

FLORA OF THE ORDER QUERCETALIA PUBESCENTIS BR.-BL. 1932 IN THE FOREST VEGETATION OF THE KOSOVO HILLY AREA

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SUPPLEMENTARY TABLES (As supplied by author)

Supplementary Table: 1. Species from the *Quercetalia pubescentis* order in forest communities of Kosovo hilly area

Species	Associations					
	C.o-s	D.C.-o	C.-O.c	S.-O.	Q.f.-c.s	Q.m.
A						
Ph. Fraxinus ornus	V (1 - 3) ^{al}	V (1 - 3) ^{al}	V (+ - 2) ^{al}	IV (+ - 2) ^{al}	II (+ - 2)	II (+ - 1)
Ph. Quercus pubescens	III (+ - 2) ^{al}	V (+ - 3) ^{al}	II (+ - 1) ^{al}	II (+ - 1) ^{al}	II (+ - 4)	
Ph. Quercus cerris	III (+ - 2) ^{al}		III (+ - 1)		V (+ - 4) ^a	III (+ - 3)
Ph. Carpinus betulus	I (+ - 1) ^{SA}		III (+ - 1)	I (+)		I (+)
Ph. Ostrya carpinifolia	II (1 - 2) ^{SS}	III (+ - 4) ^{al}	V (2 - 3) ^a	V (2 - 4) ^a		
Ph. Quercus petraea			I (+ - 2)	I (+ - 1)	II (+ - 1)	V (2 - 4)
Ph. Tilia platyphyllos			I (+ - 1)	I (+)	I (+)	III (+ - 1)
Ph. Carpinus orientalis	V (+ - 4) ^a	V (3 - 5) ^a	I (+) ^{al}			I (+)
Ph. Fagus moesiaca		I (+ - 1)	III (+ - 1)	II (+ - 1)		II (+ - 1)
Ph. Acer hyrcanum	II (+ - 2) ^{al}	III (+ - 2) ^{al}		III (+ - 1)		
Ph. Acer campestre	I (+) ^{SA}				II (+ - 1)	I (+)
Ph. Acer obtusatum		IV (+ - 2) ^a	IV (+ - 1) ^{al}			I (+ - 1)
Ph. Sorbus torminalis			I (+ - 1)	II (+ - 1)		IV (+ - 1)
Ph. Acer monspesulanum	IV (+ - 3) ^a	V (+ - 2) ^{al}				
Ch. Coronilla emeroides	II (+) ^a	III (+ - 1) ^{al}				
Ph. Colutea arborescens	II (+ - 1) ^a	II (+ - 1) ^{al}				
Ph. Pirus amygdaliformis	I (+) ^a	II (+) ^{al}				
NPh.Cotinus coggygria	I (+ - 2) ^a	I (+ - 2) ^{al}				
Ph. Crataegus orientalis(?)	I (+ - 2) ^{al}	II (+ - 1) ^a				
Ph. Rhamnus cathartica	II (+ - 1) ^{SA}	I (+) ^{al}				
Ph. Acer tataricum	I (+ - 2) ^{SA}				I (+ - 1)	
Ph. Malus florentina	I (+) ^{SA}				I (+ - 1)	
Ph. Pistacia terebinthus	I (+) ^{SO}	I (+) ^a				
Ph. Corylus colurna			IV (+ - 2) ^a			II (+ - 2)
Ph. Sorbus aria			I (+) ^{al}	IV (+ - 1) ^{al}		
Ph. Acer pseudoplatanus			I (+ - 1)			II (+)
Ph. Acer platanoides			I (+)			I (+)
Ph. Quercus farnetto					V (+ - 4) ^a	I (+ - 1)
Ph. Viburnum lantana	II (+) ^{SA}					
NPh.Ligustrum vulgare	II (+) ^{SA}					
Ph. Corylus avellana	I (+ - 1) ^{SA}					
Ph. Prunus mahaleb	II (+ - 2) ^{SS}	I (+ - 1) ^{al}				

Ph. Quercus macedonica	II (3 - 2) ^{sq}					
Ch. Clematis flamula	I (+ - 2) ^{sq}					
Ph. Pirus piraster					I (+ - 1) ^a	
Ph. Sorbus domestica					I (+) ^a	
B						
Ph. Crataegus monogyna	V (+ - 1)	V (+ - 1)	V (+ - 1)	II (+)	V (+ - 2)	V (+ - 2)
Ph. Cornus mas	IV (+ - 2)	V (+ - 2)	V (+ - 2)	IV (+ - 2)	III (+ - 2)	II (+ - 2)
Ph. Evonymus verrucosus	III (+ - 1)	V (+ - 2)	V (+ - 1)	V (+ - 1)	I (+)	III (+ - 1)
Ph. Sorbus torminalis	III (+)	IV (+ - 1)	III (+)	II (+)	II (+ - 1)	IV (+ - 1)
Ph. Pirus piraster	II (+ - 2)	II (+)	I (+)	I (+)	IV (+ - 2) ^a	III (+ - 1)
Ph. Quercus petraea	I (+ - 1)	II (+ - 2)	I (+)	II (+ - 1)	II (+ - 1)	V (+ - 2)
Ph. Juniperus communis		IV (+ - 2)	III (+ - 1)	III (+ - 2)	I (+ - 2)	I (+)
Ph. Carpinus betulus		I (+)	II (+)	I (+)	I (+ - 2)	II (+)
Rosa sp.div		IV (+)	III (+)		III (+)	III (+ - 1)
Ph. Fraxinus ornus			IV (+ - 2) ^{al}	V (+ - 1) ^{al}	II (+ - 2)	IV (+ - 2)
Ph. Colutea arborescens			I (+) ^{al}	II (+) ^{al}	I (+)	II (+ - 1)
Ph. Tilia platyphyllos			I (+ - 1)	I (+)	I (+ - 1)	II (+ - 1)
Ph. Corylus avellana		II (+ - 2)	I (+)	II (+ - 2)	I (+ - 2)	
Ph. Malus silvestris	I (+ - 1)	II (+)			III (+)	
Ph. Quercus cerris		V (+ - 2)			V (+ - 3) ^a	II (+ - 1)
Ph. Acer tataricum		II (+ - 1)			V (+ - 2)	I (+)
Ph. Sorbus aria		I (+ - 1)	III (+ - 1) ^{al}	V (+ - 1) ^{al}		
Ph. Acer campestre		I (+ - 2)			III (+ - 1)	IV (+ - 1)
Ph. Corylus colurna		I (1 - 1)	III (+) ^a			II (+ - 1)
Ph. Fagus moesiaca		I (+ - 1)	I (+ - 1)	II (+)		
Ph. Carpinus orientalis			III (+ - 2) ^{al}	I (+)		I (+)
Ph. Quercus pubescens			I (+ - 1) ^{al}	III (+) ^{al}	II (+ - 2)	
Ph. Acer platanoides			I (+)	I (+)		I (+)
Ph. Tilia argentea	I (2 - 1)	I (+)				
Ph. Cornus sanguineus	I (+ - 1)					III (+ - 2)
NPh. Ligustrum vulgare		II (+ - 1)			I (+ - 1)	
Ph. Ostrya carpinifolia			V (+ - 1) ^a	V (+ - 2) ^a		
NPh. Cotoneaster tomentosus			II (+) ^a	IV (+) ^a		
Ph. Acer obtusatum			IV (+ - 1) ^{al}			I (+)
Ph. Acer hyrcanum			I (+) ^{al}	V (+ - 2)		
Ch. Coronilla emeroides			I (+ - 1) ^{al}	IV (+ - 1) ^{al}		
Ph. Lonicera xylosteum			II (+)	I (+)		
Ph. Prunus avium			I (+)			II (+)
NPh. Cotinus coggygria				II (+ - 2) ^{al}	I (+ - 2)	
Ph. Quercus farnetto					V (+ - 3) ^a	I (+)
Ph. Evonymus europaeus		I (+)			I (+)	
NPh. Rosa canina + sp.	III (+)			II (+)		
Ph. Amelanchier ovalis				II (+) ^a		
Ph. Acer monspessulanum				II (+ - 1) ^{al}		
C						
H. Veronica chamaedrys	IV (+ - 1)	II (+ - 1)	II (+)	III (+)	V (+ - 2)	V (+ - 2)
H. Helleborus odorus	V (+ - 1)	V (+ - 2)	V (+ - 1)	III (+ - 1)	III (+ - 1)	IV (+ - 1)
H. Lithospermum purpuro-coeruleum	IV (+ - 2)	V (+ - 2)	II (+ - 1)	I (+)	III (+ - 2)	IV (+ - 2)
H. Fragaria vesca + sp.	IV (+ - 2)	V (+ - 2)	V (+ - 1)	III (+ - 1)	V (+ - 2)	V (+ - 2)
G. Lathyrus venetus	III (+ - 1)	II (+ - 1)	IV (+ - 1)	II (+ - 1)	III (+ - 2)	V (+ - 2)
G. Symphytum tuberosum	III (+ - 1)	IV (+ - 1)	III (+ - 1)	I (+)	III (+ - 1)	IV (+ - 1)

H. Stellaria holostea	III (+ - 2)	III(+ - 2)	II (+)	I (+ - 1)	III(+ - 2)	IV(+ - 2)
H. Melica uniflora	III (+ - 2)	V(+ - 2)	IV(+ - 2)	III(+ - 2)	III(+ - 2)	V (+ - 2)
H. Viola silvestris	III (+ - 2)	V(+ - 2)	V (+ - 1)	V (+ - 1)	III(+ - 1)	II (+ - 1)
H. Silene viridiflora	III (+ - 1)	II (+ - 1)	III(+)	II (+)	IV(+ - 1) ^{a/al}	I (+)
H. Stachys scardica	III (+ - 1)	V(+ - 2)	IV(+ - 1)	II (+ - 1)	V(+ - 1) ^{a/al}	III(+ - 1)
Ph.Lonicera caprifolium	II (+ - 2)	II (+ - 1)	III(+ - 2)	III(+ - 2)	III(+ - 2)	II (+ - 1)
H. Melitis melissophyllum	II (+)	IV(+ - 1)	IV(+ - 1) ^{al}	IV(+ - 1) ^{al}	III(+ - 1)	IV(+ - 2)
H. Primula acaulis	II (+ - 1)	II (+ - 1)	III(+ - 1)	II (+ - 1)	II (+ - 2)	III(+ - 2)
H. Brachypodium silvaticum	I (+ - 2)	II (+ - 1)	II (+)	I (+)	II (+ - 3)	III(- 2)
G. Polygonatum officinale	IV(+ - 2)	IV(+ - 2)	V (+ - 1)	V (+ - 1)	II (+ - 1)	IV(+ - 2)
H. Dactylis glomerata	IV(+ - 2)	V(+ - 2)	IV(+ - 1)	II (+ - 2)	V (+ - 2)	V (+ - 2)
G. Cyclamen neapolitanum	IV (+ - 2) ^a	IV(+ - 2) ^{al}	II (+ - 1) ^{al}		II (+ - 2) SM	I (+)
H. Eryngium palmatum	II (+ - 1) ^{SA}	IV(+ - 2)	III(+ - 1)	IV(+)	II (+ - 2) SM	
Ch.Teucrium chamaedrys	IV(+ - 2)	IV(+ - 2)	II (+)	IV(+ - 1)	III(+ - 2)	
H. Chrysanthemum corymbosum	III (+ - 1)	III(+ - 1)		II (+)	IV(+ - 2)	III(+ - 1)
G. Lathyrus niger	II (+ - 1)		I (+ - 1)	II (+)	V(+ - 4) ^{a/al}	V (+ - 2)
Ph.Hedera helix	II (+ - 2)	III(+ - 2)	III(+ - 2)	I (+ - 2)		I (+ - 2)
G. Trifolium pignanii	II (+ - 1)		II (+)	III(+ - 1)	II (+ - 2) ^{a/al}	II (+ - 2)
H. Campanula persicifolia	II (+ - 1)		I (+)	III(+ - 1)	I (+ - 1)	I (+ - 1)
G. Tamus communis	I (+ - 1)	I (+ - 1)		II (+ - 1)	II (+ - 2)	III(+ - 1)
H. Clinopodium vulgare	I (+ - 1)		II (+)	II (+)	II (+ - 2)	II (+ - 2)
H. Geum urbanum	I (+ - 2)	II (+)	II (+)	I (+)	I (+)	
H. Campanula trachelium	I (+)		III(+)	III(+)	I (+)	III(+ - 1)
G. Sedum maximum	II (+ - 1)	II (+)	II (+)	II (+)	I (+ - 1)	
H. Sesleria autumnalis	II (+ - 2) ^{SS}	V(1 - 3) ^{al}	V (+ - 5) ^{al}	V (2 - 4) ^a		
H. Siler trilobum	II (+ - 2)	II (1 - 2)			II (+ - 2)	III(+ - 2)
Ch.Helianthemum nummularium	II (+ - 1)	I (+)		II (+)	I (+)	
H. Galium aristatum + sp.	II (+ - 2)		III(+)	III(+)	I (+)	
H. Cynanchum vincetoxycum	II (+ - 1)	IV(+ - 2)	IV(+ - 1)		II (+)	
H. Origanum vulgare	II (+ - 2)		I (+)	III(+)	II (+ - 1)	
G. Liliium martagon	II (+ - 1)	III(+ - 1)	III(+)	V (+)		
G. Ceterach officinarum	I (+ - 2)	I (+ - 2)	II (+)	II (+ - 2)		
G. Asplenium trichomanes	I (+ - 2)	I (+ - 2)	III(+ - 2)	IV(+ - 2)		
H. Lathyrus inermis	I (+)	II (+ - 1)			III(+ - 2)	IV(+ - 1)
G. Trifolium alpestre	I (+ - 1)	II (+ - 1)			IV(+ - 1) ^{a/al}	III(+ - 1)
H. Festuca heterophylla	I (+ - 2)			I (+ - 2)	III(+ - 2)	IV(+ - 2)
H. Coronilla elegans		II (+ - 1)	I (+)		I (+ - 2) SM	III(+ - 1)
G. Convalaria majalis		II (+ - 1)	IV(+ - 2)	III(1 - 1)		III(+ - 2)
H. Thalictrum aquilegifolium		II (+ - 1)	III(+ - 1)	III(+ - 1)	I (+ - 1)	
H. Poa nemoralis			I (+ - 2)	II (+ - 2)	II (+ - 2)	II (+ - 2)
G. Platanthera bifolia		II (+)	I (+)		I (+ - 1)	II (+ - 1)
Ch.Dictamnus albus	II (+ - 2) ^a	I (+)			I (+ - 1) SM	
Ch.Asparagus tenuifolius	II (+ - 1) ^{al}	I (+)			II (+ - 1)	
H. Acanthus longifolius	II (+ -)	IV(+ - 2) ^a			II (+ - 3) SM	

	2) ^{al}					
G. Aristolochia pallida	I (+ - 1) ^{sq}	IV (+ - 1) ^a	II (+ - 1) ^{al/sD}			
H. Smyrnium perfoliatum	II (+ - 1)				II (+ - 1)	II (+ - 1)
H. Silene vulgaris	II (+ - 1)	I (+ - 1)			I (+ - 1)	
Carex sp.	II (+ - 2)	II (+ - 2)			II (+ - 2)	
H. Arabis turrita	I (+ - 1)		II (+)	III(+)		
H. Luzula forsteri	I (+)				III(+ - 2)	III(+ - 2)
H. Iris graminea	I (+ - 1)				I (+ - 2)	III(+ - 2)
Ch.Clematis vitalba	I (+)	I (+ - 2)			I (+ - 2)	
G. Mercurialis perennis		II (+ - 2)	V (+ - 2)	II (+)		
H. Primula collumnae		II (+ - 2)	II (+ - 1)	II (+ - 1)		
T. Melampyrum pratense		II (+ - 1)	III(+ - 1)	II (+)		
H. Centaurea triumffeti		II (+ - 1)	I (+)	I (+)		
H. Aremonia agrimonoides			II (+)		I (+)	II (+ - 1)
G. Epipactis palustris		I (+ - 1)		II (+)		I (+ - 1)
H. Hypericum perforatum	II (+ - 1)	I (+)			I (+)	
Ch.Genista sagitalis		I (+ - 2)			II (+ - 2)	I (+ - 2)
G. Dioscorea balcanica		V(1 - 3) ^a	IV(+ - 2) ^{al/sD}			
G. Anthericum ramosum	I (+)	II (+)			I (+ - 1)	
H. Danaa cornubiensis	II (+ - 2)					III(+ - 2)
H. Digitalis laevigata	II (+ - 1)					II (+)
T. Galium aparine	II (+ - 1)				II (+)	
H. Verbascum niger (?)	II (+ - 1)				III(+ - 1)	
Ch.Comandra elegans	I (+ - 2)				I (+ - 2) SM	
Orchis sp.	I (+)	II (+ - 1)				
G. Ajuga laxmani	I (+)				I (+)	
H. Calamintha officinalis	I (+ - 1)		II (+)			
H. Physospermum aquilegifolium		III(+ - 1)			V(+ - 2) ^{al/al}	
(?) Cirsium silvaticum (?)		II (+ - 1)			II (+ - 1)	
Ch.Cytisus supinus		I (+ - 2)			III(+ - 2)	
Ch.Coronilla emeroides			I (+) ^{al}	II (+ - 1) ^{al}		
G. Doronicum collumne			IV(+ - 2)	V (+ - 1)		
H. Saxifraga rotundifolia			III(+ - 2)	II (+ - 2)		
H. Asarum europaeum			III(+ - 1)	I (+)		
G. Dentaria bulbifera			III(+) ^{SD}			III(+ - 1)
G. Polypodium vulgare			III(+ - 2)	II (+)		
Ph.Sorbus torminalis			II (+)	I (+)		
Ph.Daphne laureola			II (+) ^{SD}			II (+)
H. Geranium sanguineum			II (+)		II (+ - 2)	
G. Paeonia corallina			II (+)			II (+ - 1)
H. Anemone hepatica			II (+ - 1)	II (+ - 1)		
Hieratium sp.			II (+)	II (+)		
H. Peltaria alliaceae			II (+)	I (+)		
H. Leucanthemum vulgare				II (+ - 1)	II (+ - 1)	
H. Inula salicina					IV(+ - 2) ^{al/al}	II (+ - 2)
H. Lychnis coronaria					IV(+ - 1) ^{al/al}	II (+)
Ch.Genista ovata					II (+ - 2) ^{al/al}	II (+ - 2)
NPh.Cytisus nigricans					III(+ - 2)	II (+ - 1)
H. Astragalus glycyphyllos					II (+ - 2)	III(+ - 2)
H. Hieratium murorum					II (+ - 1)	II (+)
H. Vicia craca					II (+ - 1)	I (+ - 1)
H. Scutellaria altissima					I (+)	II (+ - 1)
Ph.Evonymus verrucosus			I (+)	II (+)		
G. Anemone apenina	II (+ - 2) ^{SA}					
H. Carex halleriana	I (+ -					

	2) ^{sQ}					
G. Asparagus acutifolius	I (+ - 1) ^{sQ}					
Ch. Clematis flammula		II (+ - 2) ^a				
H. Oryzopsis virescens		II (+ - 2) ^a				
G. Anemone nemorosa			III(2 - 2) ^{sD}			
H. Moltkia doerfleri					IV(+ - 2) ^{a/al}	
H. Serratula tinctoria					III(+ - 2) ^{a/al}	
H. Potentilla micrantha					II(+ - 1) ^{a/al}	

Key:

C.o.s. – *Carpinetum orientalis scardicum*, D.- C.o. – *Dioscoro – Carpinetum orientalis*, C. – O. c. – *Colurno-Ostryetum carpinifoliae*, S. – O. – *Seslerio – Ostryetum*, Q. f. – c. s. – *Quercetum farnetto – cerris scardicum*, Q. m. – *Quercetum montanum*

A – tree layer, B – shrub layer, C – layer of ground vegetation

I – V – degree of participation

+ - 5 – combined abundance/cover scale (Braun-Blanquet)

(....)^a – characteristic species of association

(....)^{al} – characteristic species of alliance

(....)^{a/al} – characteristic species of association and alliance

(....)^{sA} – differential species of sub association *Anemonetosum*

(....)^{sS} – differential species of sub association *Seslerietosum*

(....)^{sQ} – differential species of sub association *Quercetosum*

(....)^{sD} – differential species of sub association *Dioscoretum*

(....)sM – differential species of sub association *Moltketosum*

Supplementary Table: 2. Biological spectrum communities of the order Quercetalia pubescentis

Association	Biological spectrum (%)					
	Ph	NPh	Ch	H	G	Th
Carpinetum orientalis scardicum	22.65	2.34	9.38	38.29	19.53	7.81
Dioscoro-Carpinetum orientalis	20.76	4.71	8.50	41.50	23.59	0.94
Colurno-Ostryetum carpinifoliae	28.87	2.06	1.03	39.18	27.83	1.03
Seslerio-Ostryetum	23.91	2.18	3.26	48.91	20.65	1.09
Quercetum farnetto-cerris scardic.	20.50	0.81	7.38	50.81	17.21	3.29
Quercetum montanum	25.74	1.98	3.97	47.52	20.79	-