

FOREST VEGETATION IN THE TECUCI PLAIN (GALAȚI COUNTY)

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Summary: In this paper, the forest vegetation in the Tecuci Plain (Galați County) is presented. There have been identified nine vegetal associations, framed out in four Classes, five Orders, and seven Alliances of vegetation. Thus, the forest vegetation is installed along the rivers, on the sand dunes, or on the hills in that region. Every association, in this paper, is accompanied by: a diagnosis, a live form's spectrum, a fitogeographical spectrum, and a phytosociological table. Also, there are cross-references to the most significantly papers, in relation to this vegetation of the Tecuci Plain.

Key Words: forest, vegetation, sand dunes, Tecuci Plain, Romania

Tecuci Plain represents the North-East part of the great Romanian Plain. In this area, a surface over 13.500 ha is covered by stabilized sands, or parts of them are taken by winds, being so-called „wandering sand dunes”. Besides the wandering dune vegetation, on these, it is also installed a forest vegetation, especially along the water courses which are passing through the Tecuci Plain, namely: **Siret** river and **Bârlad** river. Our searches, made during 1992 and 1998, have identified, on plotting areas, nine forest associations. Among of these, three are disposed along the minor riverbeds (see the next associations: Ass. *Salicetum albae-fragilis*, Ass. *Populetum x canadensis*, and Ass. *Calamagrostio-Tamaricetum ramosissimae*); other three vegetal associations are installed on the flats of the same rivers, namely: Ass. *Ulmeto-Fraxinetum pallisae*, Ass. *Fraxino pallisae-Quercetum pedunculiflorae*, and Ass. *Quercetum pedunculiflorae*. Other two forest associations are installed on the slopes of the hills in the Tecuci Plain, namely: Ass. *Lathyro collini-Quercetum pubescentis*, and Ass. *Pruno spinosae-Crataegetum*. A great part of the Tecuci Plain, and especially those parts having wandering sands, have been planted with acacia trees. Under the canopy of these trees, during the times, there was established a herbaceous layer, and together with the acacia trees, one could frame these phytocoenoses under the name: Ass. *Bromo sterilis-Robinetum pseudacaciae*. Thus, every association in this paper is accompanied by: a diagnosis, a live form's spectrum, a fitogeographical spectrum, and a phytosociological table. The nomenclature of the vascular plant species follow the “Flora Europaea” (1964-1980) [8], and the nomenclature of the vegetation follow L. Mucina, 1997 [5] and Gh. Coldea, 1997 [9].

The coenotaxonomical outline of the forest vegetation in the Tecuci Plain:

- I. SALICETEA PURPUREAE Moor 1958
 - SALICETALIA PURPUREAE Moor 1958
 - SALICION ALBAE Soó 1930
 - 1. *Salicetum albae-fragilis* Issler 1926
 - 2. *Populetum x canadensis* I. Lupu 1979

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TAMARICETALIA Borza et Boşcaiu 1963 n.n. emend. Popescu et Sanda 1992
 ARTEMISIO SCOPARIAE-TAMARICION RAMOSISSIMAE Simon et Dihoru
 (1962) 1963

3. *Calamagrostio-Tamaricetum ramosissimae* Simon et Dihoru (1962) 1963

II. QUERCO-FAGETEA Br.-Bl. et Vlieger in Vlieger 1937

FAGETALIA SYLVATICAE Pawlowski, Sokolowski et Wallisch 1928

ALNION INCANAE Pawlowski, Sokolowski et Wallisch 1928 (=ALNO-PADION
 Br.-Bl. et Tx. 1943 emend. Mill. et Görs 1958)

4. *Ulmeto-Fraxinetum pallisae* (Borza 1966) Sanda 1970

5. *Fraxino pallisae-Quercetum pedunculiflorae* A. Oprea 1997

III. QUERCETEA PUBESCENTIS Doing-Kraft ex Scamoni et Passarge 1959

QUERCETALIA PUBESCENTI-PETRAEAE Klika 1933

QUERCION PUBESCENTI-SESSILIFLOREAE Br.-Bl. 1932

6. *Lathyro collini-Quercetum pubescentis* Klika 1932 emend. Jákućs 1960

QUERCION PEDUNCULIFLORAE Popescu, Sanda, Doltu 1979

7. *Quercetum pedunculiflorae* Borza 1937

ROBINION PSEUDACACIAE M. Csürös-Káptalan 1968

8. *Bromo sterilis-Robinetum pseudacaciae* Pocs 1954

- *brometosum sterilis* Mititelu et al. 1973; Horeanu 1975

- *anthriscetosum* Magyar 1937 (=facies cu *Anthriscus trichosperma* Dobr. et al. 1969)

- *urtico-ballotetosum* Mititelu et al. 1968 (= facies cu *Ballota nigra* Dobr. et al. 1969)

- *chelidonietosum* Toth 1958

- *secalietosum* Pócs 1954

- *cannabietosum* Mititelu et al. 1968

IV. RHAMNO-PRUNETEA Rivas Goday et Borja 1961

PRUNETALIA Tx. 1952

PRUNION FRUTICOSAE Tx. 1952 (=PRUNION SPINOSAE Soó 1940)

9. *Pruno spinosae-Crataegetum* (Soo 27) Hueck 31

Description of the vegetal associations

1. Ass. *Salicetum albae-fragilis* Issler 26

This is a meso-hygrophilous vegetal association, including stable phytocoenoses, installed on alluvial soils, and floating alluvial soils. This vegetal association have a great importance, being so-called riverside coppice, with poplars and willows stands (framed in the third class of cropping power). In the past, this association had had a great importance along the rivers, but nowadays this one is replaced by the plantation of Canadian Poplar. The trees are in two-layer strata, achieving 60-70% coverage of the soil. The herbaceous stratum cover the soil up to 50%. The shrub layer is missing in this association.

Live form's spectrum: H=36 (47%); Ph=12 (16%); T=10 (13%); H (G)=4 (5%), others=19%;
 Fitogeographical spectrum: Euras=35 (46%); Eur=11 (15%); Cosm=7 (10%); Circ=6 (8%);
 Euras (submedit)=4 (5%); Adv=3 (4%); others=12%. Table No. 1 (Rel. No. 1-5).

Table No. 1

Surface of relevé, m ²	400	400	400	400	400	
Coverage of trees, %	60	65	60	65	60	
Height of trees, m	8-10	8-10	8-10	8-10	8-10	
Diameter of trees, cm	15-20	15-20	25-30	20-25	25-30	
Coverage of regeneration layer, %	1	1	1	1	1	K
Coverage of grass layer, %	15	15	10	15	15	
No. of relevé	1	2	3	4	5	
Salix alba	3	3	3	3	3	V
Salix alba juv.	+	-	-	+	-	II
Salix fragilis	2	2	2	1	1	II
<i>Salicion albae</i>						
Populus alba	1	1	1	+	1	V
Populus alba juv.	-	+	+	-	+	III
Populus nigra	+	1	+	2	1	V
Populus nigra juv.	-	-	+	-	-	I
<i>Salicetalia et Salicetea purpureae</i>						
Lysimachia mummularia	+	+	-	+	+	III
Urtica dioica	+	-	-	+	+	III
Rubus caesius var. arvalis	-	-	+	+	-	II
Saponaria officinalis	-	-	+	-	-	II
Humulus lupulus	-	+	+	-	-	II
Oenothera biennis	+	-	-	-	+	II
Aristolochia clematitis	-	-	+	+	+	II
Physalis alkekengi	+	-	-	-	-	II
<i>Agrostion stoloniferae</i>						
Lolium perenne	+	+	+	+	+	V
Poa angustifolia	+	+	+	+	+	V
Agrostis stolonifera	+	+	+	-	+	V
Elymus repens ssp. repens	+	+	+	-	+	IV
Carex hirta	-	-	+	-	-	I
<i>Quercu-Fagetea</i>						
Populus tremula	-	+	-	+	1	I
Populus tremula juv.	-	-	-	1	-	I
Pyrus pyraeaster	-	-	-	+	+	I
Rhamnus cathartica	-	-	-	-	-	I
Rhamnus cathartica juv.	-	+	-	-	-	I
Sambucus nigra	+	-	-	-	-	I
Sambucus nigra juv.	-	-	-	-	+	I
Prunus spinosa	+	-	-	-	-	I
Prunus spinosa juv.	+	-	-	-	-	I
Polygonatum odoratum	-	-	-	-	+	I
Prunella vulgaris	+	-	-	-	-	I
Torilis japonica	-	-	-	+	-	I
<i>Aliae</i>						
Ballota nigra	+	+	-	-	+	III
Taraxacum officinale	+	+	-	-	+	III
Erigeron annuus	+	-	-	+	+	III
Euphorbia cyparissias	+	+	-	-	+	III
Potentilla reptans	+	+	-	-	+	III
Ulmus minor	+	+	-	-	-	II
Polygonum hydropiper	+	-	-	-	+	II
Rorippa amphibia	-	-	+	+	-	II
Fraxinus angustifolia	+	-	-	-	+	II
Bidens tripartita	+	+	-	-	-	II
Calamagrostis epigejos	+	-	-	+	-	II
Artemisia absinthium	-	-	+	+	-	II
Polygonum lapathifolium	+	-	-	-	+	II

Daucus carota	+	-	+	-	-	II
Tussilago farfara	-	-	+	+	-	II
Scirpus maritimus	+	-	-	+	-	II
Inula britannica	-	-	+	-	+	II
Silene latifolia ssp. alba	+	-	-	-	-	I
Solanum dulcamara	-	-	+	-	-	I
Fallopia convolvulus	+	-	-	-	-	I
Potentilla argentea	-	-	-	-	+	I
Arctium tomentosum	-	+	-	-	-	I
Fragaria vesca	-	-	-	-	+	I
Agrimonia eupatoria	+	-	-	-	-	I
Echium vulgare	-	-	+	-	-	I
Artemisia annua	-	-	-	+	-	I
Leonurus cardiaca	-	-	-	-	+	I
Verbascum phlomoides	-	-	-	+	-	I
Veronica anagallis-aquatica	+	-	-	-	-	I
Tanacetum corymbosum	-	-	-	+	-	I
Trifolium repens	-	1	-	-	-	I
Geranium pusillum	-	-	-	1	-	I
Stellaria nemorum	+	-	-	-	-	I
Hypericum perforatum	-	-	+	-	-	I
Bellis perennis	-	-	-	-	+	I
Equisetum ramosissimum	-	-	-	+	-	I
Rumex crispus	-	-	-	-	+	I
Sambucus ebulus	-	+	-	-	-	I
Ranunculus repens	+	-	-	-	-	I

Data and place of the relevées: Siret riverbed at 1: Cosmești-20 Jul. 1994; 2-3: Ivești-8 Aug. 1995; 4-5: Tudor Vladimirescu-27 Jul. 1993

2. Ass. *Populetum x canadensis* I. Lupu 79

This is a vegetal association edified by the Black Canadian Poplar. The phytocoenoses are met along the Siret river banks, on plane areas. The surfaces of these plantations are not so large, and one can remark that these plantations have replaced those associations edified by the poplars and willows trees in the near past on the Tecuci Plain. The soils are alluvials. The plantations have been made with some cultivars of Canadian Poplars (*Populus x canadensis*), by some of the clones, which are suitable for the climate and soils of Romania. These clones, largely used in these plantations, are the next ones: '*Serotina*', '*Regenerata*', '*Robusta*', '*Marilandica*' [3]. These plantations with Canadian Poplars have a strong artificial feature, and a medium-term existence (being exploited at over 25 years old). As concerning the succession of the vegetation, one can see that in the clearings, are going to be installed those phytocoenoses of the previous vegetal association.

An interesting feature of the coenotaxons of the *Salicetea* class, is the herbaceous stratum, which are edified most of the time, by the weeds from *Chenopodietea*, *Plantaginetea*, and *Artemisietea* classes.

Live form's spectrum: H=49 (50%); T=17 (17%); Ph=10 (10%); others=23%.
 Fitogeographical spectrum: Euras=35 (36%); Eur=11 (11%); Cosm=9 (9%); Euras. cont=8 (8%); Circ=7 (7%); Adv=7 (7%); others=22%. Table No. 2 (Rel. No. 1-5).

Table No. 2

Surface of relevé, m ²	400	400	400	400	400	
Coverage of trees, %	70	75	70	65	90	
Coverage of shrubs, %	2	1	2	1	1	
Coverage of grass layer, %	25	20	25	20	20	K
Diameter of trees, cm	20	25	25	30	25	
Coverage of regeneration layer, %	1	1	1	1	1	
No. of relevé	1	2	3	4	5	
<i>Populus x canadensis</i>	4	4	4	4	5	V
<i>Salicion albae</i>						
Salix alba	+	1	+	-	-	II
Salix alba juv.	+	-	+	-	-	II
Salix fragilis	+	+	1	-	-	II
Salix fragilis juv.	+	-	-	-	-	I
Populus alba	1	-	+	-	+	II
Populus alba juv.	-	-	-	-	+	I
<i>Salicetalia et Salicetea purpureae</i>						
Lysimachia nummularia	-	+	1	-	+	III
Glechoma hederacea	+	-	+	+	-	III
Rubus caesius var. arvalis	+	-	-	+	-	II
Solanum dulcamara	-	-	+	+	-	II
Clematis vitalba	-	-	+	+	+	II
Aristolochia clematitis	+	-	-	-	+	II
Morus alba	-	-	+	+	-	II
Eupatorium cannabinum	+	+	-	-	-	II
Oenothera biennis	+	-	+	-	-	II
Lithospermum officinale	-	-	+	-	+	II
<i>Prunetalia</i>						
Prunus spinosa	-	-	+	-	+	II
Prunus spinosa juv.	-	-	+	-	-	I
Crataegus monogyna	+	-	+	-	-	II
Crataegus monogyna juv.	+	-	-	-	-	I
Ligustrum vulgare	-	+	-	-	-	I
Ligustrum vulgare juv.	-	+	-	-	-	I
<i>Quercu-Fagetea</i>						
Glechoma hirsuta	+	-	+	+	-	III
Geum urbanum	+	+	-	-	+	III
<i>Molinietalia et Molinio-Arrhenatheretea</i>						
Agrostis stolonifera	+	+	+	+	+	V
Prunella vulgaris	-	+	+	-	+	III
Stellaria graminea	+	+	-	-	+	III
Taraxacum officinale	+	+	+	-	-	III
Poa angustifolia	-	+	-	+	-	II
Dactylis glomerata	+	-	-	+	-	II
Vicia cracca	+	-	-	+	-	II
Bellis perennis	+	-	-	+	-	II
Lathyrus pratensis	-	-	-	+	-	I
Ajuga reptans	-	-	-	-	+	I
Lolium perenne	-	-	-	+	-	I
<i>Festuco-Brometea</i>						
Euphorbia cyparissias	+	+	-	-	+	III
Arenaria serpyllifolia	+	-	-	+	-	II
Rumex acetosella	-	-	+	+	-	II
Trifolium ochroleucon	+	-	-	+	-	II
Plantago media	-	-	-	+	-	I
Anchusa barrelieri	-	-	+	-	-	I
Potentilla recta	-	-	-	-	+	I
Allium rotundum	-	+	-	-	-	I
Vicia sativa	+	-	-	-	-	I
Trifolium campestre	-	+	-	-	-	I
<i>Chenopodietea</i>						
Conyza canadensis	+	+	+	+	+	V
Stellaria media	-	-	-	+	+	III

Convolvulus arvensis	+	-	+	+	-	II
Cirsium arvense	-	-	+	-	-	II
Reseda lutea	+	-	+	+	-	II
Cynoglossum officinale	+	-	-	+	-	II
Crepis tectorum	-	-	-	+	-	I
Hyoscyamus niger	-	-	-	-	+	I
Veronica persica	+	-	-	-	-	I
Rorippa sylvestris ssp. kernerii	-	-	-	-	+	I
Salvia verticillata	-	-	-	+	-	I
Lepidium campestre	+	-	-	-	-	I
Malva sylvestris	-	+	-	-	-	I
Stachys palustris	-	-	+	-	-	I
<i>Secalietea</i>						
Fallopia convolvulus	+	+	-	-	-	II
Raphanus raphanistrum ssp. raphanistrum	-	-	+	-	+	II
Veronica arvensis	+	-	-	-	-	I
Lathyrus tuberosus	-	-	-	+	-	I
<i>Plantagineta et Plantagineta</i>						
Rorippa sylvestris ssp. sylvestris	+	+	+	-	-	III
Ranunculus repens	+	+	-	+	-	III
Rorippa austriaca	-	-	+	+	+	III
Potentilla anserina	+	-	+	-	-	II
Plantago major	-	+	+	-	-	II
Mentha longifolia	+	-	-	+	-	II
Carex hirta	+	-	+	-	-	II
Verbena officinalis	-	-	+	-	+	II
Polygonum aviculare	-	-	-	-	+	I
<i>Artemisietea</i>						
Conium maculatum	+	+	-	+	-	III
Artemisia absinthium	+	-	-	-	+	II
Galium aparine	+	-	+	-	-	II
Leonurus cardiaca ssp. villosus	-	-	+	-	+	II
Chelidonium majus	-	-	+	+	-	II
Hypericum perforatum	+	+	-	-	-	II
Arctium tomentosum	+	-	-	-	+	II
Sambucus ebulus	-	-	+	+	-	II
Stachys germanica	+	+	-	-	-	II
Artemisia vulgaris	-	-	+	-	+	II
Erigeron annuus	+	+	-	-	-	II
Alliaria petiolata	-	-	+	-	+	II
Cirsium vulgare	+	-	-	+	-	II
Vicia sepium	-	-	+	+	-	II
Viola hirta	-	+	-	-	+	II
Dipsacus laciniatus	+	-	-	-	+	II
Trifolium pannonicum	+	+	-	-	-	II
Tussilago farfara	+	-	+	-	-	II
Ballota nigra	-	+	-	-	-	I
Chaerophyllum temulum	-	-	-	+	-	I
Bunias orientalis	-	+	-	-	-	I
<i>Phragmitetea</i>						
Carex vulpina	+	-	-	-	-	I
Phragmites australis	-	+	-	-	-	I
<i>Sedo-Scleranthetea</i>						
Acinos arvensis	+	-	-	-	-	I
Hieracium pilosella	-	-	-	-	+	I
<i>Origanetalia</i>						
Lysimachia punctata	-	-	-	-	+	I
Vincetoxicum hirundinaria	-	-	+	-	-	I

Data and place of the relevées: Siret riverbed: 1-2: Cosmești-20 Aug. 1994; 3-4: Movileni-22 Aug. 1994; 5: Tudor Vladimirescu-15 Jul. 1995

3. Ass. *Calamagrostio-Tamaricetum ramosissimae* Simon et Dihoru (1962) 1963

This vegetal association have been identified along the Siret river, on the alluviums of the inferior terraces, on large surfaces. The characteristic and dominant species is *Tamarix ramosissima*, whose coverage is between 50-75%, being accompanied by a herbaceous stratum well developed, most of the species being mesophilous, installed between the shrubs of *Tamarix ramosissima*. This lignaceous species play a pioneer part on the alluvial soils, being a stabilizer of the sands, and thus preparing the soil to install other forest vegetation along the rivers in that region.

Live form's spectrum: H=31 (52%); T=16 (26%); Ph=4 (7%); Ch (H)=2 (3%); others=12%.
Fitogeographical spectrum: Euras=26 (43%); Cosm=7 (11%); Adv=5 (8%); Circ=5 (8%);
Euras. cont=4 (7%); others=23%. Table No. 3 (Rel. No. 1-6).

Table No. 3

Surface of relevé, m ²	400	400	400	400	400	400	
Coverage of vegetation, %	50	55	55	55	75	60	
Coverage of regeneration layer, %	1	1	1	1	1	1	K
No. of relevé	1	2	3	4	5	6	
<i>Tamarix ramosissima</i>	3	3	3	3	4	3	V
<i>Tamarix ramosissima</i> juv.	+	+	+	+	+	+	V
<i>Calamagrostis epigejos</i>	+	+	+	+	-	+	V
<i>Tamaricion, Tamaricetalia et Salicetea</i>							
<i>purpureae</i>							
<i>Oenothera biennis</i>	+	-	1	+	-	+	III
<i>Urtica dioica</i>	-	-	+	1	+	+	III
<i>Salix fragilis</i>	-	+	-	-	-	-	I
<i>Populus alba</i>	+	-	-	-	-	-	I
<i>Populus alba</i> juv.	-	-	-	-	+	-	I
<i>Agrostion stoloniferae</i>							
<i>Agrostis stolonifera</i>	+	+	+	+	+	1	V
<i>Poa angustifolia</i>	+	1	+	+	1	+	V
<i>Rorippa sylvestris</i> ssp. <i>sylvestris</i>	+	-	+	+	-	-	III
<i>Trifolium repens</i>	+	-	-	-	-	1	I
<i>Taraxacum officinale</i>	-	+	-	-	-	-	I
<i>Trifolium fragiferum</i>	-	-	-	-	-	+	I
<i>Elymus repens</i>	-	-	-	-	+	-	I
<i>Lolio-Plantaginetum</i>							
<i>Lolium perenne</i>	-	+	-	+	+	-	III
<i>Plantago major</i>	+	-	+	-	+	+	III
<i>Panico-Setarion</i>							
<i>Setaria lutescens</i>	+	-	-	+	-	+	III
<i>Echinochloa crus-galli</i>	+	+	+	-	-	+	III
<i>Aliae</i>							
<i>Agrimonia eupatoria</i>	-	-	+	+	-	+	III
<i>Tanacetum vulgare</i>	+	+	-	+	+	-	III
<i>Conyza canadensis</i>	-	-	+	+	+	-	III
<i>Artemisia absinthium</i>	+	-	-	+	-	+	III
<i>Verbena officinalis</i>	-	+	+	-	+	-	III
<i>Cichorium intybus</i>	+	-	+	-	+	+	III
<i>Artemisia austriaca</i>	+	+	+	-	-	+	III
<i>Plantago lanceolata</i>	+	+	-	+	+	-	III
<i>Tussilago farfara</i>	+	-	-	+	-	+	III
<i>Potentilla argentea</i>	+	-	-	+	-	+	III
<i>Mentha pulegium</i>	-	+	-	+	-	-	II
<i>Bromus commutatus</i>	+	-	+	-	-	-	II
<i>Ranunculus repens</i>	+	-	-	-	+	-	II
<i>Achillea collina</i>	-	-	+	+	-	-	II

Achillea setacea	+	-	+	+	-	-	II
Salvia nemorosa	-	-	+	-	-	-	I
Atriplex hastata	-	-	-	+	-	-	I
Chenopodium urbicum	-	+	-	-	-	-	I
Rorippa austriaca	-	-	-	-	+	-	I
Potentilla supina	-	-	-	-	-	+	I
Centaurea biebersteinii	-	-	+	-	-	-	I
Alopecurus geniculatus	+	-	-	-	-	-	I
Althaea officinalis	-	-	-	+	-	-	I
Xanthium riparium	-	-	-	-	-	+	I
Anagallis arvensis	-	+	-	-	-	-	I
Chenopodium glaucum	-	-	-	-	+	-	I
Rubus caesius var. arvalis	-	-	+	-	-	-	I
Cynodon dactylon	+	-	-	-	-	-	I
Lotus corniculatus	-	-	-	+	-	-	I
Juncus gerardi	-	-	-	-	-	+	I
Prunella vulgaris	-	-	+	-	-	-	I
Rorippa austriaca	+	-	-	-	-	-	I
Medicago lupulina	-	-	-	+	-	-	I
Equisetum arvense	-	+	-	-	-	-	I

Date and places of relevés: river meadows of Siret: 1-3: Cosmești-18 Aug., 1994; 4-6: Furcenii Noi-20 Aug., 1994

4. Ass. *Ulmeto-Fraxinetum pallisae* (Borza 1966) Sanda 1970

This vegetal association has been identified by Al. Borza [2], for the first time in the Romanian Plain, during his searches over the forest vegetation at the Southern of the Bucharest, but missing the herbaceous layer from his relevés, under the name *Ulmeto-Fraxinetum holotrichae*. Later, V. Sanda, change the name of this association as *Ulmeto-Fraxinetum pallisae*, following his searches over the forests **Frasinu** and **Spătaru** (Buzău county) [7]. This vegetal association is installed in those numerous microdepressions in the forest of Torcești and Balta, along the Bârlad river. Also, the phreatic layer is situated quite shallow. Soils are alluvials, clay-alluvials, or even colluvials. In the first 30 cm depth, the soil has a low degree of salt. Thus, there are conditions for keeping numerous hygro-halophilous vascular plants. The tree layer is dominated by *Fraxinus pallisae* and *Ulmus minor*, having a maximum degree of K; besides these two species, other species are: *Fraxinus angustifolia*, *Quercus robur*, *Ulmus minor*, *Acer tataricum* and so forth, but having a low degree of K (I-II). The shrub layer has a low coverage degree, but the herbaceous layer is well represented, here and there.

The phytocoenoses of this association, identified in the forest of Balta Academiei (Munteni commune), represents the northest locality identified in Romania, until now [243], but having a wider spread in the Southern part of the Romanian Plane.

Live form's spectrum: H=49 (59%); Ph=10 (11%); T=9 (10%); others=20%.
Fitogeographical spectrum: Euras=32 (36%); Eur=14 (16%); Euras. cont=10 (11%); Circ=6 (7%); Cosm=5 (6%); others=24%. Table No. 4 (Rel. No. 1-5).

Table No. 4

Surface of relevé, m ²	400	400	400	400	400	
Coverage of trees, %	70	75	70	75	70	
Height of trees, m	12-14	15-17	15-16	15-17	12-14	
Diameter of trees, cm	15-25	15-30	15-25	20-35	15-25	K
Coverage of shrubs, %	2	1	1	2	1	
Coverage of grass layer, %	30	20	20	20	15	
Coverage of regeneration layer, %	2	2	3	2	2	
No. of relevé	1	2	3	4	5	
<i>Fraxinus pallisae</i>	4	4	4	4	4	V
<i>Fraxinus pallisae</i> juv.	+	+	+	+	+	V
<i>Fraxinus angustifolia</i>	+	1	+	1	+	V
<i>Fraxinus angustifolia</i> juv.	+	-	+	+	-	III
<i>Ulmus minor</i>	1	1	1	1	1	V
<i>Ulmus minor</i> juv.	+	-	-	+	-	II
<i>Alno-Padion</i>						
<i>Lysimachia nummularia</i>	+	+	+	-	+	IV
<i>Poa nemoralis</i>	+	-	+	-	-	II
<i>Glechoma hederacea</i>	-	+	-	-	+	II
<i>Gladiolus imbricatus</i>	-	-	+	+	-	II
<i>Symphytum officinale</i>	+	-	-	+	-	II
<i>Valeriana officinalis</i>	-	-	+	-	+	II
<i>Cruciata glabra</i>	+	-	+	-	-	II
<i>Rubus caesius</i> var. <i>arvalis</i>	+	-	-	-	+	II
<i>Fagetalia sylvaticae et Quercu-Fagetea</i>						
<i>Cardamine impatiens</i>	1	1	+	1	+	V
<i>Pyrus pyraster</i>	+	+	-	-	+	III
<i>Pyrus pyraster</i> juv.	-	+	-	-	+	II
<i>Geum urbanum</i>	-	+	+	-	+	III
<i>Rorippa sylvestris</i> ssp. <i>sylvestris</i>	+	-	+	-	+	III
<i>Galium rubioides</i>	+	-	-	+	+	III
<i>Ranunculus ficaria</i> ssp. <i>bulbilifer</i>	+	-	+	+	-	III
<i>Alliaria petiolata</i>	-	-	+	+	+	III
<i>Ornithogalum boucheanum</i>	+	+	-	+	-	III
<i>Hypericum hirsutum</i>	-	+	+	-	+	III
<i>Quercus robur</i>	+	-	-	-	+	II
<i>Quercus robur</i> juv.	-	+	-	+	-	II
<i>Trifolium medium</i>	-	+	-	-	+	II
<i>Asparagus tenuifolius</i>	+	-	-	+	-	II
<i>Convallaria majalis</i>	-	-	+	-	+	II
<i>Dianthus armeria</i>	+	-	-	+	-	II
<i>Fragaria viridis</i>	-	-	-	+	+	II
<i>Polygonatum latifolium</i>	+	-	-	-	+	II
<i>Scrophularia nodosa</i>	-	-	+	+	-	II
<i>Viola reichenbachiana</i>	+	-	+	-	-	II
<i>Carex divulsa</i>	+	-	-	-	+	II
<i>Galium odoratum</i>	+	-	+	-	-	II
<i>Acer tataricum</i>	-	-	+	-	-	I
<i>Lapsana communis</i>	-	-	-	+	-	I
<i>Mercurialis perennis</i>	-	-	-	+	-	I
<i>Quercetea pubescenti-petraeae</i>						
<i>Crataegus monogyna</i>	+	-	-	+	+	III
<i>Crataegus monogyna</i> juv.	-	+	-	-	+	II
<i>Vincetoxicum hirundinaria</i>	-	-	+	+	-	II
<i>Aristolochia clematitis</i>	-	+	-	+	-	II
<i>Veronica chamaedrys</i>	-	+	-	+	-	II
<i>Galanthus elwesii</i>	+	-	-	+	-	II
<i>Prunus spinosa</i>	+	+	+	+	-	IV
<i>Prunus spinosa</i> juv.	+	-	+	-	+	III

<i>Molinio-Arrhenatheretea</i>						
Poa pratensis ssp. angustifolia	+	-	+	-	+	III
Serratula tinctoria	+	-	+	-	+	III
Stachys officinalis	+	+	+	-	-	III
Veronica serpyllifolia	+	-	-	+	-	II
Dactylis glomerata	-	+	+	-	-	II
Colchicum autumnale	+	-	+	-	-	II
Poa silvicola	+	+	-	-	-	II
Ranunculus acris ssp. acris	+	-	-	-	+	II
Calamagrostis epigejos	-	-	+	-	+	II
Agrostis stolonifera	-	+	+	-	-	II
Lathyrus pratensis	+	-	-	-	+	II
Ranunculus auricomus	-	-	+	+	-	II
Scutellaria hastifolia	+	-	-	-	-	I
Poa trivialis	-	-	+	-	-	I
Serratula wolffii	+	-	-	-	-	I
Ajuga reptans	+	-	-	-	-	I
Alopecurus arundinaceus	+	-	-	-	-	I
<i>Festuco-Brometea</i>						
Galium aparine	-	+	+	-	+	III
Cardaria draba	+	-	-	+	+	III
Stellaria media	+	-	-	+	+	III
Plantago media	+	-	+	-	-	II
Lythrum salicaria	+	-	-	-	+	II
Carex vulpina	+	-	-	+	-	II
Trifolium repens	-	-	+	-	+	II
Poa bulbosa	-	+	-	-	+	II
Geranium pusillum	+	-	-	+	-	II
Potentilla recta	+	-	-	+	-	II
Capsella bursa-pastoris	-	+	-	+	-	II
Lamium purpureum	-	-	+	-	+	II
Urtica dioica	+	-	-	+	-	II
Fallopia convolvulus	-	+	-	+	-	II
Anthriscus cerefolium ssp. trichosperma	-	+	-	-	+	II
Arctium lappa	-	-	+	-	+	II
Linaria vulgaris	-	+	-	-	+	II
Torilis arvensis	+	-	+	-	-	II
Taraxacum officinale	+	-	-	-	-	I
Prunella vulgaris	+	-	-	-	-	I
Carex acutiformis	-	+	-	-	-	I
Silene latifolia ssp. alba	+	-	-	-	-	I
Melilotus officinalis	-	-	+	-	-	I
Ranunculus repens	-	+	-	-	-	I
Sium latifolium	+	-	-	-	-	I
Vicia tetrasperma	+	-	-	-	-	I
Carduus acanthoides	-	-	+	-	-	I
Achillea setacea	-	+	-	-	-	I
Cynoglossum officinale	-	-	+	-	-	I
Galium humifusum	+	-	-	-	-	I
Artemisia austriaca	-	-	+	-	-	I
Populus canescens	+	-	-	-	-	I
Artemisia vulgaris	+	-	-	-	-	I
Asperugo procumbens	-	+	-	-	-	I

Data and place of the relevés: Bârlad riverbed: 1-3: forest Balta-Munteni, 20 Jun., 1996; 4-5: forest Torcești-Umbrărești, 15 Jul., 1996

5. Ass. *Fraxino pallisae-Quercetum pedunculiflorae* A. Oprea 1997

Some phytocoenoses of this vegetal association have been identified on large surfaces in the forests: Balta Academiei (Munteni), and Torcești (Umbrărești), on full plain fields or even

on small depressions [6]. The association is installed on well drained soils, flooded in the springs, but wet-dried in the summer time. The soils are the next: phreatic-wet chernozems, phreatic-wet carbonated chernozems, leached phreatic-wet chernozems, alluvial and alluvial gleyed soils, on sandy or cleyed substratum. The coverage of the trees vary between 65-70%; the coverage of shrubs is around 5%, and the herbaceous stratum vary between 30 to 40%.

Live form's spectrum: H=53.38%; Ph=22.03%; G=8.47%; others=16.12%. Fitogeographical spectrum: Euras.=38.1%; Eur.=13.5%; Euras. cont.=7.62%; Circ.=7.62%; Eur. centr.=5.93%; others=27.23%. Table No. 5 (Rel. No. 1-10).

Table No. 5

Coverage of trees, %	70	70	65	65	65	60	65	65	75	70	
Height of trees, m	20-22	20	18-20	20	22	22	20	22	18-20	20	
Diameter of trees, cm	25-50	30-50	30-45	50	25-70	30-60	25-50	30-50	30-70	25-50	
Coverage of shrubs, %	5	5	4	3	4	5	5	4	5	3	
Coverage of regeneration layer, %	1	1	1	1	1	1	1	1	1	1	K
Coverage of grass layer, %	30	30	35	35	35	30	35	40	40	35	
Surface of relevé, m ²	400	400	400	400	400	400	400	400	400	400	
No. of relevé	1	2	3	4	5	6	7	8	9	10	
Fraxinus pallisae	+	1	1	2	2	1	1	+	1	+	V
Fraxinus pallisae juv.	+	+	+	-	+	-	+	-	+	+	IV
Fraxinus angustifolia	2	2	1	1	+	1	1	+	+	1	V
Fraxinus angustifolia juv.	+	+	+	+	-	1	1	+	+	1	V
Quercus pedunculiflora	3	3	3	3	3	3	3	3	3	3	V
Quercus pedunculiflora juv.	+	-	-	+	+	+	-	-	+	-	III
<i>Alno-Padion</i>											
Serratula tinctoria	+	1	-	-	-	+	-	-	+	+	III
Galium aparine	-	-	+	+	-	1	-	+	-	+	III
Lysimachia nummularia	+	1	-	1	+	-	-	+	-	+	III
Cruciata laevipes	-	-	+	+	-	+	+	-	-	+	III
Glechoma hederacea	+	-	1	+	1	-	+	+	-	-	III
Brachypodium sylvaticum	-	+	+	+	-	+	-	-	+	-	II
Populus alba	+	+	-	-	-	+	-	-	-	-	II
Rubus caesius	+	-	+	-	-	-	+	-	-	+	II
Rumex sanguineus	-	-	+	+	-	-	-	+	-	+	II
Viburnum opulus	+	+	-	-	-	+	-	-	+	-	II
Viburnum opulus juv.	+	-	+	-	-	-	-	-	-	-	I
Ranunculus repens	-	+	-	-	+	-	-	-	+	+	II
Symphytum officinale	+	-	-	-	+	-	-	-	-	-	I
Ranunculus acris ssp. acris	+	-	-	-	+	-	-	-	-	-	I
Lamium maculatum	-	-	-	-	1	+	-	-	-	-	I
Frangula alnus	+	-	-	-	-	-	-	-	+	-	I
Malus sylvestris	+	-	-	-	-	1	-	-	-	-	I
Gladiolus imbricatus	+	-	-	+	-	-	-	-	-	-	I
<i>Quercetea</i>											
<i>pubescenti-petraeae</i>											
Acer tataricum	+	-	-	+	+	+	+	-	+	-	III
Acer tataricum juv.	-	+	-	+	-	-	-	-	+	-	II
Polygonatum odoratum	+	+	-	+	-	+	-	-	+	-	III
Buglossoides											
purpurocoerulea	1	+	-	-	+	+	-	-	-	+	II
Calamintha sylvatica	+	-	+	-	-	+	-	-	-	-	II
Prunus spinosa	+	+	-	-	+	-	-	+	+	-	II
Poa nemoralis	-	+	-	+	-	+	-	+	-	-	II
Vincetoxicum hirundinaria	+	-	+	-	+	+	-	-	+	-	II
Genista tinctoria	-	-	-	+	+	-	-	+	-	-	II

Lathyrus niger	+	-	-	-	-	+	-	-	-	-	II
Polygonatum latifolium	+	-	-	-	+	+	+	-	-	-	II
Asparagus officinalis	+	-	+	+	-	-	-	-	-	-	II
Aristolochia clematitis	+	+	-	-	1	1	-	+	-	-	II
Lychnis coronaria	-	-	+	-	-	-	+	-	-	-	I
Sorbus torminalis	-	+	+	-	-	-	-	-	-	-	I
Rosa gallica	-	-	+	-	-	+	-	-	-	-	I
Cornus mas	1	1	-	-	-	+	-	-	-	-	I
<i>Quercus-Fagetea</i>											
Crataegus monogyna	+	-	+	-	+	-	+	+	-	-	III
Crataegus monogyna juv.	-	-	+	-	+	-	-	-	+	-	II
Pyrus pyrastrer	-	+	+	-	-	+	-	-	-	-	II
Geum urbanum	-	-	+	+	+	1	-	+	-	-	II
Cornus sanguinea	+	+	-	-	-	+	-	-	+	-	II
Rosa canina	-	-	+	-	+	-	-	-	-	+	II
Prunella vulgaris	+	-	-	1	-	+	-	-	+	-	II
Trifolium medium	-	+	-	-	+	-	-	-	+	+	II
Populus tremula	+	-	+	+	-	+	+	-	-	-	II
Rhamnus cathartica	-	-	+	-	-	+	-	+	-	-	II
Euonymus europaeus	+	+	-	-	+	-	-	-	+	-	II
Euonymus europaeus juv.	+	-	-	+	-	-	-	+	-	-	II
Ranunculus auricomus	-	-	+	-	+	-	-	+	+	-	II
Asparagus tenuifolius	+	+	-	+	-	-	+	-	-	-	II
Veronica longifolia	+	+	-	-	-	-	+	-	-	-	II
Scrophularia nodosa	-	+	-	-	+	-	-	-	+	-	II
Carex divulsa	+	-	-	-	+	+	+	-	-	-	II
Acer campestre	+	-	+	-	-	-	+	-	-	-	II
Acer campestre juv.	+	-	-	-	-	-	-	-	-	-	I
Convallaria majalis	-	+	+	-	-	-	+	-	+	-	II
Ulmus minor	+	-	-	+	-	1	+	-	-	+	II
Carex spicata	+	-	+	-	-	-	-	-	-	+	II
Ligustrum vulgare	-	+	+	-	-	+	+	-	-	-	II
Ligustrum vulgare juv.	+	+	-	-	+	-	+	-	-	+	III
Leucojum vernum	+	-	-	-	-	-	-	-	-	-	I
Veronica spicata	+	-	-	+	-	-	-	-	-	-	I
Carex sylvatica	-	+	-	-	+	-	-	-	-	-	I
Ranunculus cassubicus	+	-	-	-	+	-	-	-	-	+	I
Dianthus armeria	+	-	-	-	-	-	-	-	-	-	I
Myosotis scorpioides	-	-	+	-	-	-	-	-	-	-	I
Carpinus betulus	1	1	-	-	-	-	-	-	-	-	I
Carpinus betulus juv.	+	+	-	-	-	-	-	-	-	-	I
Glechoma hirsuta	+	-	1	+	+	-	-	-	-	-	I
Pulmonaria officinalis	-	+	+	-	+	-	-	-	-	-	I
Anemone ranunculoides	+	-	+	+	-	-	-	-	-	+	I
Astragalus glycyphyllos	-	-	-	-	-	+	-	-	-	-	I
Ranunculus ficaria ssp. bulbifer	+	-	-	+	-	-	-	-	-	-	I
Fragaria vesca	-	-	+	-	+	+	-	-	-	-	I
Viola reichenbachiana	+	-	+	-	-	+	-	-	-	-	I
<i>Phragmitetea</i>											
Cardamine impatiens	+	+	+	+	-	+	-	-	+	+	III
Sium latifolium	+	+	-	+	-	-	-	+	-	-	III
Lythrum salicaria	+	+	-	-	-	-	+	-	-	-	II
Lysimachia vulgaris	+	-	-	-	-	-	+	-	+	-	II
Eupatorium cannabinum	-	-	+	+	-	-	+	-	-	-	II
Carex vulpina	-	+	-	-	+	-	-	-	-	-	II
Agrostis stolonifera	+	1	+	+	-	-	+	+	-	-	II
Carex remota	-	+	+	-	-	+	-	-	+	-	II
Galium palustre	+	-	-	-	-	-	+	-	-	-	I
Sium sisaroides	+	-	+	-	-	-	-	-	-	-	I
Lycopus europaeus	+	-	-	-	-	-	-	-	+	-	I

Stachys palustris	-	+	-	-	-	-	-	-	+	-	I
Carex hirta	-	+	-	-	-	+	-	-	+	-	I
Rorippa sylvestris ssp. sylvestris	+	-	-	+	+	-	-	-	-	-	I
<i>Molinio- Arrhenatheretea</i>											
Dactylis glomerata	+	-	-	+	+	-	-	-	-	-	II
Thalictrum lucidum	+	-	+	-	-	+	-	-	-	+	II
Valeriana officinalis	+	+	-	-	-	-	-	+	-	-	II
Ajuga reptans	-	-	+	+	-	+	-	-	-	+	II
Calamagrostis epigejos	+	-	-	-	-	-	+	-	+	-	II
Lychnis flos-cuculi	+	+	-	-	-	-	+	-	-	-	II
Cichorium intybus	-	+	-	+	-	-	+	-	-	+	II
Stachys officinalis	+	-	-	+	-	-	+	-	-	-	II
Colchicum autumnale	+	-	+	-	-	-	+	-	-	+	II
Trifolium repens	+	-	1	-	-	-	-	+	-	+	II
Plantago media	+	-	-	+	-	-	-	-	-	-	I
Galium mollugo	+	-	+	-	-	-	-	-	-	-	I
Potentilla reptans	+	-	-	-	-	+	-	-	-	-	I
Poa angustifolia	-	-	+	-	+	+	-	-	-	-	I
Lathyrus pratensis	-	-	+	+	-	-	-	-	-	-	I
Heracleum sphondylium	+	-	-	-	+	-	-	-	-	-	I
Daucus carota	+	-	-	+	-	-	-	-	-	-	I
Clinopodium vulgare	+	-	-	-	-	+	+	-	-	-	I
Poa silvicola	-	-	+	-	-	+	-	-	-	-	I
Stellaria graminea	+	-	-	+	-	-	-	-	-	-	I
Vicia cracca	+	-	-	+	-	-	+	-	-	-	I
Taraxacum officinale	+	-	-	-	-	-	-	-	+	-	I
<i>Aliae</i>											
Anthriscus cerefolium ssp. trichosperma	+	+	-	-	+	+	-	+	-	-	II
Hypericum perforatum	+	-	-	-	-	-	+	-	-	-	I
Veronica chamaedrys	-	+	-	-	+	-	-	-	-	+	I
Althaea officinalis	+	-	+	-	-	-	-	-	-	-	I
Artemisia absinthium	-	-	-	-	-	+	-	+	-	-	I
Dipsacus fullonum	-	-	-	+	-	-	-	+	-	-	I
Fallonium convolvulus	+	-	-	+	-	-	-	-	-	-	I
Filipendula vulgaris	+	-	-	-	-	-	-	-	-	-	I
Galega officinalis	-	+	-	-	-	-	-	-	-	-	I
Lamium purpureum	+	-	-	-	+	-	-	-	+	-	I
Ornithogalum boucheanum	+	+	-	-	-	-	-	-	-	-	I

Data and place of the relevés: Bârlad riverbed: 1-5: forest Balta Academiei (Berheci-Munteni)-12 Sept., 1996; 6-10: forest Torcești (Umbrărești)-14 Sept. 1996.

6. Ass. *Lathyro collini-Quercetum pubescentis* Klika 1932 emend. Jákucs 1960

The phytocoenoses of this association occupy small areas in the Tecuci Plain, making forests with large clearings, on plaine lands or on the slopes of the hills. Soils are leached chernozems, made on loess or sands, having 3.5-8% humus in A layer, and a pH of 6-6.9. The phytocoenoses are three stratified. The stratum of the trees is low closed, and all the trees have a slow rithm of growing, wry stems and branches, with stems up to 5 or 6 m high; also, the natural regeneration of the trees is weak, from the stubs only. *Quercus pubescens* is the dominant species; other species, sporadically met, are: *Quercus virgiliana*, *Q. dalechampii*, *Q. pedunculiflora*, *Pyrus pyraister*, *Acer tataricum*...The shrub tree is weak represented. The herbaceous layer cover between 15 and 20%, being edyified by those species immigrating here from the steppe meadows surrounding the forests.

Live form's spectrum: H=38 (60%); Ph=11 (17%); T=4 (6%); others=17%. Fitogeographical spectrum: Euras=19 (30%); Euras. cont=10 (15%); Eur=8 (12%); Pont-medit=4 (6%); Circ=4 (6%); others=31%. Table No. 6 (Rel. No. 1-5)

Table No. 6

Surface of relevé, m ²	400	400	400	400	400	
Coverage of trees, %	50	65	65	70	65	
Height of trees, m	5-6	5-6	6-7	5-6	5-6	
Diameter of trees, cm	10-18	15-20	8-15	8-18	10-18	K
Coverage of shrubs, %	3	10	5	3	3	
Coverage of grass layer, %	20	15	15	20	20	
Coverage of regeneration layer, %	1	1	1	1	1	
No. of relevé	1	2	3	4	5	
<i>Quercus pubescens</i>	3	4	4	4	4	V
<i>Lathyrus pannonicus</i> ssp. <i>collinus</i>	+	-	-	+	+	II
<i>Quercion pubescenti-petraeae</i>						
<i>Dictamnus albus</i>	+	-	-	+	+	III
<i>Acer tataricum</i>	1	-	-	+	+	II
<i>Acer tataricum</i> juv.	+	+	+	+	+	V
<i>Inula hirta</i>	-	-	+	+	+	I
<i>Vicia cassubica</i>	+	-	-	-	+	I
<i>Quercetalia pubescenti-petraeae</i>						
<i>Viola hirta</i>	+	+	+	+	1	V
<i>Fragaria viridis</i>	+	+	+	+	-	IV
<i>Thalictrum aquilegifolium</i>	+	-	-	+	+	III
<i>Hypericum hirsutum</i>	+	-	+	+	+	III
<i>Quercus pedunculiflora</i>	+	-	-	-	+	II
<i>Quercetea pubescenti-petraeae</i>						
<i>Carex praecox</i>	+	+	+	+	-	IV
<i>Vinca herbacea</i>	+	+	+	+	-	IV
<i>Asparagus tenuifolius</i>	+	+	+	+	+	IV
<i>Poa angustifolia</i>	+	+	-	+	+	IV
<i>Teucrium chamaedrys</i>	+	-	-	+	+	III
<i>Cynanchum vincetoxicum</i>	+	-	-	+	+	III
<i>Agrimonia eupatoria</i>	-	-	+	+	-	II
<i>Trifolium alpestre</i>	+	-	-	+	-	II
<i>Carex divulsa</i>	-	+	-	+	-	II
<i>Stachys officinalis</i>	+	-	+	-	-	II
<i>Clinopodium vulgare</i>	-	-	-	+	+	II
<i>Veronica chamaedrys</i>	-	-	-	+	-	I
<i>Buglossoides purpureoerulea</i>	+	-	-	-	+	I
<i>Astragalus glycyphyllos</i>	+	-	-	-	-	I
<i>Brachypodium pinnatum</i>	-	-	-	+	-	I
<i>Cornus mas</i>	-	1	+	+	+	I
<i>Cornus mas</i> juv.	+	-	-	+	-	II
<i>Quercus dalechampii</i>	-	-	+	-	-	I
<i>Quercus virgiliana</i>	-	+	-	+	-	I
<i>Orno-Cotinetalia</i>						
<i>Ajuga laxmanni</i>	+	-	+	-	-	II
<i>Hypericum perforatum</i>	+	-	-	+	-	II
<i>Prunetalia et Prunion spinosae</i>						
<i>Rhamnus cathartica</i>	+	+	+	+	+	IV
<i>Rhamnus cathartica</i> juv.	+	-	+	-	-	II
<i>Crataegus monogyna</i>	+	+	+	+	+	IV
<i>Crataegus monogyna</i> juv.	-	+	+	-	-	II
<i>Prunus spinosa</i> ssp. <i>dasyphylla</i>	+	+	+	+	-	IV
<i>Prunus spinosa</i> ssp. <i>dasyphylla</i> juv.	+	-	-	-	+	II
<i>Rosa canina</i>	+	+	+	+	+	III

Rosa canina juv.	+	+	-	-	+	III
Origanum vulgare	-	-	-	+	+	II
<i>Quercus-Fagetum</i>						
Glechoma hederacea	+	+	-	+	+	III
Geum urbanum	+	-	-	+	-	II
Brachypodium silvaticum	-	+	+	-	-	II
Carex spicata	+	-	-	-	+	II
Polygonatum latifolium	-	-	-	+	-	I
Campanula persicifolia	+	-	-	-	-	I
Sedum maximum	-	-	-	+	-	I
Tanacetum corymbosum	-	+	-	-	-	I
<i>Festuco-Brometum, Festucetalia valesiacae et Festuco-Stipion</i>						
Filipendula vulgaris	+	+	+	+	+	V
Galium verum	+	+	+	+	+	V
Potentilla patula	+	-	-	+	+	III
Coronilla varia	+	-	-	+	+	III
Festuca valesiaca	+	-	+	-	+	II
Potentilla argentea	+	-	-	+	-	II
Artemisia austriaca	+	-	-	+	-	II
Plantago lanceolata	-	+	-	+	-	II
Eryngium campestre	+	-	-	-	+	II
Euphorbia nicaeensis	-	-	+	-	+	II
Medicago falcata	-	-	-	+	+	II
Dichanthium ischaemum	-	-	+	-	+	II
<i>Aliae</i>						
Galium aparine	-	-	+	+	+	III
Dactylis glomerata	-	+	+	+	+	III
Achillea setacea	+	-	-	+	+	III
Fallopia convolvulus	+	-	-	+	-	II
Ballota nigra	-	+	1	+	+	I
Vicia sativa	+	-	+	-	-	I
Trifolium campestre	-	+	-	+	-	I
Pyrus pyraeaster	+	+	-	+	-	I

Data and place of the relevés: 1-3: forest Pârlești-Valea Mărului, 19 Aug., 1996; 4-5: forest Durasca-Barcea, 27 Jun., 1996

7. Ass. *Quercetum pedunculiflorae* Borza 1937

This association has been described by Al. Borza (1937), between Prut and Nistru rivers [1]. The author, show that the grey oak make up small forests, and, rarely forests having large surfaces (for. ex. the forest of Manzâr). Those phytocoenoses described by I. Morariu as *Quercetum pedunculiflorae typicum* and *Q. p. geticum* can be also ascribed at the association *Quercetum pedunculiflorae* Borza 1937 [4]. The association of grey oak represent nowadays only traces of the forest-steppe, which characterised the Tecuci Plain vegetation in the past. Today, the grey oak make up only a few forests, having small areas, situated on the Siret-Bârlad interfluve only. *Quercus pedunculiflora* is a tree claiming more humidity, growing well on the wet soils, but survive also, on the near dry soils. In the tree stratum there are met sometimes the species *Quercus pubescens*. The shrub layer is well developed, being edyified by: *Crataegus monogyna*, *Cornus sanguinea*, *Acer tataricum*, *Prunus spinosa*, *Rhamnus cathartica*, *Ligustrum vulgare*, *Acer campestre*, *Euonymus europaeus*, *Sambucus nigra*... The most frequent herbaceous species are the next: *Geum urbanum*, *Silene vulgaris*, *Vincetoxicum hirundinaria*, *Asparagus tenuifolius*, *Buglossoides purpureoerulea*, *Carex spicata*, *Astragalus glycyphyllos*, *Polygonatum latifolium*, *Viola hirta*, *Vinca herbacea*, *Ballota nigra*... Those kind of forests are generally cleared, and the clearings are penetrated by the species belonging to the Class *Festuco-Brometum*, Order *Festucetalia valesiacae*, like the next ones: *Poa angustifolia*,

Filipendula vulgaris, *Festuca valesiaca*, *Carex praecox*... By the presence of the weeds in those forests (for instance, *Cannabis ruderalis*, *Urtica dioica*, *Ballota nigra*, *Sambucus ebulus*...), one can observe a beginning of a ruderal succession of the herbaceous layer. More, the intensive grazing process in some of the forests (the forests of Nemțeanca, Arhipoia, Țepu and so forth), clearings, recurrent mowings of the herbs, lead to a strong ruderal evolution of those forests, and there, in the herbaceous layer are dominating the next species: *Urtica dioica*, *Ballota nigra*, *Leonurus cardiaca* ssp. *villosus*, *Conyza canadensis*, *Arctium minus*, *Cannabis ruderalis* and so forth. In these forests, the characteristic species, *Quercus pedunculiflora*, is regenerating also from the stubs only, due to the recurrent cutting down of the trees; thus the strength of the stands is weak, and the juvenil trees is missing almost totally. Live form's spectrum: H=50 (54%); Ph=20 (22%); T=7 (7%); G=6 (6%); others=11%. Fitogeographical spectrum: Euras=19 (21%); Euras. cont=15 (17%); Eur=12 (14%); Eur. centr (submedit)=7 (7%); Pont-medit=6 (6%); Circ=6 (6%); others=29%. Table No. 7 (Rel. No. 1-6).

Table No. 7

Surface of relevé, m ²	400	400	400	400	400	400	
Coverage of trees, %	75	75	60	75	60	60	
Height of trees, m	18-22	18-22	18-20	18-20	18-20	18	
Diameter of trees, cm	30-50	35-55	30-40	35-40	25-50	30-50	K
Coverage of shrubs, %	3	3	5	3	5	5	
Coverage of grass layer, %	25	30	30	5	35	30	
Coverage of regeneration layer, %	1	1	1	1	1	1	
No. of relevé	1	2	3	4	5	6	
<i>Quercus pedunculiflora</i>	4	4	3	4	3	3	V
<i>Quercus pedunculiflora</i> juv.	+	+	+	+	+	+	V
<i>Quercion pubescenti-petraeae</i>							
<i>Acer tataricum</i>	+	-	-	+	+	-	III
<i>Acer tataricum</i> juv.	+	+	-	+	-	+	III
<i>Primula veris</i>	+	+	-	-	+	+	III
<i>Dictamnus albus</i>	-	-	-	+	-	-	I
<i>Lathyrus niger</i>	-	-	+	-	-	-	I
<i>Iris graminea</i>	+	-	-	-	-	-	I
<i>Pulmonaria mollis</i> ssp. <i>molissima</i>	-	-	+	-	-	-	I
<i>Inula hirta</i>	+	-	-	-	-	-	I
<i>Quercetalia pubescenti-petraeae</i>							
<i>Fragaria viridis</i>	+	-	-	+	-	+	III
<i>Viola hirta</i>	-	+	+	-	-	+	III
<i>Viola suavis</i>	-	-	-	-	+	-	I
<i>Thalictrum aquilegifolium</i>	+	-	-	-	-	-	I
<i>Quercetea pubescenti-petraeae</i>							
<i>Vincetoxicum hirundinaria</i>	+	+	-	+	+	+	V
<i>Buglossoides purpureoerulea</i>	+	-	-	+	+	+	IV
<i>Veronica chamaedrys</i>	-	+	-	-	+	+	III
<i>Carex divulsa</i>	-	+	+	-	+	-	III
<i>Vinca herbacea</i>	-	+	+	-	-	+	III
<i>Asparagus tenuifolius</i>	-	-	-	+	+	-	II
<i>Acer campestre</i>	+	+	-	-	-	-	II
<i>Ligustrum vulgare</i>	+	-	-	+	-	-	II
<i>Ligustrum vulgare</i> juv.	+	+	+	-	-	+	III
<i>Agrimonia eupatoria</i>	-	+	+	-	-	-	II
<i>Clinopodium vulgare</i>	+	-	-	+	-	-	II
<i>Quercus pubescens</i>	+	-	-	-	-	-	I
<i>Quercus robur</i>	-	-	+	-	-	-	I
<i>Brachypodium pinnatum</i>	-	-	-	-	+	-	I

Galium mollugo	-	+	-	-	-	-	I
Digitalis lanata	-	-	-	+	-	-	I
Cornus mas	-	-	+	-	-	-	I
Pyrus pyraeaster	-	-	-	+	-	-	I
Matricaria perforata	+	-	-	-	-	-	I
Tilia tomentosa	-	-	+	-	-	-	I
Teucrium chamaedrys	-	-	-	-	-	+	I
Polygonatum odoratum	-	-	-	-	+	-	I
Quercus x venusta	-	-	-	+	-	-	I
<i>Orno-Cotinetalia et Orno-Cotinion</i>							
Clematis recta	-	+	-	-	-	-	I
Asperula tenella	+	-	-	-	-	-	I
Trifolium montanum	-	-	-	-	+	-	I
Asparagus verticillatus	+	-	-	-	-	-	I
Coronilla varia	-	+	-	-	-	-	I
Cytisus austriacus	-	+	-	-	-	-	I
Campanula bononiensis	-	-	-	+	-	-	I
Campanula macrostachya	-	-	-	-	+	-	I
<i>Quercus-Fagetea</i>							
Geum urbanum	+	+	+	-	+	+	V
Euonymus europaeus	+	-	-	+	+	-	III
Euonymus europaeus juv.	+	-	-	+	-	+	III
Polygonatum latifolium	-	+	-	+	+	-	III
Lapsana communis	+	-	-	+	-	-	II
Viola odorata	+	+	-	-	-	-	II
Brachypodium silvaticum	-	-	-	+	+	-	II
Glechoma hirsuta	-	+	+	-	-	-	II
Asperula cynanchica	-	-	-	-	+	-	I
Geranium robertianum	-	+	-	-	-	-	I
Allium scorodoprasum	-	-	-	+	-	-	I
Viola alba	-	-	+	-	-	-	I
Genista tinctoria	+	-	-	-	-	-	I
Campanula persicifolia	-	-	-	-	+	-	I
Thalictrum minus	-	-	-	+	-	-	I
Centaurium erythraea	-	-	-	-	-	+	I
Festuca valesiaca	+	-	-	-	-	-	I
Mycelis muralis	-	+	-	-	-	-	I
Ajuga genevensis	-	-	-	-	+	-	I
Sedum maximum	+	-	-	-	-	-	I
Melica uniflora	-	+	-	-	-	-	I
Tanacetum corymbosum	-	-	+	-	-	-	I
Poa nemoralis	+	-	-	-	-	-	I
Scrophularia nodosa	-	-	-	-	+	-	I
Fallopia dumetorum	-	-	-	-	-	+	I
Phleum phleoides	-	-	+	-	-	-	I
Origanum vulgare	-	+	-	-	-	-	I
Scabiosa ochroleuca	-	-	-	+	-	-	I
Asparagus tenuifolius	-	-	-	-	+	-	I
Potentilla recta	-	+	-	-	-	-	I
Galium verum	-	-	-	-	+	-	I
Linaria genistifolia	-	-	-	+	-	-	I
Dianthus pseudarmeria	+	-	-	-	-	-	I
Moehringia trinervia	-	-	+	-	-	-	I
Veronica spicata	-	-	-	-	+	-	I
<i>Carpinion betuli</i>							
Prunus avium	-	+	+	-	-	+	III
Galium schultesii	-	-	+	-	-	-	I
<i>Fagetalia et Fagion sylvaticae</i>							
Euphorbia amygdaloides	+	-	-	-	-	-	I
Mercurialis ovata	-	-	+	-	-	-	I
Veronica officinalis	-	+	-	-	-	-	I

<i>Prunetalia et Prunion spinosae</i>							
Prunus spinosa ssp. dasyphylla	+	+	+	-	+	-	III
Crataegus monogyna	+	-	+	-	+	-	III
Crataegus monogyna juv.	+	-	+	+	+	+	V
Rhamnus cathartica	-	+	-	+	-	-	II
Rhamnus cathartica juv.	-	+	-	-	-	+	II
Rosa canina	-	-	+	+	-	-	II
Sambucus nigra	+	-	+	-	-	-	II
Sambucus nigra juv.	-	-	+	-	-	+	II
Cornus sanguinea	-	+	-	+	-	-	II
<i>Aliae</i>							
Urtica dioica	+	+	1	1	+	+	V
Cannabis ruderalis	1	+	+	1	+	+	V
Ballota nigra	+	+	+	+	+	+	V
Leonurus cardiaca ssp. villosus	+	+	+	+	1	1	V
Conyza canadensis	1	+	+	1	+	+	V
Arctium minus	+	+	1	+	+	+	V
Astragalus glycyphylus	+	+	-	+	-	+	IV
Stachys officinalis	+	+	-	-	+	-	III
Dactylis glomerata	+	-	-	+	-	+	III
Galium aparine	-	+	+	-	+	-	III
Carex spicata	-	+	-	-	+	+	III
Elymus repens ssp. repens	+	-	-	-	-	+	II
Poa angustifolia	-	-	+	-	-	+	II
Fallopia convolvulus	-	-	+	+	-	-	II
Hypericum perforatum	+	-	-	-	-	+	II
Arctium tomentosum	+	-	-	-	-	-	II
Inula britannica	-	+	-	-	-	-	I
Agrostis stolonifera	-	-	-	+	-	-	I
Medicago lupulina	-	-	-	-	+	-	I
Galeopsis pubescens	+	-	-	-	-	-	I
Aristolochia clematitis	-	+	-	-	-	-	I
Achillea nobilis ssp. neilreichii	-	-	-	+	-	-	I
Artemisia absinthium	-	-	+	-	-	-	I
Lysimachia nummularia	-	-	-	-	-	+	I
Ajuga reptans	-	-	-	-	+	-	I
Artemisia austriaca	+	-	-	-	-	-	I
Lolium perenne	-	-	-	-	-	+	I
Melica ciliata	-	+	-	-	-	-	I
Bromus sterilis	-	-	-	+	-	-	I
Rubus caesius	-	-	+	-	-	-	I
Prunella vulgaris	-	-	-	-	+	-	I
Plantago media	+	-	-	-	-	-	I
Arctium lappa	-	-	-	-	-	+	I
Lavatera thuringiaca	-	-	+	-	-	-	I
Stachys sylvatica	+	-	-	-	-	-	I
Althaea cannabina	-	-	-	-	+	-	I
Chaerophyllum temulum	+	-	-	-	-	-	I
Festuca valesiaca	-	-	-	+	-	-	I
Ulmus minor	-	-	+	-	-	-	I
Euphorbia cyparissias	-	-	-	-	+	-	I
Artemisia vulgaris	-	+	-	-	-	-	I
Knautia arvensis	-	-	-	-	+	-	I
Potentilla recta	-	-	-	-	-	+	I
Veronica austriaca	+	-	-	-	-	-	I

Data and place of the relevés: 1: forest Nemțeanca-Furcenii Noi, 12 Jun., 1993; 2: forest Țepu-7 Jul., 1994; 3: forest Balta-Academiei, Munteni, 16 Aug., 1995; 4: forest Hanu Conachi-20 Jul., 1992; 5: forest Șerbănești-21 Jul., 1992; 6: forest Durasca-20 May, 1996

8. Ass. *Bromo sterilis-Robinetum pseudacaciae* Pocs 1954

Beginning with the years '20 of the last century, in Tecuci Plain, has started a copious process of planting the huge areas of „wandering sand dunes” with various lignaceous species, especially acacia trees; thus, nowadays, a great part of the sand dunes are stabilized. The trees of acacia are exploited at an age of 20-30 years old. Generally speaking, those cleared surfaces resulted after the cutting down the trees, are allowed to regenerate itself. Thus, the primary plantations of acacia, together with the numerous herbaceous species under the stands, make up phytocoenoses which can be allotted to the Ass. *Bromo sterilis-Robinetum pseudacaciae* Pocs 1954.

This association is a thermophilous one, as someone can find a lot of vascular plants from Class *Quercetea pubescenti-petraeae*. The coverage of the herbaceous stratum reach at 40-65%. There is well known that the acacia plantations are characterised by a very heterogenous flora, as: *Galium aparine*, *Rubus caesius*, *Ballota nigra*, *Bromus sterilis*, *Alliaria petiolata*, *Urtica dioica*, *Leonurus cardiaca*, *Physalis alkekengi*... Some of the species have higher AD indices on the fields, so there can be pointed out different infracoenotaxons, as following:

-*brometosum sterilis* Mititelu et al. 1973, Horeanu 1975 (with *Bromus sterilis*);

-*anthriscetosum* Magyar 1937 (=facies *anthriscetosum trichospermae* Dobrescu et al. 1969)

(with *Anthriscus trichosperma* ssp. *cerefolium*)

-*urtico-ballotetosum* Mititelu et al. 1968 (= facies *ballotetosum nigrae* Dobrescu et al. 1969)

(with *Urtica dioica* și *Ballota nigra*)

-*chelidonetosum* Toth 1958 (with *Chelidonium majus*)

-*secalietosum* Pócs 1954 (with *Secale silvestre*)

-*cannabietosum* Mititelu et al. 1968 (with *Cannabis ruderalis*)

-there is signaled out a facies with *Poa angustifolia* I. Lupu 1980.

In the Tecuci Plain, those acacia plantations, are in a pretty good stage of growing, now. But, here and there, these acacia plantations have replaced in the past the natural forest vegetation made by *Quercus pubescens* and *Q. pedunculiflora*. Thus, the floristical richness is impoverished in comparison with the wild flora from the sand dunes.

Live form's spectrum: H=25 (38%); T=20 (31%); Ph=8 (12%); others=19%.

Fitogeographical spectrum: Euras=22 (33%); Eur=11 (17%); Cosm=6 (9%); Circ=6 (9%); Euras. cont=5 (8%); Adv=4 (6%); others=18%. Table No. 8 (Rel. No. 1-5).

Table No. 8

Surface of relevé, m ²	400	400	400	400	400	
Coverage of trees, %	65	50	65	65	65	
Height of trees, m	8-10	10	8-10	10-12	9-11	K
Diameter of trees, cm	20-25	20-25	20-25	20-25	20-25	
Coverage of shrubs, %	3	2	11	2	2	
Coverage of grass layer, %	35	50	50	55	50	
Coverage of regeneration layer, %	2	3	3	2	3	
No. of relevé	1	2	3	4	5	
<i>Robinia pseudacacia</i>	4	3	4	4	4	V
<i>Robinia pseudacacia</i> juv.	+	+	+	+	+	V
<i>Bromus sterilis</i>	2	+	+	+	+	V
<i>Anthriscus cerefolium</i> ssp. <i>trichosperma</i>	+	+	2	+	+	V
<i>Urtica dioica</i>	+	2	+	+	+	V
<i>Ballota nigra</i>	+	2	+	+	+	V
<i>Conium maculatum</i>	+	+	+	+	+	V
<i>Cannabis ruderalis</i>	+	+	+	3	+	V
<i>Chelidonium majus</i>	+	+	+	+	3	V
<i>Secale silvestre</i>	+	+	2	+	+	V

<i>Robinion pseudacaciae</i>						
Morus alba	-	+	-	+	-	II
Gleditsia triacanthos	+	-	-	-	-	I
Acer negundo juv.	+	-	-	+	-	I
<i>Prunetalia et Prunion spinosae</i>						
Geum urbanum	+	+	-	+	+	IV
Sambucus nigra	+	-	+	+	+	IV
Euonymus europaeus	+	+	-	+	-	III
Euonymus europaeus juv.	+	-	+	+	-	II
Crataegus monogyna	+	-	-	+	-	II
Crataegus monogyna juv.	+	+	-	-	+	III
Rosa canina	-	-	+	+	-	II
Origanum vulgare	-	+	-	-	+	II
<i>Quercetea pubescenti-petraeae</i>						
Clinopodium vulgare	+	+	-	+	-	III
Silene latifolia ssp. alba	+	-	+	+	-	III
Pyrus pyraeaster	+	+	-	+	-	III
Campanula macrostachya	+	-	-	+	-	II
Lithospermum officinale	-	+	-	-	+	II
Fallopia dumetorum	+	+	-	-	-	II
Arctium lappa	+	-	-	+	-	II
Saponaria officinalis	-	-	+	-	+	II
Achillea setacea	+	+	-	-	-	II
<i>Chenopodietea</i>						
Stellaria media	+	+	-	+	+	IV
Chenopodium album	+	-	+	+	-	III
Geranium pusillum	+	-	+	+	-	III
Fumaria schleicheri	-	-	+	+	+	III
Convolvulus arvensis	-	+	-	-	+	II
Solanum nigrum	-	+	+	-	-	II
Senecio vernalis	+	-	+	-	-	II
Capsella bursa-pastoris	+	-	-	-	+	II
Sonchus arvensis	-	+	+	-	-	II
<i>Sisymbrium et Sisymbrietalia</i>						
Conyza canadensis	+	-	-	+	+	III
Sisymbrium officinale	-	+	+	-	-	II
Bromus tectorum	-	+	+	-	-	II
Polygonum aviculare	+	-	-	+	-	II
<i>Festuco-Brometea</i>						
Potentilla argentea	-	+	+	-	-	II
Galium humifusum	+	-	-	+	-	II
Poa angustifolia	+	-	-	+	-	II
Muscari racemosum	+	-	-	+	-	II
Euphorbia cyparissias	-	+	+	-	-	II
Berteroa incana	+	-	+	-	-	II
Poa compressa	-	+	-	-	+	II
Medicago lupulina	-	-	+	-	+	II
<i>Aliae</i>						
Alliaria petiolata	+	+	-	+	+	IV
Cirsium arvense	-	+	+	-	-	II
Artemisia absintium	+	-	-	+	-	II
Taraxacum officinale	-	+	-	+	-	II
Thlaspi perfoliatum	-	-	+	-	-	I
Torilis arvensis	-	+	-	-	-	I
Setaria viridis	+	-	-	-	-	I
Veronica arvensis	-	-	+	-	-	I
Agrostis stolonifera	-	-	-	+	-	I
Arctium minus	-	-	-	-	+	I
Veronica polita	-	+	-	-	-	I
Elymus repens ssp. repens	+	-	-	-	-	I

Myosotis arvensis	-	-	+	-	-	I
Althaea cannabina	-	+	-	-	-	I

Data and place of the relevés: 1: forest Hanu Conachi, 12 Jun., 1992; 2: forest Liești, 20 Jun., 1993; 3: forest Durasca-Barcea, 3 Jul., 1993; 4: forest Pârlești-Valea Mărului, 18 Aug., 1994; 5: forest Barcea-Barcea, 3 Jul., 1993

9. Ass. *Pruno spinosae-Crataegetum* (Soó 1927) Hueck 1931

Phytocoenoses of this vegetal association are spreaded in the clearings of the forests, on the skirts of the forests, or on the place of the former forests, on plane fields or on the slopes of the hills, usually on the East or South-East exposures.

The characteristic and dominant species of this association, *Prunus spinosa* ssp. *dasyphylla*, and *Crataegus monogyna*, make up medium coverage indices (up to 50% to 60%), on surfaces between 500 m² to 1000 m². The first one of the characteristic species, is a constant one in all the phytocoenoses, while the second one, are met sporadically only. The herbaceous layer is relatively well developed, edified by various species, immigrated here from other vegetal associations. Among these species, the next ones are more frequently: *Ballota nigra*, *Galium aparine*, *Poa angustifolia*, *Elymus repens* ssp. *repens*, *Calamagrostis epigejos*...The economical importance of this association is in their pioneer's role in the vegetation succession towards the installation of the forests; besides, on those slopes quite declined, these phytocoenoses have a stabilizer role and against the soil erosion.

Live form's spectrum: H=29 (58%); Ph=6 (12%); T=4 (8%); others=22%. Fitogeographical spectrum: Euras=19 (38%); Eur=7 (14%); Euras. cont=5 (10%); Circ=4 (8%); others=30%. Table No. 9 (Rel. No. 1-5).

Table No. 9

Surface of relevé, m ²	200	200	200	200	200	
Coverage of vegetation, %	75	75	75	70	70	K
No. of relevé	1	2	3	4	5	
<i>Prunus spinosa</i> ssp. <i>dasyphylla</i>	4	4	4	4	4	V
<i>Crataegus monogyna</i>	+	+	+	+	+	V
<i>Prunion spinosae et Prunetalia</i>						
<i>Cornus sanguinea</i>	+	+	-	-	+	III
<i>Origanum vulgare</i>	+	-	+	+	-	III
<i>Rosa canina</i>	+	+	-	-	+	III
<i>Potentilla argentea</i>	-	+	-	+	-	II
<i>Euonymus europaeus</i>	-	+	-	-	-	I
<i>Aristolochia clematitis</i>	-	-	+	-	-	I
<i>Veronica chamaedrys</i>	-	-	-	+	-	I
<i>Humulus lupulus</i>	+	-	-	-	-	I
<i>Quercetea pubescenti-petraeae</i>						
<i>Geum urbanum</i>	-	+	+	-	-	II
<i>Clinopodium vulgare</i>	+	-	-	-	+	II
<i>Acer tataricum</i>	+	-	-	+	-	II
<i>Tanacetum corymbosum</i>	-	+	-	-	-	I
<i>Festuco-Brometea</i>						
<i>Poa angustifolia</i>	-	+	+	+	-	III
<i>Salvia nemorosa</i>	+	-	+	+	-	III
<i>Daucus carota</i>	+	+	-	-	+	III
<i>Gagea arvensis</i>	+	-	-	+	-	II
<i>Calamagrostis epigejos</i>	-	+	-	-	+	II
<i>Eryngium campestre</i>	-	+	+	-	-	II
<i>Salvia verticillata</i>	-	-	-	+	-	I

<i>Viola hirta</i>	+	-	-	-	-	I
<i>Euphorbia cyparissias</i>	-	-	-	-	+	I
<i>Erysimum diffusum</i>	-	+	-	-	-	I
<i>Verbascum phoeniceum</i>	-	-	+	-	-	I
<i>Aliae</i>						
<i>Ballota nigra</i>	+	+	-	+	+	IV
<i>Hypericum perforatum</i>	-	+	+	-	+	III
<i>Fragaria viridis</i>	-	+	-	+	-	II
<i>Artemisia absinthium</i>	+	-	+	-	-	II
<i>Phlomis herba-venti</i> ssp. <i>pungens</i>	+	-	-	-	+	II
<i>Lamium purpureum</i>	-	+	+	-	-	II
<i>Anemone ranunculoides</i>	-	-	+	+	-	II
<i>Stachys officinalis</i>	-	+	-	+	-	II
<i>Cichorium intybus</i>	+	-	+	-	-	II
<i>Stachys recta</i>	+	-	-	+	-	II
<i>Agrimonia eupatoria</i>	+	-	-	-	+	II
<i>Glechoma hederacea</i>	-	-	+	-	-	I
<i>Physalis alkekengi</i>	-	+	-	-	-	I
<i>Vicia cracca</i>	-	-	+	-	-	I
<i>Achillea setacea</i>	+	-	-	-	-	I
<i>Tanacetum vulgare</i>	-	-	-	-	+	I
<i>Conium maculatum</i>	-	-	+	-	-	I
<i>Erigeron annuus</i>	-	-	-	+	-	I
<i>Matriacria perforata</i>	+	-	-	-	-	I
<i>Prunella vulgaris</i>	-	+	-	-	-	I
<i>Torilis arvensis</i>	-	-	-	+	-	I

Data and place of the relevés: 1-2: forest Balta Academiei-Munteni, 7 Aug., 1994; 3-4: forest Țepu-Țepu de Sus, 15 Jul. 1993; 5: forest Pârlești-Valea Mărului, 19 Aug., 1995

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