



Ellenberg Indicator Values of the Southern Aegean Flora (Greece)



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Ecological indicator values have been derived for the vascular plants of the southern Aegean island arc comprising Kythira, Crete and the surrounding islets, the Karpathos archipelago and Rhodos (Greece). The derivation of these values follows a modified, more objective and more universal Ellenberg approach in evaluating the ecological amplitudes of plants. The evaluation concerns the climatic and edaphic eco-factors light, temperature, continentality, moisture, soil reaction, nutrient supply and salt tolerance.

Details on indicator value quality are also given. 2442 taxa (species, subspecies and a few varieties) have been classified for the first time in this manner. The set of variables provides a compact ecological characterization of the floristic elements and brings ecological specialization of plants to an operational mode. Various methods of calculating average indicator values, indicator values spectra and other approaches in combination with plant or vegetation mapping would aid effective site and vegetation classification as well as environmental monitoring. Indicator values are valid only for the area they are defined for; with the exception of the S Aegean continentality values which are plant specific. Indicator values provide a useful tool for research in theoretical as well as in applied sciences.

L: light, T: temperature, K: continentality, F: moisture; R: soil reaction; N: nutrients; S: salt value. Low values represent low intensities of a site factor, upper values high intensities.

Stipa bromoides 5-8-5-6-7-3-0

name	L	T	K	F	R	N	S	family
<i>Abutilon theophrasti</i>	6	8	6	5	7	8	1	malv
<i>Acantholimon androsaceum</i> [<i>A. echinum</i> subsp. <i>creticum</i> , <i>A. ulicinum</i>]	9	2	4#	4	7	4	0	plum
<i>Acanthus spinosus</i>	7	8°	5	4	x	7	0	acan
<i>Acer sempervirens</i> [<i>A. creticum</i> , <i>A. orientale</i>]	(5)	x	4#	5	7	4	0	acer
<i>Aceras anthropophorum</i> [<i>Orchis anthropophora</i>]	7	6°	3	4	7#	4	0	orch
<i>Achillea cretica</i>	8	8	5#	3	8	6	3	aste
<i>Achillea ligustica</i>	?	7	3#	?	5	?	0	aste
<i>Adiantum capillus-veneris</i>	4	7°	3	8	7	2	0	adia
<i>Adonis annua</i> subsp. <i>cupaniana</i>	8	8	6	4	7	6	0	ranu
<i>Adonis microcarpa</i> subsp. <i>cretica</i>	8	8	5#	3	8	7	0	ranu
...								

small font: less reliable values due to weaker data base

#: particularly good indicator quality

x: indifferent ecological behaviour: no indicator function

(): value valid only for young trees (only in T)

°: weak indicator quality

? : insufficient data base for derivation of an indicator value

abbreviation of plant systematic family (first four characters)

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