Supporting information
Goncharenko I., Kovalenko O. Oak forests of the class *Quercetea pubescentis* in Central-Eastern Ukraine
Corresponding author: goncharenko.ihor@gmail.com

Table S1 Table of relevés (relevés selected as holotypes marked in yellow)

Syntaxa numbers	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ordinal (sequence) relevé numbers	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Original relevé numbers	57	76	59	58	77	60	68	67	71	66	73	74	62	75	64
D.s. Digitali grandiflorae-Quercetum roboris ass. nov. hoc loco															
Teucrium chamaedrys	2	2	2	1	1	2	1	1	2		2	1	2	3	
Galium boreale	2	3	2		1	3	3	2	2	3		3		2	2
Serratula tinctoria	2	3	1	2		2			2			2	2		2
Digitalis grandiflora	1	2	1	1		1	1			2	2		1	2	
D.s. Carici praecocis-Quercetum roboris typicum															
Fragaria viridis															
Viola suavis															
Carex michelii															
D.s. Carici praecocis-Quercetum roboris var. Agrostis vinealis															
Agrostis vinealis															1
Crepis tectorum															
Lactuca quercina															
D.s. Carici praecocis-Quercetum roboris ass. nov. hoc loco															
Allium oleraceum			1	1		1						2			
Carex montana													1		
Carex praecox			2												
Crataegus rhipidophylla			2			2			2						2
Agrimonia eupatoria			2							2					2
Acer campestre															
D.s. Asperulo tinctoriae-Quercetum roboris violetosum mirabilis subass. nov. hoc loco															
Viola mirabilis															
Vicia sepium															
Lathyrus vernus															
D.s. Asperulo tinctoriae-Quercetum roboris dianthetosum fisheri subass. nov. hoc loco															
Dianthus fischeri								2							
Pilosella officinarum															
Veronica spicata	2		3												
D.s. cl. Quercetea pubescentis															
Acer tataricum			2		3	2		2		3		3	2		
Melampyrum nemorosum			2	3						1					3
Chamaecytisus ruthenicus	2	3			3			3	3	3	3		3		2
Anthericum ramosum	2	3		2	3	3	1	2	3		3	3	3	3	3
Campanula persicifolia					2		2			2		2			
Pyrus pyraster		1		2	1	1			2		1	1	1	1	2
Hylotelephium maximum	2		3	2	3	1	2	2		2			2		2
Clematis recta			3	2		3		3							2
Asperula tinctoria				2		1		2	2		2			1	
Potentilla alba		3			3		2	2			2		2		2
Tanacetum corymbosum								2	2	1				1	
Viola hirta			1			2									
Campanula bononiensis	2		1	1		2			2		2				1
Primula veris								2							
Pulmonaria angustifolia								2							
Lathyrus niger			3	3		3									
Iris arenaria															
Lathyrus sylvestris															
Iris aphylla															
D.s. cl. Trifolio-Geranietea															
Betonica officinalis	2	3		2	3	3	3	2		3	2	3	2		
Veronica chamaedrys		2		2	4	2	3	3	3			3	2	3	3
Polygonatum odoratum		3	3		3	3	2	2		2	2		2		3
Peucedanum oreoselinum		3	2	2		1	2		3		2		2	3	3
Clinopodium vulgare		3			3	3		3	3		3	3	2	3	
Silene nutans		3		2			2			2	2	3	2	3	2
Securigera varia	3			2					3	3	3	3	2	3	3
Genista tinctoria		3		2	2		3	3	2	2			3	2	2
Trifolium alpestre	1			2	3	3		2	3	2		3	1	1	
Geranium sanguineum	1	2	3	3		2	2					3	2		3
Hypericum perforatum		1	2	2	2		3		2	2		2	2	2	2
Fragaria vesca		3	3		3	3	3	3	3	2		3	1	3	3
Vincetoxicum hirundinaria	2	2	2	2		1			3			2	2		
Solidago virgaurea			2	2			3		2				3	3	2
Astragalus glycyphyllos			3			2		3	2	1	2			2	
Origanum vulgare	2		2	3		3				3	2	2			3
Ajuga genevensis			1								1				
Filipendula vulgaris						3									
Knautia arvensis	2												1		1
Carex spicata															
Trifolium medium				1				2							
Centaurea phrygia			2												
Campanula rapunculoides															
Thalictrum minus				1		2									
D.s. cl. Querco-Fagetea															
Quercus robur	4	4	4	3	4	4	4	5	5	4	4	4	4	4	5
Melica nutans		2			3		3	3	3	2	3	2	2	3	
Poa nemoralis		2	3		2	2					3		2	2	2
Stellaria holostea															
Euonymus verrucosus		1				1		1			1	1		1	1
Corylus avellana							1								1
Asarum europaeum								2							
Carex digitata		3			3	3		3	3	3		3	3	3	
Tilia cordata								2				1			
Festuca gigantea		3	3			3			2		3	3	2	3	3
Milium effusum															
Euonymus europaeus			1										1		
Brachypodium sylvaticum			1			1							1		2

Syntaxa numbers	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Ordinal (sequence) relevé numbers	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Original relevé numbers	82	114	79	111	118	120	123	86	113	122	84	85	90	81	88
D.s. Digitali grandiflorae-Quercetum roboris ass. nov. hoc loco															
Teucrium chamaedrys															
Galium boreale															
Serratula tinctoria															
Digitalis grandiflora															
D.s. Carici praecocis-Quercetum roboris typicum															
Fragaria viridis	2	1	2	2	3	1		2		2	1	2	2	1	2
Viola suavis	1	1	1	1	1	1	1		1						
Carex michelii	3	2		3	2	2	2	2	2	2	2	1	2	2	
D.s. Carici praecocis-Quercetum roboris var. Agrostis vinealis															
Agrostis vinealis															
Crepis tectorum															
Lactuca quercina															
D.s. Carici praecocis-Quercetum roboris ass. nov. hoc loco															
Allium oleraceum		1	1		2		2					1	1	1	1
Carex montana			1	1			1	2	1	1	2	3	2		2
Carex praecox	1	4	1	4	4		1	2			2	2	2		2
Crataegus rhipidophylla		1	2	2		2		1		2		1		2	1
Agrimonia eupatoria	1		1	1	1			1	1			1	1	1	1
Acer campestre		1				2		1			1		1	2	1
D.s. Asperulo tinctoriae-Quercetum roboris violetosum mirabilis subass. nov. hoc loco															
Viola mirabilis															
Vicia sepium															1
Lathyrus vernus															
D.s. Asperulo tinctoriae-Quercetum roboris dianthetosum fisheri subass. nov. hoc loco															
Dianthus fischeri															
Pilosella officinarum				1											
Veronica spicata															
D.s. cl. Quercetea pubescentis															
Acer tataricum		1	2	1		2		1	1	2	2	1	1	2	2
Melampyrum nemorosum	1	1	3	2	2	2				1	2	1	2	2	1
Chamaecytisus ruthenicus	2				1	2	3		1	2		1			
Anthericum ramosum	1	1					2		1	2					
Campanula persicifolia	1				1				1			1			
Pyrus pyraster				2			1			2	1	1		2	2
Hylotelephium maximum	3	2					2	1				2	1		
Clematis recta	1						2		2						
Asperula tinctoria	1	1	1		2		1		1						
Potentilla alba								1			3	1	2		2
Tanacetum corymbosum	1	2	1	2	1	1	2			3				2	
Viola hirta	1	1	1			1			2						
Campanula bononiensis				1	2		2								
Primula veris												1	1		
Pulmonaria angustifolia								2				2			1
Lathyrus niger												2	1		1
Iris arenaria		1							1						
Lathyrus sylvestris								2			2	2	2		2
Iris aphylla									3						
D.s. cl. Trifolio-Geranietea															
Betonica officinalis		1	2		1	1		2		1	1	1	2	1	3
Veronica chamaedrys	1	1		1		2	1	2	1	2	2	1	2	1	1
Polygonatum odoratum	2		2			2		3	2	3			1	2	
Peucedanum oreoselinum	2			2				2	1	2		2	2	1	2
Clinopodium vulgare			1		1	1		1	1		1		1	1	1
Silene nutans	2	1		2			3					1	2		1
Securigera varia		1	3	2	1			1		3		1		2	1
Genista tinctoria		2								2				2	
Trifolium alpestre			2		1	1		2	2	2	2	2	2		2
Geranium sanguineum	2	2			1		2		2	2					2
Hypericum perforatum		1		1				1			1				
Fragaria vesca															
Vincetoxicum hirundinaria		2	2	2				1			1	2	2		1
Solidago virgaurea										2	2				
Astragalus glycyphyllos	1	1	2					2				1		1	2
Origanum vulgare	2			2			2			2					
Ajuga genevensis	2	1				1	2	1	1						
Filipendula vulgaris		1	1	1	2						2		1	2	
Knautia arvensis											1	1	1		1
Carex spicata															
Trifolium medium								2			2	2	2		2
Centaurea phrygia			1		2				1						
Campanula rapunculoides											2		2		
Thalictrum minus															
D.s. cl. Querco-Fagetea															
Quercus robur	6	3	4	5	3	3	4	6	4	4	5	5	5	4	6
Melica nutans	2					2			1	2		1			
Poa nemoralis	2				3		1	1		1	1	1	1	1	1
Stellaria holostea	1			1	1	2	1	1	1		1	1	1		1
Euonymus verrucosus						2				2				2	2
Corylus avellana			2					1			1	1	1		
Asarum europaeum	2	1													
Carex digitata															
Tilia cordata		1		1				1			1		2		
Festuca gigantea						1		1							
Milium effusum	1								1	1					
Euonymus europaeus		2		2		2					2	1		1	
Brachypodium sylvaticum		1													

Syntaxa numbers	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Ordinal (sequence) relevé numbers	16	17	18	19	20	21	22	23	24	25	26				
Original relevé numbers	110	87	115	116	91	89	112	117	108	83	121				
D.s. Digitali grandiflorae-Quercetum roboris ass. nov. hoc loco															
Teucrium chamaedrys															
Galium boreale															
Serratula tinctoria															
Digitalis grandiflora		1													
D.s. Carici praecocis-Quercetum roboris typicum															
Fragaria viridis				1	2	1			2		1				
Viola suavis		1		1											
Carex michelii		1	2		2	1	2			2					
D.s. Carici praecocis-Quercetum roboris var. Agrostis vinealis															
Agrostis vinealis															
Crepis tectorum															
Lactuca quercina															
D.s. Carici praecocis-Quercetum roboris ass. nov. hoc loco															
Allium oleraceum				1		1	2				1				
Carex montana				1	2	2			1		1				
Carex praecox		2	4	2	3	2	1	3	4	1	2				
Crataegus rhipidophylla			1	1	1		1		1		2				
Agrimonia eupatoria								1	1		1				
Acer campestre		1	2		1			2			2				
D.s. Asperulo tinctoriae-Quercetum roboris violetosum mirabilis subass. nov. hoc loco															
Viola mirabilis															
Vicia sepium					1										
Lathyrus vernus		2				1									
D.s. Asperulo tinctoriae-Quercetum roboris dianthetosum fisheri subass. nov. hoc loco															
Dianthus fischeri															
Pilosella officinarum									1						
Veronica spicata															
D.s. cl. Quercetea pubescentis															
Acer tataricum	1	1	1	1	1	1	2			2					
Melampyrum nemorosum	1	2	1	1	2	1	2	1	2						
Chamaecytisus ruthenicus		2	2			2	2								
Anthericum ramosum			1			2	2	1	1	1	1				
Campanula persicifolia		1			1			1							
Pyrus pyraster	2	1				3	1		2	2	2				
Hylotelephium maximum			2			1	1			1					
Clematis recta				1			1			1	1				
Asperula tinctoria				1			1				1				
Potentilla alba		1			2	3									
Tanacetum corymbosum			2												
Viola hirta			2	2				2		1	1				
Campanula bononiensis								2		2					
Primula veris		1													
Pulmonaria angustifolia					1										
Lathyrus niger															
Iris arenaria			1	1			1								
Lathyrus sylvestris	2	2			2	2									
Iris aphylla			2	2											
D.s. cl. Trifolio-Geranietea															
Betonica officinalis	1	2		1	2	2	2			2					
Veronica chamaedrys	2		2			2	3	1	1	1					
Polygonatum odoratum			2	2		1	4	2	1	1	2				
Peucedanum oreoselinum			1	1			1	2	2	1	2				
Clinopodium vulgare		1		1	1	1	1			1		2			1
Silene nutans			1		2		2	2	2	2	2				
Securigera varia			1	1	1	1		1	2	2					
Genista tinctoria				2						2	2		2	1	
Trifolium alpestre		2		2	2	2	2				1				
Geranium sanguineum		2	2	2	1		2	1			2			2	
Hypericum perforatum				1	1	2	1	1	1	1	1			1	
Fragaria vesca													2		
Vincetoxicum hirundinaria			2	2	1	1			1	2					
Solidago virgaurea		2	2		2										
Astragalus glycyphyllos			1			1					1				
Origanum vulgare		2		3	3		2	2	2						
Ajuga genevensis			1		1	1		1	2	2				2	1
Filipendula vulgaris		2	1							1	2				
Knautia arvensis									1					2	
Carex spicata													2		
Trifolium medium		1	2		2	2									
Centaurea phrygia			1					1			1				
Campanula rapunculoides		1			2	1			1				2		
Thalictrum minus															
D.s. cl. Querco-Fagetea															
Quercus robur	5	4	4	4	4	5	5	3	5	5	4	4	4	4	5
Melica nutans			2			1	1	2		2	2				
Poa nemoralis		1	1	1	1	1	2	2							
Stellaria holostea	1	2	2		1	1	1	1	1	1	2	2	2	3	2
Euonymus verrucosus		2	1	2			1			2	2	1			
Corylus avellana		1			1	1				2		2			
Asarum europaeum								1							
Carex digitata															
Tilia cordata					2	1					1				
Festuca gigantea						1					2				
Milium effusum				1											
Euonymus europaeus	2	1	2	2	1				1			2			
Brachypodium sylvaticum				2											

Syntaxa numbers	3	3	3	3	3	3	3	3	3	3	3
Ordinal (sequence) relevé numbers	1	2	3	4	5	6	7	8	9	10	11
Original relevé numbers	103	105	106	96	100	93	92	94	104	107	102
D.s. Digitali grandiflorae-Quercetum roboris ass. nov. hoc loco											
Teucrium chamaedrys											
Galium boreale											
Serratula tinctoria											
Digitalis grandiflora											
D.s. Carici praecocis-Quercetum roboris typicum											
Fragaria viridis					1						
Viola suavis											
Carex michelii											
D.s. Carici praecocis-Quercetum roboris var. Agrostis vinealis											
Agrostis vinealis	3	3	3	4	3	2	4	4	3	3	1
Crepis tectorum	2	2		2	2	1		2			
Lactuca quercina	2		2				1			2	
D.s. Carici praecocis-Quercetum roboris ass. nov. hoc loco											
Allium oleraceum		2	1		1			1	1		1
Carex montana	2	2	2								
Carex praecox	2	2	2								2
Crataegus rhipidophylla						1					
Agrimonia eupatoria		2									
Acer campestre	1	1									
D.s. Asperulo tinctoriae-Quercetum roboris violetosum mirabilis subass. nov. hoc loco											
Viola mirabilis											
Vicia sepium											
Lathyrus vernus											
D.s. Asperulo tinctoriae-Quercetum roboris dianthetosum fisheri subass. nov. hoc loco											
Dianthus fischeri											
Pilosella officinarum											
Veronica spicata											
D.s. cl. Quercetea pubescentis											
Acer tataricum		2			1			1	1		
Melampyrum nemorosum				1			1				
Chamaecytisus ruthenicus	2		2		2	4			2		
Anthericum ramosum	2	2	2	2		1	1				
Campanula persicifolia			2	1		1	1	1			
Pyrus pyraster				1		1	1				
Hylotelephium maximum									1		
Clematis recta		2	1		1	1	1				
Asperula tinctoria		2									
Potentilla alba											
Tanacetum corymbosum		1		1							
Viola hirta	1				1						
Campanula bononiensis	2	2									
Primula veris			1	2			1				
Pulmonaria angustifolia								1	1		
Lathyrus niger			2							2	
Iris arenaria	2		2						2		
Lathyrus sylvestris										2	
Iris aphylla		1									
D.s. cl. Trifolio-Geranietea											
Betonica officinalis		2	2	1	1	2	1	1	4	1	
Veronica chamaedrys	2	2	1	1	2	2					
Polygonatum odoratum	2	2		2	2	2	1	2	2	2	2
Peucedanum oreoselinum		2									
Clinopodium vulgare	2		1		2	2		2	2	2	1
Silene nutans		1									
Securigera varia		1									
Genista tinctoria											
Trifolium alpestre					1						
Geranium sanguineum		2			1						
Hypericum perforatum		1						2		1	1
Fragaria vesca		2				1	4	1	1		
Vincetoxicum hirundinaria		1					1	1			
Solidago virgaurea	1								1		
Astragalus glycyphyllos			1				1				
Origanum vulgare											
Ajuga genevensis											
Filipendula vulgaris						3	1			1	
Knautia arvensis							1			2	
Carex spicata				1							
Trifolium medium											
Centaurea phrygia											
Campanula rapunculoides		2									
Thalictrum minus							1				
D.s. cl. Querco-Fagetea											
Quercus robur	4	4	4	5	4	4	4	4	4	4	4
Melica nutans	1	2		2	2	2	1	2	2	2	2
Poa nemoralis	2	3	2		2			2	2	2	
Stellaria holostea	2	2	2	3	2	2	1	1		2	3
Euonymus verrucosus	1				2	1			2	1	
Corylus avellana	2			2	2			2	2		
Asarum europaeum	2		2	2	2				2	1	
Carex digitata					2			2			
Tilia cordata	2			2	1			2	2	1	1
Festuca gigantea		1			2					1	
Milium effusum		1		2	2			2		2	2
Euonymus europaeus	2						2				1
Brachypodium sylvaticum	1	1	2		3				1		

Syntaxa numbers	4	4	4	4	4	4	4	4	4	4	4
Ordinal (sequence) relevé numbers	1	2	3	4	5	6	7	8	9	10	11
Original relevé numbers	55	6	42	47	48	43	36	50	53	51	19
D.s. Digitali grandiflorae-Quercetum roboris ass. nov. hoc loco											
Teucrium chamaedrys											
Galium boreale					1						
Serratula tinctoria											
Digitalis grandiflora											
D.s. Carici praecocis-Quercetum roboris typicum											
Fragaria viridis							1				
Viola suavis											
Carex michelii											1
D.s. Carici praecocis-Quercetum roboris var. Agrostis vinealis											
Agrostis vinealis											
Crepis tectorum											
Lactuca quercina											
D.s. Carici praecocis-Quercetum roboris ass. nov. hoc loco						

| Syntaxa numbers | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|---|---|---

| Syntaxa numbers | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|---|---|---

Syntaxa numbers	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5
Ordinal (sequence) relevé numbers	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8
Original relevé numbers	57	76	59	58	77	60	68	67	71	66	73	74	62	75	64	82	114	79	111	118	120	123	86	113	122	84	85	90	81	88	110	87	115	116	91	89	112	117	108	83	121	103	105	106	96	100	93	92	94	104	107	102	55	6	42	47	48	43	36	50	53	51	19	52	56	49	1	3	5	40	2	27
Hierochloe odorata																							2				2																																																
Viola ambigua																																													1																															
Lycopodium clavatum																																																			2																											
Lysimachia vulgaris																																													1																															
Gagea liotardii																									2																		2																														
Orthilia secunda																																															1																											
Viburnum opulus																																													1																											
Elymus caninus																																																			1																					
Dracocephalum ruyschiana																																																						1																		
Agrostis gigantea						2																																																						1											
Aristolochia clematitis			3																																																			2																		
Mercurialis perennis																																																						2																		
Actaea spicata																																																							1																	
Neottia nidus-avis																																																								1															
Platanthera bifolia																																																									1													
Alopecurus pratensis																																																										1											
Galium rubioides																																																								1											
Deschampsia cespitosa																																																												1										1	
Anthriscus sylvestris																																																															1					
Pyrola rotundifolia																										2																																														