

TAXONOMICAL AND CHOROLOGICAL NOTES 20 (200–203)

Matej DUDÁŠ¹, László LÖKÖS², Csaba MOLNÁR³ and Mónika SINIGLA⁴¹Department of Plant Biology, Institute of Biology and Ecology, Faculty of Science, Pavol Jozef Šafárik University, Mánesova 23, 040 01 Košice, Slovakia; dudas.mato@gmail.com²Hungarian National Museum Collection Centre, Hungarian Natural History Museum, Department of Botany, H–1476 Budapest, Pf. 222, Hungary; lokos.laszlo@nhmus.hu³Independent researcher, H–3728 Gömöraszó, Kassai u. 34, Hungary; birkaporkolt@yahoo.co.uk⁴Hungarian National Museum Collection Centre, Bakony Museum of the Hungarian Natural History Museum, H–8420 Zirc, Rákóczi tér 3–5, Hungary; sinigla.monika@nhmus.huDudáš, M., Lökös, L., Molnár, Cs. & Sinigla, M. (2024): Taxonomical and chorological notes 20 (200–203). – *Studia bot. hung.* 55(2): 285–293.

Abstract: Floristical records of one lichen-forming fungus and 3 flowering plants are reported from Hungary, i.e. 2nd occurrence of the lichen-species *Physcia clementei*, and three additions to the distribution of *Taraxacum parnassicum* from the Bükk Mts and from Lake Balaton; the microspecies *Taraxacum plumbeum* and the infraspecific taxon *Bromus hordeaceus* subsp. *longipedicellatus* seem to be new to Hungary: *T. plumbeum* was collected in the Vértes Mts, and *Bromus hordeaceus* subsp. *longipedicellatus* in the Cserehát. A short synopsis is given on the botanical and chorological results of the series started in 2015.

Key words: Asteraceae, *Bromus*, flowering plants, lichen-forming fungi, Hungary, *Physcia*, Physciaceae, Poaceae, *Taraxacum*

INTRODUCTION

This paper is the 20th part of the series launched in *Studia botanica hungarica* focusing on the new chorological records, nomenclature, and taxonomy of plant species from algae to vascular plants and fungi (AKÁC *et al.* 2024, ASZALÓSNÉ BALOGH *et al.* 2021, BARINA *et al.* 2015, 2020, BAUER *et al.* 2023, CSIKY *et al.* 2017, DEME *et al.* 2019, FARKAS *et al.* 2022, KIRÁLY *et al.* 2019a, b, MATUS *et al.* 2018, MESTERHÁZY *et al.* 2017, PAPP *et al.* 2016, 2020, RIGÓ *et al.* 2023, SCHMIDT 2020, SCHMIDT *et al.* 2018, SÜVEGES *et al.* 2021, TAKÁCS *et al.* 2016).

The recent part of the series provides new records of 4 species, among them one lichen and three flowering plant species.

The series was initiated by Zoltán Barina (former editor of *Studia botanica hungarica*) and the first part was launched in 2015 (in vol. 46). Altogether 20 parts (including 203 notes) were published in the last decade. So far 187 taxa of flowering plants (114), pteridophytes (6), bryophytes (20), fungi (23), lichen-

forming and lichenicolous fungi (22), and algae (2) have been discussed from 94 families (dominated by Poaceae (18) and Asteraceae (11)).

More than 400 floristical records of rare or interesting taxa have been reported from 10 countries (Albania, Hungary, Kosovo, Lithuania, Montenegro, North Macedonia, Romania, Serbia, Slovakia, Ukraine), overwhelmingly from Hungary and Albania. 47 taxa represent new occurrences to a country, i.e. 34 flowering plant taxa (22 new to Albania, 5 to Hungary, 3 to North Macedonia, 2 to Kosovo, and 1–1 to Montenegro and Serbia), 1 pteridophyte (new to Kosovo), 2 bryophytes (both new to Hungary), 4 fungi (all new to Hungary), 5 lichens (2–2 new to Hungary and Romania, 1 new to Serbia), and 1 alga (new to Romania)).

A total of 380 contributions have been presented by 84 contributors. Authors submitting more than 10 contributions are as follows: Barina, Z. (33), Lőkös, L. (24), Takács, A. (19), Farkas, E. (16), Erzberger, P. (14), Bauer, N. (13), Király, G. (13), Papp, V. (13), Süveges, K. (13), Csiky, J. (12), Matus, G. (12), and Papp, B. (10).

These figures show that the series has made a significant contribution to the botanical-chorological knowledge of Hungary, neighbouring countries and beyond. We can be satisfied with these results and we thank all contributors who have kindly submitted their records or will contribute in the future!

MATERIAL AND METHODS

CABI (2024) and MycoBank (ROBERT *et al.* 2018) were checked and followed for the nomenclature and taxonomy of lichen-forming fungi, and WFO plant list (WFO 2024) database for flowering plants. Codes of the Central European Flora Mapping grid are in square brackets. Abbreviations of herbaria follow THIERS (2017).

NEW RECORDS WITH ANNOTATIONS

Lichen-forming fungi

(200) *Physcia clementei* (Sm.) Lynge (Physciaceae, Caliciales) (Fig. 1)

Hungary, Budapest, District 13, pavement area at Babér utca 9, on bark (*Liquidambar styraciflua*). Lat.: 47.547941° N, Long.: 19.075362° E, alt. 105 m a.s.l. Coll.: Sinigla, M., 16.11.2024 [BTM003674].

Thallus small foliose, 1–3 cm diam., rosette-shaped, lobes 0.5–1 mm wide, crenulate, concave to flat, closely appressed to substrate, upper surface whitish bluish or whitish grey, covered by densely coalescent sorediose schizidia-like pustules in thallus centre, upper cortex paraplectenchymatous. Lower surface and

rhizines white to pale brown, rhizines 0.5–1 mm, lower cortex prosoplectenchymatous. Apothecia 0.8–1.2 mm diam., disc brownish black, pruinose, thalline exciple thick and crenulate.

Physcia clementei is predominantly a corticolous species, reported from several hosts with more or less smooth, nutrient-rich bark (*Acer*, *Fraxinus*, *Olea* etc.). It is regarded as a nitrophilous (MAASGEESTERANUS 1952), Atlanto-Mediterranean, Mediterranean to mild-temperate, mainly western species (FREY 1963, NIMIS 2016) (Fig. 2).

So far only one occurrence has been reported from Hungary by GALLÉ (1967, 1968; as *Physcia astroidea*) along the inundation area of the river Tisza from bark of deciduous trees. In November 2024, we detected thalli of *Physcia clementei* fully covering the bark of three *Liquidambar styraciflua* trees in a small park in Babér street in Budapest. It was accompanied by *Candelaria concolor*, *Hyperphyscia adglutinata*, and *Xanthoria parietina*.

Liquidambar styraciflua is not native in Hungary, it is an urban ornamental tree. The *Liquidambar* trees in the park came from the Bruns Pflanzen Nursery (Bad Zwischenahn, Germany) in March 2024 (according to XIII. Kerületi Közsélgáltató Zrt., Budapest). The distance between this tree nursery and Budapest is ca 1,000 km. The rather old saplings (ca 8–10 m high, 9–15 cm in DBH) packed by rootballs were transported together with their lichen cover dis-



Fig. 1. *Physcia clementei* thalli on bark of *Liquidambar styraciflua* in Budapest (photo: Sinigla, M.)



Fig. 2. Distribution of *Physcia clementei* in Europe according to GBIF

persing the lichen species easily for a very long distance. So, the lichen species is an introduced element in the lichen flora of Budapest (Hungary) now. It is an interesting task to follow how *Physcia clementei* will survive, establish or spread around and from this Budapest locality in the future.

L. Lökös, M. Sinigla

Flowering plants

(201) *Taraxacum parnassicum* Dahlst. (Asteraceae, sect. *Erythrosperma*)

Hungary, Bükk: Miskolc, Újmassa, red tourist path north from Lilla cave, partly shaded, 48.1216944° N, 20.6085278° E, 396 m, leg. & det. M. Dudáš, 1.05.2023 (KO 37785), <https://www.inaturalist.org/observations/194415218>.

Hungary, Balaton, Tihany: Félbevágott-kúp, trampled tourist path crossing the xerothermic forest clearing on Hill 200, 46.8924500° N, 17.8804611° E, 195 m, leg. & det. M. Dudáš, 4.05.2024 (KO 38156), rev. J. Štěpánek (no. det.: 38005).

Hungary, Balaton, Tihany: Tölgyes-kúp, margin of tourist (yellow/green marked) path on western part of xerothermic grassland, on western slope of Tölgyes-kúp, 46.8972172° N, 17.8799542° E, 168 m, observation by M. Dudáš, 4.05.2024, <https://www.inaturalist.org/observations/213772682>.

Taraxacum parnassicum is recently known from the major part of Europe and is considered a common species especially in Central and Southern Europe. It is a triploid apomictic microspecies belonging to *Taraxacum* sect. *Erythrosperma* (H. Lindb.) Dahlst. with unique and remarkable determination characteristics

making this *Taraxacum* species widely recognised by botanists. The microspecies is characterised by the absence of pollen grains, the acute triangle terminal lobe (terminal lobe often joined to first and second pair of lateral lobes), lateral lobes are usually simple, deltoid and regularly arranged (very often clustered in upper part of leaf), usually not having any distinct tooth on their margins and absence of tunica (DUDÁŠ and VAŠUT 2022).

Its detailed distribution was provided in Moravia (VAŠUT 2003), in Slovakia (DUDÁŠ and VAŠUT 2022), and in Poland (WOLANIN *et al.* 2023) where it grows on different substrates. The distribution data as well as overall distribution in Hungary have not been handled so far. Frequent distribution was reported in Aggtelek (VIRÓK *et al.* 2016) and several records were mentioned from northern Hungary by ŠUVADA *et al.* (2012). The findings of these two populations fill the gaps in the distribution of this microspecies in the northeastern part of the territory and its wider distribution in the given area can be assumed.

M. Dudáš

(202) *Taraxacum plumbeum* Dahlst. (Asteraceae, sect. Erythrosperma)

Hungary, Vértes Mts, Csákvár: Haraszt-hegy, margin on tourist path in valley, 47.3887531° N, 18.4382225° E, 220 m, leg. & det. M. Dudáš, 4.05.2023 (KO 38153), rev. J. Štěpánek (no. det.: 38003).

Taraxacum plumbeum is a species described from Gotland, Sweden, from an isolated area far away from the main distribution range in Central Europe, i. e. Czechia, Slovakia, Poland, Germany, Austria, Switzerland, Italy and Ukraine (KALLEN *et al.* 2003, ØLLGAARD 2003, VAŠUT 2003). In the Central European area *T. plumbeum* is easily confused with *T. cristatum* on superficial examination (VAŠUT 2003). Both species have a similar leaf shape: recurved lateral lobes denticulate on the distal margin, terminal lobe with an elongate lingulate apex and small teeth at the base. *T. plumbeum* is easy to distinguish from *T. cristatum* because it has a dark pruinose and erect outer bracts with a conspicuous hyaline margin and light brown coloured achenes with a short conical cone. This record is probably the first confirmed report of this microspecies for the flora of Hungary.

M. Dudáš

(203) *Bromus hordeaceus* L. subsp. *longipedicellatus* Spalton (Poaceae)

Hungary, Tornaszentjakab, Bika-rét, in pasture, non-tussock tall-sedge beds, near a watering hole, 48.52288° N, 20.85938° E [7491.3]; leg. et det.: Cs. Molnár, 14.06.2017. [BP]

Bromus hordeaceus (= *B. mollis* L.) is a species group with a complex and poorly understood taxonomy. Most of its infraspecific taxa described so far are often considered to be of limited taxonomic value. Among them subsp. *longipedicellatus*, considered the more stable taxon, was described in 2001 (SPALTON 2001).

Lemma (7–)8–10(–11) mm long, usually pubescent (more rarely glabrous), with obtuse marginal angle. Awn 4–11 mm long, straight. Inflorescence up to 10–20 cm long, more or less lax to contracted. At least 4 pedicels and branches exceeding the length of their spikelets. Stem often robust, up to 150 cm long (http1, SPALTON 2001).

As it has only recently been described, very little is known about its origin. Based on its habitat selection, it is considered a probable non-native taxon (http1, SCHOLZ 2008). Its origin is unknown and its distribution is poorly known, making it rare, although its range is probably underestimated. It has been recorded from Austria (SCHOLZ and HOHLA 2008), Belgium (VERLOOVE 2006), France (RICH 2003), Germany (SCHOLZ 2008), and Switzerland (LAMBELET-HAUETER *et al.* 2006), following descriptions from the British Isles. The oldest known herbarium specimen is from Belgium, dating from the 19th century, with no more detailed data than this (http1). The oldest accurate data is from 1926 from Devon in southwest England (SPALTON 2001).

The new taxon is morphologically placed between *B. commutatus* Schrad. and *B. hordeaceus* (SPALTON 2001). SCHOLZ (2008) already clearly regarded it to be an introgressive hybrid of these two species, but without further investigation this question cannot be decided. The cultivation experiments showed that subsp. *longipedicellatus* was fertile and that it came true from seed (SPALTON 2001). It is important that Antal Péntzes found the hybrid *B. commutatus* × *B. hordeaceus* in Budapest (“in the Kelenföld part of Horthy Miklós street, in the company of the two parent plants”) (PÉNTZES 1931), but he considered it timely to describe it in detail only after the examination of the seed-grown specimens, which unfortunately was not presented or described. This taxon was eventually named as *B. Péntzesi* by Soó (JÁVORKA and Soó 1951), but the publication is invalid due to the lack of the Latin diagnosis (nomen nudum) (SOMLYAY 2001). Both (putative) parent species are present in the Tornaszentjakab site.

Cs. Molnár

* * *

Összefoglaló: A sorozat legújabb részében 1 zuzmó- és 3 virágosnövény-fajról közlünk új hazai adatokat. A *Physcia clementei* zuzmófajt egy német faiskolából telepítették be Budapest területére facseteték kérgén (*Liquidambar styraciflua*). A *Taraxacum parnassicum* ismert hazai elterjedése három további előfordulással egészült ki a Bükk és a Balaton-felvidék területéről. A *Taraxacum plumbeum* mikrofaj, valamint a *Bromus hordeaceus* subsp. *longipedicellatus* alfaj új a hazai flórára, a *T. plumbeum* a Vértesből, a *B. hordeaceus* subsp. *longipedicellatus* a Cserehát területéről került elő. A bevezetésben rövid összegzést adunk az elmúlt 10 évben publikált 20 rész eredményeiről. Az eddig megjelent 203 tételben 187 taxon (alga, moha, zuzmó, gomba, páfrány és virágos növény) több mint 400 adatát közöltük 10 országból 84 szerző közreműködésével.

REFERENCES

- AKÁC, A., BUCZKÓ, K., CSER, B., FARKAS, E., LÖKÖS, L., MOLNÁR, Cs., STENGER-KOVÁCS, Cs., SZÜCS, P. and VARGA, N. (2024): Taxonomical and chorological notes 19 (195–199). – *Studia bot. hung.* **55**(1): 169–180. <https://doi.org/10.17110/StudBot.2024.55.1.169>
- ASZALÓSNÉ BALOGH, R., BUCZKÓ, K., ERZBERGER, P., FREYTAG, Cs., HOMM, Th., LÖKÖS, L., MATUS, G., NAGY, Z., PAPP, B. and FARKAS, E. (2021): Taxonomical and chorological notes 15 (153–163). – *Studia bot. hung.* **52**(2): 165–184. <https://doi.org/10.17110/StudBot.2021.52.2.165>
- BARINA, Z., BENEDEK, L., BOROS, L., DIMA, B., FOLCZ, Á., KIRÁLY, G., KOSZKA, A., MALATINSZKY, Á., PAPP, D., PIFKÓ, D. and PAPP, V. (2015): Taxonomical and chorological notes 1 (1–19). – *Studia bot. hung.* **46**(2): 205–221. <https://doi.org/10.17110/StudBot.2015.46.2.205>
- BARINA, Z., MOLNÁR, Cs., SOMOGYI, G., SZEDERJESI, T., PIFKÓ, D., RIGÓ, A., MÁRTONFFY, A., VIRÓK, V. and DUDÁŠ, M. (2020): Taxonomical and chorological notes 11 (112–125). – *Studia bot. hung.* **51**(1): 67–76. <https://doi.org/10.17110/StudBot.2020.51.1.67>
- BAUER, N., RÉDEI, T., BARABÁS, S., LOCSMÁNDI, Cs., MESTERHÁZY, A., MÉSZÁROS, A., MOLNÁR, Cs., VAJNA, F. and TAKÁCS, A. (2023): Taxonomical and chorological notes 18 (184–194). – *Studia bot. hung.* **54**(2): 205–224. <https://doi.org/10.17110/StudBot.2023.54.2.205>
- CABI (2021): *The Index Fungorum*. – <http://www.indexfungorum.org> (accessed on 5 October 2024).
- CSIKY, J., KOVÁTS, D., DEME, J., TAKÁCS, A., ÓVÁRI, M., MOLNÁR, V. A., MALATINSZKY, Á., NAGY, J. and BARINA, Z. (2017): Taxonomical and chorological notes 4 (38–58). – *Studia bot. hung.* **48**(1): 133–144. <https://doi.org/10.17110/StudBot.2017.48.1.133>
- DEME, J., PALLA, B., HASZONITS, Gy., CSIKY, J., BARÁTH, K., KOVÁCS, D., ZURDO JORDA, A., ERZBERGER, P., WOLF, M., PAPP, V. and SCHMIDT, D. (2019): Taxonomical and chorological notes 9 (94–98). – *Studia bot. hung.* **50**(2): 379–389. <https://doi.org/10.17110/StudBot.2019.50.2.379>
- DUDÁŠ, M. and Vašut, R. J. (2022): Taraxacum sect. Erythrosperma in Slovakia III: Taraxacum parnassicum Dahlst., new localities and notes on its distribution and taxonomy. – *Acta Bot. Hung.* **64**(3–4): 273–283. <https://doi.org/10.1556/034.64.2022.3-4.4>
- FARKAS, E., A. BALOGH, R., BAUER, N., LÖKÖS, L., MATUS, G., MOLNÁR, Cs., PAPP, B., PIFKÓ, D. and VARGA, N. (2022): Taxonomical and chorological notes 16 (164–177). – *Studia bot. hung.* **53**(1): 249–266. <https://doi.org/10.17110/StudBot.2022.53.2.249>
- FREY, E. (1963): Beiträge zu einer Lichenenflora der Schweiz II. III. Die Familie Physciaceae. – *Ber. Schweizerischen Bot. Gesell.* **73**: 389–503.
- GALLÉ, L. (1967): Epiphytische und epixyle Flechtengesellschaften aus den Überschwemmungsgebiete der Theiss. – *Móra F. Múz. Évk.* **1966–67**: 255–270.
- GALLÉ, L. (1968): Die quantitativen Relationen der Epiphyton- und Epixyl-Flechtenarten an den Überschwemmungsgebieten der Theiss. – *Tiscia* (Szeged) **4**: 21–35.
- JÁVORKA, S. and SOÓ, R. (1951): *A magyar növényvilág kézikönyve*. II. – Akadémiai Kiadó, Budapest, pp. 583–1120.
- KALLEN, H. W., KALLEN, C., SACKWITZ, P. and ØLLGAARD, H. (2003): Die Gattung Taraxacum Wiggers (Asteraceae) in Norddeutschland. 1. Teil: Die Sektionen Naevosa, Celtica, Erythrosperma und Obliqua. – *Bot. Rundbr. Meckl. Vorp.* **37**: 5–81.
- KIRÁLY, G., BARÁTH, K., BAUER, N., ERZBERGER, P., PAPP, B., SZÜCS, P., VERES, Sz. and BARINA, Z. (2019a): Taxonomical and chorological notes 8 (85–93). – *Studia bot. hung.* **50**(1): 241–252. <https://doi.org/10.17110/StudBot.2019.50.1.241>

- KIRÁLY, G., HOHLA, M., SÜVEGES, K., HÁBENCZYUS, A. A., BARINA, Z., KIRÁLY, A., LUKÁCS, B. A., TÜRKE, I. J. and TAKÁCS, A. (2019b): Taxonomical and chorological notes 10 (98–110). – *Studia bot. hung.* **50**(2): 391–407. <https://doi.org/10.17110/StudBot.2019.50.2.391>
- LAMBELET-HAUETER, C., SCHNEIDER, C. and MAYOR, R. (2006): *Inventaire des plantes vasculaires du canton de Genève avec Liste Rouge*. – Conservatoire et Jardin Botaniques, Genève, 135 pp.
- MAAS GEESTERANUS, R. A. (1952): Revision of the lichens of The Netherlands. II. Physciaceae. – *Blumea* **7**(1): 205–287.
- MATUS, G., CSIKY, J., BAUER, N., BARÁTH, K., VASUTA, G., BARABÁS, A., HRICSOVINYI, D., TAKÁCS, A., ANTAL, K., BUDAI, J., ERZBERGER, P., MOLNÁR, P. and BARINA, Z. (2018): Taxonomical and chorological notes 7 (75–84). – *Studia bot. hung.* **49**(2): 83–94. <https://doi.org/10.17110/StudBot.2018.49.2.83>
- MESTERHÁZY, A., MATUS, G., KIRÁLY, G., SZŰCS, P., TÖRÖK, P., VALKÓ, O., PELLER, G., PAPP, V. G., VIRÓK, V., NEMCSOK, Z., RIGÓ, A., HOHLA, M. and BARINA, Z. (2017): Taxonomical and chorological notes 5 (59–70). – *Studia bot. hung.* **48**(1): 263–275. <https://doi.org/10.17110/StudBot.2017.48.2.263>
- NIMIS, P. L. (2016): *The Lichens of Italy – a second annotated catalogue*. – Trieste, EUT Edizioni Università di Trieste, 740 pp.
- ØLLGAARD, H. (2003): New species of Taraxacum, sect. Ruderalia, found in Central and Northern Europe. – *Preslia* **75**: 137–164.
- PAPP, B., ERZBERGER, P., LÖKÖS, L., SZURDOKI, E., NÉMETH, CS., BUCZKÓ, K., HÖHN, M., ASZALÓSNÉ BALOGH, R., BARÁTH, K., MATUS, G., PIFKÓ, D. and FARKAS, E. (2020): Taxonomical and chorological notes 12 (126–136). – *Studia bot. hung.* **51**(1): 77–98. <https://doi.org/10.17110/StudBot.2020.51.1.77>
- PAPP, V., KIRÁLY, G., KOSCSÓ, J., MALATINSZKY, Á., NAGY, T., TAKÁCS, A. and DIMA, B. (2016): Taxonomical and chorological notes 2 (20–27). – *Studia bot. hung.* **47**(1): 179–191. <https://doi.org/10.17110/StudBot.2016.47.1.179>
- PÉNZES, A. (1931): Adatok Budapest adventív flórájához II. – *Magyar Bot. Lapok* **30**: 132–135.
- RICH, T. C. G. (2003): Présence en France de Bromus hordaceus L. subsp. longipedicellatus L. M. Spalton. – *Bull. Soc. Bot. Centre-Ouest*, N. S. **34**: 167–168.
- RIGÓ, A., DÖME, B., DUDÁŠ, M., KARIKÁS, M., LÖKÖS, L., PIFKÓ, D., VARGA, N. and FARKAS, E. (2023): Taxonomical and chorological notes 17 (178–183). – *Studia bot. hung.* **54**(1): 93–104. <https://doi.org/10.17110/StudBot.2023.54.1.93>
- ROBERT, V., STALPERS, J. and STEGEHUIS, G. (2018): *Mycobank, the fungal website*. – <http://www.mycobank.org/DefaultPage.aspx> (accessed on 5 October 2024).
- SCHMIDT, D. (2020): Taxonomical and chorological notes 13 (137). – *Studia bot. hung.* **51**(2): 87–90. <https://doi.org/10.17110/StudBot.2020.51.2.87>
- SCHMIDT, D., CSIKY, J., MATUS, G., BALOGH, R., SZURDOKI, E., HÖHN, M., ÁBRÁN, P., BUCZKÓ, K. and LÖKÖS, L. (2018): Taxonomical and chorological notes 6 (71–74). – *Studia bot. hung.* **49**(1): 121–130. <https://doi.org/10.17110/StudBot.2018.49.1.121>
- SCHOLZ, H. (2008): Die Gattung Bromus (Poaceae) in Mitteleuropa. Synopse und tabellarischer Bestimmungsschlüssel. – *Kochia* **3**: 1–18.
- SCHOLZ, H. and HOHLA, M. (2008): Drei für Österreich neue Taxa der anökophytischen Gattung Bromus (Poaceae). – *Linzer biol. Beitr.* **40**(1): 279–286.
- SOMLYAY, L. (2001): A rozsnok (Bromus L.) nemzetség kutatásának története és jelenlegi állása Magyarországon. – *Kitaibelia* **6**(2): 251–257.
- SPALTON, L. M. (2001): A new subspecies of Bromus hordeaceus L. (Poaceae). – *Watsonia* **23**: 525–531.

- ŠUVADA, R., MÁRTONFI, P. and MÁRTONFIOVÁ, L. (2012): Differentiation of diploid and triploid taxa within *Taraxacum* sect. *Erythrosperma* (Asteraceae) from the Pannonian Region. – *Folia Geobot.* **47**: 69–91. <https://doi.org/10.1007/s12224-011-9109-6>
- SÜVEGES, K., TAKÁCS, A., TÓTH, K., TÖRÖK, P., VIKÁR, J. and MOLNÁR, Cs. (2021): Taxonomical and chorological notes 14 (138–152). – *Studia bot. hung.* **52**(1): 65–79. <https://doi.org/10.17110/StudBot.2021.52.1.65>
- TAKÁCS, A., BARÁTH, K., CSIKY, J., CSIKYNÉ, R. É., KIRÁLY, G., NAGY, T., PAPP, V., SCHMIDT, D., TAMÁSI, B. and BARINA, Z. (2016): Taxonomical and chorological notes 3 (28–37). – *Studia bot. hung.* **47**(2): 345–357. <https://doi.org/10.17110/StudBot.2016.47.2.345>
- THIERS, B. M. (2017): *Index Herbariorum: A global directory of public herbaria and associated staff*. – New York Botanical Garden's Virtual Herbarium. <http://sweetgum.nybg.org/ih/> (accessed on 21 December 2024)
- VÁŠUT, R. J. (2003): *Taraxacum* sect. *Erythrosperma* in Moravia (Czech Republic): taxonomic notes and the distribution of previously described species. – *Preslia* **75**(4): 311–338.
- VERLOOVE, F. (2006) Catalogue of neophytes in Belgium (1800–2005). – *Scripta Bot. Belgica* **39**: 1–89.
- VIRÓK, V., FARKAS, R., FARKAS, T., ŠUVADA, R. and VOJTKÓ, A. (2016): *A Gömör–Tornai-karszt flórája. Enumeráció*. [Flóra Gemersko-turnianskeho krasu. Enumerácia]. – Aggteleki Nemzeti Park Igazgatóság, Jósvalő.
- WFO (2024): *The world flora online (WFO) plant list*. – Published on the Internet; <https://wfo.plantlist.org/>. (accessed in December 2024).
- WOLANIN, M., KLICHOWSKA, E., JEDRZEJCZYK, I., REWERS, M. and NOBIS, M. (2023): Taxonomy and distribution of *Taraxacum* sect. *Erythrosperma* (Asteraceae) in Poland. – *PhytoKeys* **224**: 1–88. <https://doi.org/10.3897/phytokeys.224.99463>

http1

<https://alienplantsbelgium.myspecies.info/content/bromus-hordeaceus> (accessed on 29.12.2024)