

Name change alert: *Salix gmelinii* Pall.

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Salix gmelinii Pall., or Gmelin's willow, has been known by the long-established name *S. dasyclados* Wimm., or woolly stemmed willow.

In 2008 Belyaeva and Sennikov resurrected the *Salix gmelinii* Pall. name, which should now be used as the correct name (Belyaeva and Sennikov, 2008). The previous names *S. dasyclados* Wimm., as well as *S. burjatica* Nasarow, and *S. jacutica* Nasarow are now considered as synonyms of *S. gmelinii*. This change resulted from a recent study of original material (authentic specimens seen by Pallas) from the Herbarium of the Komarov Botanical Institute, Saint Petersburg, Russia, which revealed the earliest published name for the same taxon.



Branch and branchlet of *Salix gmelinii*. Photos courtesy of M. Dodge, Vermont Willow Nursery.

Salix gmelinii species was described by P.S. Pallas, a famous German naturalist who was invited to Russia to explore remote territories. The epithet was dedicated to J.F. Gmelin, a German explorer of Siberia, on whose material Pallas based the description of this species.

This nomenclatural change is based on the *International Code of Botanical Nomenclature* (McNeill et al., 2012) the principle of priority, which states that the earliest legitimately published name must be used in preference to another when the same taxon was described under different names more than once. The earliest legitimately published name must be used as a designated correct name, while all other names become synonyms.

Interestingly, *S. dasyclados* was often treated as a hybrid (written as *S.* × *dasyclados*) in some European references (for example, in Rechinger (1964), Newsholme (1992)), because it resembles some hybrids of *S. viminalis*. These hybrids, in which the second parent is a species from the section *Vetrix* (such as *S. caprea* L., *S. atrocinerea* Brot.), were commonly cultivated in Western Europe under numerous names: *S. stipularis* Sm., *S. smithiana* Willd., *S. calodendron* Wimm., *S. acuminata* Sm., *S. longifolia* Host.



Pistillate branch of *Salix gmelinii*. Photos courtesy of M. Dodge, Vermont Willow Nursery.

Yet, according to Skvortsov (1968, 1999), normal seed production, absence of hybrid segregation, a specific ecological niche and vast distribution range confirm the species status of *S. dasyclados* and renders the assumption of hybrid nature incorrect.

Moreover, Skvortsov (1968, 1999) suggested that the original specimen of *S. dasyclados*, described by F.Wimmer in 1849 from the vicinities of Wroclaw, Poland, which lies outside the native distribution of the species, likely represents a cultivated specimen, and could be of hybrid origin. Though the application of the *Salix dasyclados* name remained ambiguous. Jalas and

Suominen (1976) suggested replacing the name *Salix dasyclados* with *Salix burjatica* when applying to a native species. The *Salix burjatica* binomial was widely used by researchers in European publications.

Belyaeva and Sennikov (2008) agreed that the lectotype of *S. dasyclados* may belong to a cultivated plant.

Given the confusing nomenclature and taxonomy of this group, which includes hybrids and geographical races of the species, resurrection of the name S. gmelinii, the type of which originally came from the central part of the native distribution of the species, stabilizes the nomenclature of this taxon.

Salix gmelinii is a tree or shrub up to 10 m tall distributed mostly in Russia. When grown at favorable locations on well-drained, moist substrates along river valleys in northern Russia it can attain heights up to 20 m with trunks reaching 80-90 cm in diameter. *Salix gmelinii* has thick, straight, grey-brown branches and thick yellow-brown branchlets, often covered with dense pubescence. Decorticated wood of branches has a few short ridges. Leaves are broadly lanceolate or lanceolate, widest toward the apex, 5-12 cm long and 1-2.5 cm wide with large and persistent stipules and 0.4-10 mm petioles embracing generative buds. The primary vein, which is prominent on both leaf sides, is yellowish. Leaf margin is almost entire, or with rare glands. *Salix gmelinii* flowers before the emergence of leaves. Catkins are sessile and very densely flowered (Belyaeva et al., 2006). This species is widely used for basket making, erosion control, and for biomass production in Europe and North America.

The *World Checklist of Salicaceae sensu stricto* lists *S. gmelinii* as the correct name and *S. dasyclados* as its synonym. The correct name *S. gmelinii* should be adopted by germplasm users and be used in future publications to avoid confusion and to promote the consistent application of names.

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