

**A FLORISTIC STUDY OF THE VASCULAR PLANTS ON THE
TERRITORY OF COMMUNE CĂTEASCA
(ARGEȘ COUNTY)**

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ABSTRACT. This paper presents a description of the vascular plants from the Căteasca commune area. This village is located at 20 km away from Pitești, on the right bank of the river Argeș and extends from a side of the Bucharest-Pitești highway. In the studied area were identified 204 plant species, classified in 43 families. Were analyzed biological forms, phytogeographical elements and ecological affinities of these plants. Identification of thermophilic elements of Mediterranean origin, indicating the presence of warm climate microstate.

Key words: vascular plants, Căteasca, biological forms, phytogeographical elements.

REZUMAT. Un studiu floristic al plantelor vasculare de pe teritoriul comunei Căteasca (județul Argeș). Lucrarea prezintă o descriere a plantelor vasculare de pe teritoriul comunei Căteasca. Această comună este localizată la 20 km de Pitești, pe malul drept al râului Argeș, de o parte și de alta a autostrăzii București-Pitești. În teritoriul cercetat au fost identificate 204 specii de plante, încadrate în 43 de familii. Sunt analizate formele biologice, elementele fitogeografice și afinitățile ecologice ale acestor plante. Prezența unor elemente termofile, de origine mediteraneană, indică existența unor microstațiuni cu climat călduros. Sunt menționate în lucrare posibilitățile de valorificare rațională a potențialului vegetal regional.

Cuvinte cheie: plante vasculare, Căteasca, forme biologice, elemente fitogeografice.

INTRODUCTION

Căteasca commune is located 20 km away from Pitești, on the right bank of the river Argeș and extends from a side of the Bucharest-Pitești highway. It is located in the southern part of Romania, in the high plain of Pitești. It comprises five villages: Căteasca, Cireșu, Coșeri, Siliștea, Gruiu. Situated on an ancient Geto-Dacian fireplace housing, Căteasca commune, as the entire surrounding area, benefits of pedoclimatic and geological factors favor of life and human activity. It is situated at the intersection of important routes of communication and ancient trade routes that connects the hilly and plain between Wallachia and Transylvania and regions south of the Danube.

The area that is located Căteasca commune belongs, for the most part, at Argeş river floodplain and High Plaine of Piteşti, included in Cotmeana Platform.

The area has a temperate-continental climate. Summer it is traversed by tropical air masses from North Africa, dry and scorching.

Flora and fauna are very rich represented are specific to all areas of contact between the hill and meadow. Flora is represented by forest hills, forest-steppes vegetation and of the meadow vegetation.

MATERIAL AND METHODS

Observations and field researches were performed from 2012 to 2013, during the plants vegetation period. Lists of the Vascular Plants were carried out of bibliographic data and from our own research data. For Căteasca commune we found only 5 to 10 information in the literature, and those due to the lists, especially. Vascular plants are presented in phylogenetic order, the classification adopted by Tutin et al. (Tutin et al., 1964-1980) and Ciocârlan (Ciocârlan, 2009). Within families, species are arranged alphabetically. Floristic list includes:

- scientific name and author (Flora Europaea - <http://rbg-web2.rbge.org.uk/FE/fe.html> - and Flora ilustrată a României. Pteridophyta et Spermatophyta - Ciocârlan, 2009);
- synonyms;
- biological forms (Sanda et al., 2003; Ciocârlan, 2009; Cristea et al., 2004): hemycryptophytes (H), therophytes (T), geophytes (G) and chamephytes (Ch);
- phytogeographical elements (Sanda et al., 2003; Ciocârlan, 2009; Cristea et al., 2004): Adv = Adventitious, Atl-Med = Atlantic-Mediterranean, Circ = Circumboreal, Cosm = Cosmopolit, Eur = European, Euc = Central-European, Eua = Eurasian, Med = Mediterranean, Pont = Pontic;
- the Humidity scale (Sanda et al., 1983; 2003): 1-1.5 = Xerophytes; 2-2.5 = Xeromesophytes; 3-3.5 = Mesophytes; 4-4.5 = Mesohygrophytes; 5-5.5 = Hygrophytes; 6 = Hydrophytes; 0 = Euryphytes;
- The heat scale (Sanda et al., 1983; 2003): 1-1.5 = Cryophytes; 2-2.5 = Microthermophytes; 3-3.5 = Micro-mesothermophytes; 4-4.5 = Moderately-thermophytes; 5-5.5 = Thermophytes; 0 = Eury thermophytes;
- the acidity scale (Sanda et al., 1983; 2003): 1 = High-acidophytes; 2 = Acidophytes; 3 = Acid-neutrophytes; 4 = Lean acid-neutrophytes; 5 = Neutro-alkalinophytes; 0 = Euryacidophytes;
- coenotic characteristic (Sanda et al., 2003; Ciocârlan, 2009);
- spread: each species is indicated locations literature (Lit.) accompanied by bibliographic informations or locations for the species identified in the field (Exs.) by the author of this paper.

RESULTS AND DISCUSSIONS

EQUISETACEAE

Equisetum arvense L., G, Cosm, U3T3R0, *Artemisietea*, *Chenopodietea*, *Filipendulo-Petasition*, *Secalietea*. Exs.: Chanel, village Catanele.

DENNSTAEDTIACEAE

Pteridium aquilium (L.) Kuhn, (*Cincinalis aquiline* (L.) Gled.; *Pteridium tauricum* (C.Presl) V.I.Krecz.; *Pteris aquiline* (L.) Newm.), G, Cosm, U3T3R0, *Quercetea robori-petraeae*. Lit.: Căteasca (Alexiu, 2008).

ASPIDIDACEAE (DRYOPTERIDACEAE)

Dryopteris filix-mas (L.) Schott, (*Aspidium filix-mas* (L.) Sw.; *Nephrodium filix-mas*(L.) Strempel; *Polypodium filix-mas* L., *Nephrodium filix-mas* (L.) Rich.; *Lastrea filix-mas* (L.) C. Presl; *Polyistichum filix-mas* (L.) Roth), H, Cosm, U4R3T0, *Fagetalia sylvaticae*, *Quercu-Fagetea*. Exs.: Forest, Căteasca.

ARISTOLOCHIACEAE

Aristolochia clematitis L., G, Med, U2.5T3.5R5, *Arction lappae*, *Calystegion*, *Prunetalia*. Lit.: Alexiu, 2008.

Asarum europaeum L., H, Eua, U3.5T3R4, *Fagetalia sylvaticae*. Lit.: Alexiu, 2008, Exs.: Forest, Căteasca.

RANUNCULACEAE

Adonis aestivalis L., Th, Eua-Med, U3T4R3, *Secalietea* Exs.: Wheat field, Căteasca.

Adonis vernalis L., H, Eua (Cont), U2T3.5R4, *Festucetalia valesiaca*. Exs.: Gruiu, Wheat field.

Anemone nemorosa L. subsp. *nemorosa*, G, Circ, U3.5T3R0, *Fagetalia sylvaticae*, *Quercu-Fagetea*. Exs.: Forest, Căteasca.

Anemone ranunculoides L., G, Eur, U3.5T3R4, *Fagetalia sylvaticae*, *Quercu-Fagetea*. Exs.: Forest, Căteasca.

Clematis vitalba L., nPh-L, Euc-Med, U3T3R3, *Prunetalia*, *Quercu-Fagetea*. Exs.: Forest, Căteasca.

Consolida regalis S.F. Gray subsp. *regalis* (*Consolida regalis* Gray ssp. *arvensis* (Opiz) Soo; *Delphinium consolida* L. subsp. *consolida*; *Delphinium consolida* L.; *Delphinium consolida* L. subsp. *arvense* (Opiz) Graebn.), Th, Eur-Med, U2T4R4, *Caucalidion*, *Secalietea*. Exs.: Coșeri.

Nigella arvensis L., Th, Eur-Med, U2T4R4, *Caucalidion*, *Secalietea*. Exs.: Coșeri.

Ranunculus acris L. subsp. *acris*, (*Ranunculus stevenii* auct. Angl.; *Ranunculus stevenii* auct. Hung. et roman.; *Ranunculus stevenii* auct. Angl., hung. et roman., non Andr. ex Besser), H, Eua, U3.5T0R0, *Molinio-Arrhenatheretea*. Exs.: Schoolyard Căteasca.

***Ranunculus ficaria* L.**, (*Ficaria degenii* Hervier; *Ficaria verna* Hudson; *Ficaria nudicaulis* A.Kern.; *Ficaria ranunculoides* Roth; *Ficaria vulgaris* A.St.-Hil.), H-G, Eua, U3.5T3R3, *Querco-Fagetea*. Exs.: village Catanele, Grassland, village Gruiu, forest.

***Ranunculus repens* L.**, (*Ranunculus oenanthifolius* Ten. et. Guss.; *Ranunculus pubescens* Lag.), H, Eua (Med), U4T0R0, *Agropyro-Rumicion*, *Alno-Padion*, *Bidentetalia tripartiti*, *Calystegion*, *Molinion-Arrhenatheretea*, *Phragmitetea*, *Plantaginetea majoris*, *Salicetea purpureae*. Exs.: Catanele, Grassland.

***Ranunculus sardous* Crantz** (*Ranunculus pseudobulbosus* Schur; *Ranunculus sardous* Crantz subsp. *xatardii* (Lapeyr.) Rouy et Foucaud; *Ranunculus philonotis* Ehrh.), Th, Eur-Med, U3T3R4, *Agrophyro-Rumicion*, *Agrostion stoloniferae*, *Nanocyperion flavescens*, *Secalietea*. Exs.: Catanele, Grassland, Câteasca.

PAPAVERACEAE

***Chelidonium majus* L.**, (*Chelidonium laciniatum* Mill.), H, Eua, U3R3R4, *Alliarion petiolatae*, *Arction lappae*, *Chenopodietea*, *Epilobietea angustifolii*. Exs.: Village Catanele.

***Papaver rhoeas* L.**, *Papaver strigosum* (Boenn.) Schur; *Papaver tenuissimum* Fedde; *Papaver tumidulum* Klokov; *Papaver intermedium* Beck; *Papaver roubiaei* Vig.; *Papaver insignitum* Jord.; *Papaver trilobum* Wallr.; *Papaver commutatum* Fisch. et C.A.Mey.), Th, Eua-Med, U3T3.5R4, *Secalietea*. Exs.: wheat field Catanele-Oarja.

URTICACEAE

***Urtica dioica* L.** subsp. *dioica*, H, Cosm, U3T3R4, *Alno-Padion*, *Artemisietea*, *Epilobietalia angustifolii*, *Fagetalia sylvaticae*, *Salicion albae*. Exs.: Village Gruiu.

BETULACEAE

***Alnus glutinosa* (L.) Gaertner.**, MPh (mPh), Eua, U5T3R3, *Alnion glutinosae*, *Alno-Padion*. Exs.: Village Cireșu.

CORYLACEAE

***Corylus avellana* L.**, mPh, Balc, U3T3R3, *Querco-Fagetea*. Exs.: Catanele.

CARYOPHYLLACEAE

***Gypsophila muralis* L.**, Th, Eua, (Cont), U2T3R4, *Bidentetalia tripartiti*, *Nanocyperetalia*, *Puccinellio-Salicornietea*, *Secalietea*. Lit.: Câteasca (Alexiu, 2006; 2008).

***Lychnis flos-cuculi* L.**, (*Lychnis cyrilli* K. Richt.; *Agrostema flos-cuculi* (L.) G. Don; *Coronaria flos-cuculi* (L.) A. Braun), H, Eua, U3.5T2.5R0,

Magnocaricion elatae, *Molinietalia*, *Molinio-Arhenatheretea*. Lit.: Căteasca (Alexiu, 2006; 2008).

Lychnis viscaria L. subsp. *viscaria*, (*Viscaria vulgaris* Bernh.; *Viscaria viscosa* Asch.) Ch (H), Eua U3T4R0, *Festucion rupicolae*, *Pino-Quercetalia*, *Sedo-Scleranthetea*. Lit.: Căteasca (Alexiu, 2008).

Saponaria officinalis L., (*Saponaria aenebia* Heldr.), H, Eua (Med), U3T3R0, *Calystegion*, *Chenopodietea*, *Senecion fluviatilis*. Lit.: Căteasca (Alexiu, 2008).

Silene alba (Miller) E.H.L. Kraus, (*Lychnis alba* Mill.; *Melandrium album* (Mill.) Garcke subsp. *album*; *Melandrium pretense* Rohl.), Th (TH), Eua, U3.5T2R3, *Chenopodio-Scleranthetea*, *Onopordion acanthi*, *Origanetalia*. Lit.: Căteasca (Alexiu, 2006; 2008).

Stellaria gramineae L., H, Eua, U2.5T3R3, *Arrhenatheretalia*, *Molinio-Arrhenatheretea*. Lit.: Căteasca (Alexiu, 2006; 2008).

AMARANTHACEAE

Amaranthus albus L., Th, Adv, U3T3R3, *Chenopodietea*. Lit.: Căteasca (Alexiu, 2006; 2008).

Amaranthus crispus (Lesp. Et Thev.) N. Terracc., Th, Adv, U3T4R3, *Chenopodietea*, *Sisymbrium officinalis*. Lit.: Căteasca (Alexiu, 2006; 2008).

Amaranthus retroflexus L., (*Amaranthus bulgaricus* Kov.), Th, Adv, U3T3R0, *Chenopodietea*, *Panico-Setarion*. Exs.: Gruiu, wheat field.

POLYGONACEAE

Polygonum aviculare L., (*Polygonum heterophyllum* Lindm.; *Polygonum littorale* auct.; *Polygonum monspeliense* Pers.), Th, Cosm, U2.5T0R3, *Polygonion avicularis*. Exs.: Căteasca, Schoolyard.

Polygonum convolvulus L., (*Fallopia convolvulus* (L.), A.Love), Th, Circ, U2.5T3R3, *Aperetalia*, *Chenopodio-Scleranthetea*. Lit.: Căteasca (Alexiu, 2008).

Polygonum hydropiper L., Th, Circ, U4.5T3R4, *Alnetea glutinosae*, *Bidention tripartite*, *Salcion albae*. Lit.: Căteasca (Alexiu, 2006; 2008).

Polygonum lapathifolium L., (*Polygonum paniculatum* Andrz.; *Polygonum incanum* F.W.Schmidt; *Polygonum linicola* Sutulov; *Polygonum zaporoviense* Klokov; *Polygonum nodosum* Pers.; *Polygonum scarbum* Moench.; *Polygonum andrzejowskianum* Klokov; *Polygonum hypanicum* Klokov), Th, Cosm, U4T0R3, *Bidention tripartite*, *Polygono-Chenopodion polyspermi*, *Sisymbrium officinalis*. Lit.: Căteasca (Alexiu, 2006; 2008).

Rumex acetosella L., subsp. *acetosella*, H (G), Cosm, U2T3R2, *Aperetalia*. Exs.: River Neajlov.

ROSACEAE

Crataegus monogyna Jacq. subsp. *monogyna*, mPh, Eua, U2.5T3R3, *Prunetalia*, *Quercu-Fagetea*. Lit.: Căteasca (Alexiu, 2006; 2008).

Fragaria vesca L., H, Eua, U3T2.5R0, *Cynosurion cristati*, *Epilobietalia angustifolii*, *Quercu-Fagetea*. Exs.: „Coasta Dutina”.

Geum urbanum L., H, Med (Circ), U3T3R4, *Alno-Padion*, *Carpinion betuli*, *Prunetalia*, *Quercu-Fagetea*. Lit.: Căteasca (Alexiu, 2006; 2008).

Prunus avium L., (*Cerasus avium* (L.) Moench), mPh-MPh, Euc (Med), U3T3R3, *Carpinion betuli*, *Quercu-Fagetea*. Exs.: Village Catanele.

Prunus spinosa L. subsp. *spinosa*, mPh, Eua, (Med), U2T3R3, *Prunion spinosae*. Lit.: Căteasca (Alexiu, 2006; 2008).

Rosa canina L., (*Rosa canina* L. subsp. *dumalis* (Bechst.) Arcang. pro parte; *Rosa willibaldii* Chrshan.; *Rosa sarmentacea* J. Woods pro parte; *Rosa dumalis* Bechst.; *Rosa prutensis* Chrshan.; *Rosa canina* L. subsp. *vulgaris* (Mert. et W.D.J. Koch) Gams; *Rosa communis* Rouy subsp. *canina* (L.) Rouy), nPh, Eur, U2T3R3, *Festuco-Brometea*, *Prunion spinosae*, *Quercu-Fagetea*. Exs.: Golești dam.

Rubus caesius L., H-nPh, Eur, U4T3R4, *Alno-Padion*, *Convolvuletalia*, *Fagetalia sylvaticae*, *Salicetea purpureae*, *Secalietea*. Lit.: Căteasca (Alexiu, 2006; 2008).

FABACEAE

Coronilla varia L., H, Eua, (Med), U2T3R4, *Festuco-Brometea*, *Quercetea robori-petraeae*. Lit.: Căteasca (Alexiu, 2006; 2008).

Larhrys aphaca L., Th, Med, U3T3R3, *Caucalidion*, *Secalinetea*. Lit.: Căteasca (Alexiu, 2006; 2008).

Lotus corniculatus L., (*Lotus ambiguous* Basser ex Spreng.; *Lotus caucasicus* Kuprian.; *Lotus balticus* Miniaev; *Lotus olgae* Kolkov; *Lotus corniculatus* L. subsp. *corniculatus* proles *longipes* Samp. pro parte; *Lotus ruprechtii* Miniaev; *Lotus arvensis* Pers.; *Lotus tauricus* Juz.; *Lotus komarovii* Miniaev; *Lotus zhegulensis* Klokov; *Lotus ucrainicus* Klokov), H, Eua, U2.5T0R0, *Festucetalia valesiaca*, *Festucion vaginatae*, *Molinio-Arrhenatheretea*, *Plantaginetea majoris*, *Secalietea*. Exs.: Village Gruiu.

Medicago lupulina L., (*Medicago appenina* J. Woods), Th,-H, Eua, U2.5T3R4, *Alysso-Sedion*, *Chenopodietea*, *Festuco-Brometea*, *Molinio-Arrhenatheretea*, *Plantaginetea majoris*, *Secalietea*. Exs.: Village Catanele.

Melilotus alba Medik., Th, (TH), Eua, U2.5T3R0, *Artimisieta*, *Chenopodietea*. Lit.: Căteasca (Alexiu, 2006; 2008).

Melilotus officinalis (L.) Pall., (*Melilotus petitpierrean* Willd.; *Melilotus arvensis* Wallr.; *Melilotus melilotus-officinalis* Asch. Et Graebn.), Th, (TH), Eua, U2.5T3R0, *Artimisieta*, *Chenopodietea*, *Secalietea*. Lit.: Căteasca (Alexiu, 2008).

Robinia pseudacacia L., MPh, Adv, U2.5T4R0, *Robinionpseudacacia*. Lit.: Căteasca (Alexiu, 2006; 2008). Exs.: Riverside coppice Catanele.

Trifolium arvense L., subsp. *arvense*, (*Trifolium capitulatum* Pau; *Trifolium agrestinum* Jord.ex Boreau), Th, Eua, U1.5T3R4, *Arrhenatheretalia*, *Corynephoretalia*, *Festuco-Brometea*, *Secalietea*, *Sedo-Scleranthetea*. Lit.: Căteasca (Alexiu, 2006; 2008). Exs.: Village Gruiu.

***Trifolium campestre* Schreb.**, (*Trifolium procumbens* L., nom. Ambig.), Th, (TH), Eur, U3T3R0, *Arrhenatheretalia*, *Festuco-Brometea*, *Plantaginea majoris*, *Secalietea*. Lit.: Căteasca (Alexiu, 2006; 2008).

Trifolium repens* L.**, subsp. ***repens, H, Eua, U3.5T0R0, *Cynosurion cristati*, *Molinio-Arrhenatheretea*, *Plantaginea majoris*, *Secalietea*. Lit.: Căteasca (Alexiu, 2006; 2008).

Vicia sativa* L. subsp. *sativa, (*Vicia sativa* L. subsp. *notata* Asch. et Graebn.), Th, Adv, U0T3R0, *Festuco-Brometea*, *Origanetalia*, *Secalietea*. Lit.: Căteasca (Alexiu, 2006; 2008). Exs.: Schoolyard Catanele.

***Vicia tetrasperma* (L.) Schreber.**, (*Vicia gemela* Crantz; *Ervum tetraspermum* L.), Th, Eua, U3.5T3R3, *Aperetalia*, *Secalietea*. Lit.: Căteasca (Alexiu, 2008).

LYTHRACEAE

***Lythrum salicaria* L.**, (*Lythrum intermedium* Ledeb. Ex Colla), H-Hh, Circ, U4T3R0, *Alnetea glutinosae*, *Filipendulo - Petasition*, *Molinieta*, *Phragmitetea*, *Salicetea purpureae*. Exs.: River Neajlov.

ONAGRACEAE

***Oenothera biennis* L.**, Th, Adv, U2T4R0, *Chenopodieta*, *Onopordion achantii*, *Sysimbrion officinalis*. Exs.: Village Catanele.

EUPHORBIACEAE

***Euphorbia amygdaloides* L.**, (*Euphorbia orjenii* Beck; *Tithymalus amygdaloides* (L.) Hill), Ch, Eur-Med, U3T3.5R4, *Quercu-Fagetea*. Exs.: Căteasca, Schoolyard.

SIMAROUBACEAE

***Ailanthus altissima* (Miller) Swingle.**, (*Ailanthus peregrine* F.A. Barkley; *Pongelion cacodendron* (Eherh.) Degen; *Ailanthus glandulosa* Desf.), MPh, Adv, U0T0R0, *Ailanthetum altissimae*. Lit.: Căteasca (Alexiu, 2006; 2008).

OXALIDACEAE

***Oxalis corniculata* L.**, Th, Med, U2.5T4R0, *Chenopodieta*, *Polygono-Chenopodion*. Lit.: Căteasca (Alexiu, 2006; 2008).

APIACEAE

***Bifora radians* M.B.**, Th, Med, U3T4R0, *Caucalidion*, *Consolido-Eragrostion*; Exs.: Căteasca, Schoolyard.

Daucus carota* L. subsp. *carota, (*Daucus carota* L. subsp. *maximus* auct. Luist. Non (Desf.) Ball; *Daucus communis* Rouy et E.G.Camus proles *communis*), TH-H, Eua (Med), U2.5T3R0, *Arrhenatherion elatioris*, *Molinio-Arrhenatheretea*. Lit.: Căteasca (Alexiu, 2006; 2008).

***Eryngium campestre* L.**, (*Eryngium campestre* L. subsp. *contractum* (Micheletti) Degen; *Eryngium latifolium* Hoffmanns. et Link), H, Pont-Med, U1T4.5T4, *Festucetalia valesiaca*, *Festuco-Brometea*. Lit.: Căteasca (Alexiu, 2006; 2008). Exs.: Chanel, village Catanele.

***Pinpinella saxifraga* L.**, (*Pinpinella alpine* Host; *Pinpinella dissecta* Retz.; *Pinpinella nigra* Mill.; *Pinpinella alpestris* (Spreng.) Schult.; *Pinpinella laconica* Halacsy; *Pinpinella saxifraga* L. subsp. *alpestris* (Spreng.) W.D.J. Koch), H, Eua, (Med), U2.5T0R3, *Elyno-Seslerietea*, *Festuco-Brometea*. Exs.: Grassland, Gruiu.

HYPERICACEAE

***Hypericum perforatum* L.**, (*Hypericum veronense* Schrank; *Hypericum noeanum* Boiss.), H, Eua, U3T3R0, *Festuco-Brometea*, *Organetalia*, *Sedo-Scleranthetea*. Exs.: River Neajlov.

TILIACEAE

***Tilia cordata* Miller**, (*Tilia officinarum* Crantz; *Tilia officinarum* Crantz subsp. *officinarum* pro parte; *Tilia ulmifolia* Scop.; *Tilia parvifolia* Ehrh. ex Hoffm.), MPh, Eur, U3T3R3, *Carpinion betuli*. Exs.: Village Catanele.

Tilia platyphyllos* Scop.** subsp. ***platyphyllos, (*Tilia officinarum* Crantz subsp. *platyphyllos* (Scop.) Hayek; *Tilia platyphyllos* Scop. subsp. *braunii* (Simonk) C.K.Schneid. pro parte), MPh, Euc, U2.5T3R4, *Acerion pseudoplatani*, *Fagetalia sylvaticae*, *Quercu-Fagetea*. Exs.: Grassland, village Gruiu.

MALVACEAE

***Malva pusilla* Sm.**, (*Malva borealis* Wallr.; *Malva rotundifolia* L.), Th-TH, Eua-Med, U3.5T3R3, *Chenopodietea*, *Polygonion avicularis*. Lit.: Căteasca (Alexiu, 2006; 2008).

VIOLACEAE

***Viola arvensis* Murray**, (*Viola banatica* Kit. Ex Roem. Et Schult.; *Viola nana* (DC.) Godr.; *Viola ruralis* Jord. Ex Boreau; *Viola segetalia* Jord.), Th, Cosm, U3T3R0, *Aperetalia*, *Festucetalia valesicae*, *Secalietea*. Exs.: Riverside coppice Catanele.

***Viola odorata* L.**, (*Viola stolonifera* Rodr.), H, Alt-Med, U2.5T3.5R4, *Alliarion petiolatae*, *Prunetalia*, *Quercu-Fagetea*. Lit.: Căteasca (Alexiu, 2006; 2008).

TAMARICACEAE

***Myricaria germanica* (L.) Desv.**, nPh, Eua, U0T0R4, *Salicion elaeagni*, Exs. River Neajlov.

BRASSICACEAE

***Camelina microcarpa* Andr. Ex DC.**, (*Camelina sativa* auct. ital.; *Camelina sylvestris* Wallr.; *Camelina sylvestris* Wallr. var. *sylvestris*), Th, Eua, U3T3R0, *Aperetalia*, *Chenopodietea*. Lit.: Căteasca (Alexiu, 2006; 2008).

***Capsela bursa-pastori* (L.) Medik.**, (*Bursa pastori* Hill; *Thlaspi bursa-pastoris* L.), Th-TH, Cosm (Med), U3T0R0, *Chenopodietea*, *Chenopodio-Scleranthetea*. Exs.: Triptych, village Gruiu.

***Cardaria draba* (L.) Desv.**, (*Lepidium draba* L. subsp. *draba*; *Lepidium draba* L.), H, Eua, (Med), U2T4R4, *Sysimbrion officinalis*. Lit.: Căteasca (Alexiu, 2008).

Erophila verna* (L.) Chevall. subsp. *verna, (*Draba verna* L.; *Erophila stenocarpa* Jord.; *Draba verna* L. subsp. *verna*; *Erophila vulgaris* DC.), Th, Eur, U2.5T3.5R0, *Festuca-Brometea*. Exs.: Grassland, village Gruiu.

***Rorippa austriaca* (Crantz) Besser**, (*Nasturium austriacum* Crantz), H (G), Pont, U4T3.5R4, *Agropyro-Rumicion*, *Bidentea tripartiti*, *Plantaginetea majoris*, *Senecio fluviatilis*. Lit.: Căteasca (Alexiu, 2006; 2008).

***Sinapis arvensis* L.**, (*Sinapis schkuhriana*, Rehb.; *Brassica arvensis* (L.) Rabenh., non L.; *Sinapis orientalis* L.; *Brasica sinapistrum* Boiss.), Th, Eua, U3T3R2, *Secalietea*. Exs.: Grassland, village Coșeri.

***Thlaspi arvense* L.**, Th, Eua-Med, U2T3R4, *Polygono-Chenopodion polyspermi*. Lit.: Căteasca (Alexiu, 2006; 2008).

SALICACEAE

Salix alba* L. subsp. *alba, MPh-mPh, Eua, U5T3R4, *Alno-Podion*, *Salicion albae*. Exs.: Biserica Catanele.

***Salix fragilis* L.**, mPh-MPh, Eua, U4.5T3R4, *Alno-Podion*, *Salicion albae*, *Salicion triandrae*. Lit.: Căteasca (Alexiu, 2006; 2008).

PRIMULACEAE

***Anagallis arvensis* L.**, (*Anagallis arvensis* L. subsp. *parviflora* (Hoffmanns et Link) Arcang.; *Anagallis arvensis* L. subsp. *monelli* Arcang.; *Anagallis arvensis* L. subsp. *carnea* (Schrank) Gusul. et Morariu; *Anagallis latifolia* L.; *Anagallis caerulea* L.; *Anagallis arvensis* L. subsp. *latifolia* (L.) Braun-Blanq. et Maire; *Anagallis arvensis* L. subsp. *phoenicea* Vollm.; *Anagallis arvensis* L. subsp. *caerulea* auct. eur., non Hartm.; *Anagallis arvensis* L. subsp. *micrantha* (Gren. et Godr.) Rouy; *Anagallis phoenicea* Scop.), Th, Circ, U3T3R0, *Panico-Setarion*, *Polygono-Chenopodion polyspermi*. Lit.: Căteasca (Alexiu, 2006; 2008).

Primula veris* L. subsp. *veris, H, Eua, U3T2R5, *Arrhenatheretalia*, *Quercu-Fagetea*. Lit.: Căteasca (Alexiu, 2006; 2008). Exs.: Wheat field Catanele.

GENTIANACEAE

Centaurium erythraea* Rafin. subsp. *erythraea, (*Centaurium umbellatum* auct. subsp. *austriacum* Ronniger; *Centaurium umbellatum* auct. subsp. *umbellatum*; *Erythraea centaurium* auct., non (L.) Pers.; *Centaurium umbellatum*

auct. subsp. *transiens* (Wittr.) Ronniger; *Erythraea capitata* Willd.; *Centaurium umbellatum* auct.), Th, Euc, U3T3R2, *Molinio-Arrhenatheretea*. Lit: Căteasca (Alexiu, 2008).

SOLANACEAE

***Solanum dulcamara* L.**, (*Solanum depilatum* Kitag.; *Solanum littorale* Rabb), Ch-nPh, Eua, (Med), U4.5T3R4, *Alnetea glutinosae*, *Alno-Padion*, *Bidentea tripartiti*, *Calystegion*, *Epilobietalia angustifolii*, *Phragmition australis*. Exs.: Wheat field Catanele.

Solanum nigrum* L.**, subsp. ***nigrum, (*Solanum nigrum* L. subsp. *humile* (Bernh.) Marzell; *Solanum nigrum* L. subsp. *luteovirescens* (C.C.Gmel.) Kirschl.; *Solanum moschatum* C. Presl; *Solanum judaicum* Besser; *Solanum moschatum* C. Presl subsp. *moschatum*; *Solanum humile* Bernh. ex Willd., non Lam.; *Solanum suffruticosum* Schousb. ex Willd.; *Solanum nigrum* L. subsp. *chlorocarpum* (Spenn.) Arcang.; *Solanum morella* Desv. subsp. *nigrum* (L.) Rouy; *Solanum nigrum* L. subsp. *stenopetalum* (A. Braun) Arcang.; *Solanum dillenii* Schult.; *Solanum nigrum* L. subsp. *dillenii* (Schult.) Nyman), Th, Cosm, U3T4R0, *Chenopodietea*. Exs.: Village road Catanele-Golești.

CONVOLVULACEAE

***Convolvulus arvensis* L.**, G (H), Cosm, U0T0R0, *Arction lappae*, *Festuco-Brometea*, *Chenopodio-Scleranthetea*, *Sisymbrium officinalis*, *Caucalidion*. Exs.: Kindergarten, village Catanele.

BORAGINACEAE

Myosotis arvensis* Hill** subsp. ***arvensis (*Myosotis intermedia* Link), TH, Eua, U3T3R0, *Aperetalia*, *Arrhenatheretalia*, *Epilobietea angustifolii*. Exs.: Pond, village Gruiu.

Symphytum officinale* L.** subsp. ***officinale, (*Symphytum officinale* L. subsp. *bohemicum* (F. W. Schmidt) Celak.; *Symphytum bohemicum* F. W. Schmidt; *Symphytum molle* Janka), H, Eua, U4T3R0, *Molinietalia*, *Phragmitetea*. Exs.: Schoolyard Gruiu.

LAMIACEAE

***Ajuga genevensis* L.**, H, Eua, (Cont), U2.5T3R4, *Cynosurion cristati*, *Festuco-Brometea*. Lit.: Căteasca (Alexiu, 2006; 2008).

***Leonorus cardiaca* L.** (*Leonorus villosus* Desf. ex Spreng.; *Leonorus tataricus* L.; *Leonorus quinquelobatus* Usteri; *Leonorus glaucescens* Ledeb.), H, Eua, U3T4R4, *Arction lappae*, *Chenopodietea*. Exs.: Village Catanele – chanel.

***Lycopus europaeus* L.**, H, Eua, U5T3R0, *Bidentetea tripartiti*, *Salicetea purpureae*. Exs. Căteasca, Schoolyard.

***Mentha aquatica* L.**, (*Mentha litoralis* (Hartm.) Neuman; *Mentha hirsute* Huds.; *Mentha braunii* Oborny A.), H-Hh, Eur, U5T3R0, *Alnetea glutinosae*, *Molinietalia*, *Phragmitetea*, *Salicion albae*. Exs.: River Neajlov.

Prunella vulgaris L., H, Cosm, U3T3R0, *Alnetea glutinoase*, *Bidentea tripartite*, *Plantaginetea majoris*, *Quercu-Fagetea*. Exs.: Village Cireșu.

PLANTAGINACEAE

Plantago lanceolata L., (*Plantago glabriflora* Sakalo; *Plantago lanugionosa* Bastard), H, Eua, U0T0R0, *Festuco-Brometea*, *Molinio-Arrhenatheretea*. Exs.: Village road Catanele - Oarja.

SCROPHULARIACEAE

Kickxia spuria (L.) Dumort., (*Elatinoides spuria* (L.) Wettst.; *Linaria spuria* (L.) Mill.; *Linaria spuria* (L.) Mill. subsp. *spuria*; *Linaria spuria* (L.) Mill. subsp. *spuria* var. *spuria*), Th, Euc-Med, U2.5T4R4, *Caucalidion*, *Nanocyperetalia*, *Secalietea*. Lit.: Căteasca (Alexiu, 2006; 2008).

Linaria genistifolia (L.) Mill., H, Eua-Cont, U1T3,5R5, *Festuco-Brometea*. Lit.: Căteasca (Alexiu, 2006; 2008).

Veronica chamaedrys L. subsp. *chamaedrys*, H, (Ch), Eua, (Med), U2,5T3R4, *Arrhenatheretalia*. *Prunetalia*, *Rumicion alpine*, *Trifolion medii*. Exs.: Căteasca, Schoolyard.

Veronica hederifolia L. subsp. *hederifolia*, Th, Eua, (Med), U2.5T3R4, *Aphanion*, *Polygono-Chenopodion polyspermi*, *Quercu-Fagetea*, *Secalietea*. Lit.: Căteasca (Alexiu, 2006; 2008).

RUBIACEAE

Cruciata laevipes Opiz, (*Cruciata chersonensis* auct.; *Galium cruciata* (L.) Scop.; *Cruciata ciliate* Opiz), H, Eua, U2.5T3R3, *Alno-Padion*, *Artemisietalia*, *Convolvuletalia*, *Salicion albae*. Lit.: Căteasca (Alexiu, 2006; 2008).

Galium aparine L., (*Galium spurium* L. subsp. *tenereum* (Schleich.) Nyman), Th, Circ, U3T3R3, *Convolvuletalia*. Exs.: Village Coșeri.

Galium mollugo L., (*Galium mollugo* L. subsp. *insubricum* (Gaudin) Arcang.; *Galium mollugo* L. subsp. *elatum* (Thuill.) Syme; *Galium insubricum* Gaudin; *Galium mollugo* L. subsp. *tyrolense* (Willd.) Haeyk; *Galium elatum* Thuill.; *Galium kerneranum* Klokov; *Galium tyrolense* Willd.), H, Eua, U3T0R3, *Arrhenatheretalia*, *Festuco-Brometea*, *Seslerio-Festucion pallentis*, *Teucrium montani*. Exs.: Triptych, village Gruiu.

Galium schultesii Vest., (*Galium aristatum* L. subsp. *schultesii* (Vest) Nyman; *Galium intermedium* auct., non Schult.; *Galium sylvaticum* L. subsp. *schultesii* (Vest) Stoj. et Stef.), G, Euc, U2.5T3R3, *Carpinion betuli*, *Quercu-Fagetea*. Lit.: Căteasca (Alexiu, 2006; 2008).

CAPRIFOLIACEAE

Sambucus ebulus L., (*Sambucus deborensis* Kosanin), H, Eua, (Med), U3T3R4, *Arction lappae*, *Artemisietea*, *Epilobietea angustifolii*. Exs.: Forest Coșeri.

ASTERACEAE

Achillea millefolium* L.** subsp. ***millefolium, H, Eua, U3T0R0, *Agropyro-Rumicion*, *Artemisietea*, *Molinio-Arrhenathereta*, *Polygonion avicularis*. Exs.: Village Catanele.

***Arctium lappa* L.**, (*Arctium majus* Bernh.; *Arctium chaorum* Klokov; *Lappa glabra* Lam.; *Lappa major* Gaertn.; *Lappa officinalis* All.), TH, Eua, U3T3R4, *Arctium lappae*. Exs.: Riverside coppice Catanele.

***Bellis perennis* L.**, H, Eur, (Med), U3T2.5R0, *Cynosurion cristati*, *Molinio-Arrhenatheretea*. Exs.: Căteasca, Schoolyard.

***Bidens tripartite* L.**, (*Bidens bullata* L.; *Bidens orientalis* Velen.), Th, Eua, U5T0R0, *Bidention tripartite*. Lit.: Căteasca (Alexiu, 2006; 2008).

Carduus crispus* L. subsp. *crispus, (*Carduus crispus* L. subsp. *agrestis* (A. Kern.) Vollm.; *Carduus incanus* Klokov), TH, Eur, U4T3R0, *Alno-Padion*, *Artemisietea*, *Salicion albae*. Lit.: Căteasca (Alexiu, 2006; 2008).

***Carduus personata* (L.) Jacq.**, H, Euc, U4.5T2.5R4, *Adenostylion alliariae*, *Alno-Padion*, *Filipendulo-Petasition*. Exs.: Chanel, Catanele.

***Centaurea cyanus* L.**, Th-TH, Cosm, U3T4R3, *Aperetalia*, *Secalietea*. Exs.: Wheat field, Căteasca.

***Chamomilla recutita* (L.) Rauschert**, (*Matricaria recutita* L.; *Matricaria suaveolens* L.; *Matricaria chamomilla* L. pro parte), Th, Eua, U3T3.5R5, *Aperetalia*, *Chenopodio-Scleranthetea*, *Plantaginetea majoris*, *Puccinellio-Salicornietea*. Exs.: Căteasca, Schoolyard.

***Chondrilla juncea* L.**, (*Chondrilla latifolia* M.Bieb.; *Chondrilla graminea* M.Bieb.; *Chondrilla gummifera* Iljin; *Chondrilla brevirostris* Fisch. et C.A.Mey.; *Chondrilla canescens* Kar. et Kir.; *Chondrilla acantholepis* Boiss.), TH-H, Eua (Cont), U1.5T3.5R4, *Chenopodietea*, *Festucetalia valesicae*, *Festucion vaginatae*, *Festuco-Brometea*, *Secalietea*. Lit.: Căteasca (Alexiu, 2006; 2008).

Cichorium intybus* L.** subsp. ***intybus, H, Eua, U2.5T3.5R4, *Agrostion stoloniferae*, *Arrhenatheretalia*, *Polygonion avicularis*, *Puccinellio-Salicornietea*. Lit.: Căteasca (Alexiu, 2006; 2008).

***Cirsium arvense* (L.) Scop.**, (*Cirsium setosum* (Willd.) M.Bieb.; *Cirsium incanum* (S.G.Gmel.) Fisch.; *Cnicus arvensis* (L.) Roth; *Cirsium horridum* (Wimm. & Grab.) Stankov, non (M.Bieb.) Fisch.; *Cirsium argenteum* Peyer ex Vest), G, Eua, U0T0R0, *Artemisietea*, *Chenopodio-Scleranthetea*, *Epilobietea angustifolii*, *Onopordion acanthii*. Exs.: Maize cultures, village Coșeri.

***Cirsium oleraceum* (L.) Scop.**, (*Cirsium acaulon* (L.) Scop.; *Cnicus oleraceus* L.), H, Eua, U4T3R4, *Alno-Padion*, *Calthion palustris*, *Filipendulo-Petasition*, *Molinietalia*. Lit.: Căteasca (Alexiu, 2006; 2008).

***Conyza canadensis* (L.) Cronq.**, (*Erigeron canadensis* L.; *Trimorpha canadensis* (L.) Lindm.), Th, Adv, U2.5T0R0, *Chenopodietea*, *Festucion vaginatae*, *Sisymbrium officinalis*. Lit.: Căteasca (Alexiu, 2006; 2008).

***Eupatorium cannabinum* L.**, H, Eua, U4T3R0, *Alnion glutinosae*, *Epilobietea angustifolii*, *Filipendulo-Petasition*, *Phragmitetea*, *Salicetea purpureae*. Exs.: Dutina.

***Galinsoga parviflora* Cav.**, (*Galinsoga quinquiradiata* Ruiz et Pav.), Th, Adv, U3.5T0R3, *Polygono-Chenopodietalia*. Lit.: Căteasca (Alexiu, 2006; 2008).

***Matricaria perforata* Merat**, (*Tripleurospermum maritimum* (L.) W.D.J.Koch subsp. *inodorum* (K.Kock) Hyl. Ex Vaar.; *Chamaemelum inodorum* Sch. Bip.), Th-TH, Eua, U0T3R3, *Onopordion acanthi*, *Sisymbrium officinalis*. Lit.: Căteasca (Alexiu, 2006; 2008).

***Senecio vulgaris* L.**, (*Senecio dunensis* Dumort.; *Senecio radiatus* W.D.J.Koch), Th, Eua, U3T0R0, *Chenopodietea*. Lit.: Căteasca (Alexiu, 2006; 2008).

Sonchus arvensis* L. subsp. *arvensis, (*Sonchus vulgaris* Rouy subsp. *arvensis* (L.) Rouy; *Sonchus decorus* Castagne; *Sonchus humilis* N.I.Orlova), G, Eua, U3T3R4, *Polygono-Chenopodion polyspermi*. Lit.: Căteasca (Alexiu, 2006; 2008).

***Sonchus oleraceus* L.**, Th, Cosm, U3T0R0, *Stellarietea mediae*. Lit.: Căteasca (Alexiu, 2006; 2008).

Tanacetum corymbosum* (L.) Schultz Bip. subsp. *corymbosum, (*Pyrethrum subcorymbosum* (Sch.Bip.) Schur; *Pyrethrum corymbiferum* (L.) Schrank; *Chrysanthemum corymbosum* L.), Th, Eua, U2.5T3.5R3, *Festucetalia valesicae*, *Geranion sanguinei*, *Quercetalia pubescentis*, *Quercu-Fagetea*. Exs.: Village Catanele.

***Tarxacum officinale* Weber ex Wiggers**, H, Eua, U3T0R0, *Arrhenatheretalia*, *Artemisietea*, *Plantaginetea majoris*. Exs.: Village Catanele.

Xanthium strumarium* L. subsp. *strumarium, (*Xanthium sibiricum* Patrim ex Widder), Th, Cosm, U3.5T3.5R4, *Chenopodio-Scleranthetea*. Exs.: Riverside coppice, village Catanele.

HYACYNTHACEAE

Scilla bifolia* L. subsp. *bifolia, (*Scilla bifolli* L. subsp. *subtriphyllo* (Schur) Domin), G, Eur, U3.5T3R4, *Alno-Padion*, *Carpinion betuli*, *Quercu-Fagetea*. Exs.: Riverside coppice, village Catanele.

AMARYLLIDACEAE

***Galanthus nivalis* L.**, G, Eur, U3.5T3R4, *Fagetalia sylvaticae*, *Quercu-Fagetea*. Exs.: Village Gruiu.

IRIDACEAE

***Iris pseudocorus* L.**, G-Hh, Eur, U5.5T0R0, *Phragmitetea*, *Alnetea*, *Phragmitetalia*. Exs. Catanele, swampy ditches.

JUNCACEAE

***Juncus bufonius* L.**, (*Juncus dregeanus* C.Presl; *Juncus divaricatus* Gilib.), Th, Cosm, U4.5T0R3, *Bidentetea tripartite*, *Nanocyperetalia*, *Plantaginetalia majoris*. Lit.: Căteasca (Alexiu, 2006; 2008).

POACEAE

Alopecurus pratensis* L.** subsp. ***pratensis, (*Alopecurus pratensis* L. subsp. *alpestris* (Wahlenb.) Selander), H, Eua, U4T3R0, *Agrostion stoloniferae*, *Calthion palustris*, *Filipendulo-Petasition*, *Molinio-Arrhenatheretea*. Lit.: Căteasca (Alexiu, 2006; 2008).

Apera spica-venti* (L.) Beauv.** subsp. ***spica-venti, (*Apera longistea* Klokov), TH, Eua, U3.5T0R2, *Aperetalia*. Lit.: Căteasca (Alexiu, 2006; 2008).

***Avena fatua* L.**, Th, Eua-Med, U3T0R4, *Secalietea*. Lit.: Căteasca (Alexiu, 2006; 2008).

***Bromus sterilis* L.**, (*Bromus grandiflorus* Weigel; *Anisantha sterilis* (L.) Nevski; *Bromus distichus* Moench; *Zerna sterilis* (L.) Panz.), Th, Eua, (Med), U2T4R4, *Arction lappae*, *Chenopodietea*, *Onopordion acanthi*, *Sisymbrium officinalis*. Lit.: Căteasca (Alexiu, 2006; 2008).

***Cynodon dactylon* (L.) Pers.**, (*Dactylon officinale* Vill.), G, Cosm, U2T3.5R0, *Festuco-Brometea*, *Polygonion avicularis*. Lit.: Căteasca (Alexiu, 2006; 2008).

***Digitaria sanguinalis* (L.) Scop.**, (*Digitaria pectiniformis* (Henrard) Tzvelev; *Digitaria aegyptiaca* (Retz.) Willd.; *Panicum sanguinale* L.; *Digitaria gracilis* Guss.; *Digitaria ciliaris* auct., non (Retz.) Koeler), Th, Cosm, U1.5T0R4, *Polygono-Chenopodietalia*. Lit.: Căteasca (Alexiu, 2006; 2008).

***Echinochloa crus-galli* (L.) Beauv.**, (*Echinochloa erecta* (Pollacci) Pignatti; *Panicum crus-galli* L.), Th, Cosm, U4T0R3, *Bidention tripartite*, *Chenopodietea*. Lit.: Căteasca (Alexiu, 2006; 2008).

***Elymus repens* (L.) Gould**, (*Agropyron repens* (L.) P. Beauv.; *Elytrigia repens* (L.) Nevski; *Agropyron repens* (L.) P. Beauv. subsp. *repens* var. *repens*; *Agropyron caesium* J. Presl proles *caesium*; *Triticum repens* L. var. *repens*; *Agropyron caldesii* Goiran; *Elytrigia repens* (L.) Nevski subsp. *repens* var. *repens*; *Agropyron caesium* J. Presl et C. Presl; *Triticum repens* L.), G, Circ, U0T0R0, *Artemisietea*, *Molinio-Arrhenatheretea*, *Agropyro-Rumicion*. Lit.: Căteasca (Alexiu, 2006; 2008); Exs. Village Catanele.

Festuca pratensis* Hudson** subsp. ***pratensis, H, Eua, U3.5T0R0, *Agrostion stoloniferae*, *Molinio-Arrhenatheretea*. Lit.: Căteasca (Alexiu, 2006; 2008).

Phragmites australis* (Cav.) Trin ex Steudel** subsp. ***australis (*Phragmites communis* Trin.; *Phragmites vulgaris* Samp.; *Phragmites pumila* Willk.; *Phragmites gigantea* J. Gay; *Arundo phragmites* L.; *Phragmites loscosii* Willk.), Hh, Cosm, U6T0R4, *Phragmition australis*. Lit.: Căteasca (Alexiu, 2006; 2008). Exs. Meadow Argeș, village Căteasca.

***Poa pratensis* L.**, (*Poa pratensis* L. subsp. *attica* (Boiss. et Heldr.) Rech. F.; *Poa pinegensis* Roshev.; *Poa turfosa* Litv.; *Poa attica* Boiss. et Heldr.), H, Cosm, U3T0R0, *Molinetalia*, *Molinion coeruleae*. Exs.: Village Gruiu.

***Setaria pumila* (Poiret) Schultes**, (*Setaria lutescens* (Weigel) F.T. Hubb.; *Setariopsis glauca* auct., non (L.) Samp.; *Setaria glauca* auct., non (L.) P. Beauv.),

Th, Cosm, U2.5T4R0, *Eragrostetalia*, *Polygono-Chenopodietalia*. Lit.: Căteasca (Alexiu, 2006; 2008).

***Setaria viridis* (L.) Beauv.**, (*Setariopsis viridis* (L.) Samp.), Th, Cosm, U2T3.5R0, *Polygono-Chenopodietalia*. Exs.: Village Catanele.

***Sorghum halepense* (L.) Pers.**, (*Andropogon halepensis* (L.) Brot.), H, Med, U3T4R0, *Stellarietea mediae*. Lit.: Căteasca (Alexiu, 2006; 2008).

Taxonomic analysis of flora

As a consequence of consulting the literature and of the personal research in the field we can say that Căteasca common flora is reepresented by 204 species, distributed in 43 families. The families with the most species are: Asteraceae with 24 species (12%), Ranunculaceae with 20 species (10%), Poaceae with 18 species (9%), Fabaceae with 15 species (7%), Rosaceae with 10 species (5%), Brassicaceae and Lamiaceae with 8 species each (4%), Scrophulariaceae, Apiaceae and Caryophyllaceae with 6 species each (3%), Polygonaceae with 5 species (2%). These 11 families form the core floral background, representing 62% of the flora researched territory. 32 families have 1-4 species, making up 38% of the flora (Fig. 1).

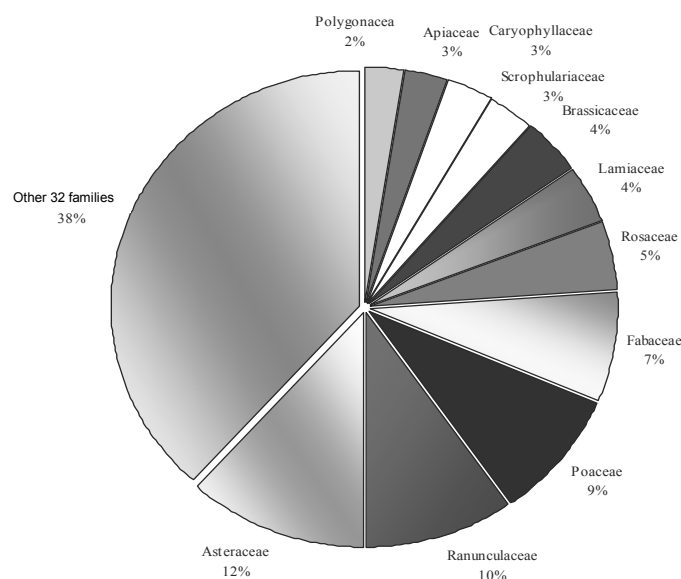


Figure 1 - Taxonomic analysis of flora.

Analysis of biological forms

Flora analysis by the percentage of different bioforms highlights predominance of hemicryptophytes (39%), indicating herbaceous layer mosaic of forests and coppices dominated by phanerophytes, and the presence of large areas of grassland mesophilic in the investigated region.

Follows in order terrophytes (33%), therefore the process of soil erosion (offering good conditions pioneer species) and anthropogenic influences. Chamaephytes and geophytes, fewer in number, are present in forests and graslands. Hydrohelophytes, a limited number, meet the small areas occupied by ponds and rivers (Fig. 2).

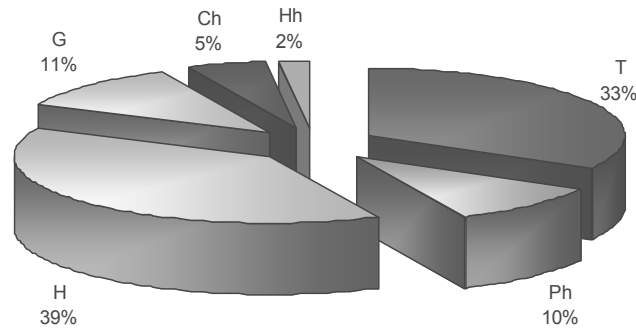


Figure 2 - Bioforms spectrum of flora.

Phytogeographical analysis

The phytogeographic spectrum shows the predominance of Eurasian elements (46%), followed by European (9.58) and cosmopolitan (8.21%). Floristic structure is colored by thermophilic elements of mediterranean origin: Atl-Med, Med (5%), indicating the existence of warm microclimate stations. In term of floristic composition, thermophilic elements are very similar to those described in the southern parts of the country, indicating phyto-historical continuity of these lands (Fig. 3).

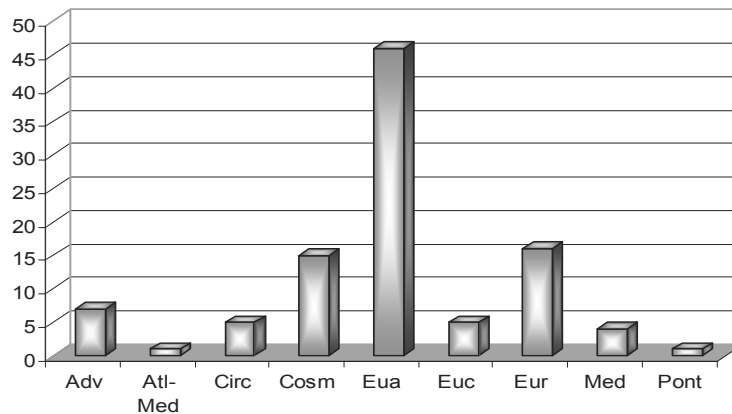


Figure 3 - Floristical elements of flora.

Cosmopolitan and adventitious elements are more common in ruderal and segetal phytocoenosis and formations hygro- and hydrophilic, inhabiting swamps and rivers in the area. Eurasian element of remarkable proportions entering the plant associations, the signal: *Lychnis viscaria*, *Cirsium arvense*, *Sonchus arvensis*, *Achillea millefolium*, *Cichorium intybus*, *Eupatorium cannabinum*, *Taraxacum*

officinale, *Stellaria graminea* etc. European species are represented by: *Galanthus nivalis*, *Scilla bifolia*, *Anemone ranunculoides*, *Tilia cordata*, *Rosa canina*, *Sambucus nigra*, *Trifolium campestre*, *Nigella arvensis*, *Euphorbia amygdaloides*.

Central European species category mentioned: *Galium schultesii*, *Centaurium erythraea*, *Coronilla varia*. Significant presence Atlanto-Mediterranean species *Viola odorata*, as well as the Mediterranean: *Sorghum halepense*, *Bifora radians*, *Oxalis corniculata*. *Geum urbanum*, *Lathyrus aphaca*.

Spectrum of ecological indices

To characterize the flora in the perimeter of Căteasca in terms of ecological affinities were taken into account three major factors: humidity, temperature and soil reaction.

Analyzing the distribution of flora by species based on their requirement to humidity factor (U), it is noted that the species (45%) are mesophilic, as shown there favorable conditions of humidity all over the commune. Mesohygrophilic and hygrophilic species (21%) indicated the presence of excess moisture favors the development of mesohygrophilic and hygrophilic coenosis. Xero-mesophilic species (24%) indicated the presence of states with moisture regim that favors the development of xero-mesophilic grassland types. Compared to them, xerophilic species (2.1%) are much less represented, they appear only islander on sunny slopes inclined. Regarding the behavior of plants in relation to temperature, the temperate climat determines the predominance of micro-mesothermal elements (63%), followed by moderately thermophilic species (12%).

From the point of view of edaphic preferences, of the soil reaction, weakly acid-neutrophilic species have the highest proportion (33%), followed by acid-neutrophilic (24%). A large number are euryionic species (37%), (Fig. 4).

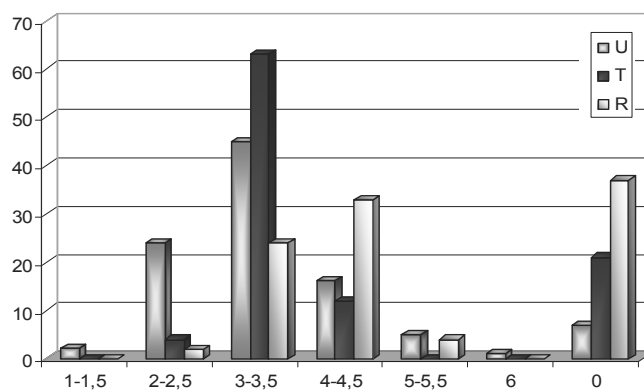


Figure 4 - Ecological indices of flora.

The economic importance of wild flora

- **Culinary herbs** used fresh, canned or as preparations: *Bellis perennis*, *Crataegus monogyna*, *Corylus avellana*, *Fragaria vesca*, *Prunus avium*,

Ranunculus ficaria, *Rosa canina*, *Rubus caesius*, *Rubus idaeus*, *Sinapis arvensis*, *Taraxacum officinale*, *Tilia* sp., *Urtica dioica*.

- **Aromatic and spicy herbs:** *Melilotus officinalis*.

- **Oleaginous plants:** *Sinapis arvensis*.

- **Fodder plants:** *Achillea millefolium*, *Agrostis stolonifera*, *Alopecurus pratensis*, *Bellis perennis*, *Chenopodium album*, *Dactylis glomerata*, *Daucus carota* ssp. *carota*, *Festucapratisensis*, *Fragaria vesca*, *Lathyrus pratensis*, *Lotus corniculatus*, *Lolium perenne*, *Malva sylvestris*, *Medicago lupulina*, *M. sativa*, *Plantago lanceolata*, *P. media*, *Poa nemoralis*, *P. pratensis*, *Polygonum aviculare*, *Salix alba*, *Symphytum officinale*, *Taraxacum officinale*, *Trifolium campestre*, *T. pratense*, *T. repens*, *Vicia cracca*, *Vicia sepium*.

- **Medicinal herbs:** *Achillea millefolium*, *Alnus glutinosa*, *Arctium lappa*, *Asarum europeum*, *Betula pendula*, *Capsella bursa-pastoris*, *Centarium erythraea*, *Convolvulus arvensis*, *Corylus avellana*, *Crataegus monogyna*, *Dryopteris filix-mas*, *Echium vulgare*, *Equisetum arvense*, *Euphorbia cyparissias*, *Fragaria vesca*, *Galanthus nivalis*, *Geum urbanum*, *Hypericum perforatum*, *Lythrum salicaria*, *Malva sylvestris*, *Melilotus officinalis*, *Plantago lanceolata*, *P. media*, *Polygonum aviculare*, *Prunus avium*, *Primula veris*, *Ranunculus acris*, *Rosa canina*, *Rubus idaeus*, *Robinia pseudacacia*, *Rumex acetosella*, *Salix alba*, *Sambucus nigra*, *Taraxacum officinalis*, *Tilia cordata*, *Urtica dioica*.

- **Melliferous plants:** *Alnus glutinosa*, *Anemone nemorosa*, *A. ranunculoides*, *Bellis perennis*, *Betula pendula*, *Chelidonium majus*, *Clematis vitalba*, *Convolvulus arvensis*, *Corylus avellana*, *Crataegus monogyna*, *Daucus carota*, *Echium vulgare*, *Fragaria vesca*, *Galanthus nivalis*, *Lamium maculatum*, *Lotus corniculatus*, *Lycopus europaeus*, *Lythrum salicaria*, *Malva sylvestris*, *Medicago sativa*, *M. lupulina*, *Melilotus officinalis*, *Mentha aquatica*, *Polygonum aviculare*, *Primula veris*, *Prunus avium*, *Robinia pseudacacia*, *Rosa canina*, *Rubus caesius*, *R. idaeus*, *Salix alba*, *Sambucus nigra*, *Scabiosa ochroleuca*, *Scrophularia nodosa*, *Taraxacum officinalis*, *Tilia cordata*, *Tilia platyphyllos*, *Trifolium arvense*, *T. repens*, *T. pratense*, *Vicia cracca*, *V. sepium*.

- **Plant raw materials, wood working, pulp and paper:** *Alnus glutinosa*, *Betula pendula*, *Prunus avium*, *Salix* sp. (4 species), *Tilia cordata*, *T. platyphyllos*.

- **Plant raw materials for the chemical, dyes and leather production:** *Alnus glutinosa*, *Arctium lappa*, *Betula pendula*, *Echium vulgare*, *Genista tinctoria*, *Ligustrum vulgare*, *Lycopus europaeus*, *Malva sylvestris*, *Polygonum aviculare*, *Salix alba*, *Sambucus nigra*, *Taraxacum officinalis*, *Urtica dioica*.

- **Plant raw materials for the textile industry:** *Tilia cordata*, *Tilia platyphyllos*, *Urtica dioica*.

- **Plant materials handicrafts and domestic industry:** *Clematis vitalba*, *Corylus avellana*, *Ligustrum vulgare*, *Salix* sp. (4 species), *Sambucus nigra*.

- **Ornamental plants:** *Acer* sp. (3 species), *Bellis perennis*, *Betula pendula*, *Corylus avellana*, *Galanthus nivalis*, *Ligustrum vulgare*, *Tilia cordata*, *T. platyphyllos*.

CONCLUSIONS

1. Summarizing data in the literature with personal research results, the commune Căteasca flora was estimated at 204 species belonging to 43 families.
2. Analyzing the bioforms on observed that the presence of a large percentage of hemicryptophytes signifies a rich herbaceous layer in forest groups, and the presence of mesophilic grasslands in the region studied.
3. Dominant share of phytogeographic elements hold Eurasian and European species, followed by the cosmopolitan. It is worth noting the presence of a small number of thermophilic elements of Mediterranean origin, which indicates the existence of warm microclimate stations.
4. Flora analysis of ecological bases reflects favorable conditions for temperature influences evident southern, moisture and soil trophic which favors the development of woody and herbaceous phytocoenoses, mesophilic and mesoxerophilic.
5. The possibilities for rational exploitation of the potential of regional plant are mentioned.

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