

## Floristic diversity of steppe territories near Poltava town (Ukraine)

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Current progress in botany requires new claims for floristic research. Now the latter is not a simple species inventory of a separate local or regional flora but it needs coordination with recent results of critical taxonomic, nomenclatural and molecular phylogenetic investigations. Based on the fact that detailed research on steppes as a zonal type of vegetation in the Forest-Steppe zone of Ukraine is very important for preservation of current steppe territories, the authors studied several territories with steppe vegetation near Poltava town (Poltava region, Ukraine). The key steppe territories found are situated near Abazivka, Rozhayivka, Kostochky, Buhayivka, Machukhy, Ivonchentsi and Zhuky villages. Data about steppe flora from only the first territory located between Abazivka and Rozhayivka villages including “Rozhayivskiyi” local botanical reserve were early reported in literature sources while data about steppe vegetation of the other areas has never been published in detail. The full list of 401 vascular plant species found on these steppe territories with the frequency of distribution, major synonym names and references to current taxonomic papers for separate species are proposed. One of these species (*Hemerocallis fulva* (L.)) is a new alien for Poltava region. Taxonomy for all species was critically revised, nomenclature of several taxa (*Dichoropetalum carvifolia* (Vill.) Pimenov & Kljuykov, *Erophila verna* (L.) DC., *Campanula canescens* (Waldst. & Kit.) Roth) is discussed in detail. The name “*Dichoropetalum carvifolium-chabraei* (Crantz) Soldano et al.” is an invalid designation based on trinomial and must be rejected. The names *Selinum chabraei* Jacq. ex Murray, *Peucedanum euphymiae* Kotov and *Hemerocallis lilio-asphodelus* var. *fulva* L. were lectotypified. The studied steppe territories have the great significance in the zoological aspect, they include 32 rare steppe plant species (seven from the Red Data Book of Ukraine and 25 from the list of locally rare plants within Poltava region) so the primary task for further research is to organize their protection as the most valuable steppe areas and the monitoring of their condition in the future.

**Keywords:** vascular plants; taxonomy; floristic findings; steppes; Poltava region.

### Introduction

The study and conservation of plant diversity is one of the most relevant topics in current botany. The Shenzhen Declaration adopted at the XIX International Botanical Congress (23–29 July 2017, Shenzhen, China) endorses seven major priorities for strategic actions in the plant sciences. Two of them are to accelerate the inventory of life on Earth for the wise use of nature and the benefit of humankind and to value, document and protect indigenous, traditional and local knowledge about plants and nature (Crane et al., 2017). So detailed floristic research on natural plant communities for their preservation is nowadays very important.

The main aim of floristic research is to provide botanical inventory of separate local or regional flora associated with some territory. This is the one of the simplest forms of botanical study and is rather popular since it needs no special equipment. The final result of this study may be published mostly in three forms: as a checklist (a short vascular plant species list without any comments), a conspectus (a checklist with comments on plant species distribution, ecology, conservation status, etc.) and a flora (a fundamental monographic paper with identification keys, morphological descriptions, detail data about plants species area of distribution, etc.).

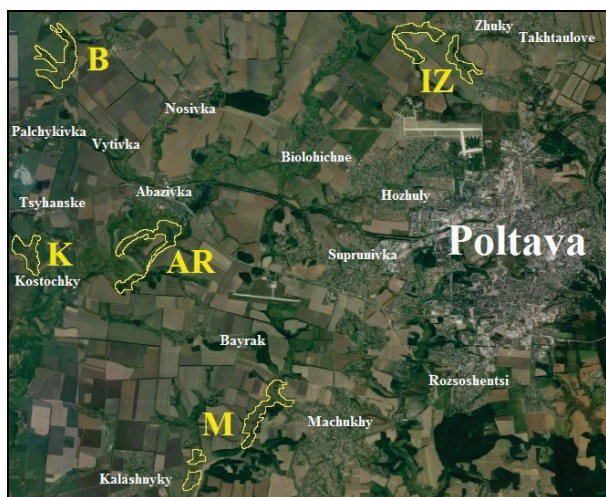
Advances in molecular biology and plant taxonomy in the past 30 years require a new approach to regional floristics. The new revolutionary system of angiosperm plant classification elaborated by the Angiosperm Phylogeny Group was published between 1998 (APG, 1998) and 2016 (APG IV, 2016). The nomenclatural data based on results of the Linnean Plant Name Typifications Project (Jarvis, 1992, 2007) and similar studies on the plant name typification (Moberg & Nilsson, 1991; Al-Shehbaz & Barrera, 2019; Peruzzi et al., 2019) have great significance for plant taxonomists. Many current authors have emphasized that both mole-

cular phylogenetic and nomenclatural data are to be summarized in current floristic checklists, conspectuses and floras (Heywood, 2000; Li, 2008). The one of recent fundamental working projects based on these principles is “Flora of Uzbekistan” (Sennikov et al., 2016) but similar studies have been previously organized and realized for Iran with adjacent areas (Akhani, 2006) and Turkey with the East Aegean Islands (Davis et al., 1998). During the last 10 years several resumptive plant checklists and conspectuses for separate European countries were also published – for the Czech Republic (Danilhelka et al., 2012), Greece (Dimopoulos et al., 2013), Albania (Barina et al., 2018), Finland (Kurto et al., 2019). So floristic studies and critical inventories of vascular plants on local and regional levels are relevant and necessary now.

Steppe communities are among the zonal vegetation types of Ukraine but they need conservation since a large number of sites with this vegetation are currently destroyed. Previously steppe areas were quite widespread in the Forest-Steppe zone of Ukraine but now in Poltava region they occupy small areas on ravine and river valley slopes. The flora and vegetation of steppe territories distributed near Poltava town have not been studied completely. Some information existing in literature sources (Illichevskiy, 1927, 1928; Andrienko et al., 1996; Bayrak-Smolyar & Korotchenko, 1996; Bayrak, 1997; Bayrak & Stetsiuk, 2005, 2008; Shaparenko, 2012) is fragmentary, partly outdated and mostly associated with separate threatened vascular plant species. During the last 15 years (2005–2019) we studied steppe vegetation in Poltava district and found several valuable steppe plots not mentioned in botanical literature sources. The only well-known territory presented in this paper is “Rozhayivskiyi” local botanical reserve; detailed information about its flora was generalized in our previous paper (Davydov & Gomlya, 2016).

## Materials and methods

This research is based on the data of the field work by the authors in 2005–2019 on the steppe territories distributed near Poltava town and in Poltavskiyi administrative district of Poltava region (Oblast) in general. For studying the flora of steppes of this region we chose five the most valuable key locations which hold numerous rare species. The first location (AR – Abazivka–Rozhayivka) is situated on slopes of the left bank of the Poluzirya River between Abazivka and Rozhayivka villages. It consists of the territory of “Rozhayivskiy” local botanical reserve and adjacent steppe plots. A list of vascular plants species found by us in this location was published in 2016 (Davydov & Gomlya, 2016). However one of us (D.A. Davydov) on his field expedition in 2017 and 2018 found here several new species not mentioned in our previous paper so they have been added and indicated in the text as “!” for AR. The second location (K – Kostochky) includes steppe communities on the slopes of the right bank of the Poluzirya River near Kostochky village. The third steppe complex (B – Buhayivka) is located on ravine slopes near Buhayivka village. The fourth territory (M – Machukhy) has a cluster structure including several ravine complexes distributed to the south of Poltava town near Machukhy village. The fifth territory (IZ – Ivonchentsi–Zhuky) neighbouring upon the borders of Poltava town (Ivonchentsi) is situated on slopes near Zhuky village (Fig. 1).



**Fig. 1.** The arrangement of studied steppe territories on the satellite map by Google Inc.: AR – Abazivka–Rozhayivka, B – Buhayivka, IZ – Ivonchentsi and Zhuky, K – Kostochky, M – Machukhy

The first step of our research was to find all species of vascular plants on all designated steppe locations. This work was realized by our field expeditions (in 2005–2007 – by both authors, in 2008–2019 – by D. A. Davydov). Based on field results, literature sources and the analysis of herbarium specimens from the herbaria of M. G. Kholodny Institute of Botany (KW) and V. G. Korolenko Poltava National Pedagogical University (PWU) we compiled the annotated checklist of vascular plants of steppe territories found near Poltava town. In this checklist the frequency of distribution is presented by the following scale: c (common) – this species is common on all (or almost all) plots of the studied steppe locations and forms numerous populations; nc (not common) – the species is found on many (but not all) plots of the studied steppe locations and it is not very common and characteristic; r (rare) – the species is found on several plots of studied steppe location, it is locally distributed; vr (very rare) – the species is very rare on this territory, it was found only several times in different years; “–” – the species has not been found on this territory. Zoological status for the vascular plants found has been indicated before the plant species names according to current nature conservation documents: “\*\*” – the third edition of the Red Data Book of Ukraine (Chervona, 2009); “\*” – the list of locally rare plants within Poltava region adopted by Annex 2 to the Decision of the 18th session of the fourth convocation of the Poltava Regional Council in February 2004 (Bayrak & Stetsiuk, 2005). The second step of our research was critical analysis of taxonomy and nomenclature of vascular plant species found on the studied steppe

territories. It has been made by D. A. Davydov, who analyzed more than 500 publications with original descriptions (protologues) of steppe plant taxa and taxonomic papers about their current systematic positions based on results of both traditional morphological and molecular phylogeny research by different authors. So the main synonym names are indicated in our list with very brief comments (if needed) and citations of major systematic revisions for separate problematic taxa.

Herbarium specimens of steppe plant species from studied locations (about 1 000 sheets) are preserved in herbaria of V. G. Korolenko Poltava National Pedagogical University (PWU) and M. G. Kholodny Institute of Botany of NAS of Ukraine (KW).

## Results

The species composition of the analyzed steppe flora includes 401 species from 237 genera and 52 families:

- Equisetaceae
1. *Equisetum arvense* L.: AR(r), K(nc), B(nc), M(nc), IZ(nc).
- Aristolochiaceae
2. *E. ramosissimum* Desf.: K(nc).
  3. *Aristolochia clematitis* L.: B(r).
- Colchicaceae
4. \*\**Colchicum versicolor* Ker Gawl. (= *Bulbocodium versicolor* (Ker Gawl.) Spreng.): AR(r), K(r). On the name of this taxon (Persson, 2007; Mosyakin, 2013).
- Liliaceae
5. *Gagea erubescens* (Besser) Schult. & Schult. f.: AR(nc), K(nc), B(nc), M(nc), IZ(nc).
  6. *G. pusilla* (F. W. Schmidt) Sweet: AR(nc), K(nc), B(nc), M(c). About the authorship of this species (Bayer & López González, 1989).
- Iridaceae
7. \*\**Crocus reticulatus* Steven ex Adams: AR(nc), K(c), B(c), M(nc), IZ(r).
  8. \*\**Gladiolus imbricatus* L. (= *G. tenuis* M. Bieb., *G. apterus* Klokov): AR(vr).
  9. \**Iris aphylla* L. (= *I. hungarica* Waldst. & Kit.): AR(r), B(nc).
  10. \**I. pumila* L.: AR(r).
- Asphodelaceae
11. *Hemerocallis fulva* (L.) L.: B(vr).
- Alliaceae
12. *Allium oleraceum* L.: AR(nc), K(nc), B(nc), M(nc), IZ(nc).
  13. *A. rotundum* L. (= *A. waldsteinii* G. Don f.): AR(nc), K(nc), B(nc), M(nc), IZ(nc).
  14. *A. sphaerocephalon* L.: K(nc).
- Agavaceae
15. *Anthericum ramosum* L.: B(r).
- Hyacinthaceae
16. *Asparagus officinalis* L. (= *A. polyphyllus* Steven): AR(nc), K(nc), B(nc), M(nc), IZ(nc).
  17. \**Bellevalia ciliata* (Cirillo) T. Nees (= *B. sarmarica* Pall. ex Woronow, *B. speciosa* Woronow ex Grossh.): K(vr). On this taxon name (Berg et al., 1989).
  18. \**Hyacinthella leucophaea* (K. Koch) Schur: AR(nc), K(r), B(nc), M(r).
  19. \**Muscari neglectum* Guss. ex Ten.: AR(nc), K(vr), B(nc), M(nc), IZ(vr).
- Cyperaceae
20. *Carex hirta* L.: AR(c), K(c), B(nc), M(c), IZ(c).
  21. *C. melanostachya* M. Bieb. ex Willd.: K(r), B(nc), M(nc).
  22. *C. michelii* Host: AR(r!), B(r).
  23. *C. praecox* Schreb.: AR(c), K(c), B(c), M(c), IZ(c).
  24. *C. supina* Willd. ex Wahlenb.: AR(r).
  25. *C. tomentosa* L.: AR(nc).
- Poaceae
26. \**Aegilops cylindrica* Host: B(r).
  27. *Agropyron cristatum* (L.) P. Beauv. s.l. (incl. *A. pectinatum* (M. Bieb.) P. Beauv., *A. stepposum* Dubovik): AR(nc), K(nc), B(nc), M(nc), IZ(r).
  28. *Agrostis vinealis* Schreb.: AR(nc), K(nc).
  29. *Alopecurus pratensis* L.: AR(nc), K(nc), B(nc), M(nc), IZ(nc).
  30. *Arrhenatherum elatius* (L.) P. Beauv. ex J. Presl & C. Presl: AR(nc), K(nc), B(c), M(c), IZ(nc).
  31. *Bothriochloa ischaemum* (L.) Keng: AR(r!).
  32. *Bromus arvensis* L.: AR(r), B(nc).

33. *B. hordeaceus* L. (= *B. mollis* L.): AR(r), K(r), B(r), IZ(r). On the correct name of this species (Krasniak, 2012).
34. *B. inermis* Leyss. (= *Bromopsis inermis* (Leyss.) Holub): AR(c), K(c), B(c), M(c), IZ(c). About the circumscription of the genus *Bromus* L. (Saarela et al., 2007; Soreng et al., 2017).
35. *B. japonicus* Thunb.: B(nc).
36. *B. riparius* Rehmman (= *Bromopsis riparia* (Rehmman) Holub): AR(nc), K(nc).
37. *B. squarrosus* L.: AR(c), K(c), B(c), M(c), IZ(nc).
38. *B. tectoris* L. (= *Anisantha tectorum* (L.) Nevski): AR(nc), K(nc), B(nc), M(nc), IZ(nc).
39. *Calamagrostis epigejos* (L.) Roth: AR(c), K(c), B(c), M(c), IZ(c).
40. *Dactylis glomerata* L.: AR(nc), K(r), B(nc), M(nc), IZ(c).
41. *Echinochloa crus-galli* (L.) P. Beauv.: K(vr), B(r), IZ(r).
42. *Elymus repens* (L.) Gould (= *Elytrigia repens* (L.) Desv. ex Nevski): AR(c), K(c), B(c), M(c), IZ(c). The generic name *Elymus* L. is to be accepted against *Elytrigia* Nevski (Melderis, 1978; Soreng et al., 2017).
43. *Festuca valesiaca* Gaud. s.l. (incl. *F. rupicola* Heuff.): AR(c), K(c), B(c), M(c), IZ(c).
44. *Hierochloa repens* (Host) P. Beauv.: AR(c), K(r), B(nc).
45. *Hordeum murinum* L. s.l. (incl. *H. leporinum* Link): IZ(r). Taxonomy (Jacobsen & Bothmer, 1995).
46. *Koeleria macrantha* (Ledeb.) Schult. (= *K. cristata* (L.) Pers. comb. illeg.): AR(c), K(c), B(c), M(c), IZ(nc). On the correct name (Amow, 1994).
47. *Lolium perenne* L.: AR(nc), K(nc), B(nc), M(r), IZ(r).
48. \**Melica transsilvanica* Schur: AR(r!), K(nc), B(c).
49. *Phleum phleoides* (L.) H. Karst.: AR(r), K(r).
50. *P. pratense* L.: AR(nc), K(nc), B(nc), M(nc), IZ(nc).
51. *Phragmites australis* (Cav.) Trin. ex Steud.: K(nc).
52. *Poa annua* L.: B(r), M(vr).
53. *P. bulbosa* L.: AR(nc), K(c), B(nc), M(nc), IZ(r).
54. *P. compressa* L.: AR(r), K(nc), B(nc), M(nc), IZ(r).
55. *P. pratensis* L. s.l. (incl. *P. angustifolia* L.): AR(c), K(c), B(c), M(c), IZ(c).
56. *Schedonorus pratensis* (Huds.) P. Beauv. (= *Festuca pratensis* Huds., *Lolium pratense* (Huds.) Derbysh.): AR(nc), K(nc), B(nc), M(nc), IZ(c). About this genus (Foggi et al., 2005; Tzvelev, 2011).
57. *Sclerochloa dura* (L.) P. Beauv.: K(vr), B(r), M(r).
58. *Setaria pumila* (Poir.) Roem. & Schult. (= *S. glauca* auct. non (L.) Roem. & Schult.): AR(r!), K(nc), B(r), M(r), IZ(r). On the correct name (Rauschert, 1973).
59. *S. viridis* (L.) P. Beauv.: AR(r), K(r), B(r), IZ(r).
60. \*\**Stipa capillata* L.: AR(c), K(c), B(c), M(nc), IZ(nc).
61. \*\**S. pulcherrima* K. Koch: AR(r).
62. *Thinopyrum intermedium* (Host) Barkworth & D. R. Dewey (= *Elytrigia intermedia* (Host) Nevski, *Elymus hispidus* (Opiz) Melderis): AR(c), K(c), B(c), M(c), IZ(nc). On this genus (Barkworth & Dewey, 1985; Soreng et al., 2017).
- Papaveraceae
63. *Fumaria schleicheri* Soy.-Willem.: AR(vr), B(vr), M(vr), IZ(r).
- Ranunculaceae
64. \*\**Adonis vernalis* L.: AR(nc), K(r), B(nc), M(r).
65. \**Anemonoides sylvestris* (L.) Galasso et al. (= *Anemone sylvestris* L.): AR(vr), M(r). On this name (Banfi et al., 2005).
66. *Ceratocephala orthoceras* DC. (= *C. testiculata* (Crantz) Besser comb. illeg.): AR(r), K(r), B(nc), M(r). This name is correct (Gutermann, 2009).
67. \**Clematis integrifolia* L.: AR(r), K(r), B(r).
68. *Delphinium consolida* L. (= *Consolida regalis* S. F. Gray, *C. paniculata* (Host) Schur): AR(nc), K(r), B(r), M(r), IZ(r). The genus *Consolida* (DC.) S. F. Gray was not accepted (Jabbour & Renner, 2011; Kadereit et al., 2016).
69. *Ficaria verna* Huds. s.l. (incl. *F. stepporum* P. Smimov): AR(r), K(vr), M(r), IZ(r).
70. *Ranunculus acris* L.: AR(r), B(r), M(r), IZ(nc).
71. *R. illyricus* L.: AR(nc), K(r), B(nc).
72. *R. pedatus* Waldst. & Kit. (= *R. silviteppeceus* Dubovik): AR(nc), K(r), IZ(r). Taxonomy (Jelenevskyi & Derviz-Sokolova, 1989).
73. *R. polyanthemus* L.: AR(c), K(nc), B(c), M(c), IZ(c).
74. *R. repens* L.: B(r), M(r).
75. *Thalictrum minus* L.: AR(c), K(nc), B(nc), M(c), IZ(nc).
76. *T. simplex* L.: AR(r!), B(r).
- Fabaceae
77. *Anthyllus vulneraria* L. s.l. (= *A. macrocephala* Wender.): K(vr), B(r).
78. *Astragalus austriacus* Jacq.: AR(nc), K(c).
79. *A. cicer* L.: AR(nc), K(nc), B(r), M(nc), IZ(nc).
80. \*\**A. dasyanthus* Pall.: AR(r), K(r).
81. *A. onobrychis* L.: AR(c), K(c), B(c), M(nc), IZ(nc).
82. *Caragana arborescens* Lam.: AR(vr!).
83. *Cytisus austriacus* L. (= *Chamaecytisus austriacus* (L.) Link): AR(c), K(c), B(nc), M(nc), IZ(nc). The genus *Chamaecytisus* Link was included in *Cytisus* L. (Cristofolini & Troia, 2006; Kadereit et al., 2016).
84. *Eryum tetraspermum* L. (= *Vicia tetrasperma* (L.) Schreb.): AR(nc), K(nc), B(nc), M(nc), IZ(nc). The genus *Eryum* L. is to be separated from *Vicia* L. (Schäfer et al., 2012; Fedoronchuk, 2018).
85. *Genista tinctoria* L.: AR(c), B(c).
86. \**Lathyrus pannonicus* (Jacq.) Garcke (= *L. lacteus* (M. Bieb.) Wissjul.): AR(r), K(r), B(nc), M(r). Taxonomy (Bässler, 1981; Schlee et al., 2011).
87. *L. tuberosus* L.: AR(nc), K(r), B(nc), IZ(nc).
88. *Lotus corniculatus* L. s.l. (= *L. ucrainicus* Klokov, *L. stepposus* Kramina): AR(nc), K(nc), B(nc), M(nc), IZ(nc).
89. *Medicago falcata* L. s.l. (incl. *M. romanica* Prodan): AR(c), K(c), B(c), M(c), IZ(c). Taxonomy (Lesins & Lesins, 1979).
90. *M. lupulina* L.: AR(r), K(r), B(nc), IZ(r).
91. *M. sativa* L.: AR(r), IZ(r).
92. *Melilotus albus* Medik.: AR(r), B(r), IZ(r).
93. *M. officinalis* (L.) Pall.: K(r), B(r), IZ(r).
94. *Onobrychis arenaria* (Kit.) DC. (= *O. tanaitica* Spreng.): AR(nc), K(r), B(r), M(nc), IZ(nc). Taxonomy (Fedoronchuk & Mosyakin, 2018).
95. \**Oxytropis pilosa* (L.) DC.: B(r).
96. *Robinia pseudoacacia* L.: AR(r), K(r), M(vr), IZ(r).
97. *Securigera varia* (L.) Lassen (= *Coronilla varia* Lassen): AR(c), K(c), B(c), M(c), IZ(c). Taxonomy (Lassen, 1989; Fedoronchuk & Mosyakin, 2018).
98. *Trifolium alpestre* L.: AR(nc), K(r).
99. *T. arvense* L.: AR(c), K(nc), B(nc).
100. *T. medium* L.: AR(nc), K(nc), B(c), M(nc).
101. *T. montanum* L. (= *Amoria montana* (L.) Soják): AR(c), K(nc), B(c), M(c), IZ(c).
102. *T. pratense* L.: AR(nc), K(nc), B(nc), M(nc), IZ(c).
103. *T. repens* L. (= *Amoria repens* (L.) C. Presl): AR(nc), K(r), B(r), M(r), IZ(r).
104. *Vicia cracca* L.: AR(c), K(nc), B(c), M(c), IZ(nc).
105. *V. tenuifolia* Roth: AR(nc), M(nc).
106. *V. villosa* Roth: AR(r), K(r), IZ(r).
- Polygalaceae
107. *Polygala comosa* Schkuhr (= *P. podolica* DC.): AR(nc), K(nc), B(nc).
- Rosaceae
108. *Agrimonia eupatoria* L.: AR(c), K(c), B(c), M(c), IZ(nc). Taxonomy (Iamónico, 2017).
109. *Argentina anserina* (L.) Rydb. (= *Potentilla anserina* L.): AR(vr), B(r). Taxonomy (Soják, 2010).
110. *Crataegus monogyna* Jacq. (= *C. leiomonogyna* Klokov): K(r), B(nc), M(r). Taxonomy of the genus (Christensen, 1992).
111. *C. rhypidophylla* Gand. (= *C. curvisepala* Lindm. nom. illeg.): AR(nc), B(nc), M(r), IZ(r).
112. *Filipendula vulgaris* Moench: AR(c), K(nc), B(c).
113. *Fragaria viridis* Weston: AR(c), K(c), B(c), M(c), IZ(c).
114. *Geum urbanum* L.: AR(r), IZ(r).
115. *Malus domestica* (Suchow) Borkh.: AR(r), K(r), M(vr), IZ(r).
116. *Potentilla argentea* L. (= *P. impolita* Wahlenb., *P. neglecta* Baumg.): AR(c), K(c), B(c), M(nc), IZ(nc). Taxonomy (Soják, 2004).
117. *P. humifusa* Willd. ex Schldl.: AR(nc), K(nc), B(nc), M(nc).
118. *P. patula* Waldst. & Kit.: K(r).
119. *P. recta* L. s.l. (= *P. obscura* Willd.): AR(c), K(nc), B(nc), M(nc), IZ(nc).
120. *P. reptans* L.: B(r).
121. *Prunus armeniaca* L. (= *Armeniaca vulgaris* Lam.): AR(r), K(r), B(r), M(vr). Taxonomy of this genus (Shi et al., 2013).
122. *P. cerasus* L. (= *Cerasus vulgaris* Mill.): AR(r).
123. \**P. fruticosa* Pall. (= *Cerasus fruticosa* Pall.): K(r), B(vr).

124. *P. spinosa* L. (= *P. stepposa* Kotov): AR(c), K(c), B(c), M(nc), IZ(c).  
 125. *Pyrus communis* L. (= *P. pyrastrer* (L.) Burgsd.): AR(r), K(r), B(nc), M(r), IZ(nc).  
 126. *Rosa antonovii* (Lonacz.) Dubovik: K(vr), IZ(vr).  
 127. *R. borysthenica* Chrshan.: M(vr).  
 128. *R. canina* L. s.l. (incl. *R. lupulina* Dubovik): AR(nc), K(nc), B(nc), M(r), IZ(r).  
 129. \**R. chrshankovskii* Dubovik (= *R. pygmaea* M. Bieb. nom. illeg.): K(vr).  
 130. *R. corymbifera* Borkh.: AR(nc), K(nc), B(nc), M(nc), IZ(nc).  
 131. *R. mediata* Dubovik: AR(r), B(r). Taxonomically problematic species, our previous indication on “*R. caesia* Sm.” (Davydov & Gomylya, 2016) belongs here.  
 132. *R. rubiginosa* L.: AR(nc), K(nc), M(r), IZ(nc).  
 133. *R. sherardii* Davies (= *R. tomentosa* auct. non Sm.): AR(r), K(r), M(r), IZ(r). On this name (Buzunova, 2000).  
 134. *R. villosa* L. (= *R. pomifera* Herm.): AR(r!), B(r), M(nc). Taxonomy (Buzunova, 2000).  
 Elaeagnaceae  
 135. *Elaeagnus angustifolia* L.: AR(vr), B(r), M(vr), IZ(vr).  
 Rhamnaceae  
 136. *Rhamnus cathartica* L.: AR(r), K(r), B(r), M(vr), IZ(vr).  
 Ulmaceae  
 137. *Ulmus minor* Mill. (= *U. carpinifolia* Rupp. ex Suchow, *U. suberosa* Moench): AR(r!), K(r), B(r), IZ(vr). Taxonomy (Zhygalova, 2016).  
 Urticaceae  
 138. *Urtica dioica* L.: AR(nc), K(nc), B(nc), M(nc), IZ(nc).  
 Euphorbiaceae  
 139. *Euphorbia kaleniczenkoi* Czern.: AR(r), K(vr), B(nc).  
 140. *E. seguieriana* Neck.: AR(nc!), K(nc).  
 141. *E. semivillosa* Prokh.: AR(nc), K(r), B(nc), M(r).  
 142. *E. stepposa* Zoz ex Prokh.: AR(c), K(c), B(c).  
 143. *E. virgata* Waldst. & Kit.: AR(c), K(c), B(nc), M(nc), IZ(nc).  
 Violaceae  
 144. *Viola accrescens* Klokov: AR(vr), K(r).  
 145. *V. ambigua* Waldst. & Kit.: AR(c), K(nc), B(c), M(nc), IZ(nc).  
 146. *V. arvensis* Murray: AR(nc), B(nc), IZ(r).  
 147. *V. tricolor* L. (= *V. matutina* Klokov): AR(nc), K(r), B(nc), M(nc), IZ(r).  
 Linaceae  
 148. *Linum flavum* L.: M(r).  
 149. *L. hirsutum* L.: AR(nc).  
 150. *L. nervosum* Waldst. & Kit.: AR(r).  
 151. \**L. perenne* L.: AR(vr, cited only by literature source (Shaparenko, 2012)).  
 Celastraceae  
 152. *Euonymus europaeus* L.: AR(vr!).  
 Hypericaceae  
 153. *Hypericum elegans* Steph. ex Willd.: AR(nc), K(r), B(nc), M(nc), IZ(r).  
 154. *H. perforatum* L.: AR(c), K(c), B(c), M(c), IZ(c).  
 Sapindaceae  
 155. *Acer negundo* L.: AR(r), K(r), B(r), M(vr), IZ(vr).  
 156. *A. tataricum* L.: AR(r), K(r), B(nc), M(r).  
 Malvaceae  
 157. *Malva thuringiaca* (L.) Vis. (= *Lavatera thuringiaca* L.): AR(c), K(nc), B(nc), M(nc), IZ(nc). On the current state of the genus *Lavatera* L. (Banfi et al., 2005; Kadereit et al., 2016).  
 Resedaceae  
 158. *Reseda lutea* L.: AR(nc), B(r), M(r).  
 Brassicaceae  
 159. *Alyssum alyssoides* (L.) L. (= *A. calycinum* L.): B(r). This name is correct (German, 2003).  
 160. *A. desertorum* Stapf: AR(nc), K(nc), B(nc).  
 161. *Arabidopsis thaliana* (L.) Heynh.: K(r), M(r).  
 162. *Berteroa incana* (L.) DC.: AR(nc), K(nc), B(nc), M(nc), IZ(nc).  
 163. *Brassica campestris* L.: M(vr), IZ(vr).  
 164. *Bunias orientalis* L.: AR(nc), K(nc), B(nc), M(nc), IZ(nc).  
 165. *Camelina microcarpa* Andr. (= *C. sylvestris* Wallr.): AR(nc), K(nc), B(nc), M(nc), IZ(nc). Taxonomy (Smejkal, 1971).  
 166. *Capsella bursa-pastoris* (L.) Medik.: AR(nc), K(r), B(nc), M(r), IZ(r).  
 167. *Chorispora tenella* (Pall.) DC.: AR(r), K(vr), B(r), M(vr).  
 168. *Descurainia sophia* (L.) Webb ex Prantl: AR(nc), B(nc), M(r), IZ(r).  
 169. *Draba nemorosa* L.: AR(nc), K(r), B(r), IZ(r).  
 170. *Erophila verna* (L.) DC.: AR(nc), K(nc), B(nc), M(r), IZ(nc). Nomenclatural citation see below.  
 171. *Erysimum diffusum* Ehrh. (= *E. canescens* Roth): AR(c), K(nc), B(c), M(c), IZ(nc).  
 172. *E. marschallianum* Andr. ex M. Bieb. (= *E. strictum* P. Gaertn. et al., *E. hieracifolium* L. nom. ambig.): AR(nc), K(r), M(r), IZ(r). Taxonomy (Polatschek, 2010; German, 2015).  
 173. *Euclidium syriacum* (L.) R. Br.: M(vr).  
 174. *Guenthera persica* (Boiss. & Hohen.) German (= *Ericastrum armorioides* (Czem. ex Turcz.) Cruchet): AR(vr), B(vr), M(r). About this genus (Gómez-Campo, 2002; German, 2015).  
 175. *Hesperis tristis* L. (= *Hesperidium triste* (L.) G. Beck comb. inval., *Sperihedium triste* (L.) Dorof.): AR(vr!), B(r), M(r).  
 176. *Lepidium densiflorum* Schrad.: B(r).  
 177. *L. draba* L. (= *Cardaria draba* (L.) Desv.): K(r), M(nc). On the state of the genus *Cardaria* Desv. (Al-Shehbaz et al., 2002).  
 178. *Microthlaspi perfoliatum* (L.) F. K. Meyer (= *Thlaspi perfoliatum* L.): AR(nc), K(nc), B(nc). About this genus (Meyer, 1973; Ali et al., 2016).  
 179. *Sinapis arvensis* L.: AR(r), B(r), M(r), IZ(vr).  
 180. *Sisymbrium loeselii* L.: AR(nc), K(nc), B(nc), M(nc), IZ(nc).  
 181. *S. polymorphum* (Murray) Roth: AR(nc), K(nc), B(nc).  
 182. *S. volgense* M. Bieb. ex Fourm.: IZ(vr). Specific epithet was corrected (German, 2014).  
 183. *Thlaspi arvense* L.: AR(r), K(nc), B(r), M(r), IZ(r).  
 184. *Turritis glabra* L.: B(r).  
 Santalaceae  
 185. *Thesium ramosum* Hayne (= *T. arvense* Horvat. nom. illeg.): AR(nc), K(nc), B(nc), M(nc), IZ(nc). Widely used in many sources, the name *T. arvense* is illegitimate (Gutermann, 2009).  
 Viscaceae  
 186. *Viscum album* L.: AR(r), M(r), IZ(r). Mostly grows on *Crataegus* spp.  
 Plumbaginaceae  
 187. *Limonium tomentellum* (Boiss.) Kuntze s.l. (= *L. alutaceum* (Steven) Kuntze): K(nc). Taxonomy (Moysiyenko, 2008).  
 Polygonaceae  
 188. *Polygonum arenastrum* Boreau (= *P. aviculare* auct. non L.): AR(nc), K(r), B(nc), M(r), IZ(r). Taxonomy (Styles, 1962).  
 189. *P. patulum* M. Bieb.: K(nc).  
 190. *Rumex acetosella* L.: K(r).  
 191. *R. confertus* Willd.: K(r), B(r), M(r).  
 192. *R. crispus* L.: AR(r), B(r), M(r), IZ(r).  
 193. *R. thyrsiflorus* Fingerh.: B(vr), IZ(vr).  
 Caryophyllaceae  
 194. *Alsine media* L. (= *Stellaria media* (L.) DC.): AR(r), M(r), IZ(r).  
 195. *Arenaria serpyllifolia* L. (= *A. viscida* Lois., *A. uralensis* Pall. ex Spreng.): AR(nc), K(nc), B(nc), M(nc), IZ(nc). Taxonomy (Lazkov, 2006).  
 196. *Cerastium fontanum* Baumg. s.l. (= *C. holosteoides* Fr.): AR(nc), K(nc), B(nc), M(nc), IZ(nc).  
 197. *Dianthus armeria* L.: M(vr).  
 198. *D. campestris* M. Bieb. (= *D. pseudoversicolor* Klokov): K(r).  
 199. \**D. eugeniae* Kleopow: IZ(r).  
 200. *Eremogone micradenia* (P. Smimov) Ikon.: AR(vr), K(r).  
 201. *Gypsophila paniculata* L.: AR(r), K(nc), B(nc), M(nc), IZ(nc).  
 202. *Holosteum umbellatum* L.: AR(nc), K(nc), B(c), M(nc).  
 203. *Psammophiliella muralis* (L.) Ikon.: AR(nc), K(nc), B(nc), M(nc), IZ(nc).  
 204. *Saponaria officinalis* L.: B(r).  
 205. *Scleranthus annuus* L.: B(r).  
 206. *Silene chersonensis* Zapał. (= *Otites chersonensis* (Zapał.) Klokov): AR(nc), K(nc), B(nc), M(nc), IZ(nc). Taxonomy of the species (Wrigley, 1986). About the circumscription of *Silene* L. s.l. (Hernández-Ledesma et al., 2015).  
 207. *S. chlorantha* (Willd.) Ehrh.: AR(r).  
 208. *S. dichotoma* Ehrh.: AR(vr), K(vr).  
 209. *S. latifolia* Poir. (= *Melandrium album* (Mill.) Garcke): AR(nc), K(nc), B(nc), M(nc), IZ(nc). Taxonomy (Oxelman et al., 2001; Hernández-Ledesma et al., 2015).  
 210. *S. nutans* L.: AR(nc), B(nc), M(nc), IZ(nc).

211. *S. viscosa* (L.) Pers. (= *Elisanthe viscosa* (L.) Rupr.): AR(r), B(nc), M(r). Taxonomy (Oxelman et al., 2001; Hernández-Ledesma et al., 2015).
212. *S. vulgaris* (Moench) Garcke (= *Oberna behen* (L.) Ikonn.): AR(r), M(r). On *Silene* L. s.l. (Oxelman et al., 2001; Hernández-Ledesma et al., 2015).
213. *Stellaria graminea* L.: AR(c), K(nc), B(c), M(nc), IZ(c).  
Amaranthaceae
214. *Amaranthus retroflexus* L.: AR(r), K(r), B(r), M(r), IZ(r).
215. *Polycnemum majus* A. Braun ex Bogenh.: M(vr). Nomenclature (Freitag & Iamónico, 2015).  
Chenopodiaceae
216. *Atriplex micrantha* C. A. Mey.: AR(vr), B(r), M(r).
217. *A. oblongifolia* Waldst. & Kit.: B(vr), IZ(vr).
218. *A. sagittata* Borkh. (= *A. nitens* Schkuhr): AR(vr!), B(r), IZ(r). On the correct name (Suchorukow, 2007).
219. *A. tatarica* L.: AR(r), K(r), B(r), M(r), IZ(r).
220. *Bassia prostrata* (L.) Beck (= *Kochia prostrata* (L.) Schrad.): K(nc). Taxonomy (Hernández-Ledesma et al., 2015; Kadereit et al., 2016).
221. *Chenopodium hybridum* (L.) S. Fuentes et al. (= *Chenopodium hybridum* L.): B(vr), IZ(vr). About this genus (Fuentes-Bazan et al., 2012; Kadereit et al., 2016).
222. *Chenopodium album* L.: AR(r), K(nc), B(nc), M(r), IZ(nc).
223. *C. betaceum* Andr. (= *C. strictum* auct. non Kit.): AR(r), B(r), IZ(vr). Taxonomy (Mosyakin, 2017a).
224. *Salsola tragus* L. (= *S. ruthenica* Iljin): M(r). Taxonomy (Mosyakin, 2017b).  
Comaceae
225. *Cornus sanguinea* L. (= *Swida sanguinea* (L.) Opiz): AR(r), K(r), B(r), M(r), IZ(r). Taxonomy (Eyde, 1987).  
Primulaceae
226. *Androsace elongata* L.: AR(nc), K(nc), B(c), M(nc), IZ(nc).
227. *Lysimachia nummularia* L.: AR(r), K(nc), B(r), M(r).  
Rubiaceae
228. *Asperula cynanchica* L.: AR(c), K(c), B(c), M(nc), IZ(nc).
229. *Galium aparine* L.: AR(r), K(nc), B(nc), M(nc), IZ(nc).
230. *G. mollugo* L. (= *G. album* Mill.): AR(r), IZ(nc).
231. *G. octonarium* (Klokov) Soó: AR(c), K(c), B(nc), M(r).
232. *G. verum* L. (= *G. ruthenicum* Willd.): AR(c), K(c), B(c), M(c), IZ(c).  
Apocynaceae
233. \**Vinca herbacea* Waldst. & Kit.: M(r).
234. *Vincetoxicum hirundinaria* Medik. s.l. (= *V. albivianum* (Kusn.) Pobed., *V. stepposum* (Pobed.) Á. Löve & D. Löve): AR(nc), K(nc), B(nc), IZ(r).  
Boraginaceae
235. *Asperugo procumbens* L.: AR(vr), K(r), M(vr), IZ(vr).
236. *Buglossoides arvensis* (L.) Johnston: AR(nc), K(nc), B(nc), M(nc), IZ(nc).
237. *Cynoglossum officinale* L.: AR(nc), K(c), B(nc), M(nc), IZ(nc).
238. *Echium vulgare* L.: AR(nc), K(nc), B(nc), M(r), IZ(nc).
239. *Lappula squarrosa* (Retz.) Dumort.: AR(nc), K(c), B(nc), M(nc), IZ(nc).
240. *Lithospermum officinale* L.: AR(r), K(nc), M(r).
241. *Lycopsis arvensis* L. (= *L. orientalis* L.): K(vr), M(vr).
242. *Myosotis arvensis* (L.) Hill: B(r).
243. *Nonea rossica* Steven: AR(c), K(nc), B(nc), M(nc), IZ(nc).  
Convolvulaceae
244. *Convolvulus arvensis* L.: AR(c), K(c), B(c), M(c), IZ(c).
245. *Cuscuta approximata* Bab. (= *C. cupulata* Engelm.): AR(vr).
246. *C. australis* R. Br. s.l. (= *C. cesattiana* Bertol.): AR(r), K(r), B(r), M(r), IZ(r).
247. *C. epithymum* (L.) L.: AR(r), M(nc).
248. *C. planiflora* Ten.: AR(vr).  
Solanaceae
249. *Datura stramonium* L.: B(vr).
250. *Hyoscyamus niger* L.: AR(r), K(r), B(r), M(r), IZ(vr).
251. *Lycium barbarum* L.: K(nc), IZ(nc).  
Plantaginaceae
252. *Linaria biebersteinii* Besser s.l. (= *L. maeotica* Klokov): AR(r), K(nc), B(nc), M(nc), IZ(r). Taxonomy (Pesskova, 2004).
253. *L. vulgaris* Mill.: AR(nc), K(nc), B(nc), M(nc), IZ(nc).
254. *Plantago lanceolata* L.: AR(nc), K(nc), B(nc), M(nc), IZ(c).
255. *P. major* L.: AR(nc), K(r), B(r), M(r), IZ(r).
256. *P. media* L. (= *P. urvillei* Opiz, *P. stepposa* Kupr.): AR(c), K(c), B(c), M(c), IZ(c). Taxonomy (Shipunov, 2000).
257. *Veronica arvensis* L.: K(nc), B(nc).
258. *V. austriaca* L. (= *V. dentata* F. W. Schmidt): AR(r), K(r), B(nc), M(r).
259. *V. chamaedrys* L. (= *V. vindobonensis* (M.A. Fisch.) M.A. Fisch.): AR(c), K(nc), B(c), M(c), IZ(c). Taxonomy (Bardy et al., 2010).
260. *V. jacquini* Baumg.: AR(c), K(nc), B(nc), M(nc).
261. *V. incana* L.: IZ(r).
262. *V. polita* Fr.: AR(nc), K(nc), B(r).
263. *V. prostrata* L.: AR(nc), K(c), B(c), M(c), IZ(nc).
264. *V. spicata* L. s.l. (= *V. barleri* Schott, *V. steppacea* Kotov): AR(c), K(c), B(nc), M(nc). Taxonomy (Bardy et al., 2011).
265. *V. spuria* L.: B(vr).
266. *V. teucrium* L.: AR(r), B(r), M(r).
267. *V. verna* L.: AR(r).  
Scrophulariaceae
268. *Verbascum chaixii* Vill. s.l. (= *V. orientale* M. Bieb. nom. illeg., *V. marschallianum* Ivanina & Tzvelev): AR(nc), K(nc), B(nc), M(nc), IZ(r).
269. *V. lychnitis* L.: AR(c), K(c), B(c), M(c), IZ(nc).
270. *V. phlomoides* L.: AR(r), M(r), IZ(nc).
271. *V. phoeniceum* L.: AR(nc), K(nc), B(nc).  
Lamiaceae
272. *Ajuga chia* (L.) Schreb. (= *A. glabra* C. Presl, *A. pseudochia* Des.-Shost.): AR(nc), K(r), B(nc), M(nc).
273. *A. genevensis* L.: AR(nc), K(nc), B(nc), IZ(nc).
274. *Ballota nigra* L.: AR(r), K(r), M(r), IZ(r).
275. *Betonica officinalis* L.: AR(nc), K(c), B(c), M(nc), IZ(nc).
276. *Clinopodium vulgare* L.: AR(r), M(r).
277. *Glechoma hederacea* L.: AR(c), K(nc), B(nc), M(nc), IZ(nc).
278. *Lamium amplexicaule* L. (= *L. paczoskianum* Worosch.): AR(nc), K(nc), B(r), M(r), IZ(nc). Taxonomy (Mennema, 1989).
279. *L. purpureum* L.: B(r).
280. *Leonurus villosus* Desf. ex D'Urv. (= *L. quinquelobatus* Gilib. nom. inval.): B(vr), IZ(vr). Nomenclature (Holub, 1993).
281. *Nepeta pannonica* L.: B(r).
282. *Origanum vulgare* L.: AR(nc), K(nc), B(nc), IZ(nc).
283. *Phlomis pungens* Willd.: AR(nc).
284. *Phlomis tuberosa* (L.) Moench (= *Phlomis tuberosa* L.): AR(nc), K(nc), B(nc), M(nc). About this genus (Kamelin & Machmedov, 1990; Mathiesen et al., 2011; Mosyakin, 2013).
285. *Prunella vulgaris* L.: AR(r), K(nc), B(r), M(r), IZ(r).
286. *Salvia nemorosa* L. (= *S. tesquicola* Klokov & Pobed., *S. illuminata* Klokov): AR(c), K(c), B(c), M(c), IZ(c).
287. *S. nutans* L.: AR(c), K(c), B(c).
288. *S. pratensis* L.: AR(nc), B(nc).
289. *S. verticillata* L.: AR(c), K(c), B(nc), M(c), IZ(c).
290. *Stachys annua* (L.) L. (= *S. neglecta* Klokov nom. inval.): AR(r), K(r), B(r), M(r), IZ(r).
291. *S. recta* L. (= *S. transilvanica* Schur): AR(c), K(c), B(c), M(c), IZ(c). Taxonomy (Chrték, 1992).
292. *Teucrium chamaedrys* L.: K(nc), M(nc).
293. *Thymus marschallianus* Willd.: AR(c), K(c), B(c), M(c), IZ(c).
294. *Ziziphora acinos* (L.) Melnikov (= *Acinos arvensis* (Lam.) Dandy, *Clinopodium acinos* (L.) Kuntze): AR(nc), K(nc), B(nc), M(nc). Current status of the genus *Acinos* Mill. and its taxonomy (Brauchler et al., 2010; Kadereit et al., 2016; Melnikov, 2016).  
Orobanchaceae
295. *Euphrasia pectinata* Ten.: AR(r).
296. *Odontites vulgaris* Moench: AR(nc), K(nc), B(nc), M(nc), IZ(nc).
297. *Orobanche alba* Steph. ex Willd.: AR(r), K(r), B(nc).  
Campanulaceae
298. *Campanula bononiensis* L.: AR(nc), K(nc), B(nc), M(nc).
299. \**C. canescens* (Waldst. & Kit.) Roth (= *Asyneuma canescens* (Waldst. & Kit.) Griseb. & Schenk): AR(nc), K(r), M(r), IZ(vr). Nomenclatural citation see below.
300. *C. glomerata* L. (incl. *C. farinosa* Andr.): AR(nc), K(r), M(nc), IZ(r).
301. \**C. persicifolia* L.: AR(r), B(r), M(vr).
302. *C. rapunculoides* L.: AR(nc), K(r), M(r), IZ(r).
303. *C. sibirica* L.: AR(nc), K(nc), B(nc), M(r), IZ(nc).  
Asteraceae

304. *Achillea millefolium* L. s.l.: AR(c), K(c), B(c), M(c), IZ(c). This species was accepted in very broad sense including *A. pannonica* Scheele, *A. setacea* Waldst. & Kit., *A. collina* J. Becker ex Rchb. and *A. stepposa* Klokov & Krytzka.
305. *A. nobilis* L.: AR(nc), K(nc), M(nc).
306. *Ambrosia artemisiifolia* L.: AR(nc), K(nc), B(nc), M(r), IZ(nc).
307. *Arctium tomentosum* Mill.: AR(r), K(r), B(r), M(r), IZ(r).
308. *Artemisia absintium* L.: AR(c), K(c), B(c), M(c), IZ(c).
309. *A. austriaca* Jacq.: AR(c), K(c), B(c), M(c), IZ(c).
310. *A. pontica* L.: K(nc).
311. *A. santonicum* L.: K(nc).
312. *A. scoparia* Waldst. & Kit.: AR(r), M(r).
313. *A. vulgaris* L.: AR(c), K(c), B(c), M(c), IZ(c).
314. \**Aster bessarabicus* Bernh. ex Rchb. (= *A. amelloides* Besser nom. illeg.): AR(r), K(vr).
315. *Carduus acanthoides* L.: AR(nc), K(c), B(nc), M(nc), IZ(nc).
316. *C. hamulosus* Ehrh. (= *C. pseudocollinus* (Schmalh.) Klokov): B(r). Taxonomy (Kazmi, 1964).
317. *C. nutans* L. s.l. (= *C. thoermeri* Weinm., *C. attenuatus* Klokov): AR(vr), M(vr).
318. *Carlina biebersteinii* Bernh. ex Homem.: B(r), M(r).
319. *Centaurea diffusa* Lam.: AR(nc), K(nc), B(nc), M(c), IZ(nc).
320. *C. jacea* L. (= *C. substituta* Czerep.): AR(c), K(nc), B(c), M(c), IZ(c).
321. \**C. orientalis* L.: AR(r), M(r).
322. *C. scabiosa* L. s.l. (incl. *C. apiculata* Ledeb., *C. adpressa* Ledeb., *C. pseudocoriacea* Dobroc.): AR(c), K(c), B(c), M(c), IZ(c). Taxonomy (Mikheev, 2000).
323. *C. stoebe* L. s.l. (incl. *C. biebersteinii* DC., *C. pseudomaculosa* Dobroc.): AR(nc), K(nc), B(r), M(nc), IZ(nc). Lectotypification of this Linnaean name (Greuter, 2003b).
324. *Cichorium intybus* L.: AR(c), K(c), B(c), M(nc), IZ(c).
325. *Cirsium setosum* (Willd.) Besser: AR(nc), K(nc), B(nc), M(r), IZ(nc).
326. *C. ukranicum* Besser ex DC.: AR(nc), B(nc), M(nc), IZ(nc).
327. *C. vulgare* (Savi) Ten.: AR(nc), K(nc), B(r), IZ(c).
328. \**Cota tinctoria* (L.) J. Gay (= *Anthemis tinctoria* L., *A. subtinctoria* Dobroc.): AR(r), K(r), B(c), M(r), IZ(r). About this genus (Greuter et al., 2003; Oberprieler et al., 2007; Sonboli et al., 2012; Kadereit et al., 2016).
329. *Crepis foetida* L. s.l. (incl. *C. rhoeadifolia* M. Bieb., *Barkhausia rhoeadifolia* (M. Bieb.) M. Bieb.): AR(nc), K(nc), B(nc), M(nc), IZ(nc). Taxonomy (Greuter, 2003c).
330. *C. tectorum* L.: K(r), B(nc), IZ(r).
331. *Echinops sphaerocephalus* L.: AR(r), K(r), B(nc), IZ(r).
332. *Erigeron acris* L.: B(vr).
333. *E. annuus* (L.) Pers. (= *Phalacrolooma anuum* (L.) Dumort., *Stenactis annua* (L.) Nees): AR(nc), K(nc), B(c), M(nc), IZ(nc). Taxonomy (Greuter, 2003a; Sennikov & Kurto, 2019).
334. *E. canadensis* L. (= *Coryza canadensis* (L.) Cronq.): B(r), IZ(r). Taxonomy (Greuter, 2003a; Kadereit et al., 2016).
335. *E. podolicus* Besser: AR(nc), K(nc), B(r), IZ(r).
336. \**Galatella villosa* (L.) Rchb. f. (= *Crintaria villosa* (L.) Cass., *Linosyris villosa* (L.) DC.): AR(r!), K(nc). Taxonomy (Greuter, 2003a; Kadereit et al., 2016).
337. *Helianthus annuus* L.: AR(vr!).
338. *Helichrysum arenarium* (L.) Moench: AR(nc), K(nc), B(nc), M(nc).
339. *Hieracium robustum* Fr.: AR(vr).
340. *H. umbellatum* L.: AR(r).
341. *H. virosum* Pall.: AR(nc), K(nc), B(nc), M(nc), IZ(nc).
342. *Iva xanthiifolia* Nutt. (= *Cyclachaena xanthiifolia* Fresen.): AR(r!), K(r), B(r), M(r), IZ(vr). Taxonomy and nomenclature (Greuter, 2003d; Pruski, 2005).
343. *Jacobaea doria* (L.) G. Gaertn. et al. (= *J. schwetzwowii* (Korsh.) Tatanov & Vasjukov, *Senecio schwetzwowii* Korsh.): M(vr). Taxonomy (Calvo & Aedo, 2015).
344. *J. erucifolia* (L.) G. Gaertn. et al. (= *Senecio erucifolius* L.): B(r), M(r), IZ(r). About the genus *Jacobaea* Mill. (Pelser et al., 2006; Kadereit et al., 2016).
345. *J. racemosa* (M. Bieb.) Pelsler s.l. (= *Senecio paucifolius* S. G. Gmel.): AR(vr), M(vr). Taxonomy (Calvo et al., 2013, 2014).
346. *J. vulgaris* Gaertn. (= *Senecio jacobaea* L.): AR(nc), K(nc), B(nc), M(nc), IZ(nc).
347. *Jurinea arachnoidea* Bunge: AR(nc), K(nc), B(nc), M(r).
348. \**J. multiflora* (L.) B. Fedtsch.: K(vr).
349. *Lactuca serriola* L.: AR(nc), K(nc), B(nc), M(nc), IZ(nc).
350. *L. saligna* L.: AR(r), K(vr), B(nc), M(r).
351. *L. tatarica* (L.) C.A. Mey.: AR(vr), M(vr), IZ(vr).
352. *Leucanthemum vulgare* (Vaill.) Lam. s.l. (incl. *L. ircutianum* DC.): AR(r), K(r), B(r).
353. *Onopordum acanthium* L.: AR(r), K(nc), B(r), M(nc), IZ(r).
354. *Pentanema britannicum* (L.) D. Gut. Larr. et al. (= *Imula britannica* L.): AR(r), K(r), B(r), M(r), IZ(r). On the recircumscription of the genus *Pentanema* Cass. (Boiko et al., 2018; Gutiérrez-Larruscain et al., 2018).
355. *P. ensifolium* (L.) D. Gut. Larr. et al. (= *Imula ensifolia* L.): AR(vr).
356. *P. salicinum* (L.) D. Gut. Larr. et al. s.l. (incl. *P. asperum* (Poir.) G. V. Boiko & Korniy.): AR(nc), K(nc), B(nc), M(nc).
357. *Picris hieracioides* L.: AR(c), K(nc), B(nc), M(c), IZ(c).
358. *Pilosella bauhini* (Besser) Arv.-Touv. aggr. (= *Hieracium bauhini* Besser, *H. hispidissimum* Rehmann, *H. plicatum* (Zahn) Juxip): AR(nc), K(nc), B(nc), M(r), IZ(nc).
359. *P. brachiata* (Lam.) F. Schultz & Sch. Bip. (= *Hieracium brachiatum* (Lam.) Naeg. & Peter): AR(r), B(vr).
360. *P. echioides* (Lum.) F. Schultz & Sch. Bip. (= *Hieracium echioides* Lum.): AR(nc), B(r), M(r).
361. *P. officinarum* F. Schultz & Sch. Bip. (= *Hieracium pilosella* L.): AR(c), K(c), B(c), M(c), IZ(c).
362. *P. praealta* (Vill. ex Gochn.) F. Schultz & Sch. Bip. (= *Hieracium praealtum* Vill. ex Gochn., *H. piloselloides* auct. non Vill.): AR(nc), B(nc), M(nc), IZ(nc).
363. *Podospermum canum* C. A. Mey. (= *Scorzonera laciniata* auct. non L., *S. cana* (C. A. Mey.) Hoffm.): K(nc), M(r).
364. *Scorzoneroidea autumnalis* (L.) Moench (= *Leontodon autumnalis* L.): AR(nc), K(r), B(r), M(r), IZ(nc). About this genus (Greuter et al., 2006; Kadereit et al., 2016).
365. *Senecio vernalis* Waldst. & Kit.: AR(r), B(r), IZ(r).
366. *Solidago canadensis* L.: K(vr), IZ(vr).
367. *S. virgaurea* L.: IZ(r).
368. *Sonchus arvensis* L.: AR(r), K(r), M(r), IZ(r).
369. *S. oleraceus* L.: AR(vr), B(vr), M(vr), IZ(vr).
370. *Tanacetum corymbosum* (L.) Sch. Bip. (= *Pyrethrum corymbosum* (L.) Scop.): B(vr). Taxonomy (Greuter et al., 2003; Oberprieler et al., 2007; Sonboli et al., 2012).
371. *T. vulgare* L.: AR(c), K(c), B(c), M(c), IZ(c).
372. *Taraxacum officinale* Wigg. aggr.: AR(nc), K(c), B(c), M(c), IZ(c).
373. *T. serotinum* (Waldst. & Kit.) Poir.: AR(nc), K(nc), B(nc), M(nc), IZ(nc).
374. *Tragopogon dubius* Scop. s.l. (incl. *T. major* Jacq.): AR(nc), K(nc), B(nc), M(nc), IZ(nc).
375. *T. orientalis* L.: B(vr), M(nc), IZ(nc).
376. *Triplourospermum inodorum* (L.) Sch. Bip. (= *Matricaria perforata* Merat): AR(r), K(nc), B(r), M(r), IZ(r).
377. *Tussilago farfara* L.: AR(r), K(r), B(r), M(nc), IZ(nc).
378. *Xanthium albinum* (Widder) H. Scholz: M(vr).
379. *X. strumarium* L.: B(vr).
- Sambucaceae
380. *Sambucus nigra* L.: AR(r), K(r), B(vr), M(r), IZ(vr).
- Caprifoliaceae
381. *Cephalaria uralensis* (Murr.) Schrad. ex Roem. & Schult.: AR(nc), K(nc), IZ(r).
382. *Knautia arvensis* (L.) Coult.: AR(c), K(nc), B(nc), M(nc), IZ(nc).
383. *Scabiosa ochroleuca* L.: AR(c), K(c), B(c), M(nc), IZ(c).
384. \**Valeriana officinalis* L. s.l.: AR(vr!), K(r), B(vr).
- Apiaceae
385. *Anthriscus sylvestris* (L.) Hoffm.: AR(c), K(nc), B(c), M(nc), IZ(nc).
386. *Carum carvi* L.: M(r).
387. *Chaerophyllum bulbosum* L. (= *C. prescottii* DC.): AR(vr), B(r), IZ(nc).
388. *Conium maculatum* L.: AR(r), K(vr), M(vr), IZ(r).
389. *Daucus carota* L.: AR(c), K(nc), B(nc), M(nc), IZ(nc).
390. *Dichoropetalum carvifolium* (Vill.) Pimenov & Kljuykov (= *Peucedanum carvifolium* Vill.): AR(r), M(r). See nomenclatural citation below.

391. *Eryngium campestre* L.: AR(c), K(c), B(c), M(c), IZ(c).  
 392. *Falcaria vulgaris* Bernh.: AR(c), K(c), B(c), M(c), IZ(c).  
 393. *Heracleum sibiricum* L.: AR(nc), K(r), B(nc), M(nc), IZ(nc).  
 394. *Pastinaca sativa* L. (= *P. sylvestris* Mill.): K(nc), IZ(nc). Taxonomy (Pimenov & Ostroumova, 2012).  
 395. *Pimpinella saxifraga* L.: AR(nc), K(nc), B(nc), M(nc), IZ(c).  
 396. *Seseli annuum* L.: AR(r), B(r), IZ(nc).  
 397. *S. tortuosum* L. (= *S. campestre* Besser): AR(nc), K(nc), B(nc), M(nc), IZ(nc). Taxonomy (Pimenov & Ostroumova, 2012).  
 398. *Silaum silaus* (L.) Schinz & Thell.: K(r). Taxonomy (Pimenov & Ostroumova, 2012).  
 399. *Torilis japonica* (Houtt) DC.: AR(r), K(r), B(r), M(r), IZ(r).  
 400. \**Trinia kitaibelii* M. Bieb.: AR(vr, cited only by literature source (Bayrak & Stetsiuk, 2005)).  
 401. *Xanthoselinum alsaticum* (L.) Schur (= *Peucedanum lubimenkoanum* Kotov): AR(nc), K(nc), B(nc), M(nc). Taxonomy (Pimenov & Ostroumova, 2012).

## Discussion

Nomenclature of several accepted species names is to be discussed here in detail.

***Dichoropetalum carvifolia* (Vill.) Pimenov & Kljuykov, 2007**, Willdenowia, 37(2): 478. – *Peucedanum carvifolia* Vill. 1779, Prosp. Hist. Pl. Dauphiné: 25; Vinogradova, 2004, Fl. Eur. Orient. 11: 394. – *Holandrea carvifolia* (Vill.) Reduron et al. 1997, J. Bot. Soc. Bot. France, 1: 93. Lectotype (Frey, 1989): [icon] Crantz, 1767, Stirp. Austr. Fasc. 3, tab. 3, fig. 2.

= *Selinum chabraei* Jacq. ex Murray, 1784, Syst. Veg., ed. 14: 279. – *Peucedanum chabraei* (Murray) Rchb. ex Moessler, 1827, Handb. Gewachsk. ed. 2, 1: 448. Lectotype (designated here by D. A. Davydov): [icon] Jacq. 1773, Fl. Austr. 1: 46, tab. 72.

= *Selinum podolicum* Besser, 1809, Prim. Fl. Galiciae Austriac. 2: 392. – *Peucedanum podolicum* (Besser) Eichw. 1830, Skizze: 155; Schischkin, 1951, Fl. URSS, 17: 195; Kotov, 1955, Fl. RSSU, 7: 591. Lectotype (Fedoronchuk, 2007): “*Selinum podolicum*. Prim. Fl. Gal. Herb. W. Besser” (KW).

= *Peucedanum euphimiae* Kotov, 1940, Bot. Zhurn. AN URSS, 1(2): 278; id. 1955, Fl. RSSU, 7: 593. Lectotype (designated here by D. A. Davydov; Shiyan, 10.VIII.2015, as “holotype”): “Russian Federation, Rostov region, Latonovo village, on the right bank of Sarmatska bottom. 18.VIII.1923. Y. M. Lavrenko” (KW 115634). Holotype of this species collected by Y. M. Lavrenko in Sarmatska bottom in 1924 was preserved in Kharkiv Agricultural Institute (Kotov, 1940) but it has been probably destroyed. However, the specimen from this location (locus classicus) collected by Lavrenko in 1923 (one year earlier) with the label verified by M. I. Kotov 09.01.1938 is present in KW, so it is the best choice for the lectotypification procedure.

Incorrect designations: “*Peucedanum carvifolium-chabraei*” Soldano, 2005, Annot. Checkl. Italian Vasc. Fl.: 20, nom. inval. – “*Holandrea carvifolium-chabraei*” Soldano et al. 2005, Atti Soc. Ital. Sci. Nat. Mus. Civico Storia Nat. Milano, 146(2): 232, nom. inval. – “*Dichoropetalum carvifolium-chabraei*” Soldano et al. 2011, Atti Soc. Ital. Sci. Nat. Mus. Civico Storia Nat. Milano, 152(2): 89; Kljuykov et al., 2015, Atti Soc. Ital. Sci. Nat. Mus. Civico Storia Nat. Milano, 2(2): 133, nom. inval.

The genus *Dichoropetalum* Fenzl is to be separated from *Peucedanum* L. based on recent molecular phylogenetic studies (Pimenov et al., 2007; Pimenov & Ostroumova, 2012; Kadereit et al., 2016). Italian botanists (Conti et al., 2005; Banfi et al., 2011) adopted the epithet “*carvifolium-chabraei*” instead of “*carvifolia*”, believed that two words firstly used by Crantz and accepted later by Jacquin and Allioni form a valid epithet and should be hyphenated. But one of us (D. A. Davydov) has no doubts that the names based on epithet “*carvifolium-chabraei*” are incorrect (Greuter, 2009; Verloove & Lambinon, 2014). The names “*Selinum carvifolium Chabraei*” and “*Selinum carvifolium Gmelini*” adopted by Crantz in 1766 and several later authors are trinomials and the phrase “*carvifolium Chabraei*” consists of two words not intended as a specific epithet in according to Art. 23.6(b) of International Code of Nomenclature for Algae, Fungi, and Plants (Shenzhen Code; Turland et al., 2018). So the first validly published name for this species is *Peucedanum carvifolium* Vill.

Based on our results the authorship of the name *Erophila verna* (Brassicaceae) needs correction:

***Erophila verna* (L.) DC. IV 1821**, Mém. Mus. Hist. Nat. 7: 249; Besser, 1822, Enum. Pl. Volhyn.: 71; Chevall. 1827, Fl. Gen. Env. Paris, ed. 2, 2: 898; N. Busch, 1939, Fl. URSS, 8: 456 (cum. auct. Bess.); Kotov, 1953, Fl. RSSU, 5: 355 (cum. auct. Bess.); id. 1979, Fl. Part. Eur. URSS, 4: 120 (cum. auct. Bess.); Ilijinska, 2007, Ecofl. Ukr.: 68; Dorofeyev, 2012, Consp. Fl. Eur. Orient. 1: 407. – *E. vulgaris* DC. V 1821, Syst. Nat. 2: 356. Lectotype (Jaffri, 1973): “Herb. Linn. No. 823.7” (LINN).

We think that the correct name for the taxon previously known as *Asyneuma canescens* (Campanulaceae) is *Campanula canescens*.

***Campanula canescens* (Waldst. & Kit.) Roth, 1827**, Enum. Pl. Phaen. Germ. 1: 716. – *Phyteuma canescens* Waldst. & Kit. 1799–1802, Descr. Icon. Pl. Hung. 1: 12, t. 14. – *Asyneuma canescens* Griseb. & Schenk, 1852, Arch. Naturgesch. (Berlin), 18: 335; An. Fedorov, 1957, Fl. URSS, 24: 411; Wissjulina, 1961, Fl. RSSU, 10: 446; An. Fedorov, 1978, Fl. Part. Eur. URSS, 3: 236.

Current phylogenetic studies of Campanulaceae demonstrated that the genus *Campanula* L. is not monophyletic in traditional circumscription and the species of this genus fall into at least four major clades containing other genera of the family (Kadereit et al., 2016). We think that the better taxonomic solution in this case is to accept *Campanula* in broad sense with inclusion in the latter of all species from the genera *Adenophora* Fisch., *Asyneuma* Griseb. & Schenk, *Legousia* Durand and *Phyteuma* L.

Our results show that floristic research gives interesting data for further critical taxonomic analysis of the taxa found. We pointed out that names of 91 plant species accepted by the last Ukrainian nomenclatural checklist (Mosyakin & Fedoronchuk, 1999) were changed. The major part of them belongs to circumscription changing of separate species taxa (mostly inclusion in others) – 40 species (*Allium rotundum* and *A. waldsteinii*, *Tragopogon dubius* and *T. major*, *Seseli tortuosum* and *S. campestre*, etc.) and to transferring to different genera mostly based on new molecular phylogenetic data – 43 species (*Pyrethrum corymbosum* and *Tanacetum corymbosum*, *Colchicum versicolor* and *Bulbocodium versicolor*, *Chenopodium hybridum* and *Chenopodium hybridum*, etc.). Five species names previously accepted by S. L. Mosyakin and M. M. Fedoronchuk included typographic or other errors which needed correction: *Calamagrostis epigeios* (instead of incorrectly cited “*C. epigeios*”), *Euphorbia seguieriana* (against “*E. seguierana*”), *Sisymbrium volgense* (against “*S. wolgensis*”), *Artemisia santonicum* (instead of “*A. santonica*”), *Cirsium ukrainicum* (against “*C. ukrainicum*”). The authorship of three plant names was clarified: *Erophila verna* (L.) DC. (instead of *E. verna* (L.) Besser, see above), *Gagea pusilla* (F. W. Schmidt) Sweet (instead of *G. pusilla* (F. W. Schmidt) Schult. & Schult. f.) and *Polycnemum majus* A. Braun ex Bogenh. (against *P. majus* A. Braun nom. inval.).

The total number of vascular plant species on the studied key steppe territories: Abazivka–Rozhayivka – 319 species (79.6%), Kostochky – 278 (69.3%), Buhayivka – 289 (72.1%), Machukhy – 257 (64.1%), Ivonchentsi–Zhuky – 230 species (57.4%).

We found that 158 vascular plant species (39.4%) occur on all five studied territories. The major part of them are very common dominant or characteristic plants for Ukrainian steppe communities (*Festuca valesiaca*, *Bromus inermis*, *Elymus repens*, *Ranunculus polyanthemos*, *Galium verum*, etc.). 54 species were found on four key steppe territories (13.5% – *Gagea pusilla*, *Galium octonarium*, *Helichrysum arenarium*, *Adonis vernalis*, etc.), 58 – on three territories (14.5% – *Carex melanostachya*, *Reseda lutea*, *Viola arvensis*, *Rumex confertus*, etc.), 57 – on two territories (14.2% – *Iris aphylla*, *Bromus arvensis*, *Silene vulgaris*, *Carduus nutans*, etc.). 74 species (18.5%) are of great interest, they were found only on the one territory: Abazivka–Rozhayivka – 23 species (5.7%; *Bothriochloa ischaemum*, *Linum hirsutum*, *Euonymus europaeus*, *Hieracium umbellatum*, *Helianthus annuus*, etc.), Buhayivka – 21 (5.2%; *Hemerocallis fulva*, *Aegilops cylindrica*, *Turritis glabra*, *Veronica spuria*, *Carduus hamulosus*, etc.), Kostochky – 15 (3.7%; *Equisetum ramosissimum*, *Bellevalia ciliata*, *Bassia prostrata*, *Jurinea multiflora*, etc.), Machukhy – 10 (2.5%; *Linum flavum*, *Vinca herbacea*, *Salsola tragus*, *Xanthium albinum*, *Carum carvi*, etc.), Ivonchentsi–Zhuky – 5 (1.2%; *Hordeum murinum*, *Sisymbrium volgense*, *Dianthus eugeniae*, *Veronica incana*, *Solidago virgaurea*).

The full species list of vascular plant species published here has great significance for regional floristic studies. It includes 13 species not mentioned in a recent publication for Poltava administrative region (Bayrak & Stetsiuk, 2008). Nine of them (*Mahus domestica*, *Prunus armeniaca*, *P. cerasus*, *Rosa mediata*, *Linum hirsutum*, *Cuscuta planiflora*, *Crepis foetida*, *Hieracium robustum* and *Pilosella brachiata*), however, have been earlier reported by us from Abazivka–Rozhayivka location (Davydov & Gomlya, 2016); one (*Rosa antonovii*) – indicated by us for Poltava district (Gomlya & Davydov, 2008), one (*Helianthus annuus* as a casual alien) – cited by Dvirna (2012), one (*Rosa borysthena*) – cited by Dubovik (1989) and only the one species (*Hemerocallis fulva*) has never been mentioned for Poltava region previously.

***Hemerocallis fulva* (L.) L. 1762**, Sp. Pl., ed. 2: 462; Czerniakowska, 1935, Fl. URSS, 4: 56; Bordzilowski, 1950, Fl. RSSU, 3: 87; Ikonnikov, 1979, Fl. Part. Eur. URSS, 4: 217. – *H. lilio-asphodelus* var. *fulva* L. 1753, Sp. Pl.: 324. Lectotype (designated here by D. A. Davydov): “Herb. Linn. No. 446.2” (LINN).

This ornamental plant from Eastern Asia which is widely distributed in Ukraine sometimes occurs in many regions as an escaped but not naturalized (as casual alien ergaziophyte or relict of cultivation) species. One of us (D. A. Davydov) found it in these locations in Poltava region: 1) Chutove district, near Iskrivka village, border of the forest plantation between “Iskrivka” and “Skorokhodove” railway stations, 24.07.2011, 06.05.2014; 2) Poltava town (Vakulentsi), a meadow area on sands on the left bank of the Vorskla River, 26.05.2013; 3) Mashivka district, Mashivka urban-type settlement, border of the forest plantation near the railroad Poltava–Lozova, 08.07.2013; 4) Novi Sanzhary district, Prystantsiynе

village, border of the alder forest near the railroad, 22.04.2014; 5) Poltava district, near Buhayivka village, on steppe slope above a pond, 24.06.2014; 6) Poltava district, Mynivka village, escaped from cultivations near “Mynivka” railway platform, 03.07.2014; 7) Karlivka district, between Fedorivka and Nyzhnia Lanna villages, near the railway bridge on the Lanna River, 08.07.2014; 8) Poltava district, near Kliushnyky village, in oak-pine forest, 27.03.2015; 9) Reshetylivka district, Shkurupiyi village, near “Shkutupiyi” railway platform, 07.05.2015, 07.07.2016; 10) Lubny town, near railroads, 10.06.2018; 11) Lubny district, Vyly village, escaped from cultivation near “Vyly” railway station, 10.06.2018; 12) Kremenchuk district, between Bondari and Bazaluky villages, border of the forest plantation near “Bilany” railway platform. Also this species was found as an alien in 2014–2019 in many locations of Kharkiv (Kolomak, Nova Vodolaha and Kehychivka districts), Kyiv (Boryspil, Brovary and Pereyaslav-Khmelynytskyi districts) and Sumy (Bilopilka district) regions within the Dnipro River Left-Bank area.

Key steppe territories found by us near Poltava town have great significance as outposts of the steppe vegetation. They hold 32 rare steppe plant species. Seven of them are included in the Red Data Book of Ukraine and have national conservation status and 25 from the list of locally rare plants within Poltava region and are regionally rare. Several of them are shown on Figure 2.

The Abazivka–Rozhayivka steppe location comprises all seven nationally and 17 regionally rare species. Kostochky – five nationally and 14 regionally rare species, Buhayivka – three nationally and 12 regionally rare species, Machukhy – three nationally and nine regionally rare species, Ivonchentsi–Zhuky – two nationally and four regionally rare species.



**Fig. 2.** Several rare plant species found on key steppe territories near Poltava town: A – *Stipa capillata* L. as dominant on slopes between Abazivka and Rozhayivka villages (17.07.2018); B – *Astragalus dasyanthus* Pall. in “Rozhayivskiy” local botanical reserve (17.07.2018); C – *Stipa pulcherrima* K. Koch on slope near the road between Abazivka and Rozhayivka villages (09.06.2018); D – *Adonis vernalis* L. near Buhayivka village (06.05.2015); E – *Crocus reticulatus* Steven ex Adams near Buhayivka village (07.04.2010); F – *Muscari neglectum* Guss. ex Ten. between Umantsivka and Buhayivka villages (06.05.2015); G – *Colchicum versicolor* Ker Gawl. in “Rozhayivskiy” local botanical reserve (05.04.2010); H – *Iris aphylla* L. near Buhayivka village (06.05.2015); I – *Hyacinthella leucophaea* (K. Koch) Schur between Umantsivka and Buhayivka villages (06.05.2015); J – *Prunus fruticosa* Pall. near Kostochky village (20.07.2018). All photographs by D. A. Davydov

The most widely distributed rare species are *Crocus reticulatus*, *Stipa capillata* (Red Data Book of Ukraine), *Muscari neglectum* and *Cota tinctoria* (regionally rare) found on all studied territories. Otherwise, 12 rare species (*Gladiolus imbricatus*, *Stipa pulcherrima*, *Iris pumila*, *Bellevalia ciliata*, *Aegilops cylindrica*, *Oxytropis pilosa*, *Rosa chrshanovskii*, *Dianthus eugeniae*, *Vinca herbacea* and *Jurinea multiflora*, including two not confirmed by our data *Linum perenne* and *Trinia kitaibelii*) were found only the on one steppe territory and belong to the very locally distributed category. Monitoring of their state through further investigations is necessary.

The studied key steppe territories near Poltava town are highly representative, they cover populations of 32 rare steppe species from 33 found

in Poltava district (except *Pedicularis kaufmannii* Pinzger occurring on slopes between Vytivka and Abazivka villages) and from 68 (47.1%) found in steppes of Poltava region (Davydov & Gomlya, unpublished data). So the preservation of these locations as objects of the Ukrainian nature reserve fund is a priority objective.

## Conclusion

Our study of the vascular plants on key steppe territories near Poltava emphasized their important scientific value as plots with high plant diversity for the steppe sites within the Forest-Steppe zone of Ukraine. The primary task for further research is to organize the protection of these most



important steppe areas and the monitoring for their condition in the future. In our opinion, regional floristic studies are very promising and relevant today. However, in the light of the current development of botany they need to be coordinated and connected with new data about taxonomy and nomenclature of separate taxa (species typification, critical revision of their circumscription based on new molecular phylogenetic data, discussion on the phylogeny and evolution of high rank taxa, etc.). With the supporting of such conditions the obtained results will have not only local but global scientific significance. Sometimes the study of new papers in the field of taxonomy or nomenclature with the new names presented there instead of the widely accepted ones causes their categorical rejection. However, it is unacceptable to willfully ignore these publications.

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