

(046–048) Proposals concerning inadvertent lectotypifications (and neotypifications)

Jefferson Prado,¹ Regina Y. Hirai¹ & Robbin C. Moran²

¹ Instituto de Botânica, Herbário, C.P. 68041, CEP 04045-972, São Paulo, SP, Brazil

² The New York Botanical Garden, 2900 Southern Blvd., Bronx, New York 10458-5126, U.S.A.

Author for correspondence: Jefferson Prado, jprado.01@uol.com.br

DOI <http://dx.doi.org/10.12705/643.29>

From an awareness point-of-view, lectotypes have been designated in one of two ways. The first is by authors who are aware that they are designating a lectotype; i.e., they are conscious of their intent and do so explicitly. Thus, when an author states “Lectotype, designated here” and specifies the herbarium or institution in which the specimen is conserved, the author is aware of what is being done (see Art. 7.10, 9.22 and 9.23 of the current *Code*—McNeill & al. in *Regnum Veg.* 154. 2012). The second way was possible only before 1 January 2001, when many (most?) lectotypifications were made by authors unaware that they were lectotypifying and who never intended to do so. These authors did nothing wrong; they could not have known that their actions would be interpreted in the future as lectotypifications.

An instance of designating a lectotype without meaning to do so is the treatment by Tryon & Stolze (in *Fieldiana, Bot.*, n.s., 27: 15. 1991) of *Megalastrum platylobum* (Baker) A.R. Sm. & R.C. Moran. They listed the following type information for the basionym, *Polypodium platylobum* Baker: “TYPE: [Peru] Mt. Guayrapurima, near Tarapoto (San Martín), *Spruce 4656* (holotype, K!; isotypes, BM!, K!, P!).” By the rules of the current *Code*, there is no holotype for this name because Baker cited only a gathering (i.e., *Spruce 4645*) and did not specify a particular herbarium. Thus, instead of a holotype, there are four syntypes (Art. 9.5). From among these four syntypes, a lectotype may be designated. When Tryon and Stolze cited the specimen at K as the “holotype”, their action resulted in that specimen becoming the lectotype (under the current Art. 9.9), yet it was never these authors’ intent to designate a lectotype. Thus, Tryon and Stolze unintentionally or “inadvertently” lectotypified. For more details about holotype specimens and type citations see McNeill (in *Taxon* 63: 112–113. 2014).

Nowadays, taxonomists often incorrectly cite “holotype” for older names where in fact only syntypes exist (e.g., Prado & Moran in *Brittonia* 60: 103–130. 2008). Taxonomists have sometimes not designated lectotypes, even when possible to do so, presumably because they thought (erroneously) that a holotype existed. Also, taxonomists are often unaware that lectotypes may have been designated previously, but inadvertently, by authors before 1 January 2001. In both cases, the result is that “holotype” is cited where in fact there is none.

Having the term “inadvertent lectotypification” in the *Code* would help explain the process. It draws attention to the fact that the types of many older names are syntypes (see Art. 9.5), not holotypes (i.e., in those situations where there was no single specimen used by the author, or designated by the author as the nomenclatural type, and instead several specimens of the original material exist, often in

more than one herbarium). Furthermore, awareness that lectotypes may have been designated inadvertently would promote a search by taxonomists for likely places where a name might have been lectotypified non-explicitly before 1 January 2001. For these reasons, we propose to add a new Note and an Example to Art. 9 and an entry to the Glossary.

It should also be noted that inadvertent neotypification was possible before 2001. This could happen for a name that has no existing original material and for which an author cited a specimen as “type”, “holotype” or “lectotype”, and specified the herbarium in which it was conserved.

(046) Insert a new Note after Art. 9.19:

“*Note n.* Designation of a lectotype or a neotype is also effected, and must be followed, if the typifying author(s) used terms correctable to lectotype or neotype under Art. 9.9, such as “type” or “holotype” or “isotype” and, when the type is a specimen or unpublished illustration, cited the herbarium or institution in which it is conserved. This inadvertent lectotypification or neotypification is possible only before 1 January 2001 (see Art. 7.10, 9.22, and 9.23).”

(047) Add a new Example:

“*Ex. n.* Christensen (in Kongel. Danske Vidensk. Selsk. Skr., Naturvidensk. Math. Afd., ser. 8, 6: 112. 1920) cited for *Dryopteris hirsutosetosa* Hieron.: “Type from Ecuador: Baños-Pintuc, *Stübel nr. 903* (B!).” Later, a duplicate of this specimen was found at BM by Moran & al. (in *Amer. Fern J.* 104: 161. 2014). These two specimens are syntypes, not holotype and isotype, because in the protologue Hieronymus (in *Hedwigia* 46: 343–344, pl. 6. 1907) cited only the locality and collecting number, but did not specify a herbarium. By citing the specimen at B as “type”, Christensen (l.c.) effectively lectotypified the name. In accordance with Art. 9.9, Moran & al. (l.c.) corrected the term “type” to “lectotype” and attributed the lectotypification to Christensen (l.c.).”

The above is an example of inadvertent lectotypification because it was not the author’s intent to designate a lectotype.

(048) Add a new entry to the Glossary:

“**inadvertent lectotypification (or neotypification).** A designation of a lectotype (or neotype) without the intention of the typifying author(s) (see Art. 9 Note *n.*)”