

Lectotypification of *Amomum zerumbet* Linnaeus (Zingiberaceae)

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Abstract

The name *Amomum zerumbet* Linnaeus is lectotypified in the article.

Key words: Lectotypification, *Amomum zerumbet* Linnaeus

INTRODUCTION

The species concept of *Amomum zerumbet* Linnaeus (*Species Plantarum* 1753: 1) was based on Linnaeus' own *Hortus Cliffortianus* (1738: 3). Linnaeus even included the synonyms of earlier author P. Hermann, but explicitly excluded some of the elements, for example, *Kua*, Rheede., (*Hortus Indicus Malabaricus* 11: p. 13, t. 7 currently placed under the genus *Curcuma*) mentioned in earlier (Linnaeus, *Fl. Zeyl.* 1748) references. Since then, different taxonomists have treated this name in different ways and the correct name for this name is *Zingiber zerumbet* (Linnaeus) Roscoe ex Smith [Basionym: *Amomum zerumbet* Linnaeus (1753: 1)].

Thielade (in *Gard. Bull. Singapore* 48: 228. 1998) designated material at K (K000815665), which was collected by R. Wight from India (date unspecified) as lectotype of *Amomum zerumbet* Linnaeus.

This material cannot be considered as lectotype or even as neotype for the following reasons:

- ◆ This is not the original element (not mentioned by Linnaeus in *Species Plantarum* (1753) for *Amomum zerumbet* Linnaeus.
- ◆ This material is collected by R. Wight (coll. no. 6562) from India. This is not the *Amomum zerumbet sensu* Linnaeus but, it is *Amomum zerumbet sensu* Roxburgh. In Linnaean herbarium (LINN) there are two specimens which are associated with the name *Amomum zerumbet* (LINN 3.3 & LINN 3.4). Critical examination of these two collections revealed that those are not original materials for the name. The "1" at the base of voucher LINN 3.3 may have been written by Linnaeus, but if he did, this links the specimen with species no. 1 in *Species Plantarum* (i.e. *A. zingiber*, not *A. zerumbet*), so this is why it is not original material. Whereas, voucher LINN 3.4 is identified as *Amomum sylvestre* by James Edward Smith (date unspecified) and

Linnaeus has written “*Amomum zerumbet*” at the bottom of the sheet, so there is some authentic link between specimen and the name. However, Linnaeus has also written “Br” at the base of the specimen indicating that it came from Patrick Browne, probably from Jamaica and received after 1753, so it cannot be the original material for the name. Hence, vouchers (LINN 3.3 & LINN 3.4) deposited in Linnaean Herbarium (LINN) cannot be considered as type of the name *Amomum zerumbet* Linnaeus.

- ◆ There is a voucher (Microfiche number IDC 1.9) deposited in the Linnaean Herbarium at the Swedish Museum of Natural History (S-LINN). These vouchers bear annotation by Linnaeus filius and not by Linnaeus. Hence, it was not considered for the typification.

Amomum zerumbet Linnaeus is a rhizomatous herb known in India as Karpurharidra, Kolanjana, Kumbhika, Sthulagranthi (Sanskrit), and Van adrak (Hindi), and found in many tropical countries.

The phrase name of *Amomum zerumbet* in *Species Plantarum* (1753: 1) of Linnaeus is “*Amomum scapo nudo, spica oblonga obtusa*”

The elements involved in the protologue of *Amomum zerumbet* Linnaeus (*Species Plantarum* 1753:1) are:

- ◆ *Amomum scapo nudo, spica oblonga obtusa Hortus Cliffortianus* 3. 1737; *Hortus Upsalensis* 1. 1742, *Flora Zeylanica* 2. 1747, *Roy. Ludgb.* 12
- ◆ *Zingiber latifolium sylvestre Herman Horti Academici Lugduno- Batavi Catalogus* 636. t. 637. 1687

The application of a name is determined by means of its nomenclatural type. No single type has been designated for this name. To protect the current usage of this name, designation of its type is necessary.

The analysis of the original elements mentioned above is as follows:

In Clifford’s Herbarium at BM there are 3 sheets associated with *Amomum zerumbet* Linnaeus, namely BM000557508, BM000557509 and BM000557510, identified as original materials.

These three sheets do not appear to be from the same gathering. The specimens with the barcodes BM000557509 and BM000557510 have leaves with a long petiole, a character that is not known in *Amomum zerumbet* Linnaeus, whereas the specimen with the barcode BM000557508 has almost sessile leaves. According to the present author, these plates do not satisfy (completely) the circumscription of *Amomum zerumbet* Linnaeus. One plate has to be definitely designated as type of the name *Amomum zerumbet* Linnaeus.

Another original element of *Amomum zerumbet* is *Zingiber latifolium sylvestre Herman Horti Academici Lugduno- Batavi Catalogus* (1687: 636. t. 637). On close examination of this plate, the inflorescence is more open as compared to that of *Amomum* Linnaeus which is more compact.

In the Ceylon Herbarium of Paul Hermann (presently in Natural History Museum, London, BM) there is one drawing (BM000594876) identified by Trimen as *Amomum zerumbet* Linnaeus (*Flora Zeylanica* 1747: 2). Linnaeus himself has annotated the drawing with the number “2”, correlating it with his numbering of his own account of the species in *Flora Zeylanica*. The drawing is original material for the name and must be taken into consideration for typification purpose.

In this case, the original element is present which is a plate deposited in Ceylon Herbarium of Paul Herman (BM)). The one, numbered as BM000594876 is the original element for the name *Amomum zerumbet* Linnaeus and is designated here as the lectotype of the name *Amomum zerumbet* Linnaeus.

LECTOTYPIIFICATION

Amomum zerumbet Linnaeus, Sp. Pl. 1: 1. 1753; *Amomum scapo nudo, spica oblonga obtusa Hortus Cliffortianus* 3. 1737; *Hortus Upsalensis* 1. 1742, *Flora Zeylanica* 2. 1747, *Roy. Ludgb.* 12

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Index Nominum Genericum (botany.si.edu/ing/)

Linnaean Plant name Typification Project (www.nhm.ac.uk/research-curation/projects/linnaean-typification/)

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