	2	4	4	5
7. Photosynthetic organs	1	1	1	1	1	1	1	1	1	4	1	1	1
8. 'Leaf' size	3	4	4	3	3	3	3	6	3	3	3	1	3
9. 'Leaf' colour	2	2	1	1	1	1	4	5	1	2	1	1	1
10. 'Leaf' length (cm)	1.5-2	3-5	1-7	1-1	0.5-1*	0.5-5	1.5-2	6-9	1.51'	0.7-2.7	0.6-2.5	0.5-1	0.2-1.2
11. 'Leaf' width (mm)	5-10	10-30	8-30	3-5	1-3*	2-5	2-4	20-30	2-4	24	4-15	1-1.?	1-2
12. 'Leaf' angle (°)	?	?	?	?	?	1	7	?	?	?	?	?	?
13. 'Leaf' margin	1 (or 3), 5	2	none	1	1	1	?	1	3	2.5	2	1	1
14. 'Leaf' surface resins	2	2	2	2	2	2	2	2	2	2	2	2	2
15. 'Leaf' glands	2	2	1	2	2	1	1	2	1	2	2	2	1
16. 'Leaf' consistency	2	2	2	2	2	2	2	2	1	2	2	2	2
17. 'Leaf' tomentosity	4	4	4	1	4	4	4	4	3	4	1	2	1
18. 'Leaf' stomata	2	2	2	2	2	2	2	2	2	2	2	2	2
19. 'Leaf' duration (yrs)	2	2	2	2wl	2wl	1	2	2	1	2	2	2	2
20. 'Leaf' seasonality	4	4	4	2	2	4	4	4	4	4	4	4	4
21. 'Leaf' area: assim. stem area	1:0	1:0	1:0	1:0	1:0	1:0	1:0	1:0	1:0	1:1	1:0	1:0	1:0
22. Organs periodically shed	4	4	4 (?)	4	4	3	3	4	4	3	4	4	4
23. Organs shed - seasonality	Ap-1S	Ap-D	Mr-1S	Mr-Jn	Jn	e Mr-Jl	Ma	Ma-S	Ma-S	Ap-S		Ma-S	
24. Shoot growth - seasonality	Mr-Ap	Mr-Ap	J-Ap	Mr-Ap-	Ap-Ma-	J-Jn	Mr-Ap	F-Ma	Ma-Ap	Mr-Ap-Ma		Ma	
25. Stem - number from base	2	1	2	2	2	2	2	2	2	2	2	2	2
	(4-6)		(6-10)	(6-10)	(5-8)	(5-10)	(5-10)	(6-8)	(6-10)	(10-15)	(5-10)	(5-10)	
26. Stem - height (m)	none	?	none	none		none	none	none	none	none		none	
Stem - diameter (cm)													
- at breast height (cm)	none	none	none	none		none	none	none	none	none		none	
- near ground level	?	?	?	?		?	?	?	?	?		?	
28. Stem lignification	1	1	1	1	1	1	1	1	1	1	1	1	1
29. Bark consistency	2	2	1	1 or 2	1	2	1	1	2	1	1	1	2
30. Bark thickness (mm)	1	1	1	1	1	1	1	1	1	1	1	1	1
31. Bark shedding	?	?	?	?	?	?	?	?	?	?	?	?	?
32. Bark shedding - seasonality	?	?	?	?	?	?	?	?	?	?	?	?	?
33. Spinescence	1	4	4	1	1	4	4	4	1	4	4	4	4
34. Underground stems	?	?	?	?	?	?	?	?	?	?	?	?	?
35. Root morphology	?	?	?	?	?	?	?	?	?	?	?	?	?
36. Root modification	?	?	?	?	?	?	?	?	?	?	?	?	?
37. Rootlet modification	?	?	?	?	?	?	?	?	?	?	?	?	?
38. Root depth (cm)	?	?	?	?	?	?	?	?	?	?	?	?	?
39. Root spread (cm)	?	?	?	?	?	?	?	?	?	?	?	?	?
40. Veg. multiplication	1	1	4	1	1	1	1	1	1	1	1	1	4
41. Veg. regen. after fire	3	3	1	3	3	3	3	3	3	3	3	3	1
42. Flowering - seasonality	Ap-Ma	Ma	Ap-Ma	Mr-Ap	Jn	Ap-Ma-	Ap-Ma	Ma	F	Jn	?	Jn-Jl	
43. Flowering - pyrogenic	2	2	1	2	2	2	2	1	2	2	2	2	2
44. Fruit dehiscence	2	1	2	2	2	2	1	1	3	1	1	1	1
45. Seed dissemination	1	1	1	1	1	1	1	1	1	1	1	1	1
46. Seedling - germ. type	2	2	2	2	2	2	2	2	2	2	2	2	2
47. Phloem position	1	1	1	1	1	1	1	1	1	1	1	1	1
48. No. leaves per 10cm item	4)	25	40	10	-	127	25	22	12	65	50	50	31

*There are leaves only in the 5 top cm's.

* Leaflets.

Abbreviations: J - January; F - February; Mr - March; Ap - April; Ma - May; Jn - June; Jl - July; Aug - August; S - September; O - October; N - November; D - December / 1S - late September; e Mr - early March.

Code of Ecomorphological Characters See Chapter 1.