



Typification of *Quercus acuta* Thunb. and *Q. glauca* Thunb. (Fagaceae)

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Abstract

The lectotypes of *Quercus acuta* Thunb. and *Q. glauca* Thunb. are designated. The fine details of leaf epidermal features of the two species are elaborated for future comparison with other closely related species.

Key words: *Quercus glauca*, *Q. acuta*, lectotype, leaf epidermal features, nomenclature

Introduction

Quercus glauca Thunb. is a dominant tree of subtropical evergreen forests, with a wide distribution in East Asia (Huang *et al.* 1999). *Q. acuta* Thunb., which is native to Japan, South Korea and Taiwan, is an important arboreal species of evergreen broad-leaf forests in this area (Frodin & Govaerts 1998, Huang *et al.* 1999).

The names *Quercus glauca* and *Q. acuta* were validly published in A Murray's Syst. Veg., ed. 14: 858, in May–June 1784 (Thunberg 1784a) (Fig. 1) with "*Thunb. l. c. M.*" cited at end of the diagnosis of each species, which refers to "*Thunb. Jap. mspt. M.*" (Thunberg's unpublished manuscript of Flora Japonica) cited under *Q. glabra* in the same work. Later, in August of the same year, Thunberg (1784b) recorded the two species with more detailed descriptions in Flora Japonica (PP: 175–176) (Fig. 2). However, no type materials were designated or other specimens cited in these two works. In the later supplementary descriptions of Thunberg (1784b), the acorn and vegetative characters of *Q. glauca* were recorded in detail, with a note stating that it grows near "Nagasaki" which is located in southwestern Japan. No collection information was given for *Q. acuta*.

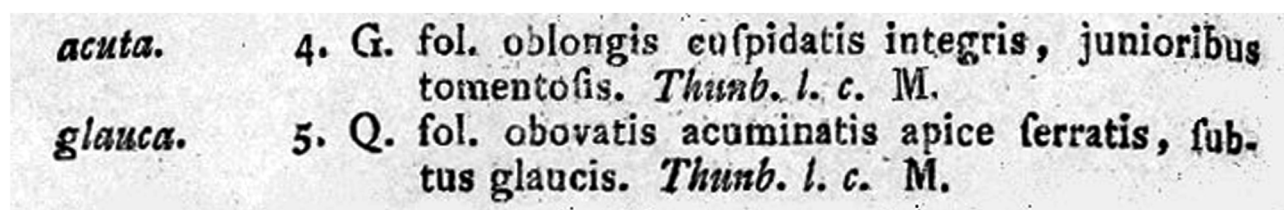


FIGURE 1. Original publication of *Q. acuta* and *Q. glauca* of Thunberg (1784a: Syst. Veg. ed. 14: 858).

Camus (1934–1954) is the most recent author to treat the genus in its entirety (Frodin & Govaerts 1998). Menitsky (1984) also comprehensively studied and documented the morphology of Asian oak species. They both studied and cited the specimens collected from S. China, Taiwan and Japan (Camus 1934–1954 [in Les Chenes / Monographie du genre *Quercus*. Paris, vol. 1: 282–286 & 305–309], Menitsky, 1984 [in Oaks of Asia, PP: 165 & 185–186]), but none of these specimens of *Q. glauca* and *Q. acuta* were collected by Thunberg, nor from Nagasaki. So far, no type of *Q. glauca* Thunberg or *Q. acuta* Thunberg has ever been designated.