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TYPE SPECIMENS IN THE HERBARIUM OF UNIVERSITY OF TARTU (TU). 2. MONOCOTYLEDONES

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Abstract. This article provides information on the monocotyledons sampling found in the Herbarium of the University of Tartu (TU), 34 of which are types for 31 taxa, 11 are presumably types for 11 taxa, 4 are nomina provisoria for the 4 taxa, and 3 were collected in locus classicus of 3 taxa.

Key words: types of plants taxa; Herbarium of the University of Tartu.

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INTRODUCTION

After we began a purposeful search for the type specimens in the collections of the Herbarium of the University of Tartu, we discovered new interesting materials on the monocotyledons flowering plants (Mayorov et al., 2022).

This article is divided into 4 sections as in the previous one (Mayorov et al., 2022). The first section contains taxa with an accurately determined type status of the specimens.

The second one contains taxa, which specimens are considered types, although we could not specify this for sure.

The third section contains information on the specimens that were marked as the type ones for the further description of the new taxa, which had never been completed for some reasons.

And finally, the fourth section contains sampling, carried out in “locus classicus”.

In each section, the taxa are listed alphabetically in the following order: families, genera, species, infraspecific taxa. Each specimen has its individual number. For every Russian label a translation is given with a following note: [In Rus.].

TYPES

Alliaceae

Allium dolichomischum Vved. 1971, Opred. Rast Sred. Azii, 2: 312.

Isotypus (TU286165): Herbarium flora USSR..., 5437. Uzbekistania, ad declivia abrupta argilloso-arenosa rubra gypsacea prope pag. Sina in promontoriis montium Tschulbair, leg. A. Vvedensky, 30.V.1929.

Protologue: the same.

Allium lutescens Vved. 1971, *Opred. Rast Sred. Azii*, 2: 312.

Isotypus (TU286167): Herbarium flora USSR..., 5440. Kaxachstania, Tian-Schan occidentalis, jugum Alatau Talassici, ad declivia versus fl. Maschat prope pag. Antonovka, leg. E. Mokeeva et I. Linczevski. 20.V.1927.

Protologue: the same.

Allium nevskianum Vved. 1971, *Opred. Rast Sred. Azii*, 2: 316, nom. superfl. [valid was described two years earlier as: *A. nevskianum* Vved. ex Wendelbo 1969, *Bot. Not.*, 122(1): 37].

Isotypus (TU286166): Herbarium flora USSR..., 5434. Uzbekistania, ad declivia saxosa montium Tschulbair ad pedes cacuminis Chodsha-barku, ca. 3000 m s.m., leg. A. Vvedensky, 30.VI.1929.

Protologue: the same.

Allium transvestiens Vved. 1971, *Opred. Rast Sred. Azii*, 2: 315.

Isotypus (TU286164): Herbarium flora USSR..., 5433. Turcomania, Kopetdag, in collibus gypsaceis in loco Parchaj, prope urb. Kara-Kala, leg. A. Maly, M. Popov et A. Vvedensky, 21.VI.1931.

Protologue: the same.

Allium tuvinicum (Friesen) Friesen 1987, *Flora Sibiriae (Araceae – Orchidaceae)*: 75.

Isotypus (TU286168): Herbarium flora USSR..., 6637. Tuva, distr. Mongut-Taiga, prope pag. Kyzyl-Chai, ad prolongamentum montis Eren-Karacz, in steppa agropyrosa, leg. N. Friesen, 3.VIII.1982.

Protologue: the same.

Amaryllidaceae

Ungernia victoris Vved. ex Artjush. 1970, *Amaryllis (Amaryllidaceae) Jaume St.-Hilaire* USSR: 31.

Isotypus (TU286180): Herbarium flora USSR..., 6252. *Ungernia victoris* Vved. Uzbekistania, ad declivia argillosa montium Tschulbair supra pag. Sina, 6.VIII.1930, leg. V. Botschantzev et A. Vvedensky.

Protologue: the same.

Asphodelaceae

Eremurus iae Vved. 1941, *Fl. Uzbekist.*, 1: 541.

Isotypus (TU286169): Herbarium flora USSR..., 5450. Uzbekistania, ad declivia argilloso-saxosa septentrionalia in montibus Tschulbair supra pag. Sina, leg. A. Vvedensky, 3.VI.1929.

Protologue: the same.

Colchicaceae

Colchicum varians Freyn et Bornm. 1897, *Bull. Herb. Boissier*, 5(10): 801.

Isotypi (TU286160, TU286161): J. Bornmüller: *Iter Persico-Turcicum*, 1892–93, No 4729. *Colchicum varians* Freyn et Bornm. sp. n. Persia, inter Kom and Sultanabad in montibus ad pagum Raguird, 1600 m s.m., 6/7.III.1892, leg. et determ. J. Bornmüller.

Protologue: Persia occid. in montibus prope pagum Ragnird inter Kom et Sultanabad 1600–1800 m. supra mare die 6 et 7 martio 1892, leg. Bornmüller! (exsic. ex itinere Pers.-Turcico, No 4729).

Merendera kurdica Bornm. 1899, Bull. Herb. Boissier, 7: 79.

Isotypus (TU286157): J. Bornmüller: Iter Persico-Turcicum, 1892–93, No 1840. *Merendera kurdica* Bornm. sp. n. Kurdistania Assyriaca: in montis Helgurd (ad fines Pers.) regione alpine, 3000 m s.m., 26.VI.1893, leg. et determ. J. Bornmüller.

Protologue: Assyria orientalis (Kurdistania): Riwandous, in alpe Helgurd, prope nives deliquescentes, alt. 3100 m s.m., 26.VI.1893 legi (Bornm., iter Persico-Turcicum, 1892–93, exs. No. 1840).

Hyacinthaceae

Ornithogalum tempkyanum Fr. et Sint. 1896, Bull. Herb. Boissier, 4(3): 188.

Isotypi (TU286149, TU286150): P. Sintensis: Iter orientale, 1894. No. 6262. *Ornithogalum tempkyanum*. Armenia turcica, Sznschak Gümüşkhale, Stadodopi, in pratis uliginosus, 10.VII.94, determ. J. Freyn.

Protologue: Armenia turcica, Gümüşkhane: in pratis humidis subalpinis ad Stadodopi die 10 julio 1894, florentem, leg. Sintensis (exs. 6262).

Iridaceae

Juno parvula Vved. 1963, Fl. Tadzhiisk. SSR, 2: 425.

Isotypus (TU286179): Herbarium flora USSR..., 5447. Uzbekistania, ad declivia argilloso-saxosa montium Tschulbair supra pag Sina, ca. 2600 m s.m., 23.V.1929, leg A. Vvedensky.

Protologue: E montibus Czulbair prope pagum Sina descripta est.

Juno subdecolorata (Vved.) Vved. 1941, Fl. Uzbekist., ed. Schreder i.: 516.

Isotypus (TU286178): Herbarium flora USSR..., 5448. Uzbekistania, in collibus argillosis prope urb. Taschkent, leg A. Vvedensky, 1928.III.25.

Protologue: Tashkent Obl. [In Rus.].

Juno vicaria Vved. 1963, Fl. Tadjikist., 2: 425.

Isotypus (TU286177): Herbarium flora USSR..., 5449. Uzbekistania, inter lapides ad declivia saxosa in montibus Hissaricus supra pag. Schargun, ca. 1250 m s.m., leg A. Vvedensky, 4.IV.1928.

Protologue: E jugo Hissarico prope Schargun descripto est.

Juncaceae

Luzula altissima Turcz. ex Ledeb. 1852, Fl. Ross., 4(12): 217, pro syn.

Lectotypus (TU286130)!: *Luzula altissima* mihi. Near Bukhat bare mountain [in Rus.], Turczaninoff, 1828.

Liliaceae

Fritillaria ophioglossifolia Fr. et Sint. 1896, Bull. Herb. Boissier 4(3): 183.

Isotypi (TU286154, TU286155): P. Sintensis: Iter orientale, 1894. No. 5535. Fr. a Sint. n. sp. Armenia turcica, Szandschak, Gümüşkhane, Argyridagh, V–VI. 1894 and 15.V.1894, det. J. Freyn.

Protologue: Armenia turcica, Gümüşkhane, in glareosis montis Argyridagh die 15 majo, florentem et junio 1894, fructiferam legit Sintenis (exs. 5535).

Gagea alexeenkoana Misczenko var. *minus* Misczenko 1913, Fl. Caucas. Crit., 2 (4): 173.

Holotypus (TU286122)!: Plantae Caucasicae. *Gagea Alexeenkoana* m. var. *minus* m. Dagestan, Eisen Am, on the slope, [in Rus.], VI.1895, leg. P. Desuolavy, [det.] Mishchenko [in Rus.] (Plantae Caucasicae).

Protologue: A.O. Eisen Am, on the slope, VI.[18]95, Desuolavy. [In Rus.].

Gagea graminifolia Vved. 1932, Fl. of Turkmen., 1(2): 269.

Isotypus (TU286171): Herbarium flora USSR..., 5513. Uzbekistania, in collibus argillosis prope urb. Taschkent, leg. et det. A. Vvedensky, 25.III.1925.

Protologue: Clay deserts and mountain and mountain semi-deserts of the southern part of Central Asia. [In Rus.].

Gagea praemixta Vved. 1977, Spisok Rast. Gerb. Fl. USSR, Bot. Inst. Vsesojuzn. Akad. Nauk, 21: 9.

Isotypus (TU286170): Herbarium flora USSR..., 5516. Uzbekistania, in hortis secus canalem Boz-Su, prope urb. Taschkent, leg. et det. A. Vvedensky, 17.III.1924.

Protologue: the same.

Gagea soleimani Bornm. 1908, Bull. Herb. Boissier, Ser. 2, 8(10): 730.

Isotypus (TU286156): J. Bornmüller: Iter Persico alterum. 1902. No 8299. *Gagea soleimani* Bornm. sp. n. Persia Borealis: m. Elburs, in alpe Tachti-Soleiman, ad nives prope Häartschal, 40–4100 m. s.m., 29.VI.1902, leg. et determ. J. et A. Bornmüller.

Protologue: the same.

Gagea sulfurea Misczenko 1908, Trudy Bot. Sada Imp. Yur'evsk. Univ., 9: 67.

Holotypus (TU286142)!: *Gagea sulfurea* Misczenko m. P. Misczenko. On the slopes of the mountains along the gorge of the Teberdy River near the Klukhor pass of the Kuban region, Batalpashinsky dept., height – 9000 ft., 30.V.1903, (often), leg. A.A. Atamanskikh (№ 152). [In Rus.].

Protologue: V. s. in h. J. [so – Vidi siccum in herbario Jureviensis]. Caucasus, on the slopes of the mountains along the gorge of the Teberdy River near the Klukhor pass, Kuban region, Batalpashinsky dept., often, 30.V.[19]03, 9000', Atamanskikh. [In Rus.].

Lilium cernuum Kom. 1901, Acta Horti Petropolitani, 20: 461.

Isotypus (TU286134): Komarov V. Flora Manshuriae. № 389. *Lilium cernuum* Komarov. Korea septentrionalis, flum. Jalu, VII.1897 (styl. vet.), leg V. Komarov.

Protologue: It grows on grassy mountain slopes along the banks of the upper course of the Yalu River, on clay-stony soil. [In Rus.].

Lilium pensylvanicum Ker.-Gawl. f. *praecox* Vrisch 1970, Spisok Rast. Gerb. Fl. USSR, Bot. Inst. Vsesojuzn. Akad. Nauk, 18: 38.

Isotypus (TU286133): Herbarium flora USSR..., 3104. Prov. Primorje, distr. Anuczinsk, in pratis varieherbosis, leg. D. Vrischz, 12.VI.1967.

Protologue: the same.

Tulipa androssowii Litv. 1908, Sched. Herb. Fl. Ross., 6: 114.

Syntypi (TU286162): Herbarium Florae Rossicae, No. 1895. *Tulipa androssowii* D. Litw. sp. n. Turkestan, disrt. Krassnowodsk, in arenosis pr. st. Perewal, 27.III.1902; ib., pr. st. Aidin (non procul a st. Perewal), 29.IV.1905, leg. N. Androssow.

Protologue: the same.

Tulipa bifloriformis Vved. 1971, Opredelitel Rasteniy Sredney Azii, 2: 320.

Isotypus (TU286172): Herbarium flora USSR..., 5401. Uzbekistania, Tian-Schan occidentalis, in collibus argillosis circa urb. Taschkent, 19.III.1923, leg. M. Popov et A. Vvedensky.

Protologue: the same.

Tulipa carinata Vved. 1971, *Opredelitel Rasteniy Sredney Azii*, 2: 318.

Isotypus (TU286172): *Herbarium flora USSR...*, 5404. Uzbekistania, Pamiro-Alaj, ad declivia argilloso-saxosa humida in montibus Tschulbair supra pag Sina, ca. 2500 m s.m., 23.V.1929, leg A. Vvedensky.

Protologue: the same.

Tulipa caucasica Lipsky 1902, *Sched. Herb. Fl. Ross.*, 4(19): 12–13.

Isotypus (TU286163): *Herbarium Florae Rossicae*, No. 942. *Tulipa caucasica* W. Lipsky sp. n. Caucasus, prov. Kuban, fonts fl. Kuban, Uczkulan, in declivibus montium, 9000'–10000', 24.VI.1900, leg. N. Desoulavy.

Protologue: the same.

Tulipa mogoltavica M. Pop. et Vved. 1971, *Opredelitel Rasteniy Sredney Azii*, 2: 318.

Isotypus (TU286174): *Гербарий флоры СССР...*, 5417. Tadzhikestania, ad declivia saxosa montium Mogol-tau in angustiis fl. Schunluk, 22.IV.1927, leg. I. Granitov, det. A. Vvedensky.

Protologue: Tian-Schan occidentalis. Ad declivia saxosa montium Mogol-tau in angustiis fl. Schunluk, 22.IV.1927, fl. Granitov, 483.

Tulipa rosea Vved. 1971, *Opredelitel Rasteniy Sredney Azii*, 2: 319.

Isotypus (TU286175): *Herbarium flora USSR...*, 5417. Tadzhikestania, in collibus siccissimus gypsaceis prope petroleas “Santo”, 16.VI.1923, leg. M. Popov et A. Vvedensky.

Protologue: the same.

Tulipa subpraestans Vved. 1971, *Opredelitel Rasteniy Sredney Azii*, 2: 318.

Isotypus (TU286176): *Herbarium flora USSR...*, 5420. Planta e bulbis a V. Botschantzev in collibus saxosis prope pag Tut-Kaul ad ripas dextras Vachscha, 1933 lectis in Horto Botanico Universitatis Asiae Mediae enata, leg. Vvedensky, 23.IV.1935.

Protologue: the same.

Orchidaceae

Cephalanthera floribunda Woronow 1908, *Věstn. Tiflissk. Bot. Sada*, 10: 22.

Isotypus (TU321306): In the oak forest below the vill. of Yeni-Rabat, Batumi reg., Artvin distr., 15.VI.1907, leg. Yu. W.[oronov]. [In Rus.].

Protologue: Habitat in quercetis Artwinensis Transcaucasiae occidentalis: in valle fl. Ardanucz-su infra p. Jeni-Rabat, ubi 17.V.07, flores detecta.

Note: on Voronov's original label is written: «*Cephalanthera floribunda* G. Woron. n. sp.». The name of the geographical point in the protologue and on the label are the same, although they are not written identically. Possibly a typo when publishing the protologue.

Satyrion rupestre Schltr. 1897, *Bot. Jahrb. Syst.*, 24(3): 422.

Isotypus (TU321301): *Distrib. ex Herb. Orchid. R. Schlechter*. No 5870. *Satyrion rupestre* Schltr. sp. S. clfr: Silver River (George), 400, Anno 1894 Nov., leg. P. Schlechter.

Protologue: Kapsches Übergangsgebiet: Auf Felsen am Silver River des Districts George, bei 130 m ü M. (R. Schlechter, n. 5870, blumend im November).

PERHARS, TYPES

Alliaceae

Allium caesium Schrenk 1844, *Bull. Cl. Phys.-Math. Acad. Imp. Sci. Saint-Pétersbourg*, 2: 113.

Original matilial (TU286126): Soongaria: ad flum Dshisdy-Kingir. 14.VII.1842, A.V. Schrenk

Protologue: Hab. ad fluvium Karagandy, nec non in collibus Dshisdy-Kingir.

Allium flavidum Ledeb. 1830, Fl. Altaic., 2: 7.

Original matilial (TU286124): *Allium flavidum* Ledebour mihi, Fl. Altaica.

Protologue: Hab. in pratis subalpinis ad fl. Belaja Uba.

Allium hymenorrhizum Ledeb. 1830, Fl. Altaic., 2: 12.

Original matilial (TU286123): *Allium hymenorrhizum* Ledebour, mihi, Fl. Altaica

Protologue: Hab. in pratis himidis ad fl. Koksun et Uba.

Allium subtilissimum Ledeb. 1830, Fl. Altaic., 2: 22.

Original matilial (TU286122): *Allium subtilissimum* Ledebour, mihi, Fl. Altaica

Protologue: Hab. in campestribus trans fl. Irtysch.

Allium tulipaefolium Ledeb. 1830, Fl. Altaic., 2: 9.

Original matilial (TU286128): *Allium tulipaefolium* Ledebour, mihi, Fl. Altaica.

Protologue: Hab. in herbidis ad fl. Irtysch frequentissime v. pr. pagum Krasnojark (L.); inter Buchtarminsk et lacum, qui Noor-Saisan vocatur (M.).

Allium uliginosum Ledeb. 1829, Icon. Pl., 1: 20, t. 83.

Original material (TU286121): Ledebour, mihi, Fl. Altaica.

Protologue: Hab. in paludosis ad fl. Belaja Uba.

Allium viridulum Ledeb. 1832, Icon. Pl., 4: 22, t. 378.

Original material (TU286127): Ledebour, mihi, Fl. Altaica.

Protologue: Hab. in regione orientali deserti soongoro-kirghisici.

Hyacinthaceae

Ornithogalum filiforme Ledeb. 1830, Fl. Altaic., 2: 30.

Original material (TU286143): *Ornithogalum filiforme* Ledebour, mihi, Fl. Altaica.

Protologue: Hab. in umbrosis humidiusculus circa Buchtarminsk et alibi (M.).

Iridaceae

Iris bloudowii Ledeb. 1833, Fl. Altaic., 4: 331.

Original material (TU286136): *Iris bloudowii* Ledebour, mihi, Fl. Altaica.

Protologue: specific locations of this species are not specified.

Liliaceae

Lilium cernuum Kom. 1901, Acta Horti Petropolitani, 20: 461.

Original material (TU286135): Flora Mandshurica. 4.VIII.1897. Flumen Amnok.-Gan. Korea septentrionalis, provincial Pen-nian, leg. V.L. Komarov.

Protologue: it grows on grassy mountain slopes along the banks of the upper course of the Yalu River, on clay-stony soil. [In Rus.].

Tulipa tricolor Ledeb. 1830, Icon. Pl., 2: 13, t. 135.

Original material (TU286145): *Tulipa tricolor* Ledebour, mihi, Fl. Altaica.

Protologue: Hab. in rupestribus ad latera collinum, nec non in planitiebus siccus trans fl. Irtysch frequens.

NOMINA PROVISORIA

Asparagaceae

Ruscus aculeatus f. *macrophyllus* Woronow

TU286140: *Ruscus aculeatus* f. *macrophyllus* mihi. Abchazia, in querceto prope Suchum-Kale, 10–13.III.1904, G. Woronov.

Asphodelaceae

Eremurus squamellatus Zing. mihi

TU286159: Turkestan, Wernoe, 18**, leg. Scalosubow.

Note: On the label, in Zinger's handwriting, it says: *Eremurus squamellatus* m. E. Bungei Bak. (Boiss. V. 324) proximus, pedicellis crassioribus et perianthii colore diversus. Perianthii folia pellucida squamellis minutis albis obtecta. V. Zinger.

Iridaceae

Crocus alexandri Petr. sp. n., nom. prov.

TU286151: Dr. C. Baenitz, Herbarium Europaeum, No. Flora Serbica: in filicetis Pteridis aquilinae pr. Vranja, 28.II.[18]94, leg. Adamovič.

Note: There was no valid description, as the homonym was probably published soon after: *C. alexandri* Nacic ex Velen. (1894, Sitzungsber. Königl. Böhm. Ges. Wiss. xxxix: 26).

Liliaceae

Gagea litwinowii Golits. sp. nov.

TU286131: *Gagea litwinowii* sp. n. Galichya Gora Nature Reserve, Vodopyanovsky distr., Voronezh Region, mixed-grass-steppe slope between bushes, 30.IV.[19]39, S. Golitsin. [In Rus.].

Note: The specimen was acquired to the Herbarium of the Voronezh State University on the eve of the Great Patriotic War, taken to Germany and after repatriation (Shcherbakov et al., 2017) sent by mistake to the University of Tartu.

SPECIMENS COLLECTED IN LOCUS CLASSICUS (TOPOTYPES)

Hyacinthaceae

Ornithogalum degenianum Polgár 1928, Magyar Bot. Lapok, 27: 20.

Topotypus (TU286182): Flora Hungarica exsiccate. Cent. X. Angiospermae, 553. 992. *Ornithogalum degenianum* Polgár Comit. Veszprém, in herbis ad viam prope pag. Papakovaesi, gregarie crescens, dum ibidem non procul itiam *O. umbellatum* L. et *O. boucheanum* (Kth.) Aschers., sporadice provenit, quarum planta nostra proles hybrid esse videtur. 4.V.1930. Locus classicus. leg. S. Polgár et S. Járovka.

Iridaceae

Iris lactea Pall. 1776, Reise Russ. Reich, 3: 713.

Topotypus (TU286184): Herbarium flora USSR..., 6641. Prov. Chita, distr. Borzja, ad ripam lacus Zun-Torei, leg. et det. V. Doronkin, 6.VI.1980.

Protologue: in desertis aridis circa lacum Tarei Dauriae.

Liliaceae

Gagea ugamica Pavl. 1950, Vestnik Akad. Nauk Kazak. SSR, 3(60): 25.

Topotypus (TU286183): Herbarium flora USSR..., 4503. Tian-Schan Occidentalis, jugum Ugamicum, in faucibus fl. Kajnar-Saj, in prato ad nives deliquescentes, 2000 m s.m., leg. V. Pavlov, 21.V.1958.

Protologue: Prov. Austro-Kazachstania, montes Ugamenses, sub maculas nivales ad summos montium, № 248, 20.VI 1949, fl., leg. B. Bykov, in Herb. Acag. Scient. Kazachstanicae, urb. Alma-Ata, conservatur.

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REFERENCES

- Mayorov S.R., Shcherbakov A.V., Yurtseva O.V. 2022. Type specimens in the Herbarium of the University of Tartu (TU). 1. Dicotyledones. — *Phytodiversity of Eastern Europe*: 16(1): 99–110. DOI 10.24412/2072-8816-2022-16-1-99-110
- Shcherbakov A.V., Agafonov V.A., Reier Ü, Negrobov V.V., Bedenko A.B. 2017. History of the Herbarium of the Voronezh State University (VOR) in the first half of the XX century. — *Bull. of the Voronezh State Univ., Ser.: Chemistry. Biol. Pharmacy*: 2: 43–47. (In Russ.).