Personalities of Russian amateur botany, 1. Leontius Petrovich Alexandrov (1857–1929), and the neglected protologue of *Alchemilla propinqua* H.Lindb.

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Leontius Petrovich Alexandrov (1857–1929) was a paediatric surgeon (in urology) in Moscow. As an amateur botanist he collected plants in 1914–1924, mostly *Alchemilla*, in Moscow and its nearest vicinities, as well as in the former Yaroslavl, Vyatka and Perm Regions. His collections, including types of *Alchemilla*, are housed at the Komarov Botanical Institute (LE) and the Herbarium of the Museum of History and Culture of the Central Kama Region in Sarapul, Udmurt Republic, Russia. The name *Alchemilla propinqua* H.Lindb. ex Alexandrov et Nekr. was validly published presumably in the first half of 1923 in the popular book *Garden-with-Fun and its vegetation* [Neskuchny Sad i ego rastitelnost] by L. P. Alexandrov and V. L. Nekrasova, accompanied with a descriptive matter in Russian. This book clearly predates the article with the same species name by S. V. Juzepczuk that was printed on the last day of 1923. The validating description of *A. propinqua* was provided by the book authors, to whom the plant name is to be attributed. The name *A. propinqua* is lectotypified here by a specimen kept at LE and collected by Alexandrov in Moscow.

Introduction to this series

'Abiit; jam et reverti debet' (Tertullian)

In former times amateur botanists played a significant role in traditional natural history. Driven by curiosity and passion, they remarkably contributed to our knowledge in the flora of the world from the very beginning of its exploration, when the diversity of plants was little known not only in remote and exotic lands (still remaining much underexplored) but even in backyards of European academies.

Amateurs were often self-taught in botany, being professionals in other fields of science or in applied disciplines, civil servants, teachers, clergymen, noblemen, etc. Their knowledge and interest varied greatly from a mere accumulation of general collections to detailed studies on most difficult groups, from an investigation of vicinities of their villages to travels across vast natural areas

Amateurs were usually closely collaborating with academies and universities, and they were often seeking for assistance of professional botanists. Their collections frequently ended up to large scholarly museums, but sometimes they became dispersed or obscurely situated in small local institutions or other organizations.

This series of brief essays is focused on those amateur botanists who mostly casually, if at all, contributed to what we commonly recognise as science, i.e. made achievements in scientific writing. Their personalities and activities are little known to present-day botanists, although the collections they gathered or the facts they observed often advanced discoveries of important novelties researched by professional scientists.

Leontius Alexandrov as a medical doctor

Leontius Petrovich Alexandrov (1857–1929) was a famous paediatric surgeon (in urology). He founded paediatric urology as a scientific discipline in Russia, and worked for many years (since 1889) as chief doctor at the St. Olga Children's Hospital in Moscow. Alexandrov established and privately (at his own expense) published the scientific magazine The Paediatrics [Detskaya meditsina] (1896-1905). Since 1902 he chaired the Moscow Society of Paediatric Doctors. In 1919 Alexandrov was elected Professor of Moscow State University, but he was unable to take the position because of voluntary service in the Russian Red Army during the Russian Civil War. In 1920– 1921 Alexandrov served on the Eastern Front, situated at that time in the Volga area; he was Senior Doctor at the Aviation Division Ilya Muromets and stationary military hospital in Sarapul, Vyatka Region (now Udmurt Republic of Russia). In late 1921 Alexandrov returned to Moscow and continued his practice at St. Olga Hospital (Nushtaev 2008).

Leontius Alexandrov as a botanist

Leontius Alexandrov was a passionate amateur botanist. In 1914–1924 he made many observations and collected plants in Moscow City, and Moscow and Yaroslavl Regions; during the civil war he botanised in Vyatka and Perm Regions, as well as worked with the collections of Sarapul Museum of Local Studies.

The long-term observations were implemented in the detailed description of the variability of flowers and leaves of *Anemone ranunculoides*

L. (Alexandrov 1922), with description of new forms. Some species records new to Moscow and Moscow Region were published separately (Alexandrov 1923b). But the most prominent botanical achievement of Alexandrov was the book discussed below.

Alexandrov and the Garden-with-Fun

In 1922 Alexandrov enthusiastically studied the history of the famous park (formerly an estate) Garden-with-Fun [Neskuchny Sad] in Moscow. He published its history reconstructed from archive documents in a small brochure (Alexandrov 1923a).

The historical study was complemented with botanical inventories. In this park Alexandrov collected 270 species of vascular plants. A list of these species with brief descriptions of morphology and ecological preferences became the basis of a popular botanical guide to the Garden (Alexandrov & Nekrasova 1923), written in collaboration with V. L. Nekrasova, a scientist at the Main Botanical Garden in Petrograd (now the Komarov Botanical Institute, St. Petersburg). The history of the Garden started from the estate owned in 18th century by the very famous Russian industrialist Procopius A. Demidoff, who turned his estate into a private botanical garden with extensive greenhouses, incredibly rich in exotic flora. Demidov's wealth was fabulous; he attracted much fame by his generous charity and unlimited eccentricity. Being fond of botany, Demidov invited the famous Peter Simon Pallas to catalogue his garden, thus leaving a record for posterity. Alexandrov dreamed of restoring the former fame of the Garden, to make it an open-air and open-access school in botany. These dreams have not been realised, but the book by Alexandrov & Nekrasova remains a valuable stage in inventory and monitoring of the flora of Moscow.

The herbarium collections of Alexandrov

Alexandrov made some herbarium collections, especially in 1920s, when he ordered printed forms for labels. In collecting plants Alexandrov

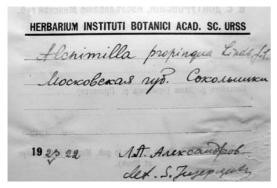


Fig. 1. A specimen collected by Alexandrov and acquired to the Komarov Botanical Institute. The label is written by Juzepczuk after 1931.



Fig. 2. Printed form from the private herbarium of Alexandrov. The label is written by Alexandrov.



Fig. 3. A draft label written by Alexandrov.



Fig. 4. An annotation slip written by Juzepczuk.

had a special taste to *Alchemilla*, which he collected carefully in many places and delivered for identification to Sergei V. Juzepczuk, a scientist at the Botanical Garden in Petrograd (St. Petersburg) who later became a famous monographer of this genus. The *Alchemilla* specimens collected by Alexandrov are preserved at the Komarov

Botanical Institute (LE). A small part of those collections (22 specimens, also identified by Juzepczuk) were given by Alexandrov to the Museum of Local Studies in Sarapul (now Museum of History and Culture of Middle Kama Region) (Starodumova 2004). Alexandrov visited Sarapul a few times after leaving for Moscow, presenting his collection titled 'Alchemist' to the Museum at 25.11.1924 (Shklyaeva, pers. comm.). In Moscow State University (MW) specimens collected by Alexandrov are not present (Seregin, pers. comm.).

Herbarium labels and handwritings of Alexandrov and Juzepczuk (all copied from LE) are exemplified here (Figs. 1–4).

Alexandrov and the studies on *Alchemilla*

Alexandrov collected a few specimens of *Alchemilla* already in 1914; those specimens were presented to the Botanical Garden in St. Petersburg and identified by Juzepczuk in the late 1921. These identifications inspired Alexandrov for further collecting, and in 1922 he collected many *Alchemilla* plants in Moscow and its nearest vicinities.

A significant collection originated also from the Garden-with-Fun. In this collection Juzepczuk identified 14 species of *Alchemilla*, all included in the guide to the Garden (Alexandrov & Nekrasova 1923).

A comparison with the monographic treatment by Lindberg (1909), the earlier treatment of *Alchemilla* in Central Russia (Litvinov 1917) and descriptions of new species from East Europe (Alekhin 1922; Juzepczuk 1922) revealed that among the *Alchemilla* collections from the Garden-with-Fun were published first records of four species new to Moscow and Moscow Region: *A. acutangula* Buser = *A. acutiloba* Opiz, *A. cymatophylla* Juz., *A. glabricaulis* H.Lindb., *A. heptagona* Juz.

Besides of these new records, the collections of Alexandrov became the basis of a species of *Alchemilla* that was new to science. This species is mentioned in the guide as "*Alchimilla* sp. nova", with a brief description in Russian but without a scientific name. The species was subse-

quently named as *A. schistophylla* Juz. with the type from Petrovsko-Razumovskoe (an estate in Moscow) and a few paratypes, including a specimen from the Garden-with-Fun.

Garden-with-Fun and its vegetation as place of valid publication of plant names

Among the Alchemilla species from the Gardenwith-Fun Juzepczuk identified the species A. propingua H.Lindb. that was established and named by Prof. Harald Lindberg in connection with the preparation of his monograph of the taxonomy and distribution of Fennoscandian species of Alchemilla (Lindberg 1909) on the basis of a single gathering collected by D.P.Syreitschikov 27.05.1902 in the vicinity of Mytischi of Moscow Region. This species was known to Juzepczuk from herbarium collections and private discussions with Lindberg, but its name remained not validly published until 1923. Juzepczuk (1923) was first to publish this name accompanied with a brief diagnosis in Latin, also indicating its original material (collections of Syreitschikov at H and the private herbarium of the collector; only the specimen at H is currently known) and the distribution area. Since then Juzepczuk was generally credited with the authorship of this name (Hill 1929; Juzepczuk 1940; Tikhomirov 2001).

In the beginning of its publication the serial *Notulae systematicae ex Herbario Horti Botanici Petropolitani* was published as annual volumes split in small issues, which were supposed to appear weekly or, later, biweekly. The new *Alchemilla* by Juzepczuk (1923) was published in the last issue of that year, which was printed (according to the front page of the issue) at 31.12.1923.

The guide to the Garden-with-Fun has a detailed treatment of *Alchemilla* species, with an identification key and brief descriptions in Russian. The description of *A. propinqua* is laconic but shows diagnostic characters which allow distinguishing this species from its closest relative, quoted here in English translation:

It is similar to the preceding species [A. pastoralis Buser = A. monticola Opiz], from which it differs in a denser pubescence of the whole plant; its leaf lobes are rotund, the short hairs on stems and petioles are directed upwards.

More detailed diagnostic characters, also in comparison to *A. pastoralis* (= *A. monticola*), can be found in the key:

The plant is mostly densely hairy; stems and petioles, especially in the upper side, are densely hairy with the hairs directed upwards. Hypanthia and sepals are more densely hairy; leaves are rotund, their marginal lobes are often overlapping; the lobes are arciform, short, the incisions between lobes are shorter than in the preceding species [A. pastoralis = A. monticola], to which this species is very closely related.

No internal evidence of the date of publication of Alexandrov & Nekrasova (1923) can be found in the book. By tradition the preface was signed "Moscow, 1922". This signature indicates that the book was completed in 1922 and published in 1923, most probably during the first part of this year. The only day of the possible time overlap with Juzepczuk (1923) is the publication day of the latter; but it seems clear that Alexandrov & Nekrasova (1923) predates Juzepczuk (1923) for publication of the name *A. propinqua*.

According to the Rules of botanical nomenclature (Brussels Rules) that were in effect in 1920s, names of new taxa of non-fossil plants, in order to be validly published, were to be accompanied with Latin diagnosis starting from 1 January 1908 (Briquet 1912). This means that in 1923 the valid publication of *A. propinqua* was Juzepczuk (1923). But by decision of the following International Botanical Congress (held in Cambridge, 1930) the starting date for Latin was pushed forward to 1 January 1935 (Briquet 1935), and this decision retroactively made the name *A. propinqua* validly published in Alexandrov & Nekrasova (1923).

Alexandrov & Nekrasova (1923) stated that "Juzepczuk kindly revised all the species of *Alchemilla* described by us". This sentence certainly assumes that Juzepczuk identified the material, but it does not assume that he contributed to the text in any way as required by Art. 46.2 (McNeill et al. 2006). The descriptions of *Alchemilla* species and the identification key in Alexandrov & Nekrasova (1923) are clearly simplified in accord with the semipopular nature of the book; this fact also evidences that the published text is written most probably by Alexandrov, although

with obvious help (by diagnostic characters etc.) from Juzepczuk. The characters used by Alexandrov do not fully match those used in descriptions of the same species published by Juzepczuk (1922, 1923, 1933, 1940), and should be considered original. According to Art. 46.4 (McNeill et al. 2006), the name *A. propinqua* should be attributed to Alexandrov and Nekrasova, because the authorship of its validating descriptive matter was not ascribed to anybody else.

The change in the place of valid publication affects the original material and typification of *A. propinqua*. The original specimen used by Lindberg and cited by Juzepczuk (1923), as well as other specimens used by Juzepczuk (1923), was neither cited nor examined by Alexandrov; formally it is not part of the original material any more. Although no specimens or localities were indicated in the protologue, it could be assumed that Alexandrov used his personal collections, and first of all from the Garden-with-Fun.

Ten specimens of A. propingua collected by Alexandrov before 1923 were traced, nine at LE and one at the Museum of History and Culture of Middle Kama Region in Sarapul. Of these, one specimen was collected in 1914 and presented to the Botanical Garden in St. Petersburg already in 1921; its use for the protologue is possible but less likely. The other specimens represent 7 gatherings collected in the present-day Moscow (Sokolniki, Kolomenskoe) and Moscow Region (Nemchinovo on Setun [Novoivanovskoe], Gorenki). No specimen from the Garden-with-Fun was traced anywhere. In the protologue of A. schistophylla Juzepczuk (1933) indicated that he received living plant material from this locality, collected 23.07.1922. Such plants were acceptable for identification but not good in collections, and probably not all plants were finally preserved.

For lectotypification I prefer the earliest gathering from Sokolniki, the locality being most frequently visited by Alexandrov, with the label of his own collection that may indicate his possession at least until the publication of the protologue. The specimen was collected 06.06.1922; this date assumes the first flowering season of *Alchemilla* with diagnostically informative flowers. Duplicates of this gathering are kept at LE and in Sarapul.

The nomenclatural account follows.

Alchemilla propinqua H.Lindb. ex Alexandrov et Nekr.

Neskuchny Sad i ego rastitelnost: 126. (presumably first half of) 1923, descr. ross.; Juzepczuk, Not. Syst. Herb. Hort. Bot. Petrop. 4 (23–24): 184. (31 XII) 1923, isonym, descr. lat. in adnot. — Type: Russia. Moscow: Sokolniki, 06.06.1922, *L. P. Alexandrov* 33 (LE, lectotype designated here; isolectotypes LE, Museum of History and Culture of Middle Kama Region).

Other plant names validly published by Alexandrov

Anemone ranunculoides f. angustifolia Alexandrov, Not. Syst. Herb. Hort. Bot. Petrop. 3(47–48): 190. 1922

Anemone ranunculoides f. dissecta Alexandrov, Not. Syst. Herb. Hort. Bot. Petrop. 3(47–48): 189. 1922

Anemone ranunculoides f. latifolia Alexandrov, Not. Syst. Herb. Hort. Bot. Petrop. 3(47–48): 189. 1922

Anemone ranunculoides f. multifida Alexandrov, Not. Syst. Herb. Hort. Bot. Petrop. 3(47–48): 190. 1922

Anemone ranunculoides f. palmata Alexandrov, Not. Syst. Herb. Hort. Bot. Petrop. 3(47–48): 189. 1922

Anemone ranunculoides f. polypetala Alexandrov, Not. Syst. Herb. Hort. Bot. Petrop. 3(47–48): 187. 1922

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