

Notes to vascular plants in Ukraine I

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ABSTRACT

Materials and methods: field observations and herbarium collections, microscope technique

Nomenclature: Plants of the World Online (POWO) (2022)

Results: In this contribution, new data concerning vascular plants in Ukraine are presented. It includes new records and confirmations for the Ukrainian regions regarding 58 species of the genera of *Aconitum*, *Amaranthus*, *Anthoxanthum*, *Artemisia*, *Asparagus*, *Cardamine*, *Carex*, *Celastrus*, *Cenchrus*, *Centaurium*, *Cerastium*, *Chenopodiaceum*, *Clematis*, *Crassula*, *Dactylorhiza*, *Datura*, *Dichodon*, *Dipsacus*, *Dysphania*, *Equisetum*, *Eritrichium*, *Euphorbia*, *Fritillaria*, *Gagea*, *Gentiana*, *Gladiolus*, *Glycyrrhiza*, *Gypsophila*, *Hedera*, *Helianthus*, *Hemerocallis*, *Heraclium*, *Iris*, *Juglans*, *Lemna*, *Lilium*, *Lunaria*, *Lysimachia*, *Mercurialis*, *Nymphaea*, *Pentanema*, *Prunus*, *Pulsatilla*, *Sagina*, *Scolochloa*, *Sedum*, *Silene*, *Solanum*, *Sorghum*, *Stipa*, *Thesium*, *Tribulus* and *Vitis*. Among them, three species of vascular plants are newly reported from Ukraine: *Anthoxanthum aristatum* was found from Chernivtsi Region; *Eritrichium nanum* – from Ivano-Frankivsk Region; *Euphorbia serpens* – from Autonomous Republic of Crimea, Kherson Region and Odesa City. Some findings concern large areas including several regions, in particular, a new species for the Right Bank of the Dnipro River (*Crassula vaillantii*) and a new species for the Steppe zone of Ukraine (*Pentanema squarrosium*) are also reported here. Most of the new finds are given for administrative regions of Ukraine: six species are given for the first time for Cherkasy and Zakarpattia Regions, four – for Dnipropetrovsk Region, three – for Chernihiv, Kirovohrad and Zaporizhia Regions, two – for Kherson, Khmelnytsk, Vinnytsia and Volhyn regions, one – for Kharkiv, Mykolaiv, Odesa, Zhytomyr Regions and Autonomous Republic of Crimea. New localities or findings of vascular plant species confirmed by recent data from Cherkasy, Dnipropetrovsk, Kherson, Kirovohrad, Kyiv and Odesa, regions are given. The localities of numerous rare species of vascular plants are provided. Among them, it is species included in the Resolution № 4 of the Bern Convention (i.e. *Thesium ebracteatum*), the Red Data Book of Ukraine (i.e. *Dactylorhiza incarnata*, *Fritillaria ruthenica*, *Gladiolus imbricatus*, *Glycyrrhiza glabra*, *Lilium martagon*, *Lunaria rediviva*, *Pulsatilla patens*, *Stipa pennata*, *Stipa tirsia*) and regionally rare plants.

KEYWORDS

biodiversity, new finds, regions, district, Ukraine

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INTRODUCTION

The study of the vascular flora in Ukraine has a long history. The results of these studies are presented in national guides (e.g. Prokudin *et al.* 1987), Flora of Ukrainian RSR 1936–1965 and Checklist of vascular plants (Mosyakin & Fedoronchuk 1999), as well as in numerous regional summaries (e.g. Bayrak 1997, Chopyk 1976, Fodor 1974, Kucherevskiy 2004, Paczowski 2008, Tarasov 2012, Tkachyk 2000, Yena 2012, Zaverukha 1985). There are also publications devoted to floristic finds, in particular, a very informative series of publications devoted to the discovery of rare species, initiated by the NGO UNCG (Records 2020, 2022, 2023). However, there are still gaps in the information on the distribution of vascular plants in Ukraine. All national-level publications date back to the past century and, hence, are quite outdated. To solve this problem, we are starting a series of publications devoted to new floristic reports on vascular plants in Ukraine. In this series of articles, it is planned to publish data on new floristic findings, eliminations and confirmations of vascular plants for Ukraine. Previously, such a series of publications was introduced for lichen-forming and lichenicolous fungi (Darmostuk & Khodosovtsev 2020). In this case, we are considering the possibility of data mobilization by publishing this article series in the format of the regional checklist.

MATERIAL AND METHODS

Plants were identified in the field or during camera processing in the laboratories. Some of the herbarium specimens are stored in the herbarium collections of M.G. Kholodny Institute of Botany (KW), Kherson State University (KHER), Yuriy Fedkovych Chernivtsi National University (CHER), M.M. Gryshko National Botanical Garden, Kyiv, Ukraine (KWA), O.V. Fomin Botanical Garden of Taras Shevchenko National University of Kyiv (KWHU), Kryvyi Rih Botanical Garden (KRW) and private collections of the authors. Non-collected materials were marked as “non coll.” in the paper. The names of vascular plant species are given according to the Plants of the World Online (POWO 2022). The name under which the species was listed in the “Vascular Plants of Ukraine. A nomenclature Checklist” (Mosyakin & Fedoronchuk 1999) is also indicated, but only if it was listed there under a different name.

SPECIES RECORDS

Aconitum anthora L.

This species was known in Ukraine only from the Western Forest-Steppe. The plant was found from the northern border of the area.

Specimen examined. Ukraine. Cherkasy Region, Zolotonosha District, in the vicinity of Khvylovo-Sorochyn village, alt. 102 m, 49.63176° N, 32.07269° E, an old forest falling gradually overgrown with trees (oak and pine), 20 August 2015, K. Lavrinenko (non coll.).

Amaranthus viridis L.

In Ukraine, it was known from the only location. For the first time in Ukraine, it was discovered by us from Kherson on 28 August 2000 (Moysiyyenko & Mosyakin 2008). We found three well-developed individuals in the front garden on I. Paczowski Lane (former Spartakivskiy Lane) near the Central Market. Then we assumed that the plant could have been introduced in a result of carrying the goods from the market. Twenty years later the plant was found for the second time in a similar locality, but already on the outskirts of the city, at a distance of 8 km from the previous location. In total, over 100 plant species were found growing in the front garden and adjacent roadside ruderal sites. This locality is remote from the ways of goods deliver. It is likely that the plant got here with seeds of ornamental plants that were grown in the front garden. Perhaps in the first case, it was recorded in the same way.

Specimen examined. Ukraine. Kherson City, suburbs Antonivka, intersection of Gvardiiska and Suvo-rova streets, alt. 34 m, 46.67629° N, 32.69752° E, 31 October 2020, leg. & det. I. Moysiyyenko (KHER).

***Anthoxanthum aristatum* Boiss.**

The species has native distribution covering the Atlantic regions of southern and western Europe, the Mediterranean basin and north-west Africa (Pinke *et al.* 2006, Drapikowska *et al.* 2020). *Anthoxanthum aristatum* grows in neighboring with Ukraine Poland (Drapikowska *et al.* 2020), Hungary (Pinke *et al.* 2006) and Czech Republic (Danilhelka *et al.* 2012), where the species is listed as alien plant. Although on the site “Plants of the World Online” (POWO 2022) *Anthoxanthum aristatum* is listed for Ukraine as introduced, but there is no information about the distribution of this species in Ukraine (Onyshchenko *et al.* 2022). In 2020, this species was discovered by us from Chernivtsi at the railway station between the platform and the railway track. The herbarium specimen of *A. aristatum* is stored in the Herbarium of the Yuriy Fedkovych Chernivtsi National University (CHER). The species is reported for the first time from Ukraine.

Specimen examined. Ukraine. Chernivtsi Region, Chernivtsi City, the railway station, between the platform and the railway track, alt. 168 m, 48.30095° N, 25.93103° E, 24 June 2020, leg. & det. O. Volutsa (CHER).

***Artemisia umbrosa* (Besser) Turcz. ex Verl.**

The plant was recorded from Chernivtsi, Donetsk, Kherson, Kyiv, Lviv, Poltava, Zakarpattia and Zhytomyr Regions, Kyiv City and Autonomous Republic of Crimea (Boiko & Kolomiychuk 2015, Moysiyenko 2000, Mosyakin *et al.* 2018, Davydov 2021, Orlov *et al.* 2022). The species is reported for the first time from the Zhytomyr Region.

Specimen examined. Ukraine. Zhytomyr Region, Popilnia District, vicinity of the Koshliaky village, alt. 180 m, 50.00275° N, 29.69015° E, along the edge of the field, 12 October 2020, A. Levon (non coll.).

***Asparagus verticillatus* L.**

The plant distributed in the south-west part of the Forest-Steppe zone (Dnistro River valley), Steppe zone and Crimean Mountains (Bordzilovskyi 1950, Prokudin *et al.* 1987, Yena 2012). Probably, the species is ergasiophygyte. It is recorded for the first time from the Zakarpattia Region.

Specimen examined. Ukraine. Zakarpattia Region, Berehove town, alt. 111 m, 48.21042° N, 22.62649° E, on the edge of the road in shrubs, 29 August 2022, O. Shynder, M. Shevera (non coll.).

***Cardamine hirsuta* L.**

It was known as a native species for the Carpathians and Crimean Mountains (Iljinska *et al.* 2007, Yena 2012), but recently was recorded in Kyiv City as alien one (Shynder *et al.* 2022a). The species is recorded the first time for Cherkasy Region.

Specimen examined. Ukraine. Cherkasy Region, Uman City, National Dendrological Park «Sofiyivka», alt. 179 m, 48.75278° N, 30.23684° E, on the “Japanese Garden” plot, as a weed, 29 June 2022, H. Chorna (non coll.).

***Carex pallescens* L.**

In Ukraine, this species is distributed in the northern part and in the Mountainous Crimea. The plant was found on the southern border of its natural areas.

Specimen examined. Ukraine. Cherkasy Region, Zvenygorodka District, in the vicinity of Mizynivka village, lower steppe-meadow slope, alt. 195 m, 49.10734° N, 30.86159° E, 29 July 2022, K. Lavrinenko (non coll.).

***Carex paniculata* L.**

This plant is distributed in the northern and western parts of Ukraine. It species was found on the southern border of its natural areas.

Specimen examined. Ukraine. Cherkasy Region, Zvenygorodskyi District, in the vicinity of Fedyukivka village, floodplain wet meadows of Hnylyi Tikych River, alt. 177 m, 49.34663° N, 30.49461° E, 17 July 2022, K. Lavrinenko (non coll.).

***Celastrus orbiculatus* Thunb.**

The plant is ergasiophyte of Eastern Asian origin (Kokhno *et al.* 2005, POWO 2022), sporadically cultivated (Grevtsova 2000, Dzyba & Kuznetsov 2005, Kokhno *et al.* 2005). It was known from Lviv region (Sytschak & Kagalo 2010), spontaneous floras of botanical gardens in Kyiv City (Shynder 2019, Kolomiychuk & Shynder 2021) and from Dendrological Park «Oleksandriya» in Kyiv Region (Galkin & Doiko 2015, Shynder & Doiko 2020). The plant has the ability to seed reproduction (Kolesnichenko *et al.* 2010). The species cultivated in the «Lianas» collection and it is found spontaneous on the territory of the Botanical Garden. This ergasiophygophyte is reported for the first time from the Dnipropetrovsk Region.

Specimens examined. Ukraine. Dnipropetrovsk Region, Kryvyi Rih City, Kryvyi Rih Botanical Garden, alt. 112 m, 48.15136° N, 33.58261° E, 12.07.2022, H. Shol (non coll.); on the fence of the Botanical Garden and on the adjacent roadside, alt. 117 m, 48.15301°, 33.57451°, 12.07.2022, H. Shol (non coll.); colony on trees and shrubs, alt. 104 m, 48.14726° N, 33.57821° E, 8 October 2022, H. Shol, O. Shynder, V. Kolomiychuk (non coll.).

***Cenchrus longispinus* (Hack.) Fernald.**

The species was known from all regions of the Steppe zone, Kyiv City, Cherkasy and Kyiv Regions (Mosyakin 1991, Protopopova 1991, Mosyakin & Yavorska 2002, Moysiienko 2011, Shynder *et al.* 2022b). The species is recorded the first time from the Kirovohrad and Vinnytsia Regions.

Specimens examined. Ukraine. Kirovohrad Region, Hayvoron town, alt. 137 m, 48.3413° N, 29.8309° E, on the sand near the rail, over 40 plants, 21 August 2020, leg. & det. O. Shynder (KW). **Vinnytsia Region**, Vapnyarka town, on the railway near the station, alt. 311 m, 48.53071° N, 28.75078° E, 1 plant, 27 July 2019, leg. & det. O. Shynder (KWHA).

***Centaureum pulchellum* var. *altaicum* (Griseb.) Cufod. (= *Centaureum meyeri* (Bunge) Druce)**

The species is widespread in the Steppe zone and in the Autonomous Republic of Crimea, but it is rare in the south of the Forest-Steppe zone. The plant was found on the northern border of the area.

Specimen examined. Ukraine. Kirovohrad Region, Novoukrainka District, Voinivka reserve, Pletenyi Tashlyk River, periodically flooded coastal strip, alt. 131 m, 48.3799° N, 31.49289° E, 23 June 2021, K. Lavrinenko (non coll.).

***Cerastium perfoliatum* L.**

The species was known from Donetsk, Kherson, Mykolaiv, Odesa and Zaporizhzhia Regions and Autonomous Republic of Crimea (Fedoronchuk *et al.* 2002a, Tarasov 2012). It is recorded the first time from Dnipropetrovsk Region.

Specimens examined. Ukraine. Dnipropetrovsk Region, Kamianske District, on the roadside near Saivka village, alt. 103 m, 48.34758° N, 33.87753° E, 10 June 2021, leg. & det. H. Shol, O. Krasova (KRW); Kryvyi Rih district, outskirts of Serhiivka village, Motina gully, alt. 85 m, 48.17857° N, 33.64366° E, on the edge of the field road, 28 June 2022, leg. & det. H. Shol (KRW).

***Chenopodiastrum hybridum* (L.) S. Fuentes, Uotila et Borsch**

The plant distributed in all regions of Ukraine (Prokudin 1987, Protopopova 1991). The species is recorded the first time from the urban flora of the Kryvyi Rih.

Specimens examined. Ukraine. Dnipropetrovsk region, Kryvyi Rih City, Ternivskyi district, alt. 94 m, 48.14749° N, 33.58164° E, on the roadside, 19 August 2021, leg. & det. H. Shol (KRW); Kryvyi Rih City, «Balka Pivnichna Chervona» landscape Reserve, near the camping sites, alt. 91 m, 48.09967° N, 33.52203° E, 31 August 2021, leg. & det. H. Shol, O. Krasova (KRW).

***Clematis vitalba* L.**

The plant known from Chernivtsi, Ivano-Frankivsk, Lviv, Ternopil, Vinnytsia and Zakarpattia Regions and Autonomous Republic of Crimea (Didukh *et al.* 2004, Yena 2012). It is a native species for the Carpathian and Crimean Mountains and alien species (ergasiophygophyte) for the plain part of Ukraine. It has a tendency for naturalization and spontaneous

spread near cultivation sites, for example, in Kyiv City and Dnipro City, Cherkasy, Donetsk and Khmelnytskyi Regions (Didukh *et al.* 2004, Lyubinska 2009, Burda & Koniakin 2019, Karmyzova & Baranovsky 2020, Shynder *et al.* 2022a). In Kharkiv City, *Clematis vitalba* occurred in a 10–20 m wide strip along the fence. Its expansion across the city is possible in a result of the rapid spread of seeds by the wind. The species is recorded the first time from Kharkiv City, Chernihiv and Volyn Regions.

Specimens examined. Ukraine. Chernihiv Region, Pryluky District, Trostyanets village, on the fence of the «Trostanets» dendrological park and in adjacent areas, spontaneously, alt. 162 m, 50.78643° N, 32.80790° E, 1 October 2022, M. Tarabun, O. Shynder, V. Kolomiychuk (non coll.); Nizhyn District, Branytsia village, alt. 115 m. a.s.l., 50.83442° N, 31.36369° E, on the roadside, spontaneously, 9 June 2017, A. Levon (non coll.); **Volyn Region**, Lutsk district, vicinity of the Zhabka village, on the edge of the pine forest, alt. 200 m, 50.82464° N, 25.42907° E, young plant (3–4 years old), 21 October 2022, O. Bezsmeretna, G. Gerasimchuk, O. Shynder (non coll.). **Kharkiv region**. Kharkiv City, Mala Danylivka village, the industrial area, alt. 123 m, 50.064163° N, 36.167786° E, 23 July 2021, K. Zviahintseva (non coll.).

Crassula vaillantii (Willd.) Roth

In the XIX century, the species was reported from the Trykraty village in Mykolaiv Region (Lindemann 1881), but this occurrence remained unconfirmed (Paczoski 2008). Recently, the species discovered in Berdyansk in the Zaporizhzhya Region (Byalt 2012). It is the only modern finding of the species in the Right-Bank of Ukraine.

Specimen examined. Ukraine. Mykolaiv Region, Pervomaisk District, in the Southern Bug valley, alt. 77 m, 48.02161° N, 30.78096° E, on a sandy slope of southwestern exposure, steepness of about 40°, synanthropic habitat, 28 August 2012, A. Levon (non coll.).

Dactylorhiza incarnata (L.) Soó

The species is included in the Red Book of Ukraine (Kuziaryn *et al.* 2009). In Ukraine, it is distributed mainly in the forest and forest-steppe zones and in the Mountainous Crimea.

Specimens examined. Ukraine. Cherkasy region, Zvenygorodka District, between Shostakove and Brodetske villages, floodplain meadows of the Hnylyi Tikych river (grazing), alt. 142 m, 49.23286° N, 30.91957° E, 9 July 2022, A. Kuzemko, O. Chusova, O. Shynder, O. Bezsmeretna, N. Pashkevch, K. Lavrinenko, A. Babytskyi (non coll.); **Ukraine. Cherkasy region**, Zvenygorodka District, between Shostakove and Brodetske villages, floodplain meadows of the Hnylyi Tikych River (grazing are present), alt. 112 m, 48.88038° N, 30.98563° E, 9 August 2022, K. Lavrinenko (non coll.).

Datura ferox L.

The plant was noted from Odesa City as ephemerophyte (Petryk 1992). It is cultivated in a collection of medicinal plants Kryvyi Rih Botanical Garden. The species widespread spontaneously across the Garden far beyond the site of its cultivation on the field where flowering plants are grown as weeds. The species is recorded the first from Dnipropetrovsk Region of the species as ergasiophytophyte.

Specimens examined. Ukraine. Dnipropetrovsk Region, Kryvyi Rih City, Kryvyi Rih Botanical Garden, alt. 111 m, 48.15130° N, 33.57996° E, 25 July 2022, leg. & det. H. Shol (KRW); *ibid.*, in a protective forest strip, alt. 111 m, 48.15116° N, 33.58068° E, 25 July 2022, H. Shol (non coll.).

Dichodon viscidum (M. Bieb.) Holub

The species is widespread mainly in the southern part of the steppe, but it is rare on the north. In the Forest-steppe zone, it was known only from the Vinnytsia Region (Klokov 1952). We discovered the plant in the northern border of the area. The species is recorded the first time from the Cherkasy Region.

Specimen examined. Ukraine. Cherkasy Region, Uman District, the roadside near the Sobkivka forestry, alt. 238 m a.s.l., 48.67413° N, 30.24001° E, 11 May 2021, A. Kuzemko, N. Pashkevych, K. Lavrinenko, Ya. Didukh, O. Khodosovtsev, det. O. Shynder (non coll.).

***Dipsacus fullonum* L. (= *Dipsacus sylvestris* Huds.)**

The species is widespread in Forest and Forest-Steppe zones, as well as Transcarpathia and Crimea (Prokudin et al. 1987). It was known from the Left-Bank part of the Dnipropetrovsk Region (Tarasov 2012). The species is recorded the first time for right-bank part of the Dnipropetrovsk Region.

Specimens examined. Ukraine. Dnipropetrovsk Region, Kryvyi Rih City, Kryvyi Rih Botanical Garden, on a plant nursery like a weed and in the adjacent part of the arboretum, alt. 110 m, 48.15155° N, 33.57107° E, 13 June 2022, leg. & det. H. Shol (KRW); «Balka Pivnichna Chervona» landscape reserve, on the bottom of the gully, alt. 79 m, 48.10254° N, 33.51022° E, in moist sites, 31 August 2021, leg. & det. H. Shol, O. Krasova (KRW); Tsentralno-Miskyi District, in the floodplain of Ingulets river, alt. 28 m, 47.80310° N, 33.25113° E, 20 August 2021, H. Shol (KRW).

***Dysphania pumilio* (R. Br.) Mosyakin & Clemants**

The species was introduced in European country by importing wool and products of its processing from Australia. Further, it spread to anthropogenic habitats by anemo- and zoochorous. The plant was reported from Odesa Region (Dubyna & Protopopova 1983, Protopopova 1991). The species is recorded the first time from the Zakarpattia Region.

Specimens examined. Ukraine. Zakarpattia Region, Uzhhorod, territory before Uzhhorod shoe factory, under the wall of a house, alt. 118 m, 48.6153° N, 22.30086° E, 11 July 2020, O. Levon (non coll.); ibid., 4 August 2022, O. Shynder (non coll.); ibid., in Mukachivska str., 30 November 2022, leg. & det. M. Shevera (KW); Uzhhorod, Dukhnovych str., on the sidewalk, alt. 123 m, 48.62361° N, 22.30092° E, 4 September 2022, O. Shynder (non coll.).

***Equisetum telmateia* EHRH.**

The rare species is protected in different regions of Ukraine (Andrienko & Peregrym 2012).

Specimens examined. Ukraine. Kirovograd Region, Novoukrainka District, in the vicinity of Dobrotymofiivka village, willow scrub, alt. 150 m, 48.36646° N, 31.08925° E, 11 July 2021, K. Lavrinenko, det. O. Shynder (non coll.); **Kyiv Region,** Bila Tserkva District, in the vicinity of Veselyi Kut village, willow scrub, alt. 144 m, 49.36355° N, 30.50446° E, 17 July 2022, K. Lavrinenko (non coll.).

***Eritrichium nanum* (L.) Gaudin.**

In the flora of Ukraine, the plant was not recorded before, but has been known from Romania near the Ukrainian border (Chopyk & Fedoronchuk 2015). It is distributed in the Central Europe (POWO 2022). Provisionally, the species is reported the first time from Ukraine, but it has unknown origin.

Specimen examined. Ukraine. Ivano-Frankivsk Region, Kalush District, Skeli Dovbusha, on rock outcrops, alt. 639 m, 49.04240° N, 23.68305° E, 3 plants, probably intentional release, 15 July 2014, A. Levon (non coll.).

***Euphorbia glyptosperma* Engelm.**

In Ukraine, this species has not yet been mentioned in the special literature, but it was already noted according to the data provided in the web-based observation resources concerning observations in Luhansk Region (Luhansk, 16.08.2020, T. Sova; Luhansk, 24.08.2022, T. Sova; Rubizhne, 24.08.2021, M. Peregrym; vicinity of Svatove, 06.2021, M. Peregrym), Mykolaiv City, (2.07.2021, R. Stepovyi) and Poltava City (30.08.2021, D. Davydov). It is xenophyte of North American origin (Hügin 1999, Geltman & Medvedeva 2017, POWO 2022). The species is recorded the first time from the Cherkasy and Zaporizhzhia Regions.

Specimens examined. Ukraine. Cherkasy Region, Cherkasy City, on the platform of the railway station, alt. 113 m, 49.42356° N, 32.04765° E, locally, but abundantly, 21 August 2022, leg. & det. O. Shynder, H. Chorna (KWAH); **Zaporizhzhia Region,** Zaporizhzhia City, in asphalt pavement near the railway, alt. 63 m, 47.82042° N, 35.18506° E, 5 June 2021, A. Levon (non coll.).

***Euphorbia maculata* L.**

The species was known from the Autonomous Republic of Crimea (Yena 2012), Dnipropetrovsk, Kharkiv, Kherson, Lviv, Odesa and Zaporizhzhia Regions, as well as in Kyiv City (Dubyna & Protopopova 1984, Moysiienko *et al.* 2020, Shynder *et al.* 2022a, data from the GBIF (*Euphorbia maculata* 2022). It was recently found in Zakarpattia Region: the first localities were recorded by M. Peregrym from the Chop in 2018 (M. Peregrym) and by V. Gleba (in coll.) in Korolevo village of the Berehove district in 2021. Both localities are connected with railway stations. The species is recorded the first time from Khmelnytskyi and Kirovohrad Regions. New localities of this species from Zakarpattia Region are reported as well.

Specimens examined. Ukraine. Khmelnytskyi Region, Kamianets-Podilskyi City, on the platform near the railway station, alt. 216 m, 48.68799° N, 26.6019° E, 8 July 2022, I. Moysiienko (non coll.); *ibid.*, alt. 115 m, 48.69019° N, 26.60224° E, 7 August 2022, O. Shynder (non coll.); **Kirovohrad Region**, Novoukrainka district, N vicinity of the Voynivka village, colony on the railway near the quarry, alt. 158 m, 48.40890° N, 31.50720° E, locally but abundantly, 19 August 2019, leg. & det. O. Shynder (KWA); **Zakarpattia Region**, Uzhhorod city, in the courtyard of the Tyvodar Legotskyi Transcarpathian Museum of Local History (the territory of the Uzhhorod castle), alt. 142 m, 48.62170° N, 22.30657° E, 26 November 2021, O. Shynder (non coll.); *ibid.*, 2 September 2022, O. Shynder, M. Shevera (non coll.); Uzhhorod city, territory of the school No. 4, front garden, alt. 130 m, 48.62635° N, 22.29683° E, 3 September 2022, leg. & det. M. Shevera, O. Shynder (KW); Berehove town, Bohdan Khmelnytskyi str., 42, near wall of a private house, alt. 114 m, 48.20228° N, 22.63862° E, 28 August 2022, leg. & det. O. Shynder, M. Shevera (non coll.); Ferenc Rákóczi II Transcarpathian Hungarian College of Higher Education, the courtyard, alt. 117 m, 48.20709° N, 22.64340° E, 29 August 2022, M. Shevera, O. Shynder (non coll.).

***Euphorbia serpens* Kunth**

In 2021, this alien species of american origin was found at the road in Shylova ravine in the Kherson Region (I. Moysiienko). Almost at the same time, this species was registered from the Autonomous Republic of Crimea by author with nickname "naprirode" at the iNaturalist ([naprirode](#)) and afterward determined by N. Taylor. A year later, the plant was revealed in the Odesa City (O. Shynder). The species is recorded the first time from Ukraine.

Specimens examined. Ukraine. Autonomous Republic of Crimea, Livadia, alt. 14 m, 44.47589° N, 34.15524° E, 20 July 2021, unknown author, det. N. Taylor (non coll.); **Kherson Region**, Beryslav District, Shylova ravine, roadside, alt. 15 m a.s.l., 46.81980° N, 33.33314° E, 18 August 2021, I. Moysiienko, det. N. Taylor (non coll.); **Odesa region**, Odesa city, Malyyi Fontan, Shampanskyi line, alt. 47 m a.s.l., 46.452317° N, 30.758983° E, 26 September 2022, O. Shynder, det. N. Taylor (non coll.).

***Fritillaria ruthenica* Wikstr.**

The species is included in the Red Book of Ukraine (Fedoronchuk *et al.* 2009). It was found on the northwestern border of its native range.

Specimens examined. Ukraine. Cherkasy region, Zolotonosha District, in the vicinity of Khvylovo-Sorochyn village, an old forest falling gradually overgrown with trees (oak and pine), alt. 103 m, 49.63128° N, 32.07258° E, 30 April 2020, K. Lavrinenko (non coll.); **Ukraine. Cherkasy region**, Zolotonosha District, in the vicinity of Khvylovo-Sorochyn village, pine forest, alt. 107 m, 49.63197° N, 32.06957° E, 30 April 2020, K. Lavrinenko (non coll.).

***Gagea villosa* (M.Bieb.) Duby**

The species occurs rarely in the Steppe and in the southern part of the Forest-Steppe zones. We discovered its new locality for the Kirovohrad Region. The species is on the northern border of the native range.

Specimen examined. Ukraine. Kirovohrad Region, Holovanivsk District, Chornotashlytskyi Reserve, an area of a gentle slope, partially shaded by a granite rock, alt. 87 m, 48.18543° N, 30.86384° E, 7 April 2021, K. Lavrinenko, det. O. Shynder (non coll.).

***Gentiana cruciata* L.**

The species is considered as rare in a number of regions of Ukraine (Andrienko

& Peregrym 2012, List of Plant 2021). We revealed a new locality of the species for the Kyiv region.

Specimen examined. Ukraine. Kyiv Region, Bila Tserkva District, upper reaches of the Hnylyi Tikych River, medium steppe-meadow slope, Plot № SN2022-0335, alt. 201 m, 49.36859° N, 30.23801° E, 20 July 2022, K. Lavrinenko, det. A. Kuzemko (non coll.).

Gladiolus imbricatus L.

This species is included in the Red Book of Ukraine (Kagalo & Kuziaryn 2009). It was known from nearby of Hirskyi Tikych basin (Kuzemko 2011). The species is on the south-eastern border of its native range.

Specimen examined. Ukraine. Cherkasy Region, Zvenygorodka District, in the vicinity of Semenivka village, floodplain meadows of the Svynotopka River, Hnylyi Tikych basin (grazing and mowing are present), plot № SN2022-0347, alt. 157 m, 49.27916° N, 30.66819° E, 23 July 2022, K. Lavrinenko, det. A. Kuzemko (non coll.).

Glycyrrhiza glabra L.

In Ukraine, it is widespread in the southern part of the Steppe zone (Vissiulina 1954), but nowadays it is reliably reported only for the Left-bank Steppe and the Crimea (Fedoronchuk 2009). In the Right-bank Steppe, old records from the vicinity of Odesa and Kherson are known (Vissiulina 1954, Paczoski 2008), but both localities are considered synanthropic. The species is a cultural relic in ancient parks in the villages of Respublikanets and Sadove in Kherson Region (Khodosovtsev *et al.* 2019). Recently, this species was discovered in the Odesa region near the Kubanka village in the valley of the Kuyalnytsky estuary (Dubyna *et al.* 2017). In the eastern part of Moldova, Grigoriopol district, this species is listed as escaped from cultivation (Zhilkina 2002). The species is recorded the first time from the southern part of the Bessarabia. Perhaps, the population from Udobne village has a synanthropic origin.

Specimens examined. Ukraine. Odesa Region, Odesa District, E vicinity of the Udobne village, abandoned agricultural plot with wild steppe vegetation on the bank of the canal, colony 20×5 m, alt. 4 m, 46.37222° N, 30.08616° E, 23 September 2022, leg. & det. O. Shynder, V. Kavrka (KWAH); Bilhorod-Dnistrovsky District, E vicinity of the of Sarata village, salt meadow in the floodplain of the Sarata River along the highway Sarata – Arcyz, colony 5×3 m; alt. 10 m, 46.02481°, 29.67888°; 06 June 2022, leg. & det. V. Kolomyichuk (KWHU); Bolhrad District, land Borodino settlement council, right tributary of the Cheligider river, «Tarutyns'kyi steppe» landscape reserve, thalweg beams colony 100×25 m, alt. 100 m, 46.26480° N, 29.46459° E; 7 July 2022, leg. & det. V. Kolomyichuk (KWHU, KW).

Gypsophila perfoliata L.

This Pontic (Black-Sea-Caspian) species is widespread in the Steppe zone. Recently, it has been observed in synanthropic habitats both within the primary range and in the northern regions (Fedoronchuk *et al.* 2002c, Shynder & Negrash 2021). The alien plant is reported the first time from the Zakarpattia Region.

Specimen examined. Ukraine. Zakarpattia Region, Uzhhorod, territory of railway station, between the tracks, alt. 115 m, 48.59986° N, 22.29516° E, 3 September 2022, O. Shynder, M. Shevera (non coll.).

Hedera helix L.

In Ukraine, it has been known in the western regions for a long time (Kotov 1955), but nowadays it is indicated for the Crimea (Yena 2012) and Odesa Region (Popova 2014). The species is recorded the first time from the Mykolaiv region.

Specimens examined. Ukraine. Mykolaiv Region, Pervomaisk District, NW vicinity of the Onyskove village, in the alder forest on the right bank of the Southern Bug river, near the stream, alt. 105 m, 48.1654° N, 30.3885° E, colony 3 m², probably this population is synanthropic, 21 May 2018, leg. & det. O. Shynder (KWAH).

Helianthus × laetiflorus Pers.

It was known from Kyiv City as cultivated and escaped plant and Dnipropetrovsk region as cultivated species (Barbarych & Dubovyk 1975). Afterwards, it is listed as a wild for Kyiv

City (Mosyakin & Yavorska 2002), Kharkiv City (Zvyagintseva 2015), Cherkasy Region (Burda 2013), as well as in general for the Northern Black Sea Plain (Moysiienko 2011). The species is recorded the first time from Zaporizhzhia Region.

Specimens examined: Ukraine. Zaporizhzhia Region, Zaporizhzhia City, ruderal place near a dirt road, alt. 64 m a.s.l., 47.82982° N, 35.180301 E, 23 September 2021, A. Levon (non coll.).

Hemerocallis fulva L.

It is cultivated throughout of the territory of Ukraine as an ornamental plant. The species was registered as ergasiophyphyte in the Cherkasy and Mykolaiv Regions.

Specimens examined. Ukraine. Cherkasy Region, Zvenygorodka District, in the vicinity of Yerky urban village, in an artificial pine plantation, alt. 124 m, 48.96625° N, 30.97638° E, 8 July 2022, O. Chusova, O. Bezsmertna, N. Pashkevch, K. Lavrinenko, A. Babytskyi, det. A. Kuzemko (non coll.); **Mykolaiv Region**, Pervomaisk district, the outskirts of the village of Kuryachi Lozy, a natural deciduous forest, alt. 183 m, 48.08912° N, 30.32031° E, 8 April 2021, leg. & det. I. Moysiienko, O. Khodosovtsev, V. Klymenko, V. Artamonov (KHER).

Heracleum sosnowskyi Manden.

The species is an invasive species in Ukraine originated from mountain forests and subalpine meadows of Central and Eastern Caucasus, Transcaucasia and Turkey. *Heracleum sosnowskyi* has a significant capacity for expansion and constitutes a significant threat to certain ecosystems, competing with native species for ecological niches (Shtoiko & Koinova 2018). The expansion of *H. sosnowskyi* in Ukraine began from the Transcarpathian region to the Polissya region with occupying the disturbed forests, floodplains, ravines, beams, parks, gardens, roadsides (Gubar & Koniakin 2021). We revealed five well-developed individuals of the species in stands of *Phragmites australis* on the shore of the Kulynychiv pond and other two individuals were found on the roadside with disturbed vegetation cover. The average height of the plants was from 1.9 to 2.5 m. Plants were at the stage of seed formation. The species is recorded the first time from the Kharkiv Region.

Specimen examined: Ukraine. Kharkiv City, Nemyshlya river, the shores of the Kulynychiv pond, alt. 134 m, 49.98542° N, 36.39003° E, 23 July 2021, K. Zviahintseva, H. Kazarinova (non coll.).

Iris graminea L.

The species is conserved as rare in the Ivano-Frankivsk, Khmelnytsk, Kirovograd, Odesa, Ternopil, Vinnytsia & Zakarpattia Regions of Ukraine (Andrienko & Peregrym 2012).

Specimen examined. Ukraine. Kirovohrad Region, Holovanivsk District, Holovanivsk forestry, in an ash-hornbeam-oak forest, alt. 205 m, 48.3319° N, 30.53475° E, 11 May 2021, A. Kuzemko, K. Lavrinenko, Ya. Didukh, N. Pashkevych, O. Khodosovtsev, det. O. Shynder, D. Davydov (non coll.).

Juglans mandshurica Maxim.

This ergasiophyphyte from the Far East has tends to naturalize in the Kyiv (Kokhno *et al.* 2002, Mosyakin & Yavorska 2002, Burda & Koniakin 2018, Shynder *et al.* 2022a), and was noted self-seeded in Donetsk Botanical Garden (Burda & Koniakin 2018, 2019). It species is recorded the first time from the Cherkasy, Chernihiv, Khmelnytskyi and Vinnytsia Regions.

Specimens examined. Ukraine. Cherkasy Region, Uman City, agronomic and biological research station of Pavlo Tychna Uman State Pedagogical University, spontaneous growth in the plant nursery and in the surrounding areas, alt. 185 m a.s.l., 48.75447° N, 30.18326° E, 2010, H. Chorna (non coll.); **Chernihiv Region**, Pryluky District, Trostyanets village, on the abandoned agricultural plots and forest strip near «Trostyanets» dendrological park, several dozen young trees (1–5 years old), alt. 165 m, 50.78879° N, 32.80424° E, 1 October 2022, M. Tarabun, O. Shynder, V. Kolomiychuk (non coll.); **Khmelnytskyi Region**, Kamianets-Podilskyi City, in the hornbeam forest above the Smotrytsky Canyon, below the Botanical Garden, alt. 194 m, 48.66921° N, 26.57760° E, spontaneous growth, several virginal plants (2–5 years old), 30 October 2022, L. Lyubinska, V. Kolomiychuk, O. Shynder (non coll.); **Vinnytsia Region**, S vicinity of Vinnytsia, forest on the slope over the left bank of the Southern Bug river, alt. 241 m a.s.l., 49.189403° N, 28.458685° E, several planted trees and spontaneous single, 9 August 2020, O. Shynder (non coll.).

***Lemna gibba* L.**

The species is protected as rare in a different regions of Ukraine ([Andrienko & Peregrym 2012](#), [List of Plants 2021](#)). The species is recorded the first time from the Kyiv and Cherkasy Regions.

Specimens examined. Ukraine. Kyiv Region, Bila Tserkva District, in the vicinity of Antonivka village, pond on the Hnylyi Tikych river, Plot № SN2022-0333, alt. 181 m, 49.38791° N, 30.24904° E, 20 July 2022, K. Lavrinenko (non coll.); **Cherkasy Region**, Zvenygorodka District, in the vicinity of Yerky Town, Shpolka River, plot № SN2022-0404, alt. 124 m, 48.99061° N, 31.02132° E, 31 July 2022, K. Lavrinenko (non coll.).

***Lilium martagon* L.**

The plant is included in the Red Book of Ukraine ([Andrienko 2009](#)).

Specimen examined. Ukraine. Kirovohrad Region, Holovanivsk District, Holovanivsk forestry, in an ash-hornbeam-oak forest, alt. 216 m a.s.l., 48.382236° N, 30.346798° E, 11 May 2021, K. Lavrinenko, det. A. Kuzemko (non coll.).

***Lunaria rediviva* L.**

The species is included in the Red Book of Ukraine ([Didukh 2009](#)). It is common for the Carpathians, but it rarely occurs in the Forest-Steppe. Perhaps, the specimen is the ergasiophygophyte.

Specimen examined. Ukraine. Cherkasy Region, Zvenygorodka District, in the vicinity of Yerky urban village, the edge of the birch-hornbeam sparse forest, alt. 127 m, 48.97321° N, 30.99982° E, 31 July 2022, K. Lavrinenko, O. Shynder (non coll.).

***Lysimachia punctata* L.**

In Ukraine, this is widely distributed ornamental plant. In Kharkiv, the species considered as an ergasiophyte and epocophyte of the Western European origin. It was found on the eastern slope characterized by humid habitat conditions. It grew among the thickets of *Urtica dioica* on disturbed ecotopes where we counted 15 individuals. The species is recorded the first time from the urban flora of Kharkiv City.

Specimen examined. Ukraine. Kharkiv City, Nemyshlyansk District, Peremoga, on a wasteland, alt. 135 m, 49.98328° N, 36.37169° E, 15 June 2021, H. Bondarenko (non coll.).

***Mercurialis annua* L.**

It is Sub-Mediterranean plant native in Crimea, but alien (xenophyte) in the rest of the territory of Ukraine ([Klokov 1955](#), [Meusel *et al.* 1978](#), [Yena 2012](#)). The species was recorded in Donetsk, Kharkiv, Odesa Regions ([Klokov 1955](#), [Paczoski 2008](#)). The species is recorded the first time from the Cherkasy Region.

Specimen examined. Ukraine. Cherkasy Region, Uman city, territory of Uman National University of Horticulture, alt. 212 m, 48.76551° N, 30.23246° E, on the side of the path, 1 plant, 1 December 2022, leg. & det. H. Chorna, O. Shynder, T. Mamchur (KWAH).

***Nymphaea candida* C. Presl**

The species is protected as rare in the the Chernihiv, Kharkiv, Khmelnytsk, Kyiv, Lviv, Odesa, Sumy, Poltava, Vinnytsia, Zakarpattia, Zhytomyr Regions of Ukraine ([Andrienko & Peregrym 2012](#), [List of Plants 2021](#)).

Specimen examined. Ukraine. Kyiv Region, Bila Tserkva District, in the vicinity of Antonivka village, pond on the Gnylyi Tikych River, Plot № SN2022-0332, alt. 182 m, 49.38788° N, 30.24890° E, 20 July 2022, K. Lavrinenko (non coll.).

***Pentanema squarrosus* (L.) D. Gut. Larr., Santos-Vicente, Anderb., E. Rico & M.M. Mart. Ort. (= *Inula conyzae* (Greiss.) Meikle)**

As alien plant, the species was noted for Volyn Region ([Dobrochayeva 1962](#)), Ternopil Region ([Dobrochayeva 1962](#)), Khmelnytskyi Region ([Schmalhausen 1886](#)), the forest-steppe

part of the Odesa Region (Rogovich 1869) and the mountainous part of the Crimea (Yena 2012). It is recorded the first time as ergasiophygophyte from the Steppe zone of Ukraine.

Specimens examined. Ukraine. Odesa Region, Odesa City, Botanical Garden of I.I. Mechnykov Odesa National University (new territory), near the entrance, spontaneously, alt. 44 m, 46.44508° N, 30.76304° E, 21 September 2017, leg. & det. O. Shynder (KWAH); *ibid.*, on lawns and meadows, often, alt. 44 m, 46.44613° N, 30.76291° E, 16 September 2022, L. Levchuk, O. Shynder; *ibid.*, alt. 45 m, 46.44506° N, 30.76417° E, 8 September 2022, leg. V. Kolomiychuk, det. D. Davydov (KWHU); Botanical Garden of I.I. Mechnykov Odesa National University (old territory), spontaneously, often, alt. 43 m, 46.44133° N, 30.76805° E, 17 September 2022, L. Levchuk, O. Shynder (non coll.); in the park of the V.P. Chkalov sanatorium, a small group, spontaneously introduced from the Botanical Garden, alt. 48 m, 46.44517°, 30.76761°, 10 August 2022, K. Kalashnik, det. D. Davydov (non coll.); *ibid.*, alt. 50 m, 46.44517°, 30.76801°, 25 September 2022, leg. & det. O. Shynder (non coll.).

Prunus persica (L.) Batsch

This is ergasiophyte of Central Asian origin widely cultivated in the southern regions and in amateur culture in almost all remaining territory of Ukraine (Kokhno *et al.* 2005). As alien ergasiophygophyte, it was noted for Dnipropetrovsk Region (Kucherevskiy & Shol 2009), Zaporizhzhya Region (Boiko & Kolomiychuk 2015) and spontaneous flora of the M.M. Gryshko National Botanical Garden in Kyiv City (Shynder 2019), as well as in general for the Northern Black Sea Plain (Moysiienko 2011). The species is recorded the first time from the Volhyn Region as ephemerophyte.

Specimens examined. Ukraine. Volyn Region, Lutsk District, vicinity of the Zhabka village, on the edge of the pine forest, alt. 201 m, 50.82836° N, 25.42737° E, 1 young plant (2 years old), near the location of the garbage, 21 October 2022, G. Gerasimchuk, O. Bezsmertna, O. Shynder (non coll.).

Pulsatilla patens (L.) Mill.

The species is included in the Red Book of Ukraine (Kagalo *et al.* 2009).

Specimen examined. Ukraine. Cherkasy Region, Zolotonosha District, in the vicinity of Khvylovo-Sorochyn village, an old forest falling gradually overgrown with trees (oak and pine), alt. 103 m, 49.63119° N, 32.07385° E, 20 August 2015, K. Lavrinenko (non coll.).

Sagina procumbens L.

It recorded in almost all regions and Autonomous Republic of Crimea (Fedoronchuk *et al.* 2002d), but this species is not reliably known in most of the southern part of the Forest-Steppe and Steppe zones. The species is recorded the first time from the Odesa Region and western part of the Kirovohrad Region.

Specimens examined. Ukraine. Kirovohrad Region, Holovanivsk District, Hayvoron, Vasylya Stusa str., alt. 147 m, 48.33815° N, 29.86743° E, near the store in the shade in the cracks of the pavement, under the water flow from the air conditioner, 26 June 2021, O. Shynder (non coll.); **Odesa Region,** Odesa City, railway station, alt. 51 m, 46.46791° N, 30.74027° E, in the cracks of the stairs and the foundation on both sides of the central entrance, 26 September 2022, O. Shynder (non coll.); Odesa City, Academician Glushko Avenue, alt. 45 m, 46.39949° N, 30.73040° E, in a shady crack in the curb, 26 September 2022, O. Shynder, K. Kalashnik (non coll.); Odesa, Hretska Str., in the cracks of paving slabs, alt. 30 m, 46.48187° N, 30.74773° E, 13 November 2022, K. Kalashnik (non coll.); Odesa, Hretska Square, in the crevices under the fountain, alt. 47 m, 46.482101° N, 30.73580° E, 13 November 2022, K. Kalashnik (non coll.).

Scolochloa festucacea L.

The species is occasionally found in Polissia and the Forest Steppe zone (Prokudin *et al.* 1977). The plant was found on the northern border of the area.

Specimen examined. Ukraine. Kyiv region, Bila Tserkva District, in the vicinity of Veselyi Kut village, floodplain wet meadows of Hnylyi Tikych River, alt. 172 m, 49.36353° N, 30.50579° E, 17 July 2022, K. Lavrinenko, det. O. Shynder (non coll.).

Sedum borissovae Balk.

The species is endemic to the granite outcrops of the southern spurs of the Dnipro Upland. The plant is on the northern border of the area.

Specimen examined. Ukraine. Kirovohrad Region, Holovanivsk District, in the vicinity of Skaleva village, the large granite rock neat the confluence of the Velyka Vys River and the Sinyuha River, alt. 129 m, 48.77063° N, 30.94013° E, 11 May 2021, K. Lavrinenko (non coll.).

Silene noctiflora L. (= *Elisanthe noctiflora* (L.) Rupr.)

The species is quite common in the eastern regions of Ukraine and Crimean Mountains, and it is sporadically and disjunctively distributed in the central and western regions of Ukraine (Fedoronchuk *et al.* 2002b). Only a few old findings were known from the Cherkasy Region before (Rogovich 1869, Goryacheva 1960). This is the only recent finding of the species in the Middle Pobuzhzhia.

Specimens examined. Ukraine. Cherkasy Region, Uman City, in the center of the town, on the slope between ruderal vegetation, alt. 221 m a.s.l., 48.749343° N, 30.221416° E, 1 plant, 19 July 2022, leg. & det. H. Chorna (UPU).

Solanum rostratum Dunal

In Ukraine, it is known from the territory of Dnipropetrovsk, Donetsk, Kyiv, Odesa and Kherson Regions (Vissiulina 1960, Tarasov 2012). It is found from the Zaporizhzhia Region for the first time.

Specimen examined. Ukraine. Zaporizhzhya Region, Zaporizhzhya District, outskirts of Vidradne village (1.2 km to the east), steppe gully near the farm, alt. 86 m, 47.99713° N, 35.08029° E, 12 September 2021, leg. & det. I. Moysiienko, D. Borovyk, D. Vynokurov, O. Khodosovtsev (KHER).

Sorghum halepense (L.) Pers.

It is a sporadic quarantine weed for the fields of the Odesa Region. In Ukrainian phytocenological and floristic publications, there are few records from the south of the Autonomous Republic of Crimea, single reports for the Dnipropetrovsk Region (Prokudin *et al.* 1987) and the Khortytsia island (Zaporizhzhia Region) (Koreshchuk 1993). The species is recorded the first time from Odessa Region.

Specimen examined. Ukraine. Odesa region, Izmail District, near Reni city, alt. 57 m, 45.46586° N, 28.30674° E, roadside, in ruderal community of association *Potentillo reptantis-Sorghetum halepensis*, 23 August 2021, N. Pashkevych (non coll.).

Stipa pennata L.

The plant is included in the Red Book of Ukraine (Tkachenko & Korotchenko 2009). In our opinion, the location from the F.E. Faltz-Fein Askania-Nova Biosphere Reserve indicated in the Red Book of Ukraine (Tkachenko & Korotchenko 2009) is erroneous. The species is recorded the first time from the Kherson Region.

Specimens examined. Ukraine. Kherson Region. Beryslav District, National Natural Park «Kamianska Sich», Kamianska ravine, the northern steppe slope, Plot N UAS60R, alt. 37 m, 47.05443° N, 33.58807° E, 5 June 2021, D. Vynokurov, I. Moysiienko, D. Borovyk, N. Skobel (non coll.); same location, northern slope with limestone outcrops, plot N UA2D20, alt. 38 m, 47.05439° N, 33.58829° E, 5 June 2021, leg. & det. D. Vynokurov, I. Moysiienko, D. Borovyk, N. Skobel (non coll.).

Stipa tirsia Steven

The plant is included in the Red Book of Ukraine (Korotchenko & Didukh 2009) The species is recorded the first time from the Kherson Region.

Specimen examined. Ukraine. Kherson region, Beryslav district, National Natural Park «Kamianska Sich», Kamianska ravine, the northern steppe slope, plot N UAS60R, alt. 37 m, 47.05443° N, 33.58807° E, 5 June 2021, leg. & det. D. Vynokurov, I. Moysiienko, D. Borovyk, N. Skobel (non coll.).

***Thesium ebracteatum* Hayne**

The species is included into Annex I of Resolution 6 of the Bern Convention ([Council of Europe 2011](#)).

Specimen examined. Ukraine. Cherkasy region, Zolotonosha District, in the vicinity of Khvylovo-Sorochyn village, an old forest falling gradually overgrown with trees (oak and pine), alt. 102 m, 49.63162° N, 32.07267° E, 9 May 2022, K. Lavrinenko, det. D. Davydov (non coll.).

***Tribulus terrestris* L.**

The species is xenophyte of the Mediterranean origin ([Protopopova 1991](#)). The plant is distributed in the Steppe and southeastern part of the Forest-Steppe zones, also it penetrated in Kyiv City ([Dobrochayeva 1955](#), [Mosyakin & Yavorska 2002](#), [Kagalo *et al.* 2004](#), [Moysiienko 2011](#)). The species is recorded the first time from the Zakarpattia Region.

Specimen examined. Ukraine. Zakarpattia Region, Khust District, Pylypets village, alt. 647 m, 48.66402° N, 23.30394° E, on the roadside before the gate of the guest estate, colony about 2 m², 31 August 2022, leg. & det. [O. Shynder](#) (KWH).

***Vitis labrusca* L.**

This Ergasiophyte of North American origin ([Kokhno *et al.* 2005](#), [POWO 2022](#)) is cultivated in different regions of Ukraine, mainly in Steppe and Forest-Steppe zone ([Prokudin *et al.* 1987](#), [Kokhno *et al.* 2005](#)). It was reported as a escaped from cultivation species ([Protopopova & Shevera 2014](#), [A. Seregin](#)). The species is recorded the first time from the Zakarpattia Region.

Specimens examined. Ukraine. Zakarpattia Region, Berehove District, northern outskirts of the Velyka Bakta village, on the side of the railway in shrubs, alt. 111 m a.s.l., 48.17046° N, 22.66724° E, 1 fruiting plant, 28 August 2022, leg. & det. M. Shevera, [O. Shynder](#) (KW).

***Vitis riparia* Michx.**

It is Ergasiophyte from North America quite widely cultivated ([Kokhno *et al.* 2005](#)). It was known from Kyiv City ([Shynder *et al.* 2022a](#)), Cherkasy ([Shynder *et al.* 2022b](#)) and Zhytomyr Regions ([Orlov *et al.* 2022](#)). Few specimens also indicated under the wrong name *V. vulpina* L. for Kharkiv Region ([Shynder & Negrash 2021](#)). The species is recorded the first time from the Chernihiv and Zakarpattia Regions.

Specimens examined. Ukraine. Chernihiv Region, Pryluky District, Trostyanets village, on the fence of the «Trostyanets» dendrological park and in adjacent areas, spontaneously, alt. 163 m, 50.78643° N, 32.80784° E, 1 October 2022, M. Tarabun, [O. Shynder](#), V. Kolomyichuk (non coll.). **Zakarpattia Region**, Berehove town, on a railway embankment, alt. 114 m, 48.20384° N, 22.62976° E, spontaneously, 28 August 2022, M. Shevera, [O. Shynder](#) (non coll.); Berehove District, Velyka Bakta village, in an old park like wild, alt. 116 m, 48.16144° N, 22.66305° E, a small colony, 28 August 2022, M. Shevera, [O. Shynder](#) (non coll.); Mukachevo town, on the roadside to Palanok Castle, in shrubs, alt. 128 m, 48.43281° N, 22.68572° E, several invasive colonies, 27 October 2021, [O. Shynder](#) (non coll.).

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РЕЗЮМЕ

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У цьому повідомленні наведено нові дані щодо судинних рослин в Україні. У ньому наведені нові відомості щодо поширення в Україні 58 видів з родів *Aconitum*, *Amaranthus*, *Anthoxanthum*, *Artemisia*, *Asparagus*, *Cardamine*, *Carex*, *Celastrus*, *Cenchrus*, *Centaurea*, *Cerastium*, *Chenopodium*, *Clematis*, *Crassula*, *Dactylorhiza*, *Datura*, *Dichodon*, *Dipsacus*, *Dysphania*, *Equisetum*, *Eritrichium*, *Euphorbia*, *Fritillaria*, *Gagea*, *Gentiana*, *Gladiolus*, *Glycyrrhiza*, *Gypsophila*, *Hedera*, *Helianthus*, *Hemerocallis*, *Heracleum*, *Iris*, *Juglans*, *Lemna*, *Lilium*, *Lunaria*, *Lysimachia*, *Mercurialis*, *Nymphaea*, *Pentanema*, *Prunus*, *Pulsatilla*, *Sagina*, *Scolochloa*, *Sedum*, *Silene*, *Solanum*, *Sorghum*, *Stipa*, *Thesium*, *Tribulus* та *Vitis*. Серед них три види рослин є новими для України: *Anthoxanthum aristatum* виявлений в Чернівецькій області; *Eritrichium nanum* – в Івано-Франківській та *Euphorbia serpens* – в автономній республіці Крим, Одеській та Херсонській області. Деякі знахідки стосуються крупних регіонів, що включають декілька областей, зокрема наводиться новий для Правобережжя Дніпра (*Crassula vaillantii*) та новий для Степової зони України (*Pentanema squarrosum*) види судинних рослин. Більшість нових знахідок наведено для адміністративних областей України: шість видів наводиться вперше для Черкаської та Закарпатської областей, чотири – Дніпропетровської області, три – Запорізької, Кіровоградської та Чернігівської областей, два – Вінницької, Волинської, Миколаївської, Херсонської та Хмельницької областей, один – Житомирської, Одеської, Харківської областей та АР Крим. Наводяться нові локалітети або підтверджуються сучасними даними знахідки видів судинних рослин в Дніпропетровській, Кіровоградській, Київській, Одеській, Херсонській та Черкаській областях. Також вказуються локалітети ряду рідкісних видів судинних рослин: включених до Резолюції № 4 Бернської конвенції (*Thesium ebracteatum*), Червоної книги України (*Dactylorhiza incarnata*, *Fritillaria ruthenica*, *Gladiolus imbricatus*, *Glycyrrhiza glabra*, *Lilium martagon*, *Lunaria rediviva*, *Pulsatilla patens*, *Stipa pennata*, *Stipa tirsia*) та ряду регіонально рідкісних видів рослин.

Ключові слова: біорізноманіття, нові знахідки, області, райони.