

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

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**Abstract.** The paper presents the species from Rosaceae Family, which were identified in the Lower Basin of the Motru River. Their identification was performed short before the defence of the Ph.D. thesis.

**Key words:** Basin, flora, Motru, Rosaceae

**Rezumat Rosaceele din Bazinului inferior al Motrului.** Lucrarea prezintă speciile din familia Rosaceae identificate în Bazinul inferior al râului Motru. Identificarea a fost realizată înainte de susținerea tezei de doctorat.

**Cuvinte cheie:** Bazin, flora, Motru, Rosaceae

### 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).

Besides the scientific side of the research, it had been wanted the applicant approach too, instructive-ecological. In this way, through collaborations with pupils, children under school age (for example through the collaboration with the Kindergarten N. Romanescu from Craiova) it had been realised activities of information about the importance of the species from the family Rosaceae. It had been presented the plants with economical and decorative importance, it had been planted saplings, in this way the children being involved in a directly way in the cognition of the importance of the plants for the man and for the nature, in this way understanding the necessity to protect them.

### 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, popular names, life expectancy, biological form, average height, time of blossoming or of spore maturing (ferns), number of chromosomes, spreading, 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-levelled 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).

Species description: 20-50 cm - height of the plant I-XII - blossoming or spore maturing period in ferns;  $2n$  = number of chromosomes in the somatic cells;  $x$  = genom (basic set) in genera.

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 ( $U_{1-6}$ ):  $U_1$  - xerophytes (they grow in dry soils and they can stand the prolonged dryness of the soil);  $U_2$  - xeromesophyte;  $U_3$  - mesophytes (in soils with average humidity, they cannot stand prolonged dryness);  $U_4$  - mesohygrophyte;  $U_5$  - hygrophyte (they grow in wet soils, and their roots are under water or in swampy areas);  $U_6$  - hydrophyte (according to the author - ultrahydrophyte), (plants which grow in water, the regeneration organs are found under water);  $U_{3(5)}$  - alternately hygrophyte (with oscillations of the humidity level during the plants' vegetation period);  $U_{1-5}$ , ( includes  $U_{1-3}$ ,  $U_{2-5}$  etc.) - eurip. = euriphYTE (with large amplitude against the soil humidity).

Heat level (T):  $T_1$  - hechistothermic;  $T_2$  - microthermic;  $T_3$  - mesothermic;  $T_4$  - subthermophytes (moderately thermophytes);  $T_5$  - thermophytes;  $T_{1-5}$  (include  $T_{1-4}$ ,  $T_{2-4}$ ,  $T_{2-5}$ ,  $T_{3-5}$ ) - euriterm. = euriterms.

Acidity level (R):  $R_1$  - high acidophilus species;  $R_2$  - acidophilus;  $R_3$  - acido-neutrophyle;  $R_4$  - low acid-neutrophyle;  $R_5$  - neutral-basophile;  $R_{1-5}$  - (includes  $R_{1-4}$ ,  $R_{1-3}$ ,  $R_{2-5}$  etc.) - euriionic.

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: \* - cultivated; cult. - cultures; 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, Rosaceae family have 60 taxa .

### SPERMATOPHYTA

#### MAGNOLIOPHYTINA (Angiospermae)

#### MAGNOLIOPSIDA (Dicotyledonatae)

#### RÓSIDAE

#### ROSÁLES

#### Rosáceae

#### *Agrimonia* Willd $x = 7$

1. *Agrimonia eupatoria* L. subsp. *grándis* (ANDRZ.) BORNM. [var. *máior* BOISS.] - Turiță mare - e., H., 15-150 cm. VI-VIII.  $2n = 28$ . Frecv.  $U_2T_3R_4$ . MH: Arginești-Gura Motrului. Submedit. *Trifolio-Geranietea sanguinei*, *Prunetalia spinosae*, *Trifolion medii*.
2. *A. repens* L. [*A. procera* WALLR., *A. odorata* auct. non MILL.] - e., H., 40-120 cm. VI-VIII. Spor.  $U_3T_2R_4$ . MH: Arginești-Gura Motrului. Eur. centr. *Prunetalia spinosae*, *Trifolion medii*.

#### *Aphanes* L. $x = 8$

3. *Aphanes arvensis* L. [*Alchemilla arvensis* (L.) SCOP.] - Crețsoare - ☉, T., 2-30 cm. V-VIII.  $2n = 48$ . Spor.  $U_3T_4R_4$ . MH: Bala (Comănești, Pestița, Molani, Crainici, Butoiești, Buicești). Eur. *Aphanion*.

#### *Aremonia* NECKER ex NESTL. $x = ?$

4. *Aremonia agrimonoides* (L.) DC. - e., H., 5-40 cm. V-VI. Spor.  $U_3T_4R_4$ . MH: Strehaia, Cerângani, Lunca Banului. Centr. eur.-medit. *Quercu-Fagetea*, *Aremonio-Fagion*, *Carpinion betuli*.

#### *Cerasus* JUSS. $x = 8$

5. *Cerasus avium* (L.) MOENCH [*Prunus avium* L. var. *avium* (var. *sylvestris* SER.)] - Hare Sweet cherry tree - MPh., 10-20 m. IV-V.  $2n = 16, 24, 32$ . Spor.  $U_3T_3R_4$ . Submedit. *Rhamno-Prunetea*, *Carpinion betuli*.
6. \* *C. vulgaris* MILL. [*Prunus cerasus* L.] - Cherry tree - MPh., 8 (10) m. IV-V.  $2n = 32$ . Frecv. cult. and subspontaneous. Eur. SE and As. by V. *Prunetalia spinosae*.

#### *Cratægus* L. $x = 17$

7. *Cratægus laevigata* (POIR.) DC. [*C. oxyacantha* auct., non L.] - Hawthorn, Hawthorn- MmPh., 2-5 m, V-VI.  $2n = 34$ . Spor.  $U_3T_3R_{3,4}$ . MH: Lunca Banului, Gura Motrului. Eur. centr. *Quercu-Fagetea*, *Prunetalia spinosae*.
8. *C. monógyna* JACQ. subsp. *monógyna* - MmPh., 2-5 (-10) m. V-VI.  $2n = 34$ . Frecv.  $U_3T_{3,4}R_4$ . MH: Arginești-Gura Motrului (BUIA AL. & al., 1961). Euras. *Rhamno-Prunetea*, *Prunetalia spinosae*.  
- subsp. *azarélla* (GRISEB.) FRANCO [*C. azarélla* GRISEB.] - MH: Bala (Comănești, Molani, Valea Mare, Pestița, Crainici). Medit. *Prunetalia spinosae*.
9. *C. pentágyna* WALDST. & KIT. - mMPh., 1-5 m. V-VI.  $2n = \dots$  Spor.  $U_3T_4R_4$ . MH: Comănești, Broșteni, Imoasa, Corcova, Strehaia (Stăncești), Lunca Banului, Butoiești (Buicești, Mitulani), Arginești; GJ: Glogova. Pont.-pan.-balc. *Quercu-Fagetea*, *Prunetalia spinosae*.

10. *C. rhipidophylla* GAND. [*C. oxyacantha* L., *C. calycina* auct. non PETERM., s.l., *C. curvisépala* LINDM., nom illegit, s.l., *C. rosifórmis* auct. non JANKA, s.l., *C. dunénsis* CINOVSCHIS] - mPh., 2-5 (-10) m. V-VI. 2n = Spor. U<sub>3</sub>T<sub>3</sub>-<sub>4</sub>R<sub>4</sub>. **MH**: Imoasa, Corcova, Lunca Banului, Arginești; **GJ**: Văgiulești. Centr. eur. *Quercu-Fagetea*, *Prunetalia spinosae*.
- Cydónia** Mill. x = 17
11. \* *Cydónia oblónga* MILL. [*C. vulgáris* DELARBRE] - Quince tree - MmPh., 1,5-6 m. V. 2n = 34. Frecv. cult. fruit and subsponaneous. As. by SV.
- Filipéndula** Mill. x = 7,8
12. *Filipéndula vulgáris* MOENCH [*Spiréa filipéndula* L., *F. hexapétala* GILIB.] - Dropwort - e,, H., 30-60 cm. V-VI. 2n = 14, 16. Frecv. U<sub>2-3</sub>T<sub>3</sub>R<sub>3-4</sub>. Euras. *Festuco-Brometea*, *Molinietalia*, *Prunetalia spinosae*.
- Fragária** L. x = 7
13. *Fragária moscháta* (DUCHESNE) Weston [*F. elátior* EHRH.] - Strawberry from field - e,, H., -40 cm. V-VII. 2n = 42. Spor. U<sub>2-3</sub>T<sub>3</sub>R<sub>2-4</sub>. **MH**: Strehaia, Arginești. Centr. eur. *Trifolio-Geranietea sanguinei*, *Carpinion betuli*, *Alno-Ulmion*.
14. *F. véscá* L. - Strawberry from forest- e,, H., 5-20 (30) cm. V-VI. 2n = 14. Frecv. U<sub>3</sub>T<sub>3</sub>R<sub>2-4</sub>. Euras. *Epilobietea angustifolii*, *Carpinion betuli*, *Trifolion medii*.
15. *F. virídís* DUCHESNE [*F. collína* EHRH.] subsp. *virídís* - Strawberry from field - e,, H., 8-15 cm. V-VI. 2n = 14. Frecv. U<sub>2</sub>T<sub>4</sub>R<sub>3</sub>. **MH**: Strehaia (BUIA AL., 1956). Euras. *Festuco-Brometea*, *Origanetalia vulgaris*.  
- subsp. *campéstris* (STEVEN) PAWL. - U<sub>2-3</sub>T<sub>4</sub>R<sub>3</sub>. **GJ**: Glogova. Pont. *Geranion sanguinei*.
- Géum** L. x = 7
16. *Géum urbánum* L. - Cerențel - e,, H., 20-60 cm. V-IX. 2n = 42. Frecv. U<sub>3</sub>T<sub>3</sub>R<sub>4</sub>. Circ. *Galio-Urticetea*, *Galio-Alliarion*, *Prunetalia spinosae*, *Fagetalia sylvaticae*.
- Málus** MILL. x = 17
17. \* *Málus doméstica* BORKH. - Apple tree - MPh., - 10(15) m. IV-V. 2n = 34. Cult. fruit.
18. *M. sylvéstris* MILL. [*Pýrus málus* L.] - Crab tree - MPh., - 12 m. IV-V. 2n = 34. Frecv. U<sub>3</sub>T<sub>3</sub>R<sub>4</sub>. Eur. *Quercetea pubescentis*, *Alno-Ulmion*, *Carpinion betuli*, *Prunetalia spinosae*.
- Potentilla** L. x = 7
19. *Potentilla anserína* L. - Crawfish tail - e,, H., 15-50 cm. V-VIII. 2n = 28, 35, 42. Frecv. U<sub>4-5</sub>T<sub>3</sub>R<sub>3-5</sub>. Cosm. *Molinio-Arrhenatheretea*, *Potentillion anserinae*.
20. *P. argénteá* L. - Scărântitoare - e,, H., 10-50 cm. VI-VII. 2n = 14. Frecv. U<sub>1-2</sub>T<sub>4</sub>R<sub>3-4</sub>. Euras. *Festuco-Brometea*, *Quercetea pubescentis*, *Sedo-Scleranthetalia*.
21. *P. erécta* (L.) RAUSCH. [*P. tormentilla* NECK., *Tormentilla erécta* L.] - Cinquefoil - e,, H., 10-30 cm. V-VIII. 2n = 28. Spor. U<sub>3-4</sub>T<sub>4</sub>R<sub>2-4</sub>. **MH**: Comănești, Florești. **GJ**: Glogova. Euras. *Molinietalia*.
22. *P. heptaphýlla* L. [*P. rúbens* (CRANTZ) ZIMMETER] - Închegățică - e,, H., 10-20 cm. IV-VI. 2n = 14, 28, 30, 35. Spor. U<sub>2</sub>T<sub>3-4</sub>R<sub>5</sub>. **MH**: Breznița de Motru. Eur. cont. *Festuco-Brometea*.
23. *P. micrántha* RAMOND. ex DC. - Frăgurel - e,, H., 1-5 (-15) cm. III-V. 2n = 14. Frecv. U<sub>2</sub>T<sub>3-4</sub>R<sub>3</sub>. **MH**: Breznița (GUSULEAC M., 1956). Centr. eur.-submedit. *Quercetea pubescentis*.
24. *P. pedáta* WILLD. - [*P. hirta* L. var. *pedáta* KOCH] - e,, H., 20-40 cm. VI-VII. 2n = 28. **R.**, U<sub>1-2</sub>T<sub>4</sub>R<sub>4</sub>. **MH**: Stângăceaua. Medit. *Festuco-Brometea*, *Festuco-Sedetalia*.
25. *P. récta* L. - Weed by five fingers - e,, H., 30-70 cm. V-VII. 2n = 28, 42. Frecv. U<sub>2</sub>T<sub>4</sub>R<sub>3</sub>. Euras. cont. *Festuco-Brometea*, *Sisymbriion officinalis*.
26. *P. réptans* L. - Five fingers - e,, H., 30-100 cm. VI-VIII. 2n = 28. Frecv. U<sub>3-4</sub>T<sub>4</sub>R<sub>3-4</sub>. Euras. *Calthion palustris*, *Agrostion stoloniferae*, *Potentillion anserinae*, *Bidentetalia tripartiti*.
27. *P. supína* L. - ⊙-e,, T.-H., 10-40 cm. VI-IX. 2n = 28. Spor. U<sub>4</sub>T<sub>3</sub>R<sub>2-5</sub>. **MH**: Meriș, Arginești. Euras.-submedit. *Molinio-Arrhenatheretea*, *Bidentetea tripartiti*, *Potentillion anserinae*, *Nanocyperion*.
- Prúnus** L. x = 8
28. \* *Prúnus cerasífera* EHRH. [incl. *P. divaricata* LEDEB.] var. *cerasífera* - Wax cherry tree - MPh., -8 m. IV-V. 2n = 16. Frecv. cult. și subsponaneous. U<sub>2</sub>T<sub>4</sub>R<sub>3-5</sub>. Pont.-balc. *Prunion spinosae*.
29. \* *P. doméstica* L. [*P. doméstica* L. subsp. *doméstica*, *P. doméstica* subsp. *oeconomica* (BORKH.) C. K. SCHNEID.] - Plum tree - MPh., -8 m. IV-V. 2n = 34. Frecv. cult. As. by V.
30. *P. spinosá* L. [*P. spinosá* subsp. *dasyphýlla* (SCHUR) DOMIN] - Sloe - mPh., 1-3 m. IV-V. 2n = 32. Frecv. U<sub>2-3</sub>T<sub>3</sub>R<sub>4</sub>. **MH**: Arginești-Gura Motrului (BUIA AL. & al., 1961). Eur. *Prunetalia spinosae*, *Alno-Ulmion*, *Carpinion betuli*.
- Pýrus** L. x = 17
31. \* *Pýrus commúnis* L. em. GAERTN. [*P. doméstica* MEDIK., *P. satíva* DC. in LAM. & DC.] - Pear tree - MPh., - 20 m. IV-V. 2n = 34, 51, 68. Cult. fruit.
32. *P. pyráster* (L.) BURGSD. [*P. áchras* GAERTN.] - Shadberry - MPh., - 20 m. IV-V. 2n = 34. Frecv. U<sub>2</sub>T<sub>3</sub>R<sub>4</sub>. **MH**: Arginești-Gura Motrului (BUIA AL. & al., 1961). Eur. *Quercetea pubescentis*, *Carpinion betuli*.
- Rósa** L. x = 7
33. *Rósa agréstis* SAVI [*R. sépium* THUILL., *R. pubéscens* RAPIN, *R. gizéllae* BORBÁS] - mPh., - 2 m. VI-VII. 2n = 35. Spor. U<sub>2</sub>T<sub>4</sub>R<sub>3-4</sub>. **MH**: Breznița, Butoiești (Buicești, Mitulani), Gura Motrului. Eur. *Rhamno-Prunetea*, *Prunetalia spinosae*.
34. *R. árvensis* HUDS. [*R. répens* SCOP.] - mPh., -1 m. VI-VII. 2n = 14. Frecv. U<sub>3</sub>T<sub>4</sub>R<sub>3</sub>. **MH**: Strehaia (BUIA AL., 1956), Breznița, Arginești. Eur. centr. and by SV. *Quercu-Fagetea*, *Carpinion betuli*, *Tilio-Acerion*, *Prunetalia spinosae*.

35. *R. canina* L. [*R. lutetiána* LÉMAN, *R. touranginiána* DÉSÉGL. & RIPART] - Sweet briar - mPh., -3 (5) m. VI-VII. 2n = 35. Frecv. U<sub>1-2</sub>T<sub>3</sub>R<sub>3</sub>. **MH**: Strehaia (BUIA AL., 1956), Comanda, Broșteni, Breznița (Priporu Hills), Cerângani. **GJ**: Iormănești, Văgiulești (Cârciu, Fundu Văii Hill). Eur. *Rhamno-Prunetea*, *Prunetalia spinosae*.
36. *R. caryophyllacea* BESSER - mPh., -2 m. V-VI. **R.**, brawn eu-mesobasic soils. Sp. oligotr. U<sub>2</sub>T<sub>3-4</sub>R<sub>4</sub>. **MH**: Arginești, Gura Motrului (BUIA AL., 1956, ZANOSCHI V. & al. 2000, COSTACHE I., 2004). Pont.-pan. *Prunetalia spinosae*.
37. *R. corymbifera* BORKH. [*R. dumetorum* THUILL., ? *R. obtusifolia* DESV.] - mPh., -3 m. V-VII. 2n = 35. Frecv. U<sub>2-3</sub>T<sub>4</sub>R<sub>3-4</sub>. **MH**: Strehaia, Gura Motrului, Broșteni, Strehaia, Stângăceaua, Slătinicul Mare, Butoiești (Ștefanu Hill), Arginești; **GJ**: Glogova. Eur. *Rhamno-Prunetea*, *Prunetalia spinosae*.
38. *R. dumalis* BECHST. [*R. verticillacantha* MÉRAT, *R. glauca* VILL. ex LOISEL. non POURR., *R. afzeliana* FR. ex LILJ., *R. reuteri* (GODET) REUT.] - Sweet briar - mPh., -3 (5) m. VI-VII. 2n = 35. Frecv. U<sub>1-2</sub>T<sub>3</sub>R<sub>3</sub>. **MH**: Strehaia (BUIA AL., 1956), Cerângani, Stângăceaua, Butoiești, Arginești; **GJ**: Iormănești, Văgiulești (Cârciu, Fundu Văii Hill). Eur. *Rhamno-Prunetea*, *Prunetalia spinosae*.
39. *R. elliptica* TAUSCH [*R. graveolens* GREN. & GODR.] - mPh., -2 m. V-VI. **R.**, brawn eu-mesobasic soils. U<sub>2</sub>T<sub>4</sub>R<sub>4</sub>. **MH**: Butoiești (Ștefanu Hill). Eur. centr. *Prunetalia spinosae*.
40. *R. gallica* L. [*R. austriaca* CRANTZ] - Eglantine - mPh., 40-80 cm. VI-VII. 2n = 21, 28. Frecv. U<sub>1-2</sub>T<sub>4</sub>R<sub>4</sub>. Pont.-medit. *Trifolio-Geranietea sanguinei*.  
- var. *subglandulosa* (BORBAS) H. BRAUN [*R. austriaca* var. *subglandulosa* BORBAS] - **MH**: between Strehaia and Cerângani.
41. *R. micrantha* BORRER ex Sm. - mPh., -3 m. VI-VII. 2n = 21, 35. Spor. U<sub>2</sub>T<sub>4</sub>R<sub>4</sub>. **MH**: Comănești (Pietricica Hill), Cerângani, Arginești, Gura Motrului. Eur. centr. and by S. *Rhamno-Prunetea*.
42. *R. subcanina* (H. CHRIST) KELLER [*R. dumalis* subsp. *subcanina* (H. CHRIST) SOO] - Sweet briar - mPh., -3 (5) m. VI-VII. 2n = 35. Frecv. brawn eu-mesobasic soils. U<sub>2-3</sub>T<sub>3-4</sub>R<sub>4</sub>. Eur. *Prunetalia spinosae*.  
? *R. tomentosa* SM. - I don't find. Mentioned by BUIA AL., 1956, in Strehaia zone (**MH**), without herbarium materil.
- Rúbus** L. x = 7
43. *Rúbus apiculatus* WEIHE & NESS. - mPh., 50-200 cm. (IV) VI-VII. 2n = 28. **R.**, brawn eu-mesobasic soils. U<sub>3</sub>T<sub>4</sub>R<sub>4</sub>. **MH**: Comănești, între Strehaia și Cerângani (Cerângani Hill), Butoiești (Buicești, Mitulani). Eur. centr. and by V. *Quercu-Fagetea*, *Prunetalia spinosae*.
44. *R. caesius* L. - Bramble by stubble field - mPh., 30-80 cm. V-VI (IX). 2n = ... Frecv. U<sub>4</sub>T<sub>4</sub>R<sub>4-5</sub>. Eur. *Galio-Urticetea*, *Salicetea purpureae*, *Alnetea glutinosae*, *Fagetalia sylvaticae*, *Stellarietea mediae*.  
- var. *arvalis* RCHB. - **MH**: Comănești, between Strehaia and Cerângani (Cerângani Hill), Butoiești (Buicești, Mitulani), Arginești; **GJ**: Glogova, Văgiulești.  
- var. *glandulosus* FOCKE - **MH**: Butoiești (Buicești, Mitulani), Arginești.
45. *R. cándicans* WEIHE ex RCHB. subsp. *cándicans* - mPh., 50-200 cm. VI-VII (IX). 2n = 21. Frecv. U<sub>2-3</sub>T<sub>3-4</sub>R<sub>4</sub>. **MH**: Comănești, Strehaia, Cerângani; **GJ**: Glogova, Iormănești Eur. centr. and by SV. *Quercu-Fagetea*, *Prunetalia spinosae*.  
- subsp. *arduennensis* (LIBERT ex LEJ.) CIOCARLAN - **MH**: Comănești, Breznița de Motru (Priporu Hill), Butoiești (Buicești, Mitulani, Popești); **GJ**: Glogova, Iormănești. *Quercetea pubescentis*, *Prunetalia spinosae*.  
- subsp. *constrictus* (P. J. MÜLL. & LEFEVRE) JANCH. [*R. cándicans* var. *menyházensis* (SIMONK.) E. I. NYARADY] - **MH**: Comănești, Butoiești (Viilor Hill); **GJ**: Glogova, Iormănești. *Alno-Ulmion*.
46. *R. canescens* DC. [*R. tomentosus* BORKH. p.p.] - mPh., 50-200 cm. VI. 2n = 14. Frecv. U<sub>3</sub>T<sub>4</sub>R<sub>4</sub>. Centr. eur.-medit. *Rhamno-Prunetea*.
47. *R. discolor* WEIHE & NEES [*R. procérus* P. J. MÜLL.] - mPh., VII-VIII. 2n = 28. Frecv. U<sub>2-3</sub>T<sub>3-4</sub>R<sub>4</sub>. **MH**: Strehaia, Breznița, Butoiești (Buicești, Mitulani, Viilor Hill, Ștefanu), Arginești. Eur. centr. and by SV. *Prunetalia spinosae*.  
- var. *robustus* P. J. MÜELL. - **MH**: between Meriș and Broșteni (NYÁRÁDY E. I., 1956)
48. *R. scàber* WEIHE & NEES in BLUFF & FINGERH - mPh., VII. Spor. U<sub>2-3</sub>T<sub>3</sub>R<sub>4</sub>. **MH**: Arginești. Centr. eur. *Prunetalia spinosae*, *Luzulo-Fagion*.
49. *R. schleicheri* WEIHE ex TRATT. - mPh., 50-200 cm. (IV) VI-VII. 2n = 28. Frecv. U<sub>3</sub>T<sub>3</sub>R<sub>3-4</sub>. **MH**: Comănești, Strehaia-Cerângani, Arginești; **GJ**: Glogova (Iormănești). Centr. eur. *Fagetalia sylvaticae*.
- Sanguisórba** Willd. x = 7
50. *Sanguisórba minor* SCOP. subsp. *polýgama* (WALDST. & KIT.) HOLUB. [*S. muricata* (SPACH) GREMLI, *S. m.* subsp. *muricata* (SPACH) ASCH. & GRAEBN., *Potérium polýgamum* WALDST. & KIT.] - Burnet, Bloodwort - e., H., 20-60 cm. V-VII. 2n = 28, 56. Frecv. U<sub>2-3</sub>T<sub>3-4</sub>R<sub>4</sub>. **MH**: Strehaia (BUIA AL., 1956). Medit. *Festuco-Brometea*, *Festucetalia valesiaca*, *Koelerio-Coryneporetea*, *Sisymbrium officinalis*.  
? *S. officinalis* L. - I don't find. Mentioned by BUIA AL., 1956, in Strehaia zone (**MH**) and by MALOȘ C., 1977, in Baia de Aramă zone, without herbarium materil.
- Sórbus** L. x = 17
51. *Sórbus doméstica* L. [*Córnus doméstica* (L.) SPACH, *Pýrus doméstica* SM.] - Fowler's pear - MPh., 10-15 m. V-VI. 2n = 34. Frecv. U<sub>2</sub>T<sub>3-4</sub>R<sub>4</sub>. Cult. forest and subsontaneous. **MH**: Gura Motrului (BUIA AL., 1956). Atl.-medit. *Quercetea pubescentis*, *Quercetalia pubescenti-petraeae*, *Carpinion betuli*.

52. *S. torminalis* (L.) CRANTZ [*Cratægus torminalis* L., *Pyrus torminalis* EHRH.] - Chess apple - MPh., 10-15 (-20) m. V-VI. 2n = 34. Frecv. U<sub>2-3</sub>T<sub>3</sub>R<sub>4</sub>. Centr. eur. *Quercetea pubescentis*, *Carpinion betuli*.

### CONCLUSIONS

In the Lower Basin of the Motru River have been identified 60 taxa on the Rosaceae family (48 species, 6 subspecies and 6 varieties), among which, *Cratægus monógyna* JACQ. subsp. *azarélla* (GRISEB.) FRANCO, *Potentilla pedáta* WILLD., *Rósa caryophyllácea* BESSER, *R. elliptica* TAUSCH, *Rúbus apiculátus* WEIHE & NESS., they are rare in the Lower Basin of the Motru, some have been included in the National Red List.

Also, 2 species (*Rósa tomentósa* SM. and *Sanguisórba officinális* L.), mentioned by BUIA AL., 1956, in Strehaia zone (MH), without herbarium materil, don't have been find.

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