

ALIEN FLORA FROM BUZĂU COUNTY – ROMANIA

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Abstract: In this paper, we provided the first checklist of alien flora of Buzău County (Romania). Our study revealed the positive invasion trend during recent years. 110 alien taxa were recorded, who belong to 36 families of vascular plants, 52 of them being invasive. The Americas, Asia and the Mediterranean area are the main regions of origin of the taxa of the inventory. Three species are of European Union concern: *Ailanthus altissima*, *Asclepias syriaca* and *Elodea nuttallii*. The most alien plant species were recorded for Buzău and Râmnicu-Sărat cities.

Keywords: allogenous plant species, invasive, Buzău, Romania

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Introduction

Biological invasions are a global phenomenon and comparison of geographically distant regions and their introduced biota is a crucial for elucidation of the determinants of invasiveness and invasibility (Reichard & White 2003; Pyšek *et al.* 2004).

European researchers (Pyšek *et al.* 2012) emphasize the research importance of the regional alien flora for better understanding the invasion process and for the control and management of alien species (Wu *et al.* 2008; Baranovski *et al.* 2016; Spampinato *et al.* 2022). Once introduced and established in a new region, invasive plant species are extremely difficult to eradicate or control (Andreu & Vilà 2010). This suggests an urgent need for information regarding the presence and degree of spread of alien species. Datasets on the floristic state, biological attributes, and the geographic distribution of alien species are significant tools in plant invasions management (Pyšek *et al.* 2002, 2004; Haq *et al.* 2021). Analysis of alien flora composition and dynamics are essential elements for assessing infestation degree of different taxa (Pyšek 2003).

The goals of this study are to provide an inventory and background information on alien plants from Buzău County (South-Eastern Romania). Data on the alien plants from this area are sporadically reported in a few papers (Sîrbu *et al.* 2011, 2014; Oprea *et al.* 2012a, b). This new and updated data should contribute to filling the knowledge gap on alien species distribution in Romania.

Material and methods

Investigated area. Buzău is a county in the South-East of Romania who connects the Carpathian Arch and the Danube Plain (Consiliul Județean Buzău 2023).

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The total area of the county is 6,102.6 square kilometers (2.6% of the country's territory) and over 40% of the total area is arable land. The county occupies the largest part of the hydrographic basin of the Buzău river, harmoniously encompassing all forms of relief: mountains in the north, plains in the south, between which lies the subcarpathian hilly area.

The vegetation presents specific elements for each of the three types of relief: the steppe and silvosteppe type in the plains, forests in Subcarpathian hills and mountain area and extensive meadows with grasses and bushes in the subalpine area.

In the steppe, vegetation has been replaced over large areas by cultivated plants. The lands, except for marshes, valleys and salt marshes, are cultivated with cereals, sunflowers, legumes and, to a lesser extent, with fruit trees and vines.

In the forest-steppe, in addition to the lands occupied by crops, in smaller areas there are forests, remnants of the forests from the past.

The area of the subcarpathian hills and the mountain area is covered by forests (oak forest, beech forest, coniferous forest), woody shrub community and subalpine meadows.

Methods. This study is based on the authors' field investigations from May to October in between 2019 and 2022. The inventory was done in 130 localities of Buzău County, covering the entire surface of the county. The data were collected from abandoned lands, railway station, cemeteries, dumping site, roadsides and some rivers, cultivated lands and protected areas. The collected data were compared with information about alien species found in previous research about flora from Buzău County, published in various scientific papers (Ciocârlan 1966, 1968; Dihoru 1975; Ștefan 1980, 1993; Mititelu *et al.* 1980; Anastasiu *et al.* 2008; Sava *et al.* 2010; Georgescu *et al.* 2015).

A database with alien plants from Buzău County has been done. Archaeophytes (aliens introduced before 1500 AD), neophytes and cryptogenic taxa (taxa for which the period of introduction is not known or not very well documented) were considered in the analyses. *Senecio inaequidens* is not included in analyses, it was discovered in November 2023, when the paper was in reviewing process.

The nomenclature of species is according to Plants of the World Online database (POWO 2023) and Sârbu *et al.* (2013). In the list of alien flora (Appendix 1), taxa were listed in alphabetic order. For each taxon we registered and analyzed: family, life span, life form (according to Sârbu *et al.* 2013), origin (according to Erhardt *et al.* 2008, Sârbu *et al.* 2013), way of introduction, residence time, invasive status (according to Anastasiu *et al.* 2019) and relative abundance (Aymerich & Sáez 2019). The terminology used to establish the status of alien plants in our country has been adapted from Richardson *et al.* (2000) and Pyšek *et al.* (2004).

Abbreviations: Life form: Ch – Chamaephytae; G – Geophyte; H – Hemicryptophyte; HH – Helohydrophyte; PhLi – Liana; PhM – Macrophanerophyte; PhN – Nanophanerophyte; T – Therophyte; Ht – Hemitherophyte. **Origin:** Af – Africa; Am – America; As – Asia; Eu – Europe; Trop – Tropical; Med – Mediterranean; N – North; E – East; S – South; W – West; C – Centre (central). **Way of introduction:** a – accidental; d – deliberate. **Residence time:** arh – archaeophyte; neo – neophyte; cry – cryptogenic taxa. **Invasive status:** c = casual; n = naturalized; i = invasive. **Relative abundance:** Rare (R): less than 5 points; Scattered (S): few points (typically <20) and locally scarce;

Locally abundant (L): few points but locally abundant; Common (C): widespread and often locally abundant.

Results

***Abutilon theophrasti* Medik.:** Băile Sărata-Monteoru (45.10081°N, 26.70158°E); Buzău (45.14269°N, 26.84434°E).

***Acer negundo* L.:** Aldeni; Băile Sărata-Monteoru; Beciu; Boldu; Buzău (Crâng Park, Industriei Boulevard, railway station, Transilvaniei Street); Meri; Râmnicelu; Râmnicu Sărat (Eternitatea Cemetery, railway station); Săhăteni; Sărata-Monteoru; Valea Părului; Vintilă Vodă.

***Aesculus hippocastanum* L.:** Băile Sărata-Monteoru (45.14951°N, 26.63066°E).

***Ailanthus altissima* (Mill.) Swingle:** Băile; Băile Sărata-Monteoru (halt); Bălănești; Beciu; Boldu; Bozioru; Buda Crăciunești; Buzău (Alexandru Marghiloman Street, Colonel Ion Buzoianu Street, Depoului Street, Industriei Boulevard, Panait Moșoiu Street, railway station, Transilvaniei Street); Căndești; Caragele; Cărlomănești; Cilibia; Ciobănoaia; Ciuta; Cocârceni; Colți; Costești; Dogari; Izvoru Dulce; Largu; Leiculești; Lunca; Meri; Ojasca; Oreavu; Pănățau; Pătârlagele; Pietroasele; Pogoanele; Policiori, Vulcanii Noroiși Păcelele Mici; Poșta Călnău; Răducești; Râmnicu Sărat (Eternitatea Cemetery, Drăgaicii Street, railway station); Rușețu; Săhăteni; Săpoca; Sărulești; Sătuc; Sibiciu de Sus; Sorești; Topliceni; Valera Părului; Valea Salciei; Vernești; Vintilă Vodă; Vipirești; Zorești.

***Alcea rosea* L.:** Buzău (Sf. Apostol Andrei Cemetery, Sf. Constantin and Elena Cemetery); Meri (45.134048°N, 26.662441°E); Topliceni (45.426163°N, 27.004843°E).

***Amaranthus albus* L.:** Buzău (Industriei Boulevard); Râmnicu Sărat (railway station) (45.37920°N, 27.05817°N).

***Amaranthus blitum* subsp. *emarginatus* (Salzm. ex Uline & Bray) Carretero, Munoz Garm. & Pedrol (*Amaranthus emarginatus* Salzm. ex Uline & Bray):** Gura Teghii (45.486611°N, 26.423478°E).

***Amaranthus caudatus* L.:** Pogoanele (44.916732°N, 26.990855°E).

***Amaranthus cruentus* L.:** Buzău (Saturn Street 45.141449°N, 26.818844°E); Mucești-Dănulești (45.513161°N, 26.920114°E).

***Amaranthus deflexus* L.:** Buzău (Marghiloman Park, Alexandru Marghiloman Street, Colonel Ion Buzoianu Street, Ostrovului Street, Panait Moșoiu Street, Poștei Street); Râmnicu-Sărat (Drăgaicii Street); Săhăteni.

***Amaranthus hybridus* L.:** Mucești-Dănulești (45.513161°N, 26.920114°E); Policiori (45.357281°N, 26.679632°E); Podu Muncii (45.434185°N, 26.735361°E).

***Amaranthus powellii* S. Wats.:** Buzău (railway station 45.14269°N, 26.84434°E); Meri (45.124985°N, 26.686115°E); Râmnicelu (45.28673°N, 27.05894°E); Râmnicu Sărat (railway station 45.378700°N, 27.059140°E).

***Amaranthus retroflexus* L.:** Băile; Băile Sărata-Monteoru (halt); Balta Tocila; Beceni; Beciu; Boldu; Buzău (Depoului Street, Industriei Boulevard, railway station, Saturn Street, Sf. Apostol Andrei Cemetery; Sf. Constantin and Elena Cemetery); Căndești; Cărlomănești; Cernătești; Cilibia; Cioranca; Cislău; Colți; Dedulești; Gura Călnăului; Gura Teghii; Instrița de Jos; Joseni; Leiculești; Meri; Mierea; Nehoiu; Nisicov; Ojasca; Păltineni; Păltiniș; Pârscov; Pătârlagele; Pietroasele; Podu Muncii; Pogoanele; Poșta Călnău; Potoceni; Râmnicelu; Râmnicu Sărat (Eternitatea Cemetery,

railway station); Sătuc; Scărișoara (cemetery); Sibicu de Sus; Sorești; Stâlpu; Topliceni; Valea Nucului; Valea Salciei (cemetery); Valea Sibicului; Vernești; Zorești.

***Ambrosia artemisiifolia* L.:** Aldeni; Băile Sărata-Monteoru (halt); Balta Tocila; Bălănești; Beceni; Beciu; Boldu; Buda Crăciunești; Buzău (Industriei Boulevard, Privat Cemetery, railway station, Sf. Apostol Andrei Cemetery); Căndești; Chirlești; Ciuta; Dogaru; Gura Teghii; Istrița de Jos; Joseni; Largu; Limpeziș; Lunca Priporului; Măgura; Meri; Mucești-Dănulești; Oreavu; Pătârlagele; Pogoanele; Poșta Călnău; Potârnichești; Râmnicelu; Râmnicu Sărat (railway station); Rușețu; Sărata; Siriu; Spătaru; Tisău; Valea Puțului; Valea Salciei (cemetery); Vernești; Zărneștii de Slănic.

***Amorpha fruticosa* L.:** Buzău (Crâng Park, Sf. Constantin and Elena Cemetery); Cheile Buzăului; Joseni; Lacul Siriu; Lunca Jariștea (downstream of the Siriu lake dam); Sărata; Sărulești; Valea Lupului; Stânca Teherău (viaduct); Viperești.

***Antirrhinum majus* L.:** Buzău (Panait Moșoiu Street 45.136166°N, 26.830355°E, Sf. Constantin and Elena Cemetery 45.160266°N, 26.785224°E).

***Armoracia rusticana* G.Gaertn., B.Mey. & Scherb.:** Beceni; Beciu; Buzău (Industriei Boulevard, Dumitru Filipescu Street); Clondiru de Sus; Cozieni; Greceanca; Izvoru Dulce; Joseni; Măgura; Meri; Mucești-Dănulești; Ojasca; Păltiniș; Pleșcoi; Poșta; Sărulești; Topliceni; Valea Salciei; Viperești.

***Artemisia annua* L.:** Băile; Beceni; Buzău (Industriei Boulevard); Cernătești; Pătârlagele; Săpoca.

***Asclepias syriaca* L.:** Lunca Priporului (45.448704°N, 26.295744°E); Scărișoara (cemetery 45.226198°N, 26.389007°E).

***Atriplex hortensis* L.:** Buda (45.501072°N, 26.911335°E); Valea Salciei (45.497581°N, 26.836414°E).

***Avena sativa* L.:** Râmnicu Sărat (railway station 45.33427°N, 27.05894°E).

***Bassia scoparia* (L.) A.J.Scott:** Băile; Băile Sărata-Monteoru (halt); Boldu; Brădeanca; Buzău (Depoului Street, Industriei Boulevard, railway station); Căndești; Cilibia; Cislău; Colți; Colțu Pietrii; Fulga; Gura Călnăului; Istrița de Jos; Nehoiu; Niscov; Păltinerni; Păltiniș; Pătârlagele; Poșta Călnău; Potârnichești; Râmnicu Sărat (railway station); Valea Sibicului; Vernești; Zărneștii de Slănic.

***Bassia scoparia* var. *trichophylla* (Voss) S.L.Welsh:** Blăjani; Buzău (Depoului Street); Potoceni; Siriu; Topliceni; Valea Sibicului.

***Bidens frondosa* L.:** Pătârlagele (45.32296°N, 26.36352°E).

***Brassica rapa* L.:** Buzău, (railway station 45.14306°N, 26.83059°E); Râmnicu Sărat (railway station 45.31004°N, 27.05894°E).

***Bromus diandrus* Roth:** Buzău (railway station 45.14268°N, 26.83123°E).

***Calendula officinalis* L.:** Buzău (Sf. Apostol Andrei Cemetery, Sf. Constantin and Elena Cemetery); Lunca Jariștei (cemetery); Râmnicu Sărat (Eternitatea Cemetery).

***Campsis radicans* (L.) Bureau:** Buzău (Marghiloman Park 45.14716°N, 26.84534°E); Pădureni (45.182907°N, 26.541039°E).

***Cannabis sativa* L.:** Băbeni; Bozioru; Buzău (Industriei Boulevard, railway station); Cârломănești; Cioranca; Greceanca; Potârnichești; Topliceni; Vernești.

***Catalpa bignonioides* Walter:** Buzău (Obor Street 45.155197°N, 26.8242°E).

***Coreopsis grandiflora* Hogg ex Sweet:** Lunca Jariștei (cemetery 45.483505°N, 26.257868°E).

***Cosmos bipinnatus* Cav.:** Furtunești (45.45802°N, 26.3944°E); Lopătari (the road to the Focurile Vii 2 45.483968°N, 26.575685°E); Scărișoara (cemetery 45.226198°N, 26.389007°E); Valea Salciei (cemetery 45.500858°N, 26.815359°E).

***Cucumis melo* L.:** Mucești-Dănulești (45.513161°N, 26.920114°E).

***Cuscuta campestris* Yunck.:** Băbeni; Beceni; Boldu; Buzău (Industriei Boulevard); Lunca Frumoasă; Oreavu; Râmniciu Sărat (railway station); Vernești.

***Cyclachaena xanthiifolia* (Nutt.) Fresen. (*Iva xanthiifolia* Nutt.):** Buzău (Industriei Boulevard 45.133978°N, 26.825178°E); Dogari (45.418064°N, 26.749273°E); Râmniciu Sărat (railway station 45.378623°N, 27.058196°E); Răducești (45.432629°N, 26.999054°E).

***Datura stramonium* L.:** Băile; Băile Sărata-Monteoru (halt); Bâsca Rozilei; Buzău (Industriei Boulevard, railway station, Sf. Apostol Andrei Cemetery); Caragele; Chirlești; Costești; Gura Dimienii; Gura Teghii; Izvoru Dulce; Joseni; Lunca; Mătești; Păltiniș; Pogoanele; Poșta Călnău; Rușetu.

***Datura wrightii* Regel:** Băile; Buzău (Sf. Apostol Andrei Cemetery, Industriei Boulevard); Cioranca; Poșta; Spătaru; Topliceni.

***Dysphania ambrosioides* (L.) Mosyakin & Clemants (*Chenopodium ambrosioides*):** Buzău (Industriei Boulevard 45.133793°N, 26.822111°E).

***Elaeagnus angustifolia* L.:** Aldeni; Atârnați; Băile Sărata-Monteoru; Balta Albă; Beciu (Vulcanii Noroioși); Bentu; between Largu and Luciu; between Policiori and Beciu; Boldu; Buzău (Crâng Park, Industriei Boulevard, the entrance of locality); Căndești; Caragele; Cilibia; Ciuta; Gura Călnăului; Gura Dimienii; Izvoru Dulce; Joseni; Mărgăriți; Mărunțișu; Merei; Oreavu; Policiori (Vulcanii Noroioși Păcelele Mici); Râmniciu Sărat (railway station); Sătuc; Scorțoasa.

***Eleusine indica* (L.) Gaertn.:** Buzău (railway station 45.14269°N, 26.84434°E).

***Elodea canadensis* Michx.:** Buzău (Crâng Park 45.1455°N, 26.79624°E).

***Elodea nuttallii* (Planch.) H.St.John:** Buzău (Crâng Park 45.1455°N, 26.79624°E).

***Erigeron annuus* (L.) Desf:** Alunișu; Băile; Băile Sărata-Monteoru; Bălănești; Balta Tocila; Bâsca Rozilei; Beceni; Beciu (Vulcanii Noroioși); Bentu; Berca; Boldu; Bozioru; between Policiori and Beciu; Buda; Buda Crăciunești; Buzău (Privat Cemetery, Industriei Boulevard, Sf. Constantin and Elena Cemetery); Cărlomănești; Cheile Buzăului; Chirlești; Cislău; Ciuta; Cocârceni; Colți; Colțu Pietrii; Dedulești; Furtunești; Grăjdana; Greceanca; Gura Bâscei; Gura Dimienii; Gura Siriului; Gura Teghii; Joseni; Leiculești; Lopătari; Lunca; Lunca Jariștea (cemetery); Lunca Priporului; Măgura; Mărunțișu; Mătești; Mierea; Mucești-Dănulești; Nehoiu; Nemetea; Niculești; Niscov; Ojasca; Păltineni; Păltiniș; Pănătău; Pârscov; Pătârlagele; Pleșcoi; Podu Muncii; Poienile; Policiori (Vulcanii Noroioși Păcelele Mici); Râmniciu; Râmniciu Sărat (Eternitatea Cemetery, railway station); Săpoca; Sătuc; Scărișoara (cemetery); Scorțoasa; Sibiciu de Sus; Spătaru; Stâlpu; Tisău; Topliceni; Unguriu; Valea Lupului; Valea Salciei (cemetery); Valea Sălciilor; Valea Sibiciului; Varlaam (cemetery); Vernești; Stânca Teherău (viaduct); Vintilă Vodă; Vipirești; Zorești.

***Erigeron canadensis* L.:** Aldeni; Băile; Băile Sărata-Monteoru; Balta Tocila; Bălănești; Beceni; Beciu; Bentu; Boldu; Buzău (Alexandru Marghiloman Street, Industriei Boulevard, Marghiloman Park, Sf. Apostol Andrei Cemetery, Sf. Constantin and Elena Cemetery, railway station, Transilvaniei Street); Căndești; Cărlomănești;

Cocârceni; Colți; Costești; Cozieni; Dogaru; Fulga; Grăjdana; Gura Călnăului; Gura Teghii; Izvoru Dulce; Leiculești; Lopătari; Lunca; Mierea; Mucești-Dănulești; Niscov; Pădureni; Păltineni; Pănătău; Poru Muncii; Pogoanele, Poșta; Poșta Călnău; Râmnicelu; Râmnicu Sărat (Drăgaiciei Street, Eternitate cemetery, railway station); Rușețu; Șarânga; Scărișoara (cemetery); Sibiciu de Sus; Sorești; Spătaru, Spătaru forest; Stâlp; Valea Părului; Valea Sălciilor; Vernești.

Erigeron sumatrensis Retz.: Buzău (railway station 45.14290°N, 26.82873°E).

Euphorbia davidii Subils: Buzău (railway station 45.14269°N, 26.84434°E).

Euphorbia glyptosperma Engelm.: Râmnicu Sărat (the north part of the locality 45.39778°N, 27.04790°E).

Euphorbia maculata L.: Buzău (Marghiloman Park 45.14716°N, 26.84534°E, Privat Cemetery 45.159203°N, 26.783609°E, Transilvaniei Street 45.154545°N, 26.819881°E, railway station 45.14269°N, 26.82354°E).

Euphorbia marginata Pursh: Buzău (Panait Moșoiu Street 45.138542°N, 26.832609°E, Sf. Constantin and Elena Cemetery 45.160266°N, 26.785224°E; Gura Teghii (cemetery 45.486611°N, 26.423478°E); Topliceni (45.426163°N, 27.004843°E).

Fallopia aubertii (L. Henry) Holub: between Ziduri and Valea Râmnicului (45.311825°N, 27.067606°E); Buzău (railway station 45.14269°N, 26.82354°E).

Fraxinus americana L.: Buzău (Colonel Ion Buzoianu Street 45.146774°N, 26.819748°E, Ostrovului Street 45.155087°N, 26.818291°E); Oreavul (45.360512°N, 27.012686°E).

Fraxinus pennsylvanica Marshall: Băile; Balta Albă; between Buzău and Spătaru; between Policiori and Beciu; Boldu; Buzău (Colonel Ion Buzoianu Street, railway station); Cilibia; Gura Călnăului; Mânzălești; Policiori (Vulcanii Noroioși Păcelele Mici); Râmnicelu; Râmnicu Sărat (railway station).

Gaillardia pulchella Foug.: Buzău (Sf. Apostol Andrei Cemetery, Sf. Constantin and Elena Cemetery; Râmnicu Sărat, Eternitate Cemetery); Scărișoara (cemetery); Valea Nucului.

Galinsoga parviflora Cav.: Beciu (45.37589°N, 26.70709°E); Leiculești (45.18245°N, 26.58228°E); Sibiciu de Sus (45.38806°N, 26.35922°E).

Galinsoga quadriradiata Ruiz & Pav.: Bălănești; Bozioru (45.38166°N, 26.491241°E); Gura Teghii (45.494503°N, 26.433077°E); Păltiniș (45.45396°N, 26.37897°E).

Gleditsia triacanthos L.: Aldeni; Băile Sărata-Monteoru (halt); Balta Albă; Bozioru; Buzău (Crâng Park, railway station, Sf. Apostol Andrei Cemetery); Istrița de Jos; Limpeziș; Oreavu; Pietroasele; Râmnicu Sărat (railway station); Săhăteni; Scorțoasa; Sorești; Stâlp; Valea Părului; Vernești.

Helianthus annuus L.: Buzău (railway station 45.14269°N, 26.84434°E); Râmnicu Sărat (railway station 45.378920°N, 27.058140°E).

Helianthus decapetalus L.: between Viperești and Cislău (45.228901°N, 26.423611°E); Mărunțișu (45.286018°N, 26.353696°E).

Helianthus tuberosus L.: Berca; between Pârjolești and Lunca Frumoasă; Bozioru; Buda Crăciunești; Buzău (Panait Moșoiu Street, Sf. Apostol Andrei Cemetery, Sf. Constantin and Elena Cemetery); Caragele; Cernătești; Cocârceni; Cozieni; Furtunești; Gura Dimienii; Haleș; Izvoru Dulce; Leiculești; Lopătari; Lunca Frumoasă; Mânzălești; Păltiniș; Pârscov; Pogoanele; Poșta; Răducești; Săpoca; Sărata-Monteoru;

Scărișoara; Scorțoasa; Sibiciu de Sus; Valea Părului; Valea Salciei (cemetery); Vernești.

***Hemerocallis fulva* (L.) L.:** Băile Sărata-Monteoru; Bâsca Rozilei; Buzău (Sf. Constantin and Elena Cemetery); Ciobănoaia; Cislău; Cocârceni; Gura Siriului; Gura Teghii (cemetery); Joseni; Lunca; Lunca Jariștei (cemetery); Lunca Priporului; Merei; Nehoiu; Niculești; Râmnicu Sărat (Eternitate Cemetery); Sărata-Monteoru; Sătuc; Scărișoara (cemetery); Stâlpu; Unguriu; Valea Salciei (cemetery); Valea Sălciilor; Valea Sibicului; Viperești.

***Impatiens parviflora* DC.:** Varlaam (45.4952°N, 26.435624°E).

***Ipomoea purpurea* (L.) Roth.:** Buzău (Industriei Boulevard, Sf. Apostol Andrei Cemetery, Sf. Constantin and Elena Cemetery); Râmnicu Sărat (Eternitatea cemetery); Sibiciu de Sus.

***Juglans regia* L.:** Alunișu; Băile; Băile Sărata-Monteoru (halt); Bâsca Rozilei; Beciu; Bentu; Berca; between Policiori and Beciu; Buzău (railway station); Chirlești; Colți; Colțu Pietrii; Costești; Furtunești; Grăjdana; Leiculești; Lunca; Lunca Jariștei; Lunca Priporului; Mărunțișu; Nehoiu; Ojasca; Păltineni; Pătiniș; Pănătău; Policiori; Râmnicu Sărat (railway station); Scorțoasa; Sibiciu de Sus; Spătaru (the edge of the forest); Valea Sibiciului; Viperești.

***Koeleria paniculata* Laxm.:** Băile Sărata-Monteoru; Beceni; between Buzău and Spătaru; Buzău (Depoului Street, railway station); Nehoiu; Sărulești.

***Lepidium densiflorum* Schrad.:** Buzău (railway station 45.14269°N, 26.84434°E); Leiculești (45.18245°N, 26.58228°E); Râmnicu Sărat (railway station 45.33427°N, 27.05817°E).

***Lepidium oblongum* Small:** Râmnicu Sărat (railway station 45.37918°N, 27.05817°E).

***Lupinus polyphyllus* Lindl.:** Gura Teghii (cemetery 45.486611°N, 26.423478°E); Lunca Jariștea (cemetery 45.483505°N, 26.257868°E); Varlaam (45.501062°N, 26.437818°E).

***Lycium barbarum* L.:** Atârnați; Băile; Băile Sărata-Monteoru (halt); Bălănești; Balta Albă; Beceni; Beciu; Berca; Blăjani; Boldu; Buzău (Marghiloman Park, railway station); Căndești; Caragele; Cărlomănești; Cilibia; Ciobănoaia; Dogari; Gălbiniși; Gura Călnăului; Gura Dimienii; Istrița de Jos; Izvoru Dulce; Joseni; Limpeziș; Luciu; Manasia; Mânzu; Mărunțișu; Merei; Mierea; Muncești-Dănulești; Niscov; Oreavu; Păltineni; Pătârlagele; Pietroasele; Podu Muncii; Pogoanele; Policiori; Poșta Călnău; Potârnichești; Râmnicele; Râmnicu Sărat (Eternitatea Cemetery, railway station); Rușețu; Săhăteni; Săpoca; Scorțoasa; Sorești; Topliceni; Unguriu; Valea Părului; Valea Salciei; Vernești; Vintilă Vodă; Zorești.

***Malus domestica* (Suckow) Borkh.:** Râmnicu Sărat (railway station 45.33427°N, 27.05894°E).

***Matricaria discoidea* DC.:** Râmnicu Sărat (railway station 45.37918°N, 27.05817°E); Varlaam (45.4952°N, 26.435624°E).

***Medicago sativa* L.:** Boldu; Buzău (Marghiloman Park, railway station); Gura Teghii; Leiculești; Pătiniș; Râmnicele; Râmnicu Sărat (railway station); Sibiciu de Sus; Valea Lupului.

***Morus alba* L.:** Atârnați; Băile Sărata-Monteoru (halt); Bălănești; Beceni; Beciu; Berca; Boldu; Buzău (railway station); Cislău; Ciuta; Costești; Gura Teghii; Lunca;

Pătărlagele; Policiori (Vulcanii noroioși, Pâclele Mici); Râmnicu Sărat (railway station); Săpoca; Valea Părului.

***Morus nigra* L.:** Buzău (Marghiloman Park); Fluierași; Gura Teghii; Mierea; Nehoiu; Policiori (Vulcanii noroioși, Pâclele Mici); Râmnicu Sărat (railway station); Sibiciu de Sus; Spătaru (the edge of the forest).

***Nicotiana alata* Link & Otto:** Băbeni (45.443275°N, 26.979601°E).

***Oenothera biennis* L.:** Cozieni (45.32576°N, 26.495592°E); Băile Sărata-Monteoru (45.17034°N, 26.6273°E); Grăjdeana (45.21294°N, 26.63668°E); Gura Teghii (45.48396°N, 26.42029°E); Leiculești (45.18245°N, 26.58228°E); Meri (45.13065°N, 26.68018°E).

***Oenothera glazioviana* Micheli:** Băbeni; Bâsca Rozilei; Berca; between Policiori and Beciu; Bozioru; Buda; Buzău (Panait Moșoiu Street, Sf. Apostol Andrei Cemetery); Căndești; Cernătești; Colți; Fulga; Grajdana; Gura Călnăului; Gura Teghii; Lunca Jariștea (cemetery); Mărunțișu; Meri; Niscov; Pătărlagele; Pleșcoi; Râmnicu Sărat (Eternitatea cemetery); Scărișoara (cemetery); Sibiciu de Sus; Siriu (dam); Strezeni; Valea Salciei (cemetery); Valea Sibicului; Varlaam (cemetery).

***Oenothera macrocarpa* subsp. *macrocarpa* (*Oenothera missouriensis* Sims):** Scărișoara, cemetery (45.226198°N, 26.389007°E); Varlaam, cemetery (45.501062°N, 26.437818°E).

***Oxalis corniculata* L.:** Buzău, Alexandru Marghiloman Street, Marghiloman Park, Poștei Street; Gura Teghii, cemetery; Râmnicu Sărat, Drăgaiciei Street, Eternitatea Cemetery; Scărișoara, cemetery.

***Oxalis dillenii* Jacq.:** Bălănești; Buzău (Crâng Park 45.1455°N, 26.79624°E, railway station 45.14288°N, 26.82737°E).

***Oxalis stricta* L.:** Pătărlagele (45.32301°N, 26.36458°E), Râmnicu Sărat (45.38554°N, 27.055056°E).

***Parthenocissus inserta* (A. Kern.) Fritsch:** Bălănești; Buzău (Industriei Boulevard, Marghiloman Park, Obor Street, Panait Moșoiu Street, railway station, Sf. Apostol Andrei Cemetery, Sf. Constantin and Elena Cemetery, the entrance of the city); Costești; Dogari; Fulga; Gura Dimienii; Gura Teghii; Băile Sărata-Monteoru (halt); Izvoru Dulce; Luciu; Lunca Priporului; Măgura; Manasia; Meri; Mierea; Nehoiu; Păltiniș; Pârscov; Pătărlagele; Pogoanele; Râmnicu Sărat (Eternitatea cemetery, Drăgaiciei Street, railway station); Rușetu; Săhăteni; Sărulești; Valea Sibicului; Vernești.

***Parthenocissus quinquefolia* (L.) Planch.:** Pogoanele (44.916732°N, 26.990855°E).

***Parthenocissus tricuspidata* (Siebold & Zucc.) Planch.:** Buzău (Obor Street 45.155197°N, 26.8242°E).

***Paulownia tomentosa* (Thunb.) Steud.:** Râmnicu Sărat (railway station 45.33427°N, 27.05894°E).

***Persicaria orientalis* (L.) Spach:** Mărăcineni (45.175751°N, 26.823992°E).

***Petrosedum ochroleucum* (Chaix) Nierderle:** Buzău (railway station, Sf. Apostol Andrei Cemetery, Sf. Constantin and Elena Cemetery); Gura Teghii (cemetery); Râmnicu Sărat (Eternitatea Cemetery).

***Petunia integrifolia* (Hooker) Schinz & Thell.:** Buzău (Alexandru Marghiloman Street 45.14677°N, 26.839054°E, Depoului Street 45.141178°N, 26.836353°E, Saturn Street 45.141449°N, 26.818844°E); Potârnichești (45.221481°N, 26.862766°E).

***Phedimus spurium* (M. Bieb.) Hart:** Buzău (Sf. Apostol Andrei Cemetery 45.158981°N, 26.788837°E, Sf. Constantin and Elena Cemetery 45.160266°N, 26.785224°E); Gura Teghii (cemetery 45.486611°N, 26.423478°E); Râmnicu Sărat (Eternitatea Cemetery 45.385834°N, 27.055744°E)

***Phytolacca americana* L.:** Atârnați; Buzău (Sf. Apostol Andrei Cemetery); Clondiru de Sus, Greceanca; Mătești; Scărișoara (cemetery); Stâlpu.

***Populus deltoides* subsp. *deltoides* (Populus carolinensis Moench):** Râmnicu Sărat (railway station 45.33427°N, 27.05894°E).

***Portulaca oleracea* L.:** Buzău (Alexandru Marghiloman Street 45.14677°N, 26.839054°E, Industriei Boulevard 45.133793°N, 26.822111°E, railway station 45.142637°N, 26.826056°E).

***Prunus cerasifera* Ehrh.:** Băile; Băile Sarata Monteoru (halt); Bălănești; Bălhaclu; Balta Albă; Bâsca Rozilei; Beciu; Bentu; between Buzău and Spătaru; between Policiori and Beciu; Boldu; Buzău (Alexandru Marghiloman Street, Crâng Park, Industriei Boulevard, Marghiloman Park); Căndești; Chirlești; Cilibia; Colți; Colțu Petrii; Costești; Furtunești; Gălbinași; Grăjdana; Gura Bâscei; Joseni; Leiculești; Lunca; Lunca Proporului; Măgura; Mărunțișu; Mierea; Nehoiu; Nemertea; Niscov; Păltineni; Păltiniș; Pănătău; Pătârlagele; Poienile; Policiori; Râmnicelu; Râmnicu Sărat (railway station); Sătuc; Scorțoasa; Sibiciu de Sus; Spătaru; Stâlpu; Valea Sibiciului.

***Prunus cerasus* (Mill.) A.Gray:** Băile; Băile Sărata-Monteoru; Beciu; Berca; Buzău (railway station); Căndești; Chirlești; Cilibia; Cislău; Gura Bâscei; Gura Teghii; Joseni; Leiculești; Măgura; Mânzu; Mărunțișu; Merei; Niscov; Ojasca; Pătârlagele; Poienile; Scorțoasa; Sibiciul de Sus; Valea Lupului; Valea Sălciilor.

***Reynoutria* × *bohemica* Chetek & Chrtková:** Gura Teghii (45.487411°N, 26.425549°E); Furtunești (45.45802°N, 26.3944°E); Păltiniș (45.45595°N, 26.37442°E).

***Reynoutria japonica* Houtt.:** Aldeni; Aluniș; Balta Tocila; Bâsca Rozilei; Beceni; Beciu; Buzău (Sf. Constantin and Elena Cemetery); Gura Dimienii; Leiculești; Manasia; Nehoiașu; Siriu; Varlaam.

***Rhus typhina* L.:** Buzău (Depoului Street); Ciuta; Fulga; Grăjdana; Izvoru Dulce; Joseni; Leiculești; Niscov; Pietroasele; Râmnicu Sărat; Săpoca; Sărulești; Sătuc; Valea Părului; Varlaam; Viperești.

***Robinia pseudoacacia* L.:** Aldeni; Băile; Băile Sărata-Monteoru; Bălănești; Bălhaclu; Balta Albă; Bâsca Rozilei; Beciu (Vulcanii Noroioși); Bentu; between Policiori and Beciu; Berca; Blăjani; Boldu; Bozioru; Buda; Buzău (Sf. Apostol Andrei Cemetery, the entrance of the city, railway station); Căndești; Caragele; Chirlești; Cilibia; Ciobănoaia; Cislău; Ciuta; Cocărceni; Colți; Colțu Petrii; Costești; Dedulești; Fluierași; Furtunești; Gălbinași; Grăjdana; Greceanca; Gura Bâscei; Gura Siriului; Gura Teghii; Izvoru Dulce; Joseni; Leiculești; Limpeziș; Lunca; Lunca Jariștea (downstream of the Siriu lake dam); Lunca Priporului; Măgura; Mânzu; Mărgăriți; Mărunțișu; Merei; Mierea; Nehoiu; Nemertea; Niscov; Ojasca; Oreavu; Păltineni; Păltiniș; Pătârlagele; Pogoanele; Poienile; Policiori (Vulcanii noroioși, Păclele Mici); Răducești; Râmnicelu; Râmnicu Sărat (railway station); Săhăteni; Săpoca; Sărata; Sărata-Monteoru; Sătuc; Scărișoara (cemetery); Sibiciu de Sus; Sorești; Stâlpu; Stâncă Teherău (viaduct); Valea Lupului; Valea Sălciilor; Valea Sălciilor; Valea Sibiciului; Varlaam (cemetery); Vintilă Vodă; Viperești; Vizireni; Zorești.

***Robinia viscosa* Michx. ex Vent.:** Varlaam (cemetery 45.48569°N, 26.42818°E).

***Rudbeckia hirta* L.:** Varlaam (cemetery 45.501062°N, 26.437818°E).

***Rudbeckia laciniata* L.:** Lunca Jariștea (cemetery 45.483505°N, 26.257868°E); Pădureni (45.182907°N, 26.541039°E).

***Senecio inaequidens* DC.:** Mânzălești, on Meledic Plateau (45.496062°N, 26.620423°E).

***Solanum lycopersicum* L.:** Buzău (railway station 45.142637°N, 26.826056°E); Cărlomănești (45.221855°N, 26.672293°E); Mucești-Dănulești (45.513161°N, 26.920114°E); Pătârlagele (45.32301°N, 26.36458°E); Râmnicu Sărat (railway station 45.33427°N, 27.05894°E); Râmnicu Sărat (railway station 45.378700°N, 27.059140°E).

***Solanum tuberosum* L.:** Păltiniș (45.45396°N, 26.37897°E).

***Solidago canadensis* L.:** Buzău (Sf. Constantin and Elena Cemetery); Ciobănoaia; Pietroasele; Râmnicu Sărat (Eternitatea Cemetery); Viperești; Zărneștii de Slanic; Zorești.

***Sorghum halepense* (L.) Pers.:** Aldeni; Băile; Băile Sărata-Monteoru (halt); Bălănești; Bălhaclu; Balta Albă; Beceni; Bentu; between Buzău and Spătaru; Boldu; Buzău (Alexandru Marghiloman Street, Dumitru Filipescu Street, Industriei Boulevard, Marghiloman Park, railway station, the entrance of the city, Sf. Apostol Andrei Cemetery); Căndești; Chirlești; Cilibia; Ciobănoaia; Cioranca; Ciuta; Costești; Cozieni; Fulga; Grăjdana; Greceanca; Gura Călnăului; Gura Dimienii; Izvoru Dulce; Limpeziș; Măgura; Mânzu; Mărgăriți; Merei; Mierea; Niscov; Ojasca; Oreavu; Oreavul; Pârscoav; Pietrosele; Podu Muncii; Pogoanele; Poșta; Potârnichești; Râmnicelu; Râmnicu Sărat (Eternitatea Cemetery, railway station); Rușețu; Săhăteni; Săpoca; Sătuc; Sorești; Spătaru; Stâlpu; Topliceni; Valea Sălciilor; Vernești; Zărneștii de Slanic; Zorești.

***Tagetes erecta* L.:** Gura Teghii (cemetery 45.486686°N, 26.422961°E); Lunca Jariștei (cemetery 45.483505°N, 26.257868°E); Scărișoara (cemetery 45.226198°N, 26.389007°E); Valea Salciei (cemetery 45.500858°N, 26.815359°E); Varlaam (cemetery 45.501062°N, 26.437818°E).

***Tradescantia virginiana* L.:** Greceanca (45.074463°N, 26.545359°E); Pătârlagele (45.318741°N, 26.360176°E).

***Triticum aestivum* L.:** Râmnicu Sărat (railway station 45.37918°N, 27.05817°E).

***Ulmus pumila* L.:** Buzău (railway station 45.14269°N, 26.84434°E).

***Xanthium orientale* subsp. *italicum* (Moretti) Greuter:** Aldeni; Bălănești; Băile; Băile Sărata-Monteoru (halt); Balta Tocila; Bâsca Rozilei; Beceni; Beciu; between Pârjolești and Lunca Frumoasă; between Policiori and Beciu; Boldu; Bozioru; Buzău (Industriei Boulevard); Căndești; Caragele; Cilibia; Ciobănoaia; Cislău; Cocărceni; Ciuta; Colți; Colțu Pietrii; Costești; Gura Dimienii; Gura Teghii; Istrița de Jos; Izvoru Dulce; Joseni; Leiculești; Limpeziș; Lunca Jariștea (downstream of the Siriu lake dam); Mătești; Mierea; Mucești-Dănulești; Niscov; Pădureni; Păltineni; Păltiniș; Pânătau; Pătârlagele; Pleșcoi; Pogoanele; Policiori (Vulcanii noroioși, Păcele Mici); Poșta Călnău; Potârnichești; Râmnicelu; Râmnicu Sărat (Eternitatea cemetery, railway station); Rușețu; Săhăteni; Sărulești; Siriu; Sorești; Spătaru; Stâlpu; Topliceni; Valea Salciei; Vernești.

Xanthium spinosum L.: Beciu (45.379456°N, 26.698874°E); Gura Dimienii (45.398529°N, 26.760878°E); Mucești-Dănulești (45.513161°N, 26.920114°E); Pătârlagele (45.32296°N, 26.36352°E); Rușețu (44.965633°N, 27.224133°E).

Discussion

To compile the inventory of alien species from Buzău County, 1640 records were analyzed. We identified 110 alien plants taxa (Appendix 1) which represents 16.39% of the total species reported for Romania (Sirbu & Oprea 2011). High aliens' abundance can be attributed by combination of regional factors (a complex geomorphologic structure and suitable climatic conditions), as well as an active anthropogenic transformation (Baranovski *et al.* 2016).

Combining these results with data collected from the literature resulted in an inventory of 184 taxa. Of these, 74 taxa were not identified by us during the inventory (Appendix 2) and 57 taxa having the first report for the area. Among the newly reported ones 30 taxa are ornamental, planted and escaped from cultivation in cemeteries or/and on the side of the roads, in front of the yards.

The inventoried taxa belong to 36 families and 78 genera (Appendix 1). The families with the most representatives are Asteraceae (16 taxa - 20.77%); Fabaceae, Poaceae and Solanaceae with 5 taxa; Amaranthaceae (4 taxa - 5.19%); Brassicaceae, Polygonaceae and Sapindaceae with 3 taxa (Fig. 1). This group of 8 families were dominant, embracing together more than 40% of the total alien species number. The rest of the 28 families are represented by only two or one taxa.

The genus with the highest number of alien taxa is *Amaranthus* (8 species). The rest of the genera are represented by 4 species (*Euphorbia*), 3 species (5 genera), two species (13 genera) and by a single species (57 genera).

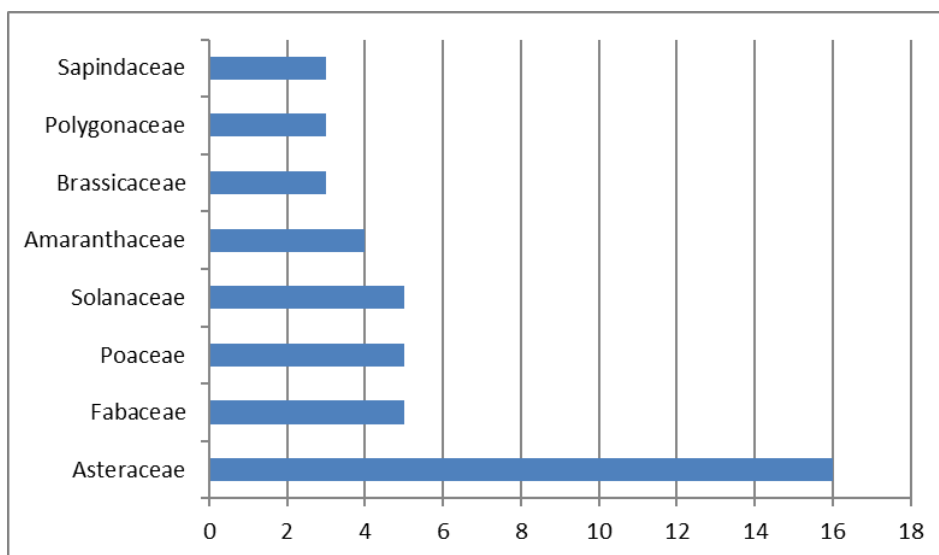


Fig. 1. Spectrum of the families of alien plant species from Buzău County with more than one or two taxa

The analysis of life span shows a close proportion between annuals – 53 species (48.62%) and perennials – 52 species (47.27%). Biennals are represented by 2 species (2.46%). Among the identified taxa there are also 3 annual species with a tendency to perennialize: *Antirrhinum majus*, *Oxalis dillenii* and *Oxalis stricta*.

Although the dominance of annuals is a trend observed in numerous research of regional flora in the country and abroad (Lambdon *et al.* 2008; Baranovski *et al.* 2016; Burduşel *et al.* 2020; Răduţoiu & Stan 2013), in this case the presence of a large number of perennial species is given by the large number of species of introduced for ornamental purposes. Thus, among the 28 phanerophytes, 23 species are ornamental.

As ornamental trees and shrubs we can list *Ailanthus altissima*, *Catalpa bignonioides*, *Fraxinus americana*, *Fraxinus pennsylvanica*, *Koelreuteria paniculata*, *Paulownia tomentosa*, *Rhus typhina* and *Robinia viscosa*.

Among the 20 perennials hemicytopytes (Fig. 2), also a high number (16 species) are ornamental and were observed especially in the studied cemeteries. Among these we mention *Asclepias syriaca*, *Coreopsis lanceolata*, *Gaillardia pulchella*, *Hemerocallis fulva*, *Lupinus polyphyllus*, *Rudbeckia hirta*.

Perennial hydrophytes are represented by two species: *Elodea nuttallii* and *Elodea canadensis*, invasive plants recorded in a water basin in “Crâng” Park from Buzău town. The species was probably introduced together with exotic ornamental water lily species.

The geophytes and chamaephytes have just one representative.

As annual species there are some weeds associated with roadsides or cultivated land, especially considering that of the total area of the county, over 40% is arable land (*Amaranthus* spp., *Datura stramonium*, *Erigeron annuus*, *Portulaca oleracea*, *Xanthium orientale* subsp. *italicum*, *Xanthium spinosum*).

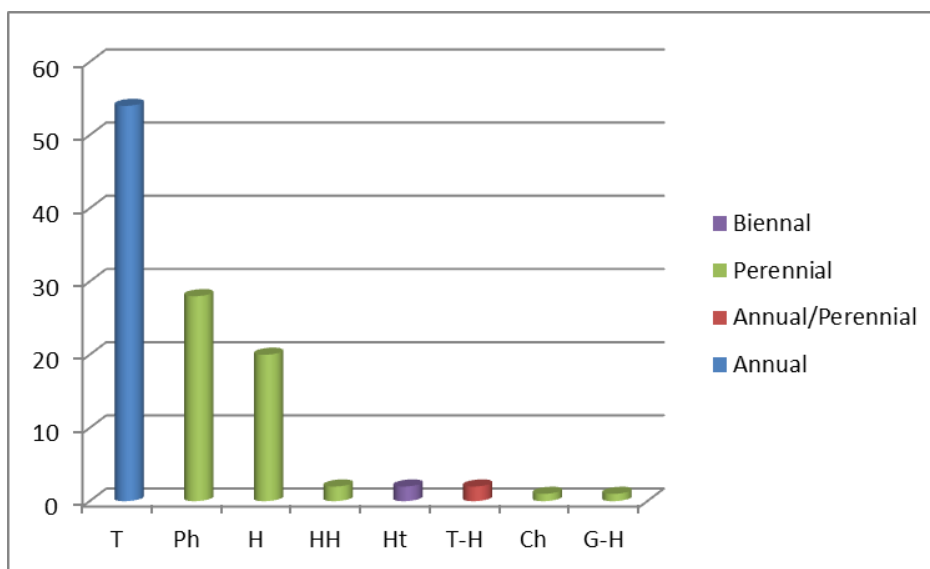


Fig. 2. Biological form spectrum of alien plant species from Buzău County in correlation with life span

Sources of annuals are also railway platforms and waste lands associated to the railways. We mention from here *Erigeron sumatrensis*, *Euphorbia davidii*, *Lepidium densiflorum*, *Lepidium oblongum*, some of them found in the county just in Buzău train station.

The greatest contribution to the regional alien flora was made by species originating from the Americas (67 taxa, 60.90%), among which most originate from North America (57 taxa) (Fig. 3). The next most frequent areas of origin are: Asia (26 taxa) and the Mediterranean basin (6 taxa). Three taxa are from South- East Europe and West Asia. African taxa have just 2 representatives.

Of the total alien taxa, the majority is represented by neophytes (97 taxa – 88.18%) (Appendix 1) and only 9.09%, is represented by archaeophytes. Only two cryptogenic taxa were found (*Abutilon theophrasti*, *Armoracia rusticana*).

Considering the way of introductions, 74 taxa (67.88%) from total taxa were introduced deliberately and 36 (32.72%) accidentally.

Regarding the introduction pathways of alien flora, ornamental and alimentary use results to be the main causes of introduction. 56 taxa were introduced as ornamental plants, horticulture being a major factor of continuous increase in the number of alien taxa. These represent 21.21% of the total of alien species introduced (264 taxa) for ornamental purposes in Romania (Urziceanu *et al.* 2020).

Cemeteries were the main places where some of them were identified: *Asclepias syriaca*, *Calendula officinalis*, *Coreopsis lanceolata*, *Gaillardia pulchella*, *Hemerocallis fulva*, *Lupinus polyphyllus*, *Oenothera macrocarpa* subsp. *macrocarpa*, *Rudbeckia hirta*, *Petrosedum ochroleucum*, *Phedimus spurius*, *Tagetes erecta*. As well, the presence of a large number of alien plants (37 species) in these places proves that they are hotspots of potentially invasive plants species.

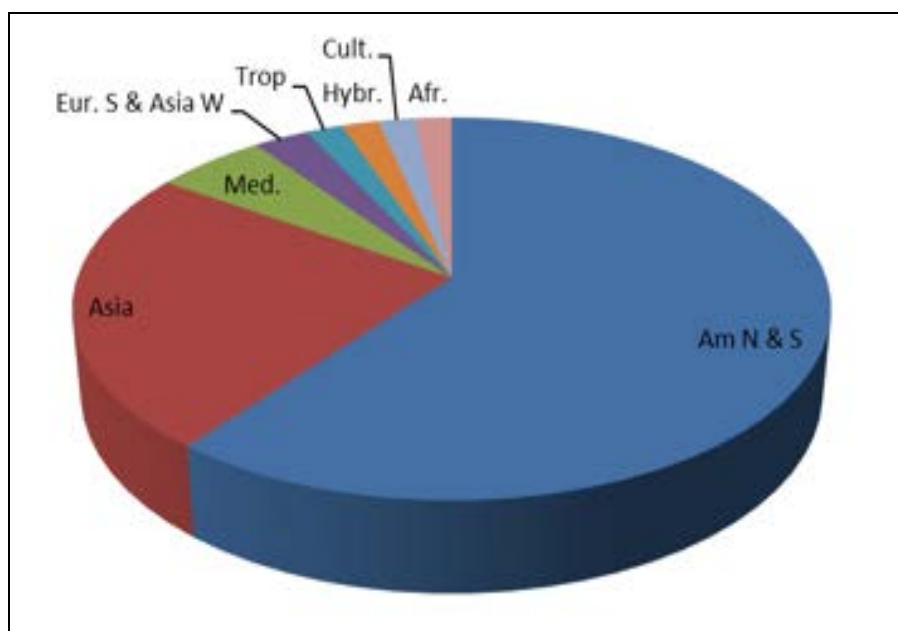


Fig. 3. Origin spectrum of alien plant species from Buzău County

Regarding the degree of naturalization, almost half of the taxa are invasive (53), 40 are casual aliens and 17 are naturalised. The established aliens (naturalised + invasive) are 70 (63.63%) of the recorded taxa.

Of this, *Ailanthus altissima*, *Asclepias syriaca* and *Elodea nuttallii* are included in the updated list of invasive alien species of EU concern (The European Commission 2019). The first species is widely spread over the surface of the county, but the other two species were identified in one or two localities. The number of *Asclepias syriaca* individuals is very low but in case of *Elodea nuttallii* we mention a very large number of individuals in the lake in “Crâng” Park, where the water surface of the lake was invaded.

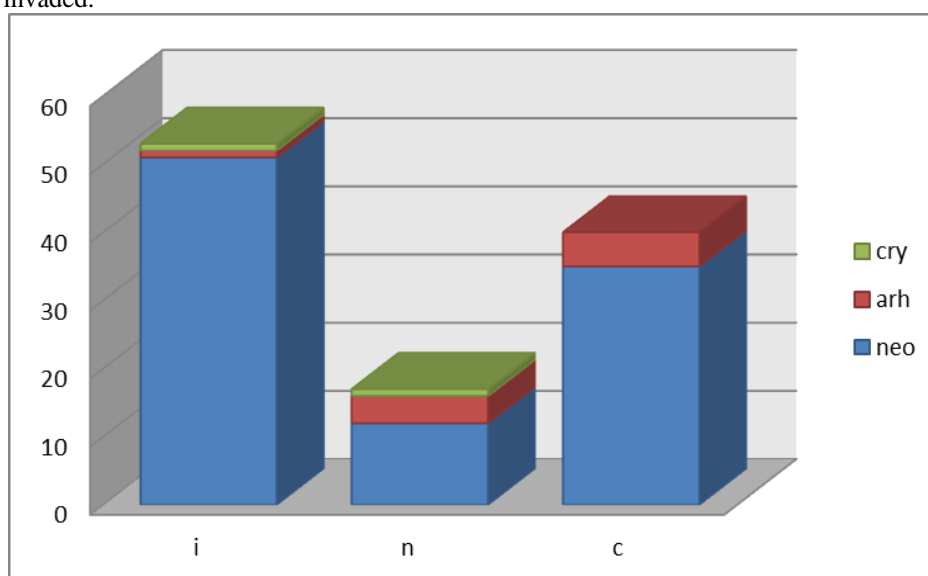


Fig. 4. The degree of naturalization of alien plant species from Buzău County

Also, from the invasive taxa, 47 are included in the list of the 150 most widespread alien plant species in Europe (Lambdon *et al.* 2008).

Analysis of relative abundance of alien plant species from Buzău County show that species with rare status (53) have the highest presence and were identified in less than 5 points where the inventory was made. Of these, 24 species are casual, 17 invasive and 12 naturalized. This shows that a large part of the total alien species registered (53 species) are in the initial stage of spreading in this county.

27 taxa are common species, having a wide regional distribution and a large number of individuals). Most of these are invasive plants, widely spread throughout the country as *Ailanthus altissima*, *Ambrosia artemisiifolia*, *Datura stramonium*, *Erigeron annuus*, *Erigeron canadensis* and *Helianthus tuberosus*.

18 taxa are considered scattered (because were identified in less than 20 points and are locally scarce), casual species predominating: *Alcea rosea*, *Calendula officinalis*, *Petrosedum ochroleucum*, *Phedimus spurius*, *Tagetes erecta*. These species are decorative plants present especially in the studied cemeteries. Interesting is the weak presence of the invasive species *Solidago canadensis* and *Artemisia annua*.

Just 12 taxa are locally abundant (restricted to a few places), mostly in railways stations and cemeteries, important points for introduction of alien species.

Overall, taxa that have achieved a major implantation in the territory (common + locally abundant) are 28.39% from total taxa and those that show little colonization success (rare + scarce) are 70.37 %.

The inventory was made in 130 localities of Buzău County, the greatest number of alien species being registered in the largest cities of the county, Buzău (77 taxa) and Râmnicu Sărat (48).

Conclusions

The result of the studies indicates an active invasion of alien plants into the flora of Buzău County with a dominance of neophytes (97 taxa – 88.18%) and 47 taxa included in the list of the 150 most widespread alien plant species in Europe. Also, 3 taxa (*Ailanthus altissima*, *Asclepias syriaca* and *Elodea nuttallii*) are included in the updated list of invasive alien species of EU concern.

Of the 110 reported taxa, 57 taxa have the first report for Buzău County. Most of the new taxa inventoried in this county are represented by plants that have escaped from cultivation in cemeteries, confirming the important role of horticulture in the introduction of alien plants, some of them with invasive potential.

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Nr. crt.	Taxa	Family	Life span	Life form	Origin	Way of introduction	Residence time	Invasivity	Relative abundance
1.	<i>Abitilon theophrasti</i>	Malvaceae	Annual	T	As	a	ery	i	R
2.	<i>Acer negundo</i>	Sapindaceae	Perennial	PhM	AmN	d	neo	i	C
3.	<i>Aesculus hippocastanum</i>	Sapindaceae	Perennial	PhM	Med	d	neo	c	R
4.	<i>Ailanthus altissima</i>	Simsaroubaceae	Perennial	PhM	As E	d	neo	i	C
5.	<i>Alicea rosea</i>	Malvaceae	Perennial	H	As	d	neo	c	S
6.	<i>Amaranthus albus</i>	Amaranthaceae	Annual	T	AmN&C	a	neo	i	L
7.	<i>Amaranthus blitum</i> subsp. <i>emarginatus</i>	Amaranthaceae	Annual	T	Trop.	a	neo	c	R
8.	<i>Amaranthus caudatus</i>	Amaranthaceae	Annual	T	AmS	d	neo	n	R
9.	<i>Amaranthus cruentus</i>	Amaranthaceae	Annual	T	AmTrop	d	neo	n	R
10.	<i>Amaranthus deflexus</i>	Amaranthaceae	Annual	T	AmS	a	neo	i	S
11.	<i>Amaranthus hybridus</i>	Amaranthaceae	Annual	T	AmN	a	neo	i	R
12.	<i>Amaranthus powellii</i>	Amaranthaceae	Annual	T	AmN&S	a	neo	i	L
13.	<i>Amaranthus retroflexus</i>	Amaranthaceae	Annual	T	AmN	a	neo	i	C
14.	<i>Ambrosia artemisiifolia</i>	Asteraceae	Annual	T	AmN	a	neo	i	C
15.	<i>Amarpha fruticosa</i>	Fabaceae	Perennial	PhN	AmN	d	neo	i	L
16.	<i>Antirrhinum majus</i>	Plantaginaceae	Annual/ Perennia	T	EuSW	d	neo	n	R
17.	<i>Armoracia rusticana</i>	Brassicaceae	Perennial	H	Eu SE, As W	d	ery	n	C
18.	<i>Arisema amua</i>	Asteraceae	Annual	T	AsC&S	a	neo	i	S
19.	<i>Asclepias syriaca</i>	Apocynaceae	Perennia	H	AmN-E	d	neo	i	R
20.	<i>Atriplex hortensis</i>	Amaranthaceae	Annual	T	AsC	d	neo	c	R
21.	<i>Avena sativa</i>	Poaceae	Annual	T	AsMinor	a	arh	c	R
22.	<i>Bassia scoparia</i>	Amaranthaceae	Annual	T	AsTemp	d	neo	i	C
23.	<i>Bassia scoparia</i> var. <i>trichophylla</i>	Amaranthaceae	Annual	T	AsTemp	d	neo	c	S
24.	<i>Bidens frondosa</i>	Asteraceae	Annual	T	AmN	a	neo	i	R
25.	<i>Brassica rapa</i>	Brassicaceae	Annual	T	Med	d	neo	c	R

Nr. crt.	Taxa	Family	Life span	Life form	Origin	Way of introduction	Residence time	Invasivity	Relative abundance
26.	<i>Bromus diandrus</i>	Poaceae	Annual	T	Med	a	neo	c	R
27.	<i>Calendula officinalis</i>	Asteraceae	Annual	T	Med	d	arb	c	S
28.	<i>Campsis radicans</i>	Loganiaceae	Perennial	PhLi	AmN	d	neo	c	R
29.	<i>Cannabis sativa</i>	Cannabaceae	Annual	T	ASW'	d	arb	n	S
30.	<i>Catalpa bignonioides</i>	Bignoniaceae	Perennial	PhM	AmN	d	neo	n	R
31.	<i>Coreopsis lanceolata</i>	Asteraceae	Perennial	H	AmN	d	neo	c	R
32.	<i>Cosmos bipinnatus</i>	Asteraceae	Annual	T	Am (Mexic)	d	neo	c	S
33.	<i>Cucumis melo</i>	Cucurbitaceae	Annual	T	AfrTrop,AsTro	d	neo	c	R
34.	<i>Cuscuta campestris</i>	Convolvulaceae	Annual	T	AmN	a	neo	i	C
35.	<i>Cyclachaena xanthifolia</i>	Asteraceae	Annual	T	AmN	a	neo	i	R
36.	<i>Datura stramonium</i>	Solanaceae	Annual	T	AmN	d	neo	i	C
37.	<i>Datura wrightii</i>	Solanaceae	Annual	T	AmN	d	neo	c	S
38.	<i>Dysphania ambrosioides</i>	Amaranthaceae	Annual	T	AmTro	d	neo	n	R
39.	<i>Elaeagnus angustifolia</i>	Elaeagnaceae	Perennial	PhN	AsTem	d	neo	i	C
40.	<i>Elettaria indica</i>	Poaceae	Annual	T	Trop.	a	neo	i	R
41.	<i>Elaeagnus canadensis</i>	Hydrocharitaceae	Perennial	HH	AmN	a	neo	i	R
42.	<i>Elaeagnus nuttallii</i>	Hydrocharitaceae	Perennial	HH	AmN	a	neo	i	R
43.	<i>Erigeron annuus</i>	Asteraceae	Annual	T	AmN	a	neo	i	C
44.	<i>Erigeron canadensis</i>	Asteraceae	Annual	T	AmN	a	neo	i	C
45.	<i>Erigeron sumatrensis</i>	Asteraceae	Annual	T	AmS	a	neo	n	R
46.	<i>Euphorbia davidii</i>	Euphorbiaceae	Annual	T	AmN	a	neo	c	R
47.	<i>Euphorbia glyptosperma</i>	Euphorbiaceae	Annual	T	AmN	a	neo	c	R
48.	<i>Euphorbia maculata</i>	Euphorbiaceae	Annual	T	AmN	a	neo	i	L
49.	<i>Euphorbia marginata</i>	Euphorbiaceae	Annual	T	AmN	d	neo	n	R
50.	<i>Fallugia adscerzi</i>	Polygonaee	Perennial	PhLi	As	d	neo	c	L
51.	<i>Fraxinus americana</i>	Oleaceae	Perennial	PhM	AmN	d	neo	i	R
52.	<i>Fraxinus pennsylvanica</i>	Oleaceae	Perennial	PhN	Am	d	neo	i	C
53.	<i>Gaillardia pulchella</i>	Asteraceae	Perennial	H	AmN	d	neo	c	L

Nr. crt.	Taxa	Family	Life span	Life form	Origin	Way of introduction	Residence time	Invasivity	Relative abundance
54.	<i>Galinisoga parviflora</i>	Asteraceae	Annual	T	AmS	a	neo	i	L
55.	<i>Galinisoga quadriradiata</i>	Asteraceae	Annual	T	AmN	a	neo	n	R
56.	<i>Gleditsia triacanthos</i>	Fabaceae	Perennial	PhM	AmN-C&E	d	neo	i	C
57.	<i>Helianthus annuus</i>	Asteraceae	Annual	T	AmN	d	neo	e	R
58.	<i>Helianthus decapetalus</i>	Asteraceae	Perennial	H	AmN	d	neo	i	R
59.	<i>Helianthus tuberosus</i>	Asteraceae	Perennial	H	AmN	d	neo	i	C
60.	<i>Hemerocallis fulva</i>	Asphodelaceae	Perennial	H	AsE	d	neo	e	C
61.	<i>Impatiens parviflora</i>	Balsaminaceae	Annual	T	AsC	a	neo	i	R
62.	<i>Ipomoea purpurea</i>	Convolvulaceae	Annual	T	AmTro	d	neo	i	R
63.	<i>Juglans regia</i>	Juglandaceae	Perennial	PhM	Med	d	arth	n	C
64.	<i>Koeleria paniculata</i>	Sapindaceae	Perennial	PhM	AsE	d	neo	e	S
65.	<i>Lepidium densiflorum</i>	Brassicaceae	Annual	T	AmN	a	neo	i	L
66.	<i>Lepidium oblongum</i>	Brassicaceae	Annual	T	AmN	a	neo	e	L
67.	<i>Lupinus polyphyllus</i>	Fabaceae	Perennial	H	AmN-W	d	neo	e	L
68.	<i>Lycium barbarum</i>	Solanaceae	Perennial	PhN	As (China)	d	neo	i	C
69.	<i>Malus domestica</i>	Rosaceae	Perennial	PhM	hybrid	d	arth	e	R
70.	<i>Matricaria discoides</i>	Asteraceae	Annual	T	AmN,AsNE	a	neo	i	R
71.	<i>Medicago sativa</i>	Fabaceae	Perennial	H	AsC,W	d	arth	n	L
72.	<i>Morus alba</i>	Moraceae	Perennial	PhM	As (China)	d	neo	i	C
73.	<i>Morus nigra</i>	Moraceae	Perennial	PhM	AsC	d	neo	n	C
74.	<i>Nicotiana glauca</i>	Solanaceae	Annual	T	AmS	d	neo	e	R
75.	<i>Oenothera biennis</i>	Onagraceae	Biennial	Ht	AmN	d	neo	i	S
76.	<i>Oenothera glazioviana</i>	Onagraceae	Biennial	Ht	AmN	d	neo	i	C
77.	<i>Oenothera macrocarpa</i> subsp. <i>microcarpa</i>	Onagraceae	Perennial	H	AmN	d	neo	e	R
78.	<i>Oxalis corniculata</i>	Oxalidaceae	Perennial	H	EuS	a	neo	i	S
79.	<i>Oxalis dillenii</i>	Oxalidaceae	Annual/ Perennial	T-H	AmN-C&E	a	neo	i	R

Nr. ert.	Taxa	Family	Life span	Life form	Origin	Way of introduction	Residence time	Invasivity	Relative abundance
80.	<i>Oxalis stricta</i>	Oxalidaceae	Annual/Perennial	T-H	AmN-C&E	a	neo	i	R
81.	<i>Parthenocissus inserta</i>	Vitaceae	Perennial	PhLi	AmN	d	neo	i	C
82.	<i>Parthenocissus quinquefolia</i>	Vitaceae	Perennial	PhLi	AmN	d	neo	i	R
83.	<i>Parthenocissus tricuspidata</i>	Vitaceae	Perennial	PhLi	As	d	neo	c	R
84.	<i>Panicum tomentosum</i>	Panicaceae	Perennial	PhM	AsE (Japan)	d	neo	c	R
85.	<i>Panicum orientale</i>	Panicaceae	Annual	T	AsE&SE	d	neo	c	R
86.	<i>Pectisidum ochroleucum</i>	Crassulaceae	Perennial	Ch	Mes	d	neo	c	S
87.	<i>Pentaria integrifolia</i>	Solanaceae	Annual	T	AmS	d	neo	c	R
88.	<i>Phedimus spurius</i>	Crassulaceae	Perennial	H	As	d	neo	c	S
89.	<i>Phytolacca americana</i>	Phytolaccaceae	Perennial	H	AmN	d	neo	i	S
90.	<i>Populus deltoides</i> subsp. <i>deltoides</i>	Salicaceae	Perennial	PhM	AmN	d	neo	c	R
91.	<i>Portulaca oleracea</i>	Portulacaceae	Annual	T	As	d	arth	n	C
92.	<i>Prunus cerasifera</i>	Rosaceae	Perennial	PhM	AsW, EuSE	d	arth	i	C
93.	<i>Prunus cerasus</i>	Rosaceae	Perennial	PhM		d	arth	c	C
94.	<i>Reynoutria × bohemica</i>	Polygonaceae	Perennial	H	Hybrid	a	neo	i	R
95.	<i>Reynoutria japonica</i>	Polygonaceae	Perennial	G-H	As (Japan)	d	neo	i	L
96.	<i>Rhus typhina</i>	Anacardiaceae	Perennial	PhM	AmN-E	d	neo	n	S
97.	<i>Robinia pseudoacacia</i>	Fabaceae	Perennial	PhM	AmN-E&C	d	neo	i	C
98.	<i>Robinia viscosa</i>	Fabaceae	Perennial	PhM	AmN	d	neo	n	R
99.	<i>Rudbeckia hirta</i>	Asteraceae	Perennial	H	AmN	d	neo	c	R
100.	<i>Rudbeckia laciniata</i>	Asteraceae	Perennial	H	AmN	d	neo	i	R
101.	<i>Solanum lycopersicum</i>	Solanaceae	Annual	T	AmS	d	neo	c	R
102.	<i>Solanum tuberosum</i>	Solanaceae	Annual	T	AmS	d	neo	c	R
103.	<i>Solidago canadensis</i>	Asteraceae	Perennial	H	AmN	d	neo	i	S
104.	<i>Sorghum halepense</i>	Poaceae	Perennial	H	AfrN, AsSW	a	neo	i	C

Nr. crt.	Taxa	Family	Life span	Life form	Origin	Way of introduction	Residence time	Invasivity	Relative abundance
105.	<i>Taraxacum officinale</i>	Asteraceae	Annual	T	AmC	d	nso	c	S
106.	<i>Trifolium virginianum</i>	Compositaceae	Perennial	H	AmN	d	nso	c	R
107.	<i>Triticum aestivum</i>	Poaceae	Annual	T		d	ath	c	R
108.	<i>Urtica procumbens</i>	Urticaceae	Perennial	PhM	As	d	nso	n	R
109.	<i>Xanthoxylum orientale</i> subsp. <i>italicum</i>	Asteraceae	Annual	T	Am	a	nso	i	C
110.	<i>Xanthoxylum spinosum</i>	Asteraceae	Annual	T	AmS	a	nso	i	S

Appendix 2. The list of plants from the literature not found in the field during the investigations

Nr. crt.	Family	Taxa	Distribution	References
1.	Amaranthaceae	<i>Amaranthus blitoides</i> S. Watson var. <i>blitoides</i>	Aldeni, Slănicul de Buzău basin, Cernătești, Furnica-Mt. Siriu, Cârgele, Călmățui, Păcelele Depression, Lăciu, Rușești, Pogonele, Buzău, Ojoneasca, Toplicea, Râmnicu Sărat, Rubla	Ciocărlan 1968; Dihoru 1975, 2015; Mititelu et al. 1980; Morariu, in Silvășescu 1952; Sîrbu & Oprea 2011; Ștefan 1980
2.	Amaranthaceae	<i>Amaranthus blitoides</i> S. Watson var. <i>reverechianii</i> Ulline et Bray	Pogonele	Costea 1998
3.	Amaranthaceae	<i>Amaranthus blitum</i> L. subsp. <i>blitum</i>	Valea Neagră, Sirului Valley, Rubla, Ceairu, Ceairu, Ojoneasca, Râmnicu Sărat	Dihoru 1975; Ștefan & Mititelu 1980; Ștefan 1980
4.	Amaranthaceae	<i>Amaranthus blitum</i> L. subsp. <i>olertensis</i> (L.) Costea	Siriu-Băi, Berbeci	Dihoru 1975, 2015
5.	Amaranthaceae	<i>Amaranthus crispus</i> (L.) Desf. et Thénau) N. Terracc.	Slănicul de Buzău Basin, Sîrata Montecoru, Buzău, Cernătești, Dălmă, Gara Sărății-Montecoru, Slănicul Valley, Păcelele Depression, Vladimир Hill-Sîrata Montecoru, Gara Nișcovului, Măritocora-Sîrata Montecoru, Piașul Sărății-Sîrata Montecoru, Râmnicu Sărat - train station, Păcură Mare Valley, Păcelele (Vulcanii Noroioși), Bibeni, Dedulești, Toplicea, Râmnicul Valley, Clăpănișten, between Râmnicu Sărat and Boldu	Ciocărlan 1968; Costea 1998; Dihoru 2015; Mititelu et al. 1980; 1987; Morariu, in Silvășescu 1952; Ștefan 1980

Nr. crt.	Family	Taxa	Distribution	References
6.	Amaranthaceae	<i>Amaranthus hypochondriacus</i> L.	south of Slănicului de Buzău Basin, Caragele, Călmățui, Rușești	Ciocărlan 1968; Dîhoru 2015
7.	Ranunculaceae	<i>Aquilegia vulgaris</i> L.	Buzăului Mountains-between pr. Nișcov and pr. Băscă-Mare	Brândză 1879-1883; Kanitz 1879-1881
8.	Asteraceae	<i>Artemisia abrotanum</i> L.	Crângul Buzăului	Dîhoru 2015
9.	Poaceae	<i>Avena sterilis</i> L. subsp. <i>halovicensis</i> (Durieu) Nyman	Pogoanele	Buia & Beldie, in Săvulescu 1972
10.	Borraginaceae	<i>Borago officinalis</i> L.	Râmnic	Grecescu 1898
11.	Brassicaceae	<i>Brassica juveca</i> (L.) Czern.	Vulcanii Noroioși, Aldeni, Siriu Mountain-Cheia Buzăului, Cheia Buzăului, Clondara, Păcelele (Vulcanii Noroioși), Buda, Rădăcești-Topliceni, Zaplazi-Topliceni	Ciocărlan 1966, 1968; Dîhoru 1975, 2015; Doliu et al. 1984; Mititelu et al. 1980; Ștefan 1980
12.	Buddlejaceae	<i>Buddleja davidii</i> Franch.	Crângul Buzăului	Dîhoru 2015
13.	Apiaceae	<i>Bunium bulbocastaneum</i> L.	Vulcanii Noroioși on Păcelele Mici Valley	Dîhoru 2015
14.	Buxaceae	<i>Buxus sempervirens</i> L.	Crângul Buzăului	Dîhoru 2015
15.	Fagaceae	<i>Castanea sativa</i> Mill.	Buzău	Grecescu 1898
16.	Cupressaceae	<i>Chamaecyparis lawsoniana</i> (A. Murray) Parl.	Crângul Buzăului	Dîhoru 2015
17.	Asteraceae	<i>Chomomilla murveolens</i> (Pursh) Rydb.	Lopădari, Vîntilă Vodă, Siriu Mountain, Cheia Buzăului, Pietra Tebrăului, Prigon, Tabon	Ciocărlan 1968; Dîhoru 1975, 2015
18.	Asteraceae	<i>Chaetolepis glaucofolia</i> (L.) Cass.	Spălăra Forest, Gomoesti, between Lipșa and Pietrosu, Stălpou, between Buzău and Pogoanele, between Tîntești and Frasinu Forest	Dîhoru & Negrean 2009; Nyirady, in Săvulescu 1965
19.	Chenopodiaceae	<i>Chenopodium botrys</i> L.	Slănicului Valley, Bocenii, Buzău, Pențeleu Mountain	Brândză 1879-1883; Grecescu 1898; Kanitz 1879-1881; Prodan, in Săvulescu 1952

Nr. crt.	Family	Taxa	Distribution	References
20.	Chenopodiaceae	<i>Chenopodium foliosum</i> (Moench) Asch.	Pentelea Mountains	Prodan, in Săvulescu 1952; Oprea 2005
21.	Chenopodiaceae	<i>Chenopodium scleroderanum</i> Schult.	Toplicei, Plevna (Greblina)	Ștefan & Mitrileu 1980; Ștefan 1980
22.	Asteraceae	<i>Cirsium affine</i> (Jacq.) Fisch.	Scurtești	Grecescu 1900
23.	Fabaceae	<i>Colutea arborescens</i> L.	Băile Sărata Monteoru, pr. Sărata (Ciura Sărăi), Nișcov	Dihoru 2015; Nyárády A., in Săvulescu 1957
24.	Compositaceae	<i>Compositula communis</i> L.	Greblina, Podgoria, Râmniceu Sărat, Toplicei, Valea Râmniceului	Ștefan 1980
25.	Brassicaceae	<i>Diplozotis viminea</i> (L.) DC.	Slimnicului Valley	Dihoru 2015
26.	Lamiaceae	<i>Dracopis lupulin molardica</i> L.	Băscu-Rozilei (Rusilei), Buzău to Sărata	Grecescu 1898
27.	Cucurbitaceae	<i>Echinocystis lobata</i> (Michx) Torr. et A. Gray	Nehova, Siriu	Sirbu & Oprea 2011
28.	Oenotheraceae	<i>Epilobium adenocaulon</i> Hausskn.	Lunca lui Izmaș, Morcovoaia, Prigon, Urlițoarea Valley	Dihoru 2015
29.	Poaceae	<i>Eragrostis cilianensis</i> (All.) Vignolo ex Janch	Beceni, Buzău, Săpoca, Siriu-Băi – Siriu Mountains, Măgura	Dihoru 1975, 2015
30.	Asteraceae	<i>Erechtites hieracifolius</i> (L.) Rafin. ex DC.	Siriu-Băi – Siriu Mountains, Măgura	Dihoru 1975, 2015
31.	Brassicaceae	<i>Eruca vesicaria</i> (L.) Cav.	Vulcanii Noroioși, Aldeni (var. cappadocica), Păcele	Ciocărlan 1966; Ciocărlan 1968; Mitrileu et al. 1980
32.	Polygonaceae	<i>Fagopyrum esculentum</i> Moench	Isrîța, Frasinu Forest, Spătaru Forest, Sărata Monteoru and surroundings	Dihoru 2015
33.	Polygonaceae	<i>Fagopyrum tartaricum</i> (L.) Gaertn.	Sărata Monteoru and surroundings	Dihoru 2015
34.	Poaceae	<i>Hordeum distichon</i> L.	Boldu	Dihoru 2015
35.	Poaceae	<i>Hordeum marinum</i> Huds.	Grădinoș, Movila, Măceșca Babei	Dihoru 2015
36.	Poaceae	<i>Hordeum vulgare</i> L.	Mihăilești	Dihoru 2015

Nr. crt.	Family	Taxa	Distribution	References
37.	Balsaminaceae	<i>Impatiens glandulifera</i> Royle	Gara Teghii Nehoua, Sîrbu	Diboru 2015; Sîrbu & Oprea 2011
38.	Juncaceae	<i>Juncus tenuis</i> Willd.	Lunca Băilor, Morcovoaia (Sîrbu Mountain), Păcelele Depression, Penteleu, Păcelele, Băltăgari, Buda, Debuleşti-Topliceni, Pietroniu, Pleşi-Bisoca	Diboru 1975, 2015; Mitielu et al. 1980; Ştefan 1980
39.	Cupressaceae	<i>Juniperus virginiana</i> L.	Crângul Buzăului	Diboru 2015
40.	Chenopodiaceae	<i>Kochia sibiriana</i> (Pallas) C. A. Mey.	Buzău- railway station	Sîrbu & Oprea 2011
41.	Asteraceae	<i>Lactuca tatarica</i> (L.) C. A. Mey.	Buzău- railway station	Ciocărlan 2009
42.	Lamiaceae	<i>Lallemantia ibetica</i> (M. Bieb.) Fisch. et C. A. Mey.	Gara Teghii	Diboru 2015
43.	Brassicaceae	<i>Lepidium virginicum</i> L.	Buzău, Râmnicu Sărat	Sîrbu & Oprea 2011
44.	Apiaceae	<i>Levisticum officinale</i> W. D. J. Koch	Buzăului Mountains at Băseca	Brândză 1879-1883
45.	Linaceae	<i>Linum usitatissimum</i> L.	Sîrbu	Diboru 2015
46.	Poaceae	<i>Lolium multiflorum</i> Lam.	Aldeni, Sîrbu Mountain-Mucălea Babei	Ciocărlan 1968, 1975
47.	Fabaceae	<i>Medicago × varia</i> Martyn	Beceni, Istripa Hill, Săpoca Hill, Beceni, Nişcovului Valley, Râmnicu Sărat, Rubla (Râmnicelului Valley)	Diboru 2015; Grecescu 1898; Momriu, în Săvulescu 1957; Ştefan 1980
48.	Lamiaceae	<i>Melissa officinalis</i> L. subsp. <i>officinalis</i>	Băleşti, Fâncelele Vîhăulenilor, Honeşti-Băbeni, Hâria pasture, Frasinu Forest, Spătaru Forest, Vernescu Forest, Proca Mare, Trăteşti, Buzău	Diboru 2015; Grecescu 1898
49.	Lamiaceae	<i>Mentha × spicata</i> L.	Aldeni, Hartag on Buzăului Valley, Hartagului Peak, Buzău (under <i>M. viridis</i>)	Ciocărlan 1968; Diboru 2015; Grecescu 1898
50.	Rosaceae	<i>Mespilus germanica</i> L.	Buzău County	Diboru 2015
51.	Poaceae	<i>Panicum capillare</i> L.	Buzău- railway station, Buzău, Râmnicu Sărat	Sîrbu & Oprea 2011; Ştefan 1980
52.	Poaceae	<i>Panicum dichotomiflorum</i> Michx.	the meadow of Buzău River	Sîrbu & Oprea 2011

Nr. crt.	Family	Taxa	Distribution	References
53.	Hydrophyllaceae	<i>Phacelia tanacetifolia</i> Benth.	Podgoria, Râmnicu Sărat	Ștefan 1980
54.	Pinaceae	<i>Pinus nigra</i> J. F. Arnold	between Slănicului Valley and Sărățel Valley	Anastasiu et al. 2008
55.	Poaceae	<i>Polypogon monspeliensis</i> (L.) Desf.	the meadow of Buzău River	Sîrbu & Oprea 2011
56.	Rosaceae	<i>Prunus armeniaca</i> L.	Pârșcov, Pietraru	Dibora 2015; Grecescu 1898
57.	Rosaceae	<i>Prunus domestica</i> L. ssp. <i>domestica</i>	Nehoiu, Pârșcov, Pârșcovul de Jos, Pietraru, Siriu	Dibora 2015
58.	Fagaceae	<i>Quercus rubra</i> L.	Crângul Buzăului	Dibora 2015
59.	Rosellaceae	<i>Rosella odorata</i> L.	Râmnicu Sărat basin	Ștefan 1980
60.	Ribesaceae	<i>Ribes rubrum</i> L.	Buzău	Dibora 2015
61.	Lamiaceae	<i>Salvia reflexa</i> Hornem.	Stălpni (north-west Buzău)	Ciocărlan 1992
62.	Crassulaceae	<i>Sempervivum tectorum</i> L.	Buzăului Mountains (pr. Bircovu and Bîscu Mare, Băile de la Nifon), Penteleu Mountain at Piatra cu Ulmi	Kamitz 1879-1881; Oprea 2005
63.	Poaceae	<i>Setaria faberii</i> J. Herms.	Buzău – railway station	Oprea et al. 2012
64.	Asteraceae	<i>Sigenbeckia orientalis</i> L.	Ruşavîl	Nyárády, in Săvulescu 1964; Dibora 2015
65.	Asteraceae	<i>Silybum marianum</i> (L.) Gaertn.	Siriu Mountain (Siriu-Băi, Berbeci Village), Siriu	Dibora 1975, 2015
66.	Lamiaceae	<i>Stachys byzantina</i> K. Koch	Melodie-Mânzalești	Dibora 2015
67.	Caprifoliaceae	<i>Symphoricarpos albus</i> (L.) S. F. Blake	Crângul Buzăului	Dibora 2015
68.	Asteraceae	<i>Symphoricarpos ciliatum</i> (Ledeb.) Nesott	Cocărești, Viperești, Buzău-train station, Râmnicu Sărat	Anastasiu 2010; Sîrbu & Oprea 2011; Ștefan 1980
69.	Tamaricaceae	<i>Tamarix gallica</i> L.	Penteleu Mountains	Borza 1947

Nr. crt.	Family	Taxa	Distribution	References
70.	Asteraceae	<i>Tanacetum parthenium</i> (L.) Sch. Bip.	Râmnicu Sărat, Oratia, Podgoria	Ștefan 1980
71.	Cupressaceae	<i>Thuja orientalis</i> L.	Călugăr Buzăului	Diboru 2015
72.	Tiliaceae	<i>Tilia rubra</i> DC.	Nișcovului basin	Diboru 2015
73.	Fabaceae	<i>Trigonella coerulea</i> (L.) Ser.	Nișcovului basin on Sărata Valley, Băile Sărata-Monteoru and surroundings, Coslești, Istrița Hill, Frasinu Forest, Spătaru Forest, Râmnicului Valley	Diboru 2015
74.	Scrophulariaceae	<i>Veronica persica</i> Poir.	Slătucului basin, Siriu Mountain, Nișcovului basin on Pădăcel Valley, Băile Sărata-Monteoru and surroundings, Istrița Hill, Râmnicu Sărat	Ciocârlan 1968; Diboru 1975, 2015; Ștefan 1980