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Identity of *Salix chilkoana* Sukaczew (Salicaceae)

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Summary. The identity of *Salix chilkoana* Sukaczew is discussed. The name *S. chilkoana* is synonymised with the currently accepted name, *S. udensis* Trautv. et C. A. Mey. Both names, *S. chilkoana* and *S. udensis*, are typified here.

Таксономическая принадлежность *Salix chilkoana* Sukaczew (Salicaceae)

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Ключевые слова: таксономическая принадлежность, типификация, Salicaceae, *Salix chilkoana*.

Аннотация. В статье обсуждается таксономическая принадлежность *Salix chilkoana* Sukaczew. Название *S. chilkoana* синонимизируется с современным принятым названием *S. udensis* Trautv. et C. A. Mey. Оба названия *S. chilkoana* и *S. udensis* типифицированы.

While working on the compilation of the “World Checklist of Salicaceae s. str.” (I. V. Belyaeva), digitization of the authentic herbarium specimens deposited in the Herbarium of Tsitsin Main Botanical Garden RAS (МНА) (N. Yu. Stepanova and S. A. Poluektov) as well as research on cultivated willows in the Middle Urals (O. V. Epanchintseva, I. V. Belyaeva and L. A. Semkina), the authors of the

current paper came across the name *Salix chilkoana* Sukaczew. This name was given to a willow that was cultivated and described by Sukaczew (1934). This willow was then widely distributed across Russia and adjacent countries and appears in cultivation under this name in various gardens and private collections.

The application of scientific names requires the use of nomenclatural types, according to Art. 7.1 of the ICN (Turland et al., 2018). However, as stated by the authors previously (Belyaeva et al., 2018) many names published before 1 January 1958 have not been typified, thereby creating confusion for botanists and horticulturists as to which specimen should be used for verification of their identity.

While describing *S. chilkoana*, Sukaczew mentioned this willow under the heading “Hybrid willows” (1934: 65): “² *S. chilkoana* – ива, выращенная из черенков, собранных по берегу р. Хилка, около ст. Хилок в Забайкалье (о ней см. далее) [² *S. chilkoana* – a willow grown from cuttings collected along the bank of the River Khilka near Khilok station in Baikal Region (see below) – translation by I. V. Belyaeva]”. He used this willow in two hybrid combinations, *Salix viminalis* L. × *S. chilkoana* and *S. purpurea* L. × *S. chilkoana* noting that *S. chilkoana* is a male plant collected in 1925 belonging to an unknown species that is similar to *S. dahurica* Turcz. ex Laksch. (the current name is *S. miyabeana* Seemen) in its leaves but has two stamens. Sukaczew’s first impression, as he wrote, was that it is a hybrid with possible parentage of *S. rorida* Laksch., *S. siuzevii* Seemen (current name is *S. udensis* Trautv. et C. A. Mey.) or *S. dahurica*. While developing his opinion about the hybrid origin of *S. chilkoana*, he stated that the hybrid plants of *S. viminalis* × *S. chilkoana* did not have connate stamens, which is further evidence that *S. dahurica* was not a parent of *S. chilkoana*. He also assumed that it could be a variation (mutation) of *S. siuzevii*, which is very different from the typical species and grows very quickly but has rods that are not of very good quality for basketry. Thus, this mysterious willow was described from living plants in cultivation and found its place in the garden of Sukaczew in Mozhinka, a village near Moscow.

Two authentic herbarium specimens of *S. chilkoana* (Fig. 1–2) were found in MHA, MHA0032899 and MHA0032898, but they do not belong to the original material because they were collected by Sukaczew in his garden in Mozhinka years after the name *S. chilkoana* was published. Both specimens were annotated by A. K. Skvortsov in 1973 as *S. udensis* and the specimen MHA0032899 has the additional note by Skvortsov “Lectotypus” although the actual typification was not made by him. Careful study of both herbarium specimens by the authors of the current paper in comparison with *S. udensis*, *S. miyabeana* and *S. rorida* supported the identification of this willow by Skvortsov as

S. udensis. This name, however, was not included in the synonymy of *S. udensis* by Skvortsov in the newly translated edition of his monograph (Skvortsov, 1999).

As Sukaczew did not mention any herbarium material in his publication (1934), where *S. chilkoana* was originally described from cultivated living plants and no original material exists, a neotype should be designated according to Art. 9.8 of ICN (Turland et al., 2018).

Salix chilkoana Sukaczew, 1934, Select. & Introd. Fast-Growing Woody Pl.: 65, 71, 72, **syn. nov.**

Neotype (designated here): “Russia, Moscow region, Zwenigorod district, Mozhinka village, Salicetum by the house 39, 6 VIII 1952, V. Sukaczew s. n.” (MHA0032899!).

Additional specimen studied: “Russia, Moscow region, Zwenigorod district, Mozhinka village, Salicetum by the house 39, 1 VII 1951, V. Sukaczew s. n.” (MHA0032898!).

= *S. udensis* Trautv. et C. A. Mey., 1856, in Middendorff, Reise Sibir. 1(2; 3): 81.

Lectotype (designated here): “Russia, Khabarovsk region, Udskoiï village, 15 VI 1844, Middendorff s. n.”, ♀, top fragment in the middle (LE01016805!; syntypes – LE01016801!, LE01016802!, LE01016803!, LE01016804!).

Comments: Five specimens were recognized as syntypes at LE by Buzunova et al. (2018). All five specimens having printed labels “Specimen authenticum” belong to the same gathering and the same species, *S. udensis*. Two of them, LE01016804 and LE01016805, have original labels with the species name on them and printed labels with the text “Herb. Acad. Petrop. Udskoi, Sibir. orient. Exped. Acad. 1844.” Specimen LE01016803 has only a printed label with species name by an unknown person and the text “Herb. Acad. Petrop. Udskoi, Sibir. orient. Exped. Acad. 1844.” Specimens LE01016801 and LE01016802 have original labels with the exact dates of collection but the name “*Salix udensis* Trautv. et Mey.” was added by Trautvetter probably later than the species was described. The specimen LE01016805 (Fig. 3) with four fragments (three with female catkins and young leaves and one without catkins) that look like parts of the same plant is in better condition than the other four specimens and correspond to the description (Trautvetter, Meyer, 1856) and therefore this specimen is chosen here as the lectotype.



Fig. 1. Neotype of *Salix chilkoana* Sukaczev.



Fig. 2. Authentic specimen of *Salix chilkoana* Sukaczev.

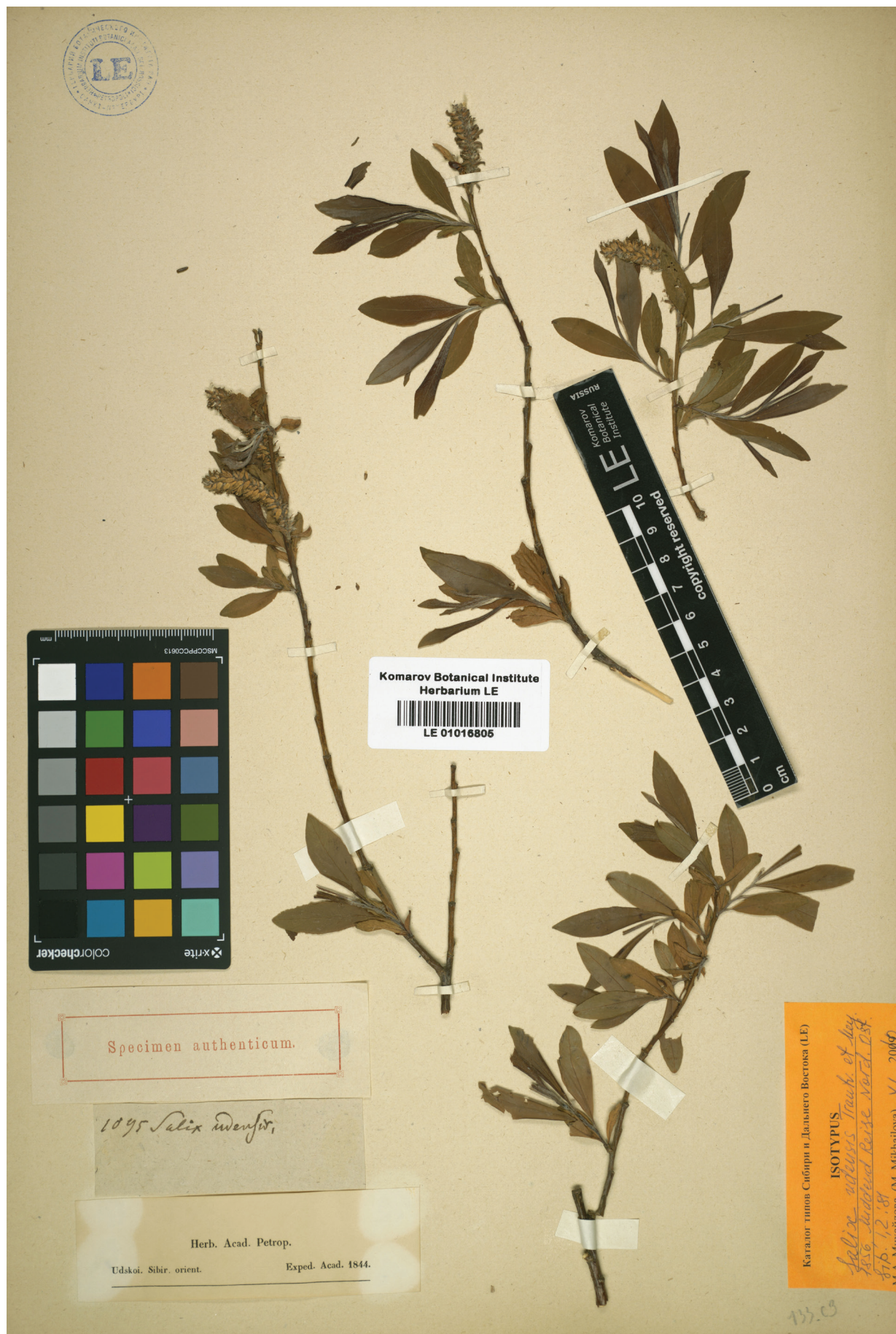


Fig. 3. Lectotype of *Salix udensis* Trautv. et C. A. Mey.

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