

## THE POACEAE FAMILY FROM THE LOWER BASIN OF THE MOTRU RIVER

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**Abstract.** *The paper presents the 111 taxa from Poaceae Family, which were identified in the Lower Basin of the Motru River.*

**Keywords:** *Basin, Motru, flora, Poaceae.*

**Rezumat.** *Poaceele din Bazinului inferior al Motrului. Lucrarea prezintă 111 taxoni din familia Poaceae identificați în Bazinul inferior al râului Motru.*

**Cuvinte cheie:** *Bazin, Motru, flora, Poaceae.*

### INTRODUCTION

From the geographical point of view, the Lower Basin of the Motru River lies in the western part of the Getic Piedmont, with the coordinates: 44° 55' north latitude and 23° 45' east longitudes. The studied area is 691 Km<sup>2</sup>. From the administrative-territorial point of view, the territory under research is located at the borderline between the counties of Gorj and Mehedinți – the borderline starts in the eastern part of the Negoiești Hills (Comănești-Mehedinți, altitude 388 m) and reaches Valea Jiului near Gura Motrului (altitude 110 m). Being situated in the south-western part of the country and of the Getic Piedmont, the studied area has a Central-European climate with sub-Mediterranean influences.

In the territory under research, there have been made floristic and phytosociological studies between 1997 and 2005, within the PhD thesis (COSTACHE I., 2005).

### MATERIALS AND METHODS

The first stage in the research of the Lower Basin of the Motru River was represented by looking into the bibliographic material. Against the background of this bibliographic information there were carried out, several times, personal studies in the field, in order to identify and inventories all the species, to watch all their vegetation stages, to notice the biotope characteristics, to take photos, to collect and preserve the species for a thorough checking in the laboratory, as well as to enrich the Herbarium of the University of Craiova. The collected and preserved material was determined by using specialty literature: Romanian Flora, Flora Europaea, The Illustrated Flora of Romania (BELDIE AL., 1977; CIOCÂRLAN V., 2000 etc.) and others. The critical taxa were checked by Prof Dr. Vasile Ciocârlan and compared to other materials found in the great herbariums of the country (Bucharest, Cluj and Craiova). The terminology of the taxa was adopted according to ROTHMALER W., 2002; we have taken into consideration the International Botanical Terminology Index (Code de Tokyo, 1993). For the synonymies, we have taken into account the index worked out by KERGUÉLEN M., 1993.

The species were defined within the following systematical units: Phylum, Subphylum, Class, Order, Family and Genus (here, the species are alphabetically presented).

The description of the species includes: scientific name, author (authors), equivalent names, life expectancy, biological form, ecology, territories for rare species (for frequently met species there is no indication of locality), geoelement and coenotaxonomic belonging.

The coenotaxonomic belonging of the species, as well as their affiliation to high-leveled coenotaxonomic units, were made according to RODWELL & al. 2002 etc.

Abbreviations and conventional signs used in our paper:

Systematic units (taxa): Sp. - species; subsp.- underspecies; var. - variety.

Life expectancy: ☉ - yearly; e, - perennial.

Bioforms (biological forms, life forms): T. - terrophytes (annual plants which go over unfavorable conditions during winter or summer under the form of seeds); H. - hemicriptomphytes (perennial plants whose regeneration organs are located at the soil level and are protected, during winter, by vegetal remains or snow).

Frequency (spreading level): Freq. - frequent (numerous specimens with an odd spreading on large areas); Spor. - sporadic (few specimens spread in few stations); R. - rare (very few specimens spread in 1-2 stations).

Ecologic characterization: significance of the indexes U T R used in the paper in order to simplify the carrying out of the spectra when studying vegetation (according to POPESCU A. & SANDA V., 1998).

Soil humidity level (U<sub>1-6</sub>): U<sub>1</sub> - xerophytes (they grow in dry soils and they can stand the prolonged dryness of the soil); U<sub>2</sub> - xeromesophyte; U<sub>3</sub> - mesophytes (in soils with average humidity, they cannot stand prolonged dryness); U<sub>4</sub> - mesohygrophyte; U<sub>5</sub> - hygrophyte (they grow in wet soils, and their roots are under water or in swampy areas); U<sub>6</sub> - hydrophyte (according to the author - ultrahydrophyte), (plants which grow in water, the regeneration organs are found under water); U<sub>3(5)</sub> - alternately hygrophyte (with oscillations of the humidity level during the plants' vegetation period); U<sub>1-5</sub>, ( includes U<sub>1-3</sub>, U<sub>2-5</sub> etc.) - eurip. = euriphyte (with large amplitude against the soil humidity).

Heat level (T): T<sub>1</sub> - hecistothermic; T<sub>2</sub> - microthermic; T<sub>3</sub> - mesothermic; T<sub>4</sub> - subthermophytes (moderately thermophytes); T<sub>5</sub> - thermophytes; T<sub>1-5</sub> (include T<sub>1-4</sub>, T<sub>2-4</sub>, T<sub>2-5</sub>, T<sub>3-5</sub>) - euriterm. = euriterms.

Acidity level (R): R<sub>1</sub> - high acidophilus species; R<sub>2</sub> - acidophilus; R<sub>3</sub> - acido-neutrophyle; R<sub>4</sub> - low acid-neutrophyle; R<sub>5</sub> - neutral-basophile; R<sub>1-5</sub> - (includes R<sub>1-4</sub>, R<sub>1-3</sub>, R<sub>2-5</sub> etc.) - eurionic.

Geoelement (phytogeographical elements, origin of the species): Adv.- adventive (species which appeared because of man's inconstant activity); Am. - America; As. - Asia; Atl.- Atlantic; Balc. - Balkan; Circ. - Circumpolar (spread in the northern part of Eurasia and North America); Cosm. - Cosmopolite (large spreading all over the world); Euras. - Eurasian; Euras. cont.- Eurasian continental; Eur. - European; Eur. centr. - Central European; Eur. cont. - European continental; Medit. - Mediterranean; Pont. - pontic (North of the Black Sea); Pan. - Panonic (In the Panonic Plain); Submedit. - SubMediterranean; Subatl. - Subatlantic.

Other abbreviations: E. - east; GJ. - Gorj; MH. - Mehedinți; N. - north; Sol.- soils; S. - south; V. - west.

## RESULTS AND DISCUSSIONS

The conspectus of the flora in the Lower Basin of the Motru River includes about 1.120 vascular taxa (COSTACHE I., 2005), among which, Poaceae family have 111 taxa.

### SPERMATOPHYTES

#### MAGNOLIOPHYTES (Angiosperms)

#### LILIOPSIDA (Monocotyledonata)

#### POALES (GRAMINAE)

#### Poaceae (Gramineae)

1. *Aégilops cylíndrica* HOST - ☉, T., Spor. U<sub>2</sub>T<sub>4</sub>R<sub>3-4</sub>. Cont. euras. *Thero-Airion*, *Onopordion*, *Stellarietea mediae*, *Festucetalia valesiacae*.
2. *Agróstis canína* L. subsp. *canína* - e, H., Frecv. U<sub>3-4</sub>T<sub>3</sub>R<sub>3</sub>. Euras. *Arrhenatheretalia*.  
- var. *mítica* Gaud. - U<sub>3</sub>T<sub>3</sub>R<sub>3-4</sub> MH: Meriș, Broșteni, Strehaia (Ciochiuța).  
- subsp. *stolonífera* BLYTT [subsp. *transilvánica* (SCHUR) ASCH. & GRAEBN.] - Spor. U<sub>4-5</sub>T<sub>3</sub>R<sub>3</sub>. MH: Comănești, Crainici, Câmpu Mare, Stroești, Florești, Zegujani.
3. *A. capilláris* L. [A. *tenuis* SIBITH.] - e, H., Frecv. (Negoești-Strehaia). U<sub>3</sub>T<sub>3</sub>R<sub>3</sub>. Circ. *Arrhenatheretalia*.
4. *A. gigantéa* ROTH - e, H.(G.), Frecv. U<sub>4-5</sub>T<sub>3-5</sub>R<sub>4</sub>. Euras. *Arrhenatheretalia*, *Phragmitetalia*, *Calthion palustris*.
5. *A. stolonífera* L. - e, H., Frecv. U<sub>4-5</sub>T<sub>3-5</sub>R<sub>2-5</sub>. Circ. Car. *Molinio-Arrhenatheretea*, *Molinetalia*, *Potentillion anserinae*.
6. *Áira elegantíssima* SCHUR [Á. *capilláris* HOST, Á. *élegans* WILLD. ex. GAUDIN p. p.] var. *biaristáta* GREN. & GODR. [Á. *ambígua* G. DE NOTARIS non MICHX. & RICH.] - ☉, T., Spor. U<sub>2</sub>T<sub>4</sub>R<sub>3-4</sub>. MH: Bala (Comănești, Pestița, Molani, Valea Mare, Crainici), Câmpu Mare; GJ: Negoești, Glogova - Motru. Centr. eur.-medit. *Thero-Airion*.
7. *Alopecúrus aequális* SOBOL. [A. *fulvus* SM.] - ☉, ☉☉, T.-Ht., Frecv. U<sub>4-5</sub>T<sub>3</sub>R<sub>5</sub>. Circ. Car. *Bidentetea tripartiti*, *Bidention tripartiti*, *Nanocyperion*, *Phragmition communis*.
8. *A. geniculátus* L. - ☉, ☉☉, e, T., Ht., H., Spor. U<sub>4</sub>T<sub>3-5</sub>R<sub>3-4</sub>. GJ: Cătunele, Steic, Lupoia, Motru, Samarinești; MH: Meriș, Broșteni, Corcova, Comanda, Lunca Banului, Arginești, Gura Motrului. Cosm. Car. *Molinio-Arrhenatheretea*, *Molinetalia*, *Potentillion anserinae*, *Bidention tripartiti*, *Nanocyperion*.
9. *A. praténsis* L. subsp. *praténsis* - Coadă vulpii - e, H., Frecv. U<sub>4</sub>T<sub>3</sub>R<sub>3-5</sub>. Euras. Car. *Molinio-Arrhenatheretea*, *Molinetalia*.  
- subsp. *pseudonígricans* O. SCHWARZ [A. *nígricans* auct. non HORNEM., A. *praténsis* var. *obsúrus* (GRISEB.) ASCH. & GRAEBN.] - Frecv. U<sub>2-3</sub>T<sub>3</sub>R<sub>4</sub>. *Festuco-Brometea*.
10. *Anthoxánthum odorátum* L. - e, H., Frecv. U<sub>3</sub>T<sub>1-4</sub>R<sub>3-4</sub>. Euras. Car. *Molinio-Arrhenatheretea*.
11. *Apéra spíca-vénti* (L.) P. BEAUV. - Iarba vântului - ☉, T., Spor. (local frecv.). U<sub>2-3(4)</sub>T<sub>2-5</sub>R<sub>2-4</sub>. Euras. Car. *Stellarietea mediae*.
12. *Arrhenátherum elátius* (L.) P. BEAUV. ex. J. PRESL & C. PRESL - e, H., R., U<sub>3</sub>T<sub>3</sub>R<sub>4</sub>. GJ: Steic, Valea Mânăstirii, Lupoia. Euras. Car. *Molinio-Arrhenatheretea*, *Arrhenatherion*, *Agropyretalia repentis*.
13. *Avéna fátua* L. - ☉, T., Frecv. U<sub>2</sub>T<sub>3-5</sub>R<sub>3-4</sub>. Euras. Car. *Stellarietea mediae*, *Centaureetalia cyani*.
14. *Avénula compréssa* (HEUFF.) W. SAUER & CHMELITSCHK [Ávena *compréssa* HEUFF., *Helictotríchon compréssum* (HEUFF.) HENRARD] - e, H., Frecv. U<sub>2-3</sub>T<sub>4</sub>R<sub>4</sub>. Pont.-pan.-balc. *Festuco-Brometea*.
15. *Brachypódium pinnátum* (L.) P. BEAUV. - e, H., Spor. (Negoești - Strehaia). U<sub>2-3</sub>T<sub>4</sub>R<sub>4</sub>. Euras. (submedit.). Car. *Festuco-Brometea*, *Danthonion-Brachypodion*, *Geranion sanguinei*, *Cephalanthero-Fagion sylvaticae*, *Quercion frainetto*.
16. *B. sylváticum* (HUDS.) P. BEAUV. - e, H., Frecv. U<sub>3-4</sub>T<sub>3</sub>R<sub>4</sub>. Euras. (submedit.). Car. *Quercio-Fagetea*.
17. *Bríza média* L. - e, H., Frecv. U<sub>2-3(4)</sub>T<sub>3</sub>R<sub>3</sub>. Euras. Car. *Festuco-Brometea*, *Arrhenatheretalia*.
18. *Brómus arvénsis* L. - ☉, ☉ de iarnă, T.-Ht., Frecv. U<sub>2-3</sub>T<sub>3</sub>R<sub>3-4</sub>. Euras. (submedit.). Car. *Stellarietea mediae*, *Atriplici-Chenopodietalia albi*.

19. *B. benekénii* (LANGE) TRIMEN [*B. áasper* auct., *B. ramósus* subsp. *benekénii* (LANGE) LINDB., *Zérna benekénii* (LANGE) LINDMAN, *Bromópsis benekénii* (LANGE) HOLUB] - e, H, U<sub>3-4</sub>T<sub>3</sub>R<sub>3</sub>. Euras. Car. *Quercu-Fagetea*, *Fagetalia sylvaticae*, *Carpinion betuli*, *Origanetalia vulgaris*.
20. *B. commutátus* SCHRAD. - ☉, ☉ de iarnă, T.-Ht., Frecv. U<sub>2-4</sub>T<sub>4</sub>R<sub>2-5</sub>. Euras. (submedit.). *Festuco-Brometea*, *Arrhenatheretalia*.  
- var. *apricórum* SIMONK. - Spor. MH: Comănești, Strehăia, Cerângani, Breznița, Butoiești, Buicești, Arginești; GJ: Glogova, Văgiulești.
21. *B. hordeáceus* L. [*B. mólilis* L.] - ☉, ☉ de iarnă, T.-Ht., Frecv. U<sub>2-4</sub>T<sub>4</sub>R<sub>2-5</sub>. Euras. (submedit.). *Arrhenatherion*, *Sisymbriion officinalis*.
22. *B. inérmis* LEYSS. [*Zérna inérmis* (LEYSS.) LINDMAN, *Bromópsis inérmis* (LEYSS.) HOLUB] - Obsigă nearistată, Târsacă - e, H. Frecv. U<sub>2-3</sub>T<sub>4</sub>R<sub>4</sub>. Euras. cont. Car. *Artemisietea vulgaris*, *Agropyretalia repentis*, *Festucetalia valesiacae*, *Sisymbriion officinalis*.
23. *B. japónicus* THUNB. [*B. pátilus* MERT. & W. D. J. KOCH] - ☉, ☉ de iarnă, T.-Ht., Frecv. U<sub>2</sub>T<sub>4</sub>R<sub>4</sub>. Euras. cont. Car. *Stellarietea mediae*, *Caucalidion*, *Atriplici-Chenopodietalia albi*.
24. *B. ramósus* HUDS. [*B. áasper* MURRAY, *B. serótinus* BENEKEN, *Zérna ramósa* (HUDS.) LINDMAN, *Bromópsis ramósa* (HUDS.) HOLUB] - e, H., Frecv. U<sub>3</sub>T<sub>3</sub>R<sub>4</sub>. Eur. centr. și de SV. *Fagetalia sylvaticae*, *Atropetalia*, *Prunetalia spinosae*.
25. *B. squarrósus* L. - ☉, ☉ de iarnă, T.-Ht. Frecv. U<sub>1-2</sub>T<sub>3</sub>R<sub>4</sub>. Cont. euras. Car. *Stellarietea mediae*, *Dauco-Melilotion*.  
- var. *megastáchys* (BORBÁS) GRECESCU [*B. megastáchys* BORBÁS];  
- var. *villósus* (GMEL.) KOCH. [*B. villósus* K.C. GMEL.] - MH: Breznița, Butoiești, Buicești, Arginești.
26. *B. stérilis* L. - ☉, T., Frecv. N<sub>3-4</sub>, U<sub>2</sub>T<sub>4</sub>R<sub>4</sub>. Euras. (submedit.). Car. *Stellarietea mediae*, *Sisymbriion officinalis*.  
- var. *lanuginósus* (ROHLENA) ASCH. & GRAEBN. [*B. stérilis* f. *lanuginósus* ROHLENA] - Frecv.
27. *B. tectórum* L. [*Anisántha tectórum* (L.) NEVSKI] - ☉, T., Frecv. U<sub>1-2</sub>T<sub>4-5</sub>R<sub>4</sub>. Euras. cont. Car. *Stellarietea mediae*, *Sisymbriion officinalis*.  
- var. *longipílus* (KUMM. & SENDTN.) BORBÁS [*B. longipílus* KUMM. & SENDTN.] - MH: Breznița, Butoiești, Buicești, Arginești;  
- var. *rúbens* SCHUR - MH: Breznița, Butoiești, Buicești, Arginești, Gura Motrului.
28. *Calamagróstis epigéjos* (L.) ROTH - e, H.(G.), Frecv. U<sub>1-5</sub>T<sub>3</sub>R<sub>1-5</sub>. Euras. Car. *Artemisietea vulgaris*, *Agropyretalia repentis*, *Salicion albae*, *Epilobion angustifolii*.
29. *C. pseudophragmites* (HALLER fil.) KOELER - e, H., MH: Lunca Banului (COSTACHE I., 2006), Euras. cont.
30. *Catabrósa aquática* (L.) P. BEAUV. [*Glyceria aquática* (L.) J. PRESL. & C. PRESL. non (L.) WAHLBENB.] - e, H., Frecv. U<sub>4-5</sub>T<sub>2-3</sub>R<sub>4</sub>. Circ. *Glycerio-Sparganion*, *Bidention tripartiti*.
31. *Chrysopógon grýllus* (L.) TRIN. [*Andropógon grýllus* L.] - e, G., Spor. U<sub>1-2</sub>T<sub>4</sub>R<sub>4</sub>. MH: Comănești, Câmpu Mare, Strehăia, Cerângani, Butoiești, Arginești, Gura Motrului; GJ: Glogova-Motru, Cătunele, Steic, Lupoaia, Motru, Samarinești. Submedit. Car. *Festuco-Brometea*, *Danthonio-Chrysopogonetalia*.
32. *Cleistogénes serótina* (L.) KENG [*Festúca serótina* L.] - e, G., Spor. U<sub>1-2</sub>T<sub>4</sub>R<sub>4</sub>. MH: Cerângani, Butoiești, Arginești. Centr. eur.-medit. Car. *Festuco-Brometea*, *Festucion valesiacae*.
33. *Crýpsis alopecuroídes* (PILLER & MITTERP.) SCHRAD. [*Heleóchloa alopecuroídes* (PILLER & MITTERP.) HOST ex ROEM.] - ☉, T., Frecv. U<sub>3-4</sub>T<sub>4</sub>R<sub>4-5</sub>. MH: Meriș, Corcova, Lunca Banului. Euras. Car. *Isoëto-Nanojuncetea*, *Nanocyperion*.
34. *Cýnodon dáctylon* (L.) PERS. - e, G., Frecv. U<sub>2</sub>T<sub>4</sub>R<sub>4-5</sub>. Cosm. Car. *Stellarietea mediae*.
35. *Cynosúrus cristátus* L.- e, H., U<sub>3</sub>T<sub>3</sub>R<sub>3</sub>. Eur. Car. *Molinio-Arrhenatheretea*, *Cynosurion cristati*.
36. *C. echinátus* L. - ☉, T., Frecv. U<sub>2</sub>T<sub>4</sub>R<sub>4</sub>. GJ: Glogova (MORARIU I., 1972). Medit. *Chelidonio-Robinietalia*, *Sisymbriion officinalis*.
37. *Dáctylis glomeráta* L. - e, H., Frecv. U<sub>2-3</sub>T<sub>2-5</sub>R<sub>4</sub>. MH: Arginești-Gura Motrului (BUIA AL. & al. 1961). Euras. Car. *Molinio-Arrhenatheretea*, *Arrhenatheretalia*, *Atropetalia*, *Alno-Ulmion*.
38. *D. polýgama* HORV. [*D. aschaersoniána* GRAEBN.] - e, H., Spor. U<sub>3</sub>T<sub>3</sub>R<sub>3</sub>. MH: Bala, Câmpu Mare, Stroești, Broșteni, Corcova, Pârvulești, Breța, Vlădășești, Strehăia, Cerângani, Butoiești, Buicești; GJ: Negoiești, Glogova, Samarinești, Văgiulești. Centr. eur. Car. *Quercu-Fagetea*, *Fagetalia sylvaticae*, *Carpinion betuli*.
39. *Danthónia alpína* VEST [*D. calýcina* (VILL.) RCHB. non (LAM.) ROEM. & SCHULT. nom. confus.; *D. provinciális* DC. nom. illeg.] - e, H., Frecv. U<sub>2-3</sub>T<sub>4</sub>R<sub>3-4</sub>. MH: Bala, Câmpu Mare, Stroești, Broșteni, Corcova, Pârvulești, Breța, Vlădășești, Strehăia, Cerângani, Butoiești, Buicești; GJ: Negoiești, Glogovei, Samarinești, Văgiulești. Centr. eur.-medit. Car. *Festuco-Brometea*, *Danthonio-Brachypodion*.
40. *D. decúmbens* (L.) DC. [*Sieglíngia decúmbens* (L.) BERNH.] - e, H., Spor. U<sub>3</sub>T<sub>3</sub>R<sub>2-3</sub>. Eur. *Danthonio-Brachypodion*.
41. *Dasypýrum villósum* (L.) P. CANDARGY [*Haynaldia villósa* (L.) SCHUR] - ☉, T., Frecv. U<sub>2</sub>T<sub>4</sub>R<sub>4-5</sub>. Medit. *Thero-Airion*, *Festuco-Brometea*.
42. *Dichánthium ischémum* (L.) ROBERTY [*Andropógon ischémum* L., *Bothrióchloa ischémum* (L.) KENG] - Bărboasă - e, H., Frecv. U<sub>1-2</sub>T<sub>4</sub>R<sub>3</sub>. Euras. (submedit.). *Festuco-Brometea*.
43. *Digitária sanguinális* (L.) SCOP [*Panicum sanguinále* L.] - ☉, T., Frecv. U<sub>2-3</sub>T<sub>3-5</sub>R<sub>4</sub>. Cosm. Car. *Stellarietea mediae*.

44. *Echinóchloa crus-gállii* (L.) P. BEAUV. - ☉, T., Frecv. U<sub>3-4(5)</sub>T<sub>3-5</sub>R<sub>4-5</sub>. Cosm. Car. *Oryzetea sativae*, *Stellarietea mediae*, *Atriplici-Chenopodietalia albi*, *Bidention tripartiti*.
45. *Élymus hispidus* (OPIZ) MELDERIS [*Triticum intermedium* HOST, *Agropyron intermedium* (HOST) P. BEAUV., *Elytrigia intermedia* (HOST) NEVSKI] - e, G., Frecv. U<sub>2</sub>T<sub>4</sub>R<sub>4</sub>. Cont. euras. Car. *Artemisietea vulgaris*, *Festucetalia valesiacae*.
46. *É. repéns* (L.) GOULD [*Triticum repéns* L., *Agropyron repéns* (L.) P. BEAUV., *Elytrigia repéns* (L.) DESV. ex NEVSKI] - Pir târâtor - e, G., Frecv. U<sub>2-3(4)</sub>T<sub>4</sub>R<sub>4-5</sub>. Circ. Car. *Artemisietea vulgaris*, *Molinio-Arrhenatheretea*, *Potentillion anserinae*.
47. *Eragrostis minor* HOST [*E. poaeoides* P. BEAUV.] - ☉, T., Frecv. U<sub>2</sub>T<sub>4</sub>R<sub>3-4</sub>. Centr. eur.-medit. Car. *Stellarietea mediae*, *Eragrostion*.
48. *E. pilósa* (L.) P. BEAUV. - ☉, T., Spor. U<sub>2</sub>T<sub>4</sub>R<sub>3-4</sub>. Centr. eur.-medit. Car. *Stellarietea mediae*.
49. *Festúca arundinácea* SCHREB. subsp. *orientális* (HACK.) TZVELEV (*F. orientális* KREZ. et BOROV, *F. elátior* L. subsp. *orientális* HACK.) - e, H., Spor. U<sub>4</sub>T<sub>2</sub>R<sub>4</sub>. MH: Buicești (Pluta), Ciochiuța-Strehaia (BUIA AL. & al., 1961). Eur. centr. and SE. *Molinietalia*, *Agrostion*, *Agropyro-Rumicion*, *Puccinellietalia*.
50. *F. drymėja* MERT. & KOCH [*F. montana* M. BIEB.] - e, H., Spor. U<sub>3</sub>T<sub>2</sub>R<sub>3</sub>. MH: Bala, Câmpu Mare, Stroești, Broșteni, Corcova, Pârvulești, Breța, Vlădășești, Strehaia, Cerângani, Butoiești, Buicești, Arginești, Gura Motrului; GJ: Negoiești, Glogova, Samarinești, Văgiulești. Eur. centr. și SE. Car. *Quercu-Fagetea*, *Aremonio-Fagion*.
51. *F. gigantéa* (L.) VILL. - e, H., Frecv. U<sub>4</sub>T<sub>3</sub>R<sub>3-4</sub>. Euras. Car. *Quercu-Fagetea*, *Fagetalia sylvaticae*, *Alno-Ulmion*.
52. *F. heterophýlla* LAM. - e, H., Frecv. U<sub>2-3</sub>T<sub>3</sub>R<sub>4</sub>. Centr. eur.-submedit. Car. *Quercu-Fagetea*, *Carpinion betuli*, *Quercion petraeae*.
53. *F. praténsis* HUDS. - e, H., Frecv. U<sub>3-4</sub>T<sub>2</sub>R<sub>3-5</sub>. Euras. Car. *Molinio-Arrhenatheretea*.
54. *F. pseudodalmática* KRAJINA ex DOMIN - e, H., Spor. U<sub>2</sub>T<sub>4</sub>R<sub>4</sub>. MH: Bala (COSTACHE I., 2004), Câmpu Mare; GJ: Negoiești, Glogova. Eur. centr. și de E. Car. *Festuco-Brometea*, *Quercion petraeae*.
55. *F. púlchra* SCHUR [*F. pseudovína* HACK. ex WIESB., *F. valesiaca* subsp. *parviflora* (HACK.) TRACEY] - e, H., Spor. U<sub>2</sub>T<sub>4</sub>R<sub>3-4</sub>. Cont. euras. *Festucetalia valesiacae*.
56. *F. rúbra* L. subsp. *rúbra* [*F. rúbra* subsp. *genuína* HACK.] - Păiuș roșu - e, H., Spor. U<sub>3-4</sub>T<sub>3-4</sub>R<sub>3</sub>. MH: Bala, GJ: Negoiești, Glogova (Cămuiești). Circ. Car. *Molinio-Arrhenatheretea*, *Cynosurion cristati*.  
- subsp. *júncea* (HACK.) K. RICHT. - Spor. U<sub>3</sub>T<sub>4</sub>R<sub>4</sub>. GJ: Valea Perilor, Steic, Cătunele, Motru. *Festucetalia valesiacae*, *Cynosurion cristati*.
57. *F. rupícóla* HEUFF. [*F. sulcáta* (HACK.) NYMAN, *F. hirsúta* HOST, *F. valesiaca* subsp. *sulcáta* (HACK.) SCHINZ & KELLER] - e, H., Frecv. U<sub>2</sub>T<sub>4</sub>R<sub>4</sub>. Cont. euras. Car. *Festuco-Brometea*, *Festucion valesiacae*.
58. *F. valesiaca* SCHLEICH. ex GAUDIN - e, H., Frecv. U<sub>1-2</sub>T<sub>4</sub>R<sub>4</sub>. Euras. cont. Car. *Festuco-Brometea*, *Festucion valesiacae*.
59. *Glycéria flúitans* (L.) R. BR. - e, H.(HH.), Frecv. U<sub>5</sub>T<sub>3</sub>R<sub>0</sub>. MH: Arginești-Gura Motrului (BUIA AL. & al., 1961). Euras. Car. *Phragmitetea australis*, *Glycerio-Sparganion*, *Phragmition communis*, *Calthion palustris*.
60. *G. máxima* (HARTM.) HOLMB. [*G. aquática* (L.) WAHLBENB. non (L.) J. PRESL. & C. PRESL.] - e, H.(HH.), Frecv. U<sub>5</sub>T<sub>3</sub>R<sub>4</sub>. MH: Arginești-Gura Motrului (BUIA AL. & al., 1961). Circ. Car. *Phragmitetea australis*, *Phragmitetalia*.
61. *G. notáta* CHEVALL. [*G. plicáta* (FR.) FR.] - e, H.(HH.), Frecv. U<sub>5-6</sub>T<sub>3</sub>R<sub>4-5</sub>. MH: Arginești-Gura Motrului (BUIA AL. & al., 1961). Circ. Car. *Glycerio-Sparganion*, *Bidention tripartiti*.
62. *Hólcus lanátus* L. - e, H., Frecv. U<sub>3-4</sub>T<sub>3</sub>R<sub>2-5</sub>. Cosm. Car. *Molinio-Arrhenatheretea*.
63. *Hordélymus europaéus* (L.) JESS. ex HARZ [*Cuviéra europaéa* (L.) KOELER, *Élymus europaéus* L.] - e, H., Spor. U<sub>3-4</sub>T<sub>3</sub>R<sub>3</sub>. MH: Bala, Câmpu Mare, Strehaia, Cerângani; GJ: Negoiești, Glogova. Eur. centr. Car. *Quercu-Fagetea*, *Carpinion betuli*.
64. *Hórdeum marínium* HUDS. [*H. marítimum* WITH., *H. rígídum* ROTH.] subsp. *gussoneánium* (PARL.) THELL. [*H. hýstrix* ROTH., *H. geniculátum* ALL. nom. ambig., *H. geniculátum* M. BIEB., *H. marítimum* STOKES subsp. *gussoniánium* (PARL.) ASCH. & GRAEBN., *H. winkleri* HACK., *H. secálinum* BAUMG.] - ☉, T., R. U<sub>2</sub>T<sub>4</sub>R<sub>4-5</sub>. MH: Corcova (COSTACHE I., 2006), Pluta. Cont. euras. Car. *Puccinellion limosae*.
65. *H. murínium* L. - ☉, T., Frecv. U<sub>2-3</sub>T<sub>4</sub>R<sub>4</sub>. Euras. *Sisymbriion officinalis*.
66. *Leérsia oryzoídes* (L.) SW. [*Phaláris oryzoídes* L., *Oryza clandestína* (WEBER) A. BRAUN] - e, G.(HH.), Spor. U<sub>6</sub>T<sub>3</sub>R<sub>4-5</sub>. MH: Meriș, Comanda, Lunca Banului, Arginești, Gura Motrului; GJ: Steic, Lupoiaia, Motru. Circ. Car. *Phragmitetea australis*, *Glycerio-Sparganion*.
67. *Lólium multiflórum* LAM. [*L. itálicum* A. BRAUN] - ☉, ☉☉, e, T.-H., Spor. U<sub>4</sub>T<sub>3</sub>R<sub>4</sub>. Medit. Car. *Molinio-Arrhenatheretea*, *Arction lappae*, *Sisymbriion officinalis*.
68. *L. perénne* L. - e, H., Frecv. U<sub>3</sub>T<sub>3</sub>R<sub>2-5</sub>. Cosm. Car. *Molinio-Arrhenatheretea*, *Cynosurion cristati*.
69. *Mélica nútans* L. - e, H. (G.). Spor. U<sub>3</sub>T<sub>3-5</sub>R<sub>4</sub>. MH: Lunca Banului, Buicești, Arginești-Gura Motrului. Euras. Car. *Quercu-Fagetea*.
70. *M. transsilvánica* SCHUR [*M. ciliáta* subsp. *transsilvánica* (SCHUR) HUDS.] - e, H., Spor. U<sub>2</sub>T<sub>4</sub>R<sub>4</sub>. MH: Breznița, Butoiești, Arginești. Submedit. Car. *Artemisietea vulgaris*, *Convolvulo arvensisi-Agropyron repentis*, *Festucetalia valesiacae*, *Geranion sanguinei*, *Gallio-Alliarion*.

71. *M. uniflora* RETZ. - e, H., Frecv. U<sub>3</sub>T<sub>4</sub>R<sub>4</sub>. MH: Arginești-Gura Motrului (BUIA AL. & al. 1961). B.S.M. Centr. eur.-submedit. Car. *Quercu-Fagetea*, *Fagetalia sylvaticae*, *Carpinion betuli*.
72. *Milium effusum* L. - e, H, Frecv. U<sub>3</sub>T<sub>3</sub>R<sub>3</sub>. Circ. *Fagetalia sylvaticae*, *Carpinion betuli*.
73. *Panicum capillare* L. - ☉, T., Spor. Spontaneous. Am de N. *Atriplici-Chenopodietalia albi*.
74. *P. dichotomiflorum* MICHX. - ☉, T., R. U<sub>1-4</sub>T<sub>3-5</sub>R<sub>2-5</sub>. MH: Arginești. Adv. (Am de N.). *Panico-Setarion*.
75. *Phalaris arundinacea* L. [*Typhoides arundinacea* (L.) MOENCH] - e, HH., Frecv. U<sub>5-6</sub>T<sub>3</sub>R<sub>4-5</sub>. MH: Arginești-Gura Motrului (BUIA AL. & al. 1961). Circ. Car. *Phragmitetea australis*, *Phalaridion arundinaceae*.
76. *Phleum paniculatum* HUDS. [*Ph. asperum* JACQ.] - ☉, T., Spor. U<sub>1-2</sub>T<sub>4</sub>R<sub>4</sub>. MH: Ciocuiuța, Strehaia, Stângăceaua, Breznița, Butoiești, Buicești. Centr. eur.-medit. *Festucetalia valesiacae*, *Stellarietea mediae*, *Atriplici-Chenopodietalia albi*.
77. *Ph. phleoides* (L.) H. KARST. [*Ph. boéhmeri* WIB.] - e, H., Frecv. U<sub>1-2</sub>T<sub>3</sub>R<sub>4</sub>. Euras. cont. Car. *Festuco-Brometea*.
78. *Ph. pratense* L. - e, H., Spor. U<sub>3</sub>T<sub>2-5</sub>R<sub>3-4</sub>. MH: Comănești, Crainici, Broșteni; GJ: Glogova. Euras. Car. *Molinio-Arrhenatheretea*, *Cynosurion cristati*.
79. *Phragmites australis* (CAV.) STEUD. [*Ph. communis* TRIN.] subsp. *chrysantha* (MABILLE) SOJÁK [subsp. *altissimus* (BENTH.) W.D. CLAYTON] - e, G.(HH.). Frecv. U<sub>6</sub>T<sub>2-5</sub>R<sub>4</sub>. Euras., Afr. Car. *Phragmitetea australis*, *Phragmition communis*.
80. *Poa angustifolia* L. [*P. pratensis* L. subsp. *angustifolia* (L.) GAUDIN] - e, H., Frecv. U<sub>2-3</sub>T<sub>3</sub>R<sub>3-5</sub>. Euras. Car. *Festuco-Brometea*, *Agropyretalia repentis*.
81. *P. annua* L. - ☉- e, T.-H. Frecv. U<sub>3-4</sub>T<sub>1-5</sub>R<sub>1-5</sub>. Cosm. Car. *Polygono arenastri-Poëtea annuae*, *Matricario-Polygonion avicularis*.
82. *P. bulbosa* L. - e, H. Frecv. U<sub>2</sub>T<sub>4</sub>R<sub>4</sub>. Euras. *Sedo-Schleranthea*, *Thero-Airion*, *Festucetalia valesiacae*.  
- var. *vivipara* KOEL. - Frecv.
83. *P. compressa* L. - e, H. Frecv. U<sub>2</sub>T<sub>3</sub>R<sub>2-5</sub>. Euras.-cont. Car. *Artemisietea vulgaris*, *Koelerio-Corynepherea*, *Sedo-Schleranthea*, *Agropyretalia repentis*, *Sisymbrium officinalis*, *Atriplici-Chenopodietalia albi*.
84. *P. nemoralis* L. - e, H. Frecv. U<sub>3</sub>T<sub>3</sub>R<sub>3-4</sub>. Circ. Car. *Quercu-Fagetea*, *Atropion*, *Trifolion medii*.
85. *P. palustris* L. [*P. serotina* EHRH., *P. fertilis* HOST] - e, H. Frecv. U<sub>4-5</sub>T<sub>4</sub>R<sub>3-4</sub>. B.S.M. Circ. Car. *Molinio-Arrhenatheretea*, *Phragmitetea australis*, *Calthion palustris*.
86. *P. pratensis* L. - e, H. Frecv. U<sub>3-4</sub>T<sub>2-5</sub>R<sub>3-5</sub>. Circ. (astăzi Cosm.). Car. *Molinio-Arrhenatheretea*.
87. *P. sylvicola* GUSS. [*P. trivialis* L. subsp. *sylvicola* (GUSS.) H. LINDB.] - e, H. Frecv. U<sub>4</sub>T<sub>4</sub>R<sub>4</sub>. MH: Strehaia (GHIȘA & BELDIE, 1972). Submedit. *Molinietalia*.
88. *P. trivialis* L. - e, H. Frecv. U<sub>4</sub>T<sub>2-5</sub>R<sub>3-5</sub>. Euras. Car. *Molinio-Arrhenatheretea*, *Calthion palustris*.
89. *Puccinellia convoluta* (HORNEM.) HAYEK subsp. *pseudobulbosa* (E. I. NYÁRÁDY) BORZA [*P. fominii* BILYK] - e, H. R., U<sub>4</sub>T<sub>4</sub>R<sub>5</sub>. MH: Arginești-Gura Motrului. Pont. Car. *Puccinellio-Salicornietea*, *Puccinellietalia*.
90. *P. limosa* (SCHUR) HOLMB. [*P. distans* (L.) PARL. subsp. *limosa* (SCHUR) JÁV.] - e, H. R., U<sub>3-4</sub>T<sub>3-5</sub>R<sub>5</sub>. MH: Broșteni, Comanda. Pont.-pan. Car. *Puccinellio-Salicornietea*, *Puccinellietalia*.
91. *Scleróchloa dura* (L.) P. BEAUV. [*Poa dura* (L.) SCOP.] - ☉, T., Frecv. U<sub>2</sub>T<sub>3</sub>R<sub>3</sub>. Medit. Car. *Polygono arenastri-Poëtea annuae*, *Matricario-Polygonion avicularis*.
92. *Setaria pumila* (POIR.) ROEM. & SCHULT. [*S. glauca* auct. non (L.) P. BEAUV., *S. lutescens* (STUNTZ) F. T. HUBB.] - ☉, T., Frecv. U<sub>3-4</sub>T<sub>4</sub>R<sub>3-5</sub>. Cosm. *Panico-Setarion*.
93. *S. viridis* (L.) P. BEAUV. [*Panicum viride* L., *S. italica* subsp. *viridis* (L.) THELL.] - ☉, T. Frecv. U<sub>2-3</sub>T<sub>3-4</sub>R<sub>4-5</sub>. Euras. (astăzi Cosm). *Panico-Setarion*.
94. *Sorghum halepense* (L.) PERS. - e, G., Frecv. U<sub>3-4</sub>T<sub>5</sub>R<sub>2-5</sub>. Medit. *Chenopodietalia*, *Centaureetalia cyani*, *Panico-Setarion*.
95. *Taeniattherum caput-medusae* (L.) NEVSKI [*Hordélymus asper* (SIMONK.) BELDIE] - ☉, T. Spor. U<sub>2</sub>T<sub>4</sub>R<sub>4-5</sub>. MH: Strehaia, Breznița, Butoiești, Arginești, Gura Motrului. Pont.-medit. *Thero-Airion*, *Onopordion*.
96. *Tragus racemosus* (L.) ALL. - ☉, T. Spor. U<sub>1-2</sub>T<sub>4-5</sub>R<sub>4</sub>. MH: Jirov, Strehaia, Stângăceaua, Breznița, Butoiești. Medit. Car. *Stellarietea mediae*, *Bromion tectorum*, *Eragrostetalia*.
97. *Trisetum flavescens* (L.) P. BEAUV. [*Avéna flavescens* L.] - e, H. Spor. U<sub>3</sub>T<sub>2-3</sub>R<sub>3-4</sub>. GJ: Glogova Euras. (submedit.). Car. *Molinio-Arrhenatheretea*, *Polygono-Trisetion*, *Arrhenatherion*.
98. *Ventenata dubia* (LEERS) COSS. [*Avéna dubia* LEERS, *Avéna tenuis* MOENCH] - ☉, T. Frecv. U<sub>2</sub>T<sub>3-4</sub>R<sub>3</sub>. Pont.-medit. *Thero-Airion*.
99. *Vulpia bromoides* (L.) S.F. GRAY [*Festuca bromoides* L., *Festuca dertronensis* (ALL.) ASCH. & GRAEBN.] - ☉, T. R., U<sub>2</sub>T<sub>5</sub>R<sub>4</sub>. GJ: Glogova. Pont.-medit. *Thero-Airion*.
100. *V. myuros* (L.) C. C. GMEL. - ☉, ☉ de iarnă, T., Ht. Frecv. U<sub>2</sub>T<sub>4</sub>R<sub>3</sub>. Euras. (Cosm.). *Thero-Airion*.

## CONCLUSIONS

In the Lower Basin of the Motru River have been identified 111 taxa on the Poaceae family (100 species, 3 subspecies and 8 varieties). *Hórdeum marínium* HUDS. subsp. *gussoneánum* (PARL.) THELL., *Panicum dichotomiflorum* MICHX., *Puccinellia convoluta* (HORNEM.) HAYEK subsp. *pseudobulbosa* (E. I. NYÁRÁDY) BORZA, *Puccinellia limosa* (SCHUR) HOLMB., *Vulpia bromoides* (L.) S.F. GRAY, they are rare in the Lower Basin of the Motru.

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