CARPATHIANS ENDEMIC TAXA IN ARGEŞ COUNTY

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Abstract
Endemic plant species are the biogeographic elements why use the delimitation of biogeographical regions. Their presence explains, in the context of identifying phyto-historical factors, distribution of species and certain distribution patterns. Endemic areas, with pronounced as the basic unit of biogeography, indicates those particular geographic region, both in the growth areas and the evolutionary biological processes of speciation.In this study we proposed the following objectives: knowing the list Carpathian endemic species and endemic centers present in Argeş, also, areas of endemism in the Carpathians Mountains of the Argeş County.

Keywords: endemic species, Argeş County, sozological categories.

1. INTRODUCTIONS

In the north side Argeş County are the mountains, from the Southern Carpathians group – the Făgăraş Mountains with Moldoveanu Peak (2544 m), the Iezer-Păpuşa Mountains with Roşu Peak (2469 m), Piatra Craiului Mountains with La Om Peak (2237 m) and Leaota Mountains with Leaota Peak (2133 m). The flora of these mountains are present endemic species, some of them endangered. The conservation of species, particularly those in danger of extinction forms one of the basic elements of biodiversity conservation. Endemic species (gr. Ενδεμοσ = living in one place, indigenous) are units of different taxonomic ranks (subspecies, species, genera, families) "*defined in spreading a given territory, so a taxa with small area at a specific natural area*" (Dihoru & Pîrvu, 1987). The main criterion used to characterize endemic species is the size of the area. Their existence is due to degeneration (disappearance) of a spacies in most of the area, leaving only a narrow region, or through the formation of a new species not yet had sufficient time to expand.
Endemic flora give a strong feature of geographical units, of the natural phenomenon of speciation and current evolution in the area, determined by the orogenetic processes, as well as climatic influences. For here lies the importance of identifying centers endemic-conservative and endemic-generators for the various geographical areas.

2. MATERIAL AND METHOD

Knowledge of the presence of different species of endemic vascular plants in the mountainous region of Argeş could be possible after personal research field, determination of a considerable number of species of flora, and processing data from the literature. Were sythesized processing monographs on the flora of the mountains: Iezer-Păpuşa (Alexiu V., 1995, 1996, 1998a, 1998b, 1998c, Bărbulescu C., 1961, Richițeanu A., 1975), Piatra Craiului (Alexiu V., 1996, 1998a, 1998c, 2003, 2004, Mihăilescu S., 2001, Alexiu V. & Stancu Daniela, 2003a), Făgăraş (Alexiu V., 1999, 2000, 2002, Alexiu V. & Stancu Daniela, 2003b), Buda-Râiosu (Buia Al. & Todor I., 1943, Stancu Daniela, 2005), Leaota (Diaconescu Florița, 1973, Neblea Monica & Chirițoiu Magdalena, 2003), Bucegi (Beldie Al., 1967, Sanda V. & Alexiu V., 2005); works on flora Argeş County (ALEXIU V., 2008, 2011, OPREA A., 2005).
Endemic species of Argeş County mountains are inserted into a database:

Table 1 – Carpathians endemic vascular plants in Argeş County

No.	Family	Species	Biol. forms	Fl.elem.	U	T	R	Cat. threat
1	*Pinaceae*	*Larix decidua*	MPh	Carp-Sudet	2,5	0	0	
2	*Ranunculaceae*	*Aconitum firmum*	H	Carp-Balc-Sud	2,5	2,5	4	
3	*Ranunculaceae*	*Aconitum * moldavicum*	H	Carp	3	2	3	NT
4	*Ranunculaceae*	*Aconitum * tauricum*	H	Alp-Carp	3	2,5	3	
5	*Ranunculaceae*	*Aconitum toxicum*	H	Carp-Balc	4	2,5	4	
6	*Ranunculaceae*	*Aconitum * paniculatum*	H	Alp-Carp-Balc	3	1,5	4	
7	*Ranunculaceae*	*Aconitum * dasytrichum*	H	Alp-Carp	3	2,5	3	
8	*Ranunculaceae*	*Aquilegia transsilvanica*	H	Carp	2,5	2	4	
9	*Ranunculaceae*	*Helleborus purpurascens*	H	Carp-Balc-Pan	2,5	3	4	
10	*Ranunculaceae*	*Hepatica transsilvanica*	G	Carp	3	2	4	LC
11	*Ranunculaceae*	*Pulsatilla alba*	H	Alp-Carp	3	2	2	
12	*Ranunculaceae*	*Ranunculus carpaticus*	G	Carp	3,5	2	4	NT
13	*Ranunculaceae*	*Ranunculus crenatus*	H	Carp-Balc	4	1	4	NT
14	*Ranunculaceae*	*Ranunculus oreophilus*	H	Alp-Carp-Balc	2,5	3	4	
15	*Ranunculaceae*	*Ranunculus pseudomontanus*	H	Carp-Balc	3,5	2	4	NT
16	*Ranunculaceae*	*Ranunculus thora*	H	Alp-Carp-Balc	4	1	4	NT
17	*Papavaraceae*	*Papaver alpinum*	H	Carp	2	2	4	VU
18	*Fagaceae*	*Fagus * moesiaca*	MPh	Balc	3	3	0	
19	*Betulaceae*	*Alnus viridis*	mPh	Alp-Carp-Balc	3,5	2,5	3	
20	*Corylaceae*	*Corylus avellana*	mPh	Balc	3	3	3	
21	*Caryophyllaceae*	*Arenaria rotundifolia*	Ch	Carp-Balc-Anat	2	2	0	
22	*Caryophyllaceae*	*Cerastium * lerchenfeldianum*	Ch	Carp	3,5	1,5	4	NT
23	*Caryophyllaceae*	*Cerastium * calcicola*	Ch	Balc	2,5	0	3	NT
24	*Caryophyllaceae*	*Cerastium transsilvanicum*	Ch	Carp	2,5	1,5	4	NT
25	*Caryophyllaceae*	*Dianthus * compactus*	H	Alp-Carp-Balc	2	3	4	VU
26	*Caryophyllaceae*	*Dianthus callizonus*	Ch	Carp (End)	2	1	4	VU
27	*Caryophyllaceae*	*Dianthus giganteus*	H	Carp-Balc	2,5	3	4	
28	*Caryophyllaceae*	*Dianthus * glacialis*	H	Alp-Carp	3,5	1	2	NT
29	*Caryophyllaceae*	*Dianthus * gelidus*	H	Carp	3,5	1	2	NT
30	*Caryophyllaceae*	*Dianthus henteri*	H	Carp	2	3,5	4	NT
31	*Caryophyllaceae*	*Dianthus * petraeus*	Ch	Carp	2	3,5	4	
32	*Caryophyllaceae*	*Dianthus spiculifolius*	H	Carp	2	3,5	4	NT
33	*Caryophyllaceae*	*Dianthus tenuifolius*	H	Carp	2	3,5	4	LC
34	*Caryophyllaceae*	*Gypsophila petraea*	H	Carp	2	3,5	4	NT
35	*Caryophyllaceae*	*Minuartia austriaca*	Ch	Alp-Carp	2	3	4	NT
36	*Caryophyllaceae*	*Saponaria pumilio*	H	Alp-Carp	2,5	1,5	4	NT
37	*Caryophyllaceae*	*Scleranthus uncinatus*	Th	Carp-Balc-Anat	3	2	0	
38	*Caryophyllaceae*	*Silene dinarica*	H	Carp	2	1	0	
39	*Caryophyllaceae*	*Silene heuffeli*	Th	Carp-Balc	3,5	2	0	
40	*Caryophyllaceae*	*Silene lerchenfeldiana*	H	Carp-Balc	2	2	3	NT
41	*Caryophyllaceae*	*Silene * dubia*	H	Carp	2	3	0	NT
42	*Polygonaceae*	*Rumex alpinus*	H	Alp-Carp-Balc	3,5	2	0	

43	*Polygonaceae*	*Rumex scutatus*	H	Alp-Carp-Balc	2,5	0	4	NT
44	*Plumbaginaceae*	*Armeria * alpina*	H	Alp-Carp	3,5	0	3	NT
45	*Crassulaceae*	*Jovibarba heuffelli*	Ch	Carp-Balc	1,5	2	0	NT
46	*Crassulaceae*	*Sempervivum * carpaticum*	Ch	Carp	2	1,5	1	
47	*Saxifragaceae*	*Chrysosplenium alpinum*	H	Carp	4	3	3	NT
48	*Saxifragaceae*	*Saxifraga carpatica*	H	Carp-Balc	3,5	1,5	2	NT
49	*Saxifragaceae*	*Saxifraga corymbosa*	Ch	Carp-Balc	2	1	4	
50	*Saxifragaceae*	*Saxifraga * demissa*	Ch	Carp	1,5	1,5	4	VU
51	*Saxifragaceae*	*Saxifraga * cymosa*	Ch	Carp-Balc	4	1,5	3	NT
52	*Saxifragaceae*	*Saxifraga * heucherifolia*	H	Carp-Balc	3,5	0	4	
53	*Rosaceae*	*Alchemilla glabra*	H	Alp-Carp	3,5	2,5	0	
54	*Rosaceae*	*Alchemilla gracillima*	H	Balc				
55	*Rosaceae*	*Potentilla* chrysocraspeda*	H	Carp-Balc	0	1,5	2	
56	*Fabaceae*	*Chamaecytisus ciliatus*	nPh	Carp-Balc	2	3,5	4	
57	*Fabaceae*	*Chamaecytisus leiocarpus*	nPh	Carp-Balc	2	3	5	
58	*Fabaceae*	*Chamaecytisus ratisbonensis*	nPh	Carp-Balc	2,5	3	4	NT
59	*Fabaceae*	*Lathyrus hallersteinii*	H	Carp-Balc	3	3	4	
60	*Fabaceae*	*Onobrychis * montana*	H	Carp	2	1,5	4	
61	*Fabaceae*	*Oxytopis carpatica*	H	Carp	2,5	1,5	4	
62	*Fabaceae*	*Oxytopis halleri*	H	Alp-Carp	2	1,5	4	NT
63	*Fabaceae*	*Trifolium pallescens*	H	Alp-Carp-Balc	2	2	4	
64	*Onagraceae*	*Epilobium alpestre*	H	Alp-Carp	3,5	2	4	NT
65	*Euphrobiaceae*	*Euphorbia carniolica*	H	Alp-Carp-Balc	3	4	4	
66	*Geraniaceae*	*Geranium caeruleatum*	H	Carp-Balc	3,5	2,5	4	
67	*Geraniaceae*	*Geranium macrorrhizum*	G	Alp-Carp-Balc	4	3	5	
68	*Linaceae*	*Linum * extraaxillare*	H	Carp-Balc	2,5	0	4	LC
69	*Polygalaceae*	*Polygala alpestris*	H	Alp-Carp	2,5	1,5	4	DD
70	*Apiaceae*	*Anthriscus nitida*	H	Alp-Carp-Balc	3	2,5	4	
71	*Apiaceae*	*Athamanta * hungarica*	H	Carp	2	3,5	4	NT
72	*Apiaceae*	*Bupleurum * glaucocarpum*	Th	Balc-Pont-Pan	1,5	4	4	
73	*Apiaceae*	*Heracleum * transsilvanicum*	H	Carp	4	2,5	0	LC
74	*Apiaceae*	*Ligusticum mutellina*	H	Alp-Carp-Balc	3,5	1,5	3	
75	*Hypericaceae*	*Hypericum * transsilvanicum*	H	Carp				
76	*Violaceae*	*Viola alpina*	H	Alp-Carp	2	2	4	NT
77	*Violaceae*	*Viola dacica*	H	Carp-Balc-Alt	3	2	2	NT
78	*Violaceae*	*Viola declinata*	H	Carp-Balc	3,5	2	2	
79	*Violaceae*	*Viola joói*	H	Dac-End	2,5	2,5	4	NT
80	*Cistaceae*	*Helianthemum * alpestre*	Ch	Alp-Carp	2,5	1,5	5	
81	*Brassicaceae*	*Alyssum * repens*	Ch	Carp-Balc	2	4	5	
82	*Brassicaceae*	*Arabis allionii*	H	Alp-Carp-Balc	1,5	3	4	
83	*Brassicaceae*	*Arabis sagittata*	TH	Carp-Balc	1,5	2	0	
84	*Brassicaceae*	*Aubrieta deltoidea*	H	Balc	2	1,5	4	
85	*Brassicaceae*	*Cardamine glanduligera*	G	Carp (End)	4	2,5	4	
86	*Brassicaceae*	*Cardamine * rivularis*	H	Alp-Carp-Balc	4	3	2	
87	*Brassicaceae*	*Cardamine resedifolia*	H	Alp-Carp	3	1	0	NT

88	*Brassicaceae*	*Cardaminopsis * ovirensis*	H	Alp-Carp-Balc	3,5	2,5	2	
89	*Brassicaceae*	*Cardaminopsis neglecta*	H	Carp	3,5	1,5	3	
90	*Brassicaceae*	*Draba aizoides*	Ch	Alp-Carp-Balc	2	0	5	NT
91	*Brassicaceae*	*Draba haynaldii*	H	Carp (End)	2	1,5	0	
92	*Brassicaceae*	*Draba kotschyi*	H	Alp-Carp	2	1,5	3	LC
93	*Brassicaceae*	*Draba lasiocarpa*	Ch	Carp-Balc	2	2,5	4	NT
94	*Brassicaceae*	*Erysimum * witmannii*	H	Carp-Balc	1,5	3,5	4	
95	*Brassicaceae*	*Erysimum * transsilvanicum*	H	Carp	1,5	3,5	5	NT
96	*Brassicaceae*	*Hesperis * moniliformis*	H	Carp	4	1,5	3	
97	*Brassicaceae*	*Hesperis * cladotricha*	H	Balc	3	3	3	NT
98	*Brassicaceae*	*Hesperis nivea*	H	Carp	4	1,5	3	NT
99	*Brassicaceae*	*Hesperis oblongifolia*	H	Carp	1,5	1	4	NT
100	*Brassicaceae*	*Peltaria alliacea*	H	Alp-Carp-Balc	2,5	2,5	4	NT
101	*Brassicaceae*	*Thlaspi * dacicum*	Th	Carp	2	1,5	0	NT
102	*Brassicaceae*	*Thlaspi * banaticum*	Th	Carp	2	1,5	0	
103	*Brassicaceae*	*Thlaspi kovatsii*	H	Carp-Balc-Pan	1,5	1,5	0	
104	*Salicaceae*	*Salix retusa*	Ch	Carp	3,5	1,5	4	
105	*Salicaceae*	*Salix silesiaca*	mPh	Carp-Balc-Sudet	4	2	2	
106	*Ericaceae*	*Bruckenthalia spiculifolia*	nPh	Carp-Balc-Anat	2,5	2,5	1	
107	*Ericaceae*	*Rhododendron myrtifolium*	nPh	Carp-Balc	3	0	2	VU
108	*Primulaceae*	*Androsace arachnoidea*	Ch	Alp-Carp	2	1,5	4	NT
109	*Primulaceae*	*Androsace lactea*	H	Alp-Carp	2	2	4	
110	*Primulaceae*	*Androsace obtusifolia*	H	Carp-Balc	3	1	1	
111	*Primulaceae*	*Primula * baumgarteniana*	H	Carp (End)	2,5	1,5	4	VU
112	*Gentinaceae*	*Gentiana acaulis*	H	Alp-Carp	3	2	1	NT
113	*Gentinaceae*	*Gentiana clusii*	H	Alp-Carp	3	2	5	NT
114	*Gentinaceae*	*Gentiana * phlogifolia*	H	Alp-Carp	2	2,5	4	NT
115	*Gentinaceae*	*Gentiana frigida*	H	Alp-Carp	3	1,5	1	NT
116	*Gentinaceae*	*Gentiana lutea*	G	Alp-Carp	3	2	0	CR
117	*Gentinaceae*	*Gentiana * favratii*	H	Alp-Carp	3	0	4	
118	*Gentinaceae*	*Gentiana punctata*	H	Alp-Carp	3	1,5	4	VU
119	*Gentinaceae*	*Gentianella austriaca*	TH	Alp-Carp-Balc	3	2	4	
120	*Gentinaceae*	*Gentianella bulgarica*	Th	Carp-Balc	2,5	3	4	NT
121	*Gentinaceae*	*Gentianella lutescens*	TH	Alp-Carp	3	3	2	
122	*Gentinaceae*	*Swertia * punctata*	H	Carp-Balc	5	1,5	0	
123	*Boraginaceae*	*Eritrichium * nanum*	H	Alp-Carp	2	1,5	3	NT
124	*Boraginaceae*	*Eritrichium * jankae*	H	Alp-Carp	2	1,5	3	NT
125	*Boraginaceae*	*Pulmonaria rubra*	H	Carp-Balc	3,5	2	3	
126	*Boraginaceae*	*Symphytum cordatum*	H	Carp-Balc	3	2	3	
127	*Lamiaceae*	*Acinos * majoranifolius*	H	Balc	3	0	5	
128	*Lamiaceae*	*Lamium * laevigatum*	H	Carp-Balc-Anat	2	4	4	NT
129	*Lamiaceae*	*Salvia transsylvanica*	H	Dac	1,5	3,5	4	NT
130	*Lamiaceae*	*Thymus comosus*	Ch	Carp	2,5	2	4	LC
131	*Lamiaceae*	*Thymus longicaulis*	Ch	Balc	2	4	3	NT
132	*Lamiaceae*	*Thymus * polytrichus*	Ch	Carp-Balc	1,5	3,5	2	

133	*Lamiaceae*	*Thymus pulcherrimus*	Ch	Carp	2	1,5	3	NT
134	*Plantaginaceae*	*Plantago gentianoides*	H	Carp-Balc-Anat	4	2	3	NT
135	*Scrophulariaceae*	*Melampyrum bihariense*	Th	Dac	2,5	3	3	
136	*Scrophulariaceae*	*Pedicularis * campestris*	H	Balc	3	2,5	0	
137	*Scrophulariaceae*	*Pedicularis exaltata*	H	Carp-Sarm	3	2,5	0	NT
138	*Scrophulariaceae*	*Rhinanthus alpinus*	Th	Carp-Balc	3	2	0	
139	*Scrophulariaceae*	*Scrophularia * laciniata*	H	Carp-Balc	2	2,5	0	NT
140	*Scrophulariaceae*	*Tozzia * carpatica*	G	Carp-Balc	3,5	2	4	NT
141	*Scrophulariaceae*	*Verbascum chaixii*	TH	Dac-Balc	3	2	3	
142	*Scrophulariaceae*	*Verbascum * abietinum*	Th	Dac-Balc	3	2,5	4	
143	*Scrophulariaceae*	*Veronica bachofenii*	H	Carp-Balc-Anat	2,5	4	3	NT
144	*Scrophulariaceae*	*Veronica baumgartenii*	H	Carp-Balc	2	1,5	3	NT
145	*Orobanchaceae*	*Orobanche flava*	G	Alp-Carp	3	2	0	
146	*Campanulaceae*	*Campanula alpina*	H	Alp-Carp	3	1,5	2	
147	*Campanulaceae*	*Campanula carpatica*	H	Carp	3	2,5	4	NT
148	*Campanulaceae*	*Campanula crassipes*	H	Carp-Balc	1,5	4	4	NT
149	*Campanulaceae*	*Campanula kladniana*	H	Carp	2,5	2	0	NT
150	*Campanulaceae*	*Campanula * abietina*	TH	Carp-Balc	3,5	2	2	LC
151	*Campanulaceae*	*Campanula * polymorpha*	H	End (Carp)	2,5	2	0	
152	*Campanulaceae*	*Campanula serrata*	H	End (Carp)	0	2,5	0	LC
153	*Campanulaceae*	*Campanula * divergentiformis*	H	Balc-Dac-Pan	2,5	4	4	
154	*Campanulaceae*	*Campanula transsilvanica*	TH	Carp-Balc	3	2	5	VU
155	*Campanulaceae*	*Phyteuma confusum*	H	Alp-Carp-Balc	3	2	2	NT
156	*Campanulaceae*	*Phyteuma tetramerum*	H	Carp	3	3,5	3	NT
157	*Campanulaceae*	*Symphyandra wanneri*	H	Carp-Balc-Anat	2	2	3	NT
158	*Rubiaceae*	*Asperula capitata*	H	Carp-Balc	2	2	4	
159	*Rubiaceae*	*Galium anisophyllon*	Ch	Alp-Carp	2	3	3	
160	*Rubiaceae*	*Galium kitaibelianum*	H	Carp-Balc	3	3	3	NT
161	*Dispacaceae*	*Knautia * rosea*	H	Dac-Balc	2	4	3	
162	*Dispacaceae*	*Knautia longifolia*	H	Alp-Carp	2	1,5	2	
163	*Dispacaceae*	*Scabiosa * pseudobanatica*	H	Dac-Pan				NT
164	*Dispacaceae*	*Scabiosa lucida * barbata*	H	Alp-Carp	2,5	2	4	NT
165	*Asteraceae*	*Achillea * sudetica*	H	Alp-Carp	2,5	1,5	3	
166	*Asteraceae*	*Achillea * schurii*	H	Carp	3,5	2	2	NT
167	*Asteraceae*	*Achillea stricta*	H	Alp-Carp	2,5	2	3	
168	*Asteraceae*	*Anthemis * fusii*	H	Carp-Balc	2	2	3	DD
169	*Asteraceae*	*Artemisia eriantha*	H	Alp-Carp-Balc	1,5	1	2	
170	*Asteraceae*	*Carduus * kerneri*	TH	Carp-Balc	2,5	2	0	
171	*Asteraceae*	*Centaurea atropurpurea*	H	Dac-Balc	2	3	5	NT
172	*Asteraceae*	*Centaurea kotschyana*	H	Carp-Balc	2	2	4	NT
173	*Asteraceae*	*Centaurea pinnatifida*	H	Carp	2	4	4	NT
174	*Asteraceae*	*Centaurea * nervosa*	H	Alp-Carp	3	2	2	NT
175	*Asteraceae*	*Cirsium candelabrum*	TH	Balc	2	4	4	
176	*Asteraceae*	*Cirsium waldsteinii*	H	Alp-Carp-Balc	4	2	2	

177	*Asteraceae*	*Crepis conyzifolia*	H	Alp-Carp-Balc	3	2	2	NT
178	*Asteraceae*	*Crepis jacquinii*	H	Alp-Carp-Balc	3	1,5	5	NT
179	*Asteraceae*	*Doronicum carpaticum*	H	Carp-Balc	2,5	1,5	0	NT
180	*Asteraceae*	*Doronicum columnae*	Th	Alp-Carp-Balc	3,5	2	3	
181	*Asteraceae*	*Erigeron nanus*	H	Carp	3	1	0	VU
182	*Asteraceae*	*Hieracium dentatum*	H	Alp-Carp	2	1,5	2	
183	*Asteraceae*	*Hieracium rotundatum*	H	Carp-Balc	3	0	0	
184	*Asteraceae*	*Hypochoeris uniflora*	H	Alp-Carp	3	2,5	2	
185	*Asteraceae*	*Leontodon * croceus*	H	Alp-Carp	4	1,5	2	
186	*Asteraceae*	*Leontodon * rilaensis*	H	Carp-Balc	4	1,5	2	NT
187	*Asteraceae*	*Leucanthemum * atratum*	H	Alp-Carp	4	1	2	
188	*Asteraceae*	*Leucanthemum waldsteinii*	H	Carp	4	2	3	NT
189	*Asteraceae*	*Petasites kablikianus*	G	Carp-Balc	4	0	0	
190	*Asteraceae*	*Scorzonera * rosea*	G	Alp-Carp-Balc	2	0	4	NT
191	*Asteraceae*	*Senecio * carpathicus*	H	Alp-Carp-Balc	2,5	1,5	2	NT
192	*Asteraceae*	*Senecio glaberrimus*	H	Carp-Balc	3	1,5	4	NT
193	*Asteraceae*	*Senecio * carniolicus*	H	Alp-Carp	3	1,5	4	NT
194	*Asteraceae*	*Senecio papposus*	H	Carp-Balc	3	2	2	
195	*Asteraceae*	*Senecio squalidus*	TH	Alp-Carp-Balc	2	0	2	
196	*Asteraceae*	*Senecio subalpinus*	H	Alp-Carp-Balc	3,5	2	3	
197	*Asteraceae*	*Tanacetum * clusii*	H	Alp-Carp-Balc	2,5	2,5	3	
198	*Asteraceae*	*Taraxacum nigricans*	H	Carp-Balc-Sudet	3	1,5	2	
199	*Asteraceae*	*Telekia speciosa*	H	Carp-Balc-Cauc-Anat	4	2	0	
200	*Alliaceae*	*Allium * fuscum*	G	Dac-Balc-Apen	1	4	3	
201	*Melanthiaceae*	*Tofieldia calyculata*	H	Alp-Carp	4,5	0	4	
202	*Iridaceae*	*Crocus banaticus*	G	Dac-Balc	3	3	0	EN
203	*Iridaceae*	*Crocus vernus*	G	Carp-Balc	3	1	2	
204	*Orchidaceae*	*Dactylorhiza * cordigera*	G	Alp-Carp-Balc	4,5	2	2	NT
205	*Juncaceae*	*Juncus * trifidus*	H	Alp-Carp	3	1	2	
206	*Cyperaceae*	*Carex curvula*	H	Alp-Carp-Balc	2,5	1	1	
207	*Cyperaceae*	*Carex dacica*	H	Dac-Balc	0	2	2	
208	*Cyperaceae*	*Carex * transsilvanica*	H	Dac-Balc	0	2	2	
209	*Poaceae*	*Agrostis alpina*	H	Alp-Carp	3	1	3	NT
210	*Poaceae*	*Agrostis rupestris*	H	Alp-Carp-Balc	2,5	1	1	
211	*Poaceae*	*Avenula versicolor*	H	Alp-Carp	4	3	0	
212	*Poaceae*	*Bromus bracensis*	H	Carp-Balc	2	0	4	NT
213	*Poaceae*	*Festuca bucegiensis*	H	Carp	2	1	2	VU
214	*Poaceae*	*Festuca carpatica*	H	Carp	3	2	4	NT
215	*Poaceae*	*Festuca drymeja*	H	Carp-Balc	4	2	3	
216	*Poaceae*	*Festuca picta*	H	Alp-Carp-Balc	2,5	2	0	
217	*Poaceae*	*Festuca rupicola*	H	Alp-Carp-Balc	2	4	4	
218	*Poaceae*	*Festuca versicolor*	H	Alp-Carp-Sudet	2	2	4	NT
219	*Poaceae*	*Helictotrichon decorum*	H	Carp	2,5	3,5	4	LC
220	*Poaceae*	*Koeleria * transsilvanica*	H	End (Carp)				LC
221	*Poaceae*	*Melica ciliata*	H	Euc- Balc	1,5	4	0	

222	*Poaceae*	*Oreochloa disticha*	H	Alp-Carp	3	1	1	NT
223	*Poaceae*	*Phleum montanum*	H	Carp-Balc-Anat	1,5	4	4	
224	*Poaceae*	*Poa * contracta*	H	Carp-Balc	3,5	1,5	4	NT
225	*Poaceae*	*Poa * disparilis*	H	Carp	2,5	1,5	2	NT
226	*Poaceae*	*Poa media*	H	Carp	2,5	1	2	
227	*Poaceae*	*Poa minor*	H	Alp-Carp	2,5	1,5	2	
228	*Poaceae*	*Poa molinerii*	H	Carp	3	2	0	
229	*Poaceae*	*Sesleria bielzii*	H	Carp-Balc	2,5	2,5	4	NT
230	*Poaceae*	*Sesleria coerulans*	H	Carp-Balc	2,5	2,5	4	
231	*Poaceae*	*Sesleria heuflerana*	H	Carp	2	3,5	4	
232	*Poaceae*	*Trisetum alpestre*	H	Alp-Carp	2,5	2	0	NT
233	*Poaceae*	*Trisetum fuscum*	H	Carp	3	1,5	2	NT
234	*Poaceae*	*Trisetum macrotrichum*	H	Carp	2,5	1,5	3	NT
235	*Poaceae*	*Sesleria rigida*	H	Carp-Balc	2,5	2	4	

72% of endemic species of Argeş County are hemicriptophytes, followed by chamephytes (10%), terrophytes (8%), geophytes (6%) and phanerophytes (4%).

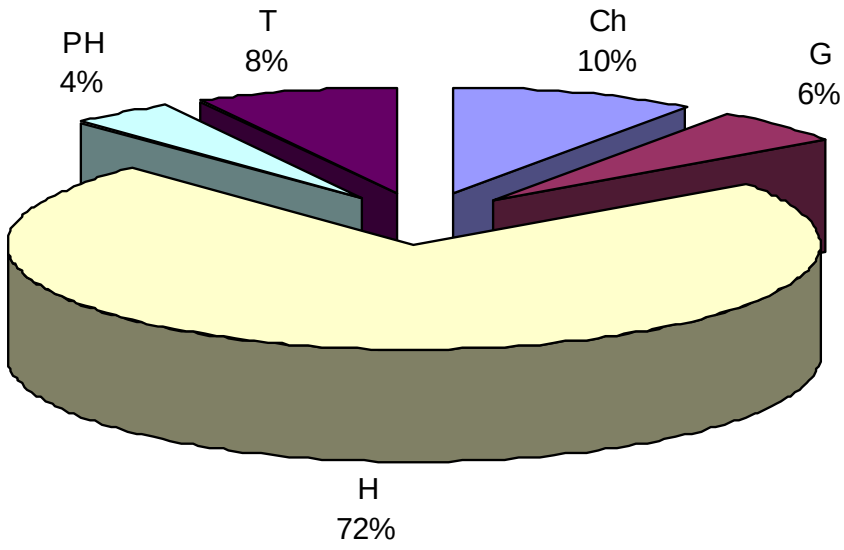

Figure 1 - Bioforms spectrum of endemic species

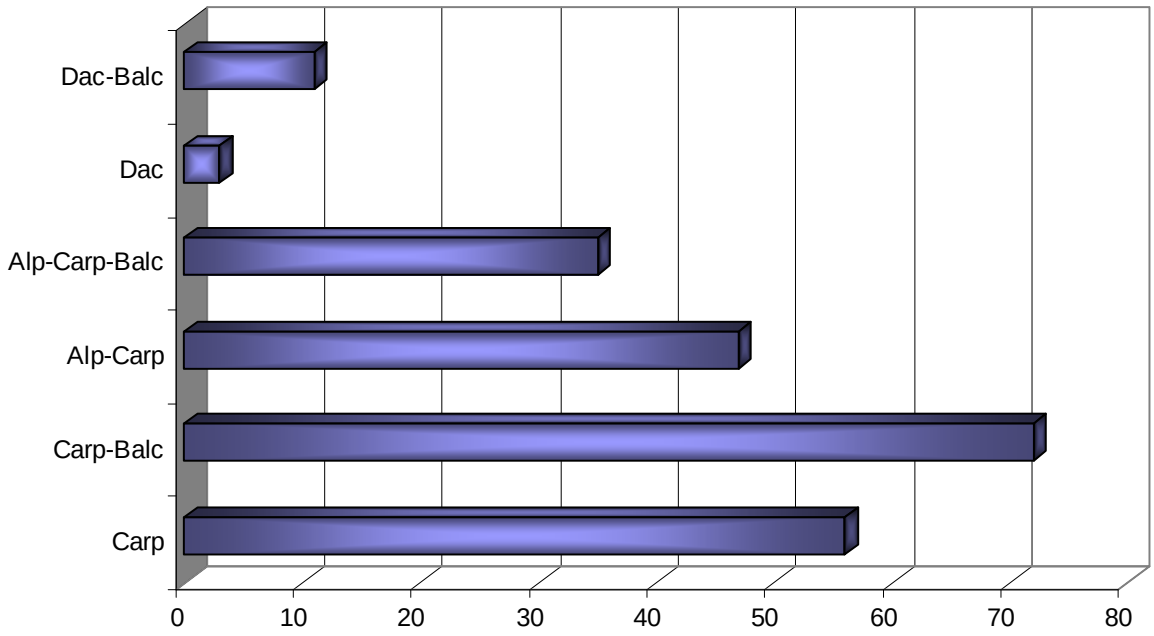

Figure 2 – Floristical elements of endemic species

From the point of view of the floristical elements observed predominance of species Carpatho-Balkan, Carpathian, Alpine-Carpathian and Alpine-Carpathian-Balkan.

By analyzing the spectrum of floristical elements emerges that 60% of all species studied are the Carpathian, Carpathian-Balkan and Dacian, which highlights the value of information content transmitted. He reveals the intensity of particular differentiation and conservation of the region studied.

By analyzing the spectrum of floristical elements emerges that 60% of all species studied are the Carpathian, Carpathian-Balkan and Dacian, which highlights the value of information content transmitted. He reveals the intensity of particular differentiation and conservation of the region studied.

Highlighting the ecological peculiarities of all endemic plant species area studied to establish the specific ecological vegetation consistent with complex local pedo-climatic factors. The spectrum of ecological indices evidences the great number of xero-mesophilic (44,59%) and mesophilic species (35,9%). In relation to temperature, the species are predominantly microthermal (38,96%) and chryophitic species (31,16%).This predominance is explained by the fact that most of the endemic species are found in the alpine and sub-alpine mountains, cool climate characteristics and high altitudes. Regarding the soil reaction, the majority of the endemic species are low acid-neutrophilic species (33,53%). Along with neutro-basiphilic species (4,76%) these species have a share 43,29%) exceeding weight acidophilous species (17,74%) and strongly acidophilic species (3,46%), which demonstrates that the majority of endemic species resort grows in limestone mountain ranges in the basic substrate. Endemic flora is predominantly calciphile.

In conclusion, the analysis of ecological indicators highlighted the fact investigated plant species have adopted different strategies to adapt to the climatic conditions which are characteristic habitats, strategies that allow keeping some relict forms and the endemic species.

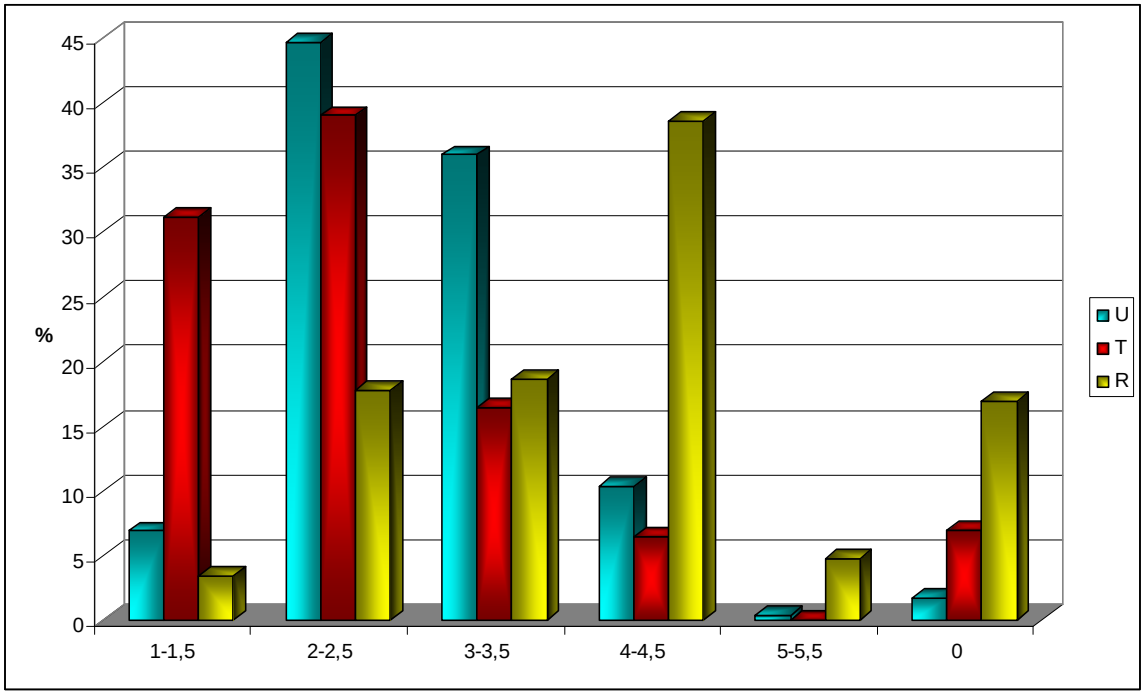

Figure 3 – Ecological indices of endemic plant species

Substrate preference envisages three categories of endemic plants: acidophilic, calciphile and indifferent. It appears that most of the endemic species in Argeş County are taxa calciphile, 100 taxa (43,29%) falling into this category. If they added 82 taxa indifferent (35,49%), that the number of those whose ecological requirement necessarily requires an acidic environment is reduced to 41 taxa (21,21%), finding reflects the ability endemic-generators in these limestone thermophilic areas. In terms of frequency Carpathian endemic plants in Argeş County, she displays in six appearances in Făgăraş, Piatra Craiului, Iezer-Păpuşa, Leaota, Ghimbav and Ghiţu Mountains (*Campanula serrata*), to secure one occurrence (83 taxa). Only 18 taxa occurring in at least 5 areas analyzed, they constituted the core that provides a degree of homogeneity zonal Carpathian endemic flora of Argeş County.

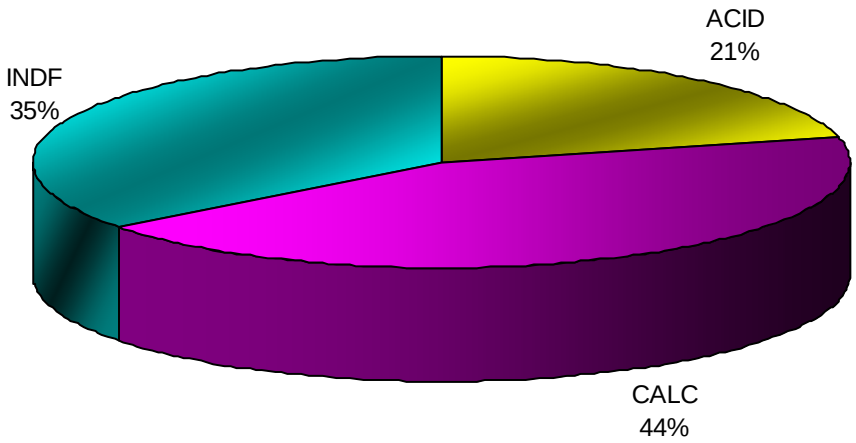

Figure 4 – Share endemic species substrate preferences of Argeş County

From the point of view of the threat, 114 species (48,7%) belong six sozological categories under UICN. Of these, one species is critically vulnerable - CR (*Gentiana lutea*), one threatened – EC (*Crocus banaticus*) and 10 species are vulnerable status - V (*Papaver alpinum* ssp. *corona sancti-stephani*, *Dianthus barbatus* ssp. *compactus*, *Dianthus callizonus*, *Saxifraga mutata ssp. demissa*,

Rhododendron myrtifolium, Primula wulfeniana ssp. *baumgarteniaia, Gentiana punctata, Campanula transsilvanica, Erigeron nanus, Festuca bucegiensis*).

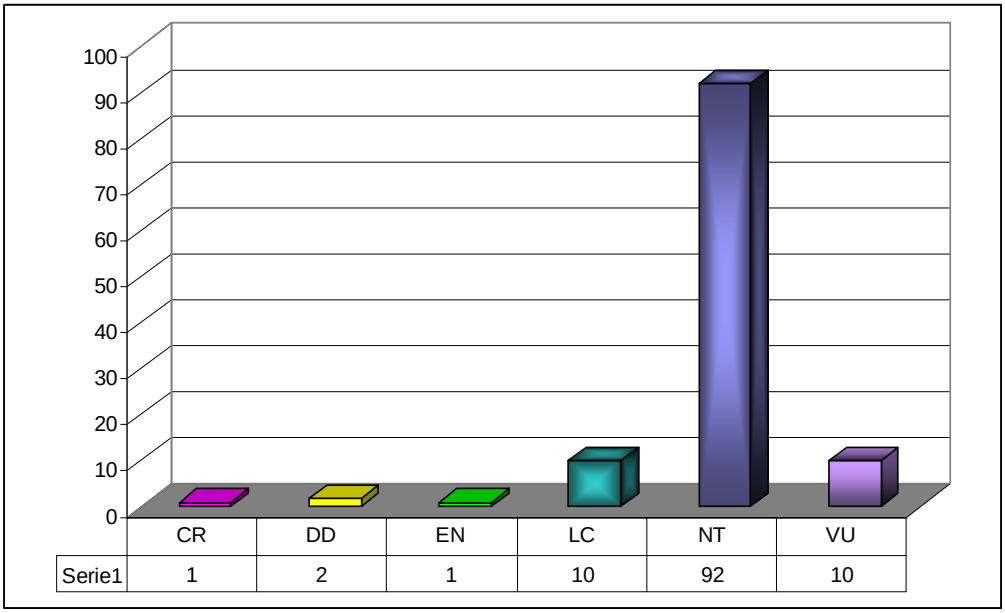

Figure 5 – Sozological categories in the endemic flora of Argeş County

4. CONCLUSIONS

Plants are the basis on which the whole biodiversity. Endemic flora give a strong feature of geographical units, of the natural phenomenon of speciation and current evolution in the area, determined by the orogenetic processes, as well as climatic influences. For here lies the importance of identifying centers endemic-conservative and endemic-generators for the various geographical areas. The Carpathian itself, which has a considerable weight in the mountains of Argeş County, is interesting to note that the floristic differentiation gives various plant groups, and above, all the informational content that you submit in this category are included endemic species present in territory.

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