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Lectotypification of Rhus cotinus L., replaced synonym of Cotinus coggygria Scop. (Anacardiaceae)

P. Pablo Ferrer-Gallego

Abstract

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The lectotypification of *Rhus cotinus* L., replaced synonym of *Cotinus coggygria* Scop. *(Anacardiaceae)* is discussed. The designation of the nomenclatural type is based on an assessment of Linnaeus's original material. A specimen from the Clifford Herbarium at BM is designated as lectotype.

Keywords

ANACARDIACEAE - Cotinus - Rhus - Linnaeus - Lectotypification - Nomenclature

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Introduction

The genus Cotinus Mill. (Anacardiaceae) includes 5 species of deciduous, polygamous or dioecious, small trees or shrubs, widely distributed through central and southern Europe to the Himalayas, southwest China, and the southeastern United States. Cotinus coggygria Scop. is the most widespread of the species, in nature as well as in cultivation; it occurs from south central Europe into the Mediterranean region and, with discontinuities, across the continent through the Himalayas and into China. The common name for C. coggygria, smokebush, refers to the unique inflorescences of the entire genus, which are covered with tiny, persistent trichomes that give the inflorescences (panicles) the appearance of plumes of smoke. The panicles are borne at the ends of the branches; usually they are about half as wide as long, with a rounded, feathery tip, and the small and dark fruits develop among the panicles. It is commonly grown as an ornamental plant, with several cultivars available. Many of these have been selected for purple foliage and flowers (TRIPP, 1994).

Linnaeus published at the rank of species 17 names in the genus *Rhus* (LINNAEUS, 1753, 1756, 1759, 1763, 1771). The name *Rhus cotinus* L. (LINNAEUS, 1753: 267), the replaced synonym of *Cotinus coggygria*, appears to be yet untypified (see JARVIS, 2007: 794) and it is here investigated. The type designation is based on the study of the protologue and consultation of Linnaeus's original material conserved in the herbarium of the Natural History Museum of London at BM (Clifford Herbarium).

Typification

Rhus cotinus L., Sp. Pl.: 267. 1753.

Cotinus coggygria Scop., Fl. Carniol., ed. 2, 1: 220. 1771.
Lectotypus (designated here): Herb. Clifford: 111, *Cotinus* 1, 3A (BM [BM000558435]).

Notes. – Linnaeus's protologue consists of a nomen specificum legitimum "RHUS foliis simplicibus obovatis" followed by three synonyms, and as geographical locality "Habitat in Lombardia Italiae & ad radices Apenninorum". The first synonym "Cotinus foliis obverse ovatis" was cited from VAN ROYEN (1740: 243) and an earlier Linnaean work (LINNAEUS, 1738: 111), the second synonym "Cotinus coriaria" was cited from Dodoëns (1616: 778-779), and the third synonym "Cocconilea s. Coccygria" from BAUHIN (1623: 415).

DODOËNS (1616: 778) provides an illustration "Cotinus coriaria" that is considered original material, and could be selected as lectotype.

Among the original material there are three specimens in the Clifford Herbarium at the Natural History Museum in London (BM) (see JARVIS 2007: 794). The sheet Herb. Clifford: 111, *Cotinus* 1, 3A (BM [BM000558435]) bears a fragment with leaves and an inflorescence. The sheet Herb. Clifford: 111, *Cotinus* 1, 3B (BM [BM000558436]) bears also a fragment with leaves and an inflorescence, and the sheet Herb. Clifford: 111, *Cotinus* 1, 3C (BM [BM000558437]) bears a fragment with leaves and two inflorescences.

On the other hand, in the Linnaean herbarium at LINN there is a sheet [Herb. Linn. N° 378.27], that bears a fragment well preserved of this species, with leaves and an inflorescence, and is annotated "Polonia" and "Cotinus" by Linnaeus. However, this sheet lacks the original Linnaean species number in the *Species Plantarum*, in this case the number "12", a very important link to the Linnaeus's work, and explicitly referring to the number of the species account in Linnaeus's protologue (see STEARN, 1957; TURLAND & JARVIS, 1997; TURLAND, 2006; JARVIS, 2007); therefore the material is a post-1753 addition to the Linnaean collection and thus not original material for the name.

We have been unable to locate any further original material in any Linnaean or Linnaean–linked herbaria (e.g., in L [van Royen's collection which is linked to the synonym by VAN ROYEN (1740)] or UPS [Burser's collection which is linked to the Bauhin's synonym in 1623]).

Among the candidate elements (specimens at BM and the illustration by DODOËNS, 1616), we designate the specimen at Herb. Clifford: 111, *Cotinus* 1, 3A (BM [BM000558435]) (image available at) as the lectotype. This specimen is the most complete and informative original material available and it matches Linnaeus's protologue. Further this selection follows the practice outlined by JARVIS (2007: 21-22) wherein when both well-preserved specimens and illustrations are represented in the original material, specimens should be preferred for lectotypification because of their potential ability to provide an enormous range of additional characters (micromorphological, chemical, molecular) that cannot matched by illustration.

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