

# Nomenclatural type of *Torminalis glaberrima*, current name for the species traditionally known as *Sorbus torminalis* (Rosaceae)

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## Abstract

The name *Torminalis glaberrima* (Rosaceae), based on the Gandoger's name *Sorbus glaberrima*, is discussed and typified. *Torminalis glaberrima* is the current name of the species traditionally known as *Sorbus torminalis*. A lectotype is selected from a specimen preserved in the Claude Bernard University Lyon 1 Herbarium at LY.

**Keywords:** *Crataegus torminalis*, Gandoger, lectotype, nomenclature, *Sorbus glaberrima*, tautonym.

## Resumen

Se discute y tipifica el nombre *Torminalis glaberrima* (Rosaceae), basado en el nombre de Gandoger *Sorbus glaberrima*. *Torminalis glaberrima* es el nombre actual de la especie tradicionalmente conocida como *Sorbus torminalis*. Se selecciona un lectotipo a partir de un espécimen conservado en el Herbario Claude Bernard University Lyon 1 en LY.

**Palabras clave:** *Crataegus torminalis*, Gandoger, lectotipo, nomenclatura, *Sorbus glaberrima*, tautónimo.

*Sorbus* L. (Rosaceae) is a complex genus (see Warburg & Kárpáti, 1968; Jankun & Kovanda, 1988; Aldasoro *et al.*, 1998, 2004; McAllister, 2005; Rich *et al.*, 2010; Pellicer *et al.*, 2012). Sennikov & Kurtto (2017) perform a precise nomenclatural revision of this genus (*sensu lato*) in Europe based on some previously published works (see e.g., Nelson-Jones *et al.*, 2002; Campbell *et al.*, 2007; Dickinson *et al.*, 2007; Potter *et al.* 2007; Kurtto, 2009; Li *et al.*, 2012; Lo & Donoghue, 2012).

These authors (Sennikov & Kurtto, 2017) propose a new combination within the genus *Torminalis* Medik., to name the species traditionally called *Sorbus torminalis* (L.) Crantz. Thus, *Crataegus torminalis* L., the basionym of *S. torminalis*, when transferred to *Torminalis* is named *Torminalis glaberrima* (Gand.) Sennikov & Kurtto, based on the Gandoger's name *Sorbus glaberrima*. The use of Linnaean epithet in *Torminalis* would result in a tautonym (Art. 23.4 of the *Shenzhen Code*, see Turland *et al.*, 2018) and would not be validly published (*Shenzhen Code* Art. 32.1(c)).

*Crataegus torminalis* is the type, and the only species, of the genus *Torminalis*. The lectotype of the Linnaean name is a specimen preserved in the Joachim Burser herbarium at UPS-BURSER, Herb. Burser XXIV: 4 (UPS No. V-175771), designated by Jonsell & Jarvis (2002: 74).

*Torminalis glaberrima* is a tree up to 25 m, with simple and lobed leaves, green underneath at maturity, more or less concolorous, and brown fruit, 12–18 mm long and obovoid (see below). This species is distributed in Europe, North-West Africa, Anatolia, Asia Minor, the Caucasus and northern Iran (see Warburg & Kárpáti, 1968; Aedo & Aldasoro, 1998; Kurtto, 2009; Sennikov & Kurtto, 2017; POWO, 2024). Many infraspecific taxa at the level of variety and forma have been separated on the basis of minor variations in the leaf shape and pubescence (e.g. Kárpáti, 1960; Kovanda, 1997). However, according to Sennikov & Kurtto (2017) these forms have no taxonomic significance in this widespread and sexual species.

A large number of nomenclatural types have been indicated or designated in the work published by Sennikov & Kurtto (2017). However, the type name *Tominalis glaberrima* has not yet been designated. The aim of this work is to lectotypify the name *Tominalis glaberrima* from the study of the protologue published by Gandoger and the original material.

This work is based on the study of the protologue of the name *Sorbus glaberrima* and the original material preserved in the herbarium LY (Claude Bernard University Lyon 1, FR-BioEEnVis). The identity of the designated lectotype is verified with the current usage of the name. The typified name is in bold italics typeface, followed by the basionym and the homotypic synonyms, both indicated with the symbol  $\equiv$ , the most relevant heterotypic synonym is indicated with the symbol  $=$ .

## Typification of the name

Gandoger's protologue for *Sorbus glaberrima* includes a description: "Fr. [fruit] ovoïde, déprimé aux 2 extrémités, large de 10-11 millim.; f. [feuilles] elliptiques ovales, longuement acuminées, arrondies à la base, larges de 75-80 millim. à lobes allongés de 22-27 millim., très-lancéolés acuminés, finement denticulés", followed by the provenance: "*Bois à Dardilly, Charbonnières, Saint-Bonnet-le-Froid (Rhône)*", and a brief diagnosis "*S. [Sorbus] à f. [feuilles] très-glabres*" (Gandoger, 1875: 90).

Michel Gandoger (1850–1926) was a French botanist, and his herbarium is currently kept at LY with duplicates in many herbaria (Stafleu & Cowan, 1976; Theillère, 2022). Fortunately, there is a specimen at LY (FR-BioEEnVis, UCB Lyon 1), with barcode LY0773098, which is part of the original material used by Gandoger to describe his species *Sorbus glaberrima* (Mélanie Thiebaut, pers. comm.).

The sheet LY0773098 bears two branches, with leaves and fruits, and three separate leaves. The sheet contains also an original label handwritten by Pierre Chabert (see below) and Gandoger, annotated as: "*Sorbus glaberrima Gand. / Aria ——. / Sorbus torminalis Crantz, aust. 85 / Crataegus torminalis (L. Sp. 681) / Pyrus torminalis (Ehrh. Beitr. 6, 92) / Rhône / Bois montagneux, Dardilly, / Charbonniere, St Bonnet-le-Froid / Gandoger, M. / 23 Août / 1857 / P. Chabert*" (Figure 1).

Gandoger, born in 1850, was unable to collect this specimen in 1857. However, his collection is the result of collecting, exchanging, donating and, above all, buying numerous herbarium sheets of exceptional quality from renowned botanists or their heirs. He bought his first herbarium in 1868. These were duplicates of regional collections made by Pierre Chabert (1796–1867), a local shoemaker. The main departments visited by Chabert were Ain, Isère, Loire and Rhône (Theillère, 2022).

As I have not found any other original material of *S. glaberrima* in other consulted herbaria (e.g., B, BC, BM, C, FI, G, JE, K, LE, LY, M, MA, MPU, NAP, OXF, P, RO, S, TO, W, WAG) (acronym according to Thiers, 2004), the specimen barcoded LY0773098 is for now the only original material for this name. However, as I cannot exclude that there is more than one specimen of this taxon being part of the same gathering, I consider the specimen barcoded LY0773098 as the lectotype of the name *Torminalis glaberrima*, admitting that the specimen might well be the holotype.

This specimen LY0773098 is well-preserved and complete, showing relevant diagnostics characters (e.g., leaves 5–9 cm, ovate, with 3–4 pairs of triangular-ovate to lanceolate lobes, serrate, green and glabrous on both surfaces (the leaves are pubescent beneath at least when young, but the pubescence rarely persistent); fruit 12–18 mm, obovoid to subglobose, brown, with numerous lenticels), and clearly represents the traditional concept and current usage of the name (see e.g., Jávorka, 1927; Kárpáti, 1949, 1950, 1960; Warburg & Kárpáti, 1968; Aedo & Aldasoro, 1998; Aldasoro *et al.*, 1998, 2004; McAllister,

2005; Price & Rich, 2007; Németh, 2013; Keller *et al.*, 2015). This specimen is therefore designated as the lectotype of the name *Sorbus glaberrima*.

***Torminalis glaberrima*** (Gand.) Sennikov & Kurtto, Soc. Fauna. Fl. Fenn. 93: 32 (2017)

≡ *Sorbus glaberrima* Gand., Fl. Lyon.: 90 (1875) [basionym]

≡ *Sorbus torminalis* f. *glaberrima* (Gand.) Hegi, Illustr. Fl. Mitteleur., 4(2): 720 (1923)

**Lectotype (designated here):**— [France], bois à Dardilly, Charbonnières, Saint-Bonnet-le-Froid (Rhône), 23 Aout 1857, P. Chabert s.n., LY (barcode LY0773098) (Figure 1).

= *Crataegus torminalis* L., Sp. Pl.: 476 (1753)

≡ *Sorbus torminalis* (L.) Crantz, Stirp. Austr. Fasc. 2: 45 (1763)

Lectotype (designated by Jonsell & Jarvis (2002: 74)):— Herb. Burser XXIV: 4 (UPS-BURSER No. V-175771).



**Figure 1.** Lectotype of *Torminalis glaberrima*, LY (barcode LY0773098). Image courtesy of the herbarium LY, reproduced with permission.

**Figura 1.** Lectotipo de *Torminalis glaberrima*, LY (código de barras LY0773098). Imagen cortesía del herbario LY, reproducida con permiso.

## Conflict of Interest

None.

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