

(1949) Proposal to conserve *Tieghemella* Pierre (*Sapotaceae*) against *Tieghemella* Berl. & De Toni (*Absidiaceae*)

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(1949) *Tieghemella* Pierre, Not. Bot. 1: 18. 30 Dec 1890 [*Sapot.*], nom. cons. prop.

Typus: *T. africana* Pierre.

(H) *Tieghemella* Berl. & De Toni in Saccardo, Syll. Fungorum 7: 215. 1888 [*Fungi*], nom. rej. prop.

Typus: *T. repens* (Tiegh.) Berl. & De Toni (*Absidia repens* Tiegh.).

The genus *Tieghemella* Pierre (*Sapotaceae*) comprises two recognized species: *T. africana* Pierre and *T. heckelii* (A. Chev.) Pierre ex Heine. Both species, known in timber trade and forestry as *makoré*, *douka*, or *baku*, are commonly used as timber in West and Central Africa. They are economically important for countries of these areas as shown by the Gabonese timber volume exportation statistics (La lettre de l'ATIBT 18: 41. 2003). The genus *Tieghemella* Pierre is currently used in floras, ecological studies or timber tree atlases, as well as by political authorities, forestry departments and timber exploitation companies. Moreover, both species of the genus *Tieghemella* Pierre are listed in the IUCN Red List of Threatened Species of 2009 with the endangered status (IUCN, 2009).

From a nomenclatural point of view, the genus *Tieghemella* Pierre was published originally in 1890 (Pierre, l.c.) to accommodate a single species, *T. africana*. However two years earlier the fungal genus name *Tieghemella* Berl. & De Toni had been published (Berlese & De Toni, l.c.). Hence, the fungal name has priority according to the *International Code of Botanical Nomenclature* (McNeill & al. in *Regnum Veg.* 146. 2006).

To build the case for its conservation, a review of the history of *Tieghemella* Pierre is in order. Following publication by Pierre, based only on its seeds, it was first mentioned as an uncertain genus by Engler (*Nat. Pflanzenfam. Nachtr.* 1: 279. 1897) and later ignored by him (*Monogr. Afrik. Pflanzen-Fam.* 8[Sapotaceae]: 1–88. 1904). Perrot (in Chevalier, *Vég. Util. Afr. Trop. Franç.* 1(2): 160. 1907) mistakenly treated its only species, *T. africana*, in the synonymy of *Mimusops djave* Laness. ex Engl. (l.c. 1897) (= *Baillonella toxisperma* Pierre), but while comparing the fruits of another species (*moabi* or *M. pierreana* Engl.) to those of *djave* (l.c.: 172), he suggested that those of *moabi* better resembled a plant he called “*Tieghemella heckelii* (Pierre), vulgairement *makerou du Grand-Bassam*”, presumably referring to a handwritten name on the label of a poor seed specimen from Ivory Coast in Pierre's herbarium. Lacking diagnostic elements and collection number references, this name has to be considered a nomen nudum. That same year Chevalier himself validly published the name *Dumoria heckelii* A. Chev. (in *Compt. Rend. Hebd. Séances*

Acad. Sci. 145: 267. 1907. ‘*Heckelii*’), based on study of additional material from Ivory Coast, Ghana, and Liberia, under his new genus *Dumoria* A. Chev., arguing that *Tieghemella* Pierre, based only on seed material, was too obscure to be used. Dubard (in *Ann. Mus. Col. Marseille, sér. 3*, 3: 40–41. 1915) reconsidered the two genera and concluded that they were most likely congeneric. Although being aware that *Tieghemella* Pierre should have priority (but unaware of *Tieghemella* Berl. & De Toni) he decided to keep *Dumoria* because of its much clearer description and published the new combination *D. africana* (Pierre) Dubard for the Gabonese species. Later, however, both species of *Dumoria* were treated in *Mimusops* by Hutchinson & Dalziel (*Fl. W. Trop. Afr.* 2: 14. 1931), a position followed by several other authors during the next 30 years.

Based on material that had accumulated in the intervening decades, including flowering material of the Gabonese species, Aubréville (in *Notul. Syst. (Paris)* 16: 235. 1960) first demonstrated unambiguously that the two species were congeneric. Unfortunately, he was also unaware of the precedence of *Tieghemella* Berl. & De Toni and discarded the name *Dumoria* in favour of *Tieghemella* Pierre. However, Aubréville never made formally the combination *T. heckelii*, which was inadvertently but validly published three years later by Heine (in Hepper, *Fl. W. Trop. Afr., ed. 2*, 2: 21. 1963).

The illegitimacy of the name *Tieghemella* Pierre, pointed out in the *Index Nominum Genericorum* (<http://botany.si.edu/ing/>), could easily be overcome, as the legitimate name *Dumoria* can be adopted without need of any new species combination (*D. africana* having been published by Dubard in 1915, l.c.: 41). However, the name *Tieghemella* Pierre is firmly established in both taxonomic and politico-commercial literature, in comparison to *Dumoria*. Since Aubréville (l.c. 1960) convincingly distinguished the two species from *Mimusops*, placing them in *Tieghemella*, the later genus has been widely accepted in taxonomic works. The only departure from this was by Baehni (in *Boissiera* 11: 121. 1965), who combined the considered species under *Baillonella* in his system of *Sapotaceae*. The name *Dumoria* has not been accepted since Aubréville's treatment, while *Tieghemella* predominates in monographs, in regional floristic publications, and in ecological, forestry and phylogenetic works (as in 29 references noted, including Aubréville, *Fl. Gabon* 1: 45. 1961, *Fl. Cameroun* 2: 42. 1964; Heine, l.c.; Keay & al., *Nigerian Trees* 2: 35. 1964, ed. 2: 392. 1989; Kunkel, *Trees Liberia*: 196. 1965; Gautier in Lebrun & Stork, *Énum. Pl. Fleurs Afr. Trop.* 4: 148. 1997; Burkill, *Useful Pl. W. Trop. Afr.* 5: 60–61. 2000; Govaerts & al., *World Checkl. Bibliogr. Sapot.*: 323–324. 2001; and PROTA [Fr. version] 7(1): 624. 2008). This is further evidenced by a Web search

conducted on 2 August 2010, which gives a very neat advantage to “*Tieghemella* + timber” (more than 5800 results) compared to “*Dumoria* + timber” (235 results).

In turn, the fungal name *Tieghemella* Berl. & De Toni, which has priority over *Tieghemella* Pierre, is now placed under synonymy of *Absidia* Tiegh., as the type (*T. repens* (Tiegh.) Berl. & De Toni) is currently recognized as an *Absidia* species (*A. repens* Tiegh.) according to the *Index Fungorum* (<http://www.indexfungorum.org/>). Among the other fungal species previously placed under *Tieghemella* Berl. & De Toni, most are now considered *Absidia* species as well, and a few are placed under *Gongronella* Ribaldi, *Lichteimia* Vuill. and *Rhizomucor* Lucet & Constantin. A recent revision (Hoffmann & al. in Mycol. Res. 111: 1169–1183. 2007) using molecular, morphological and physiological data confirmed the placement in *Absidia* of several species previously placed under *Tieghemella* Berl. & De Toni, including the type species *T. repens*. Two poorly known species without any recorded economic interest still await transfer from *Tieghemella* Berl. & De Toni to another genus.

Although acknowledging the illegitimacy of *Tieghemella* Pierre, Pennington (Gen. Sapotaceae: 125–126. 1991) continued to accept this

genus in his monograph of *Sapotaceae* genera, labelling it as a “nom. cons. prop.”, but such a proposal has never been prepared. Given this precedent, and the historical pattern of usage of both generic names in different parts of West Africa, we consequently assume that a change from *Tieghemella* Pierre to *Dumoria* A. Chev. would not be implemented by most political and forestry authorities, perpetuating the confusion in the future and increasing the nomenclatural discrepancy between those in the scientific community and politico-commercial authorities. We therefore now finally propose the conservation of *Tieghemella* Pierre.

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(1950) Proposal to conserve the name *Caytonia* against *Laconiella* (Fossil *Gymnospermae*, *Caytoniopsida*)

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- (1950) *Caytonia* H.H. Thomas in Philos. Trans., Ser. B 213: 314. 21 Feb 1925, nom. cons. prop.
Typus: *C. seawardii* H.H. Thomas (‘*sewardii*’).
- (=) *Laconiella* F. Krasser in Akad. Wiss. Wien Sitzungsber., Math.-Naturwiss. Kl., Abt. 1. 129: 16. 13 Dec 1920¹ [Foss.], nom. rej. prop.
Typus (hic designatus): *Grithoropia nathorstii* H.H. Thomas (Philos. Trans., Ser. B 213: 305. 21 Feb 1925).

The congeneric identity of both fossil genera, *Caytonia* and *Laconiella*, was established as early as 1929 by Edwards (in Ann. Mag. Nat. Hist., ser. 10, 4: 386. 1929) (along with *Grithoropia* H.H. Thomas, a synonym of *Caytonia* H.H. Thomas), and later was accepted by Harris (in Ann. Bot. (Oxford), n. ser., 16: 718. 1940, in Yorksh. Jurass. Fl. 2: 20. 1964). After Edwards’s synonymization, *Laconiella* fell into oblivion, and disappeared from palaeobotanical works. However, its generic priority still remains over the well-known and widely used generic name *Caytonia* that serves as type of a distinct group of extinct plants, ranging from family to even subphylum [*Caytoniaceae* Kräusel in Engler & Prantl, Nat. Pflanzenfam. ed. 2, 13: 98, 1926, *Caytoniales* E.V. Wulf in Priroda 15(11–12): 95. 1926, *Caytoniopsida* H.H. Thomas in Arkell, Jurass. Syst. Gr. Brit.: 219. 1933 (‘*Caytoniales*’), and *Caytoniophytina* Doweld, Prosyllabus:

xxi. 2001] and very widely used in modern systematic palaeobotany. Article 38.1 of the ICBN (McNeill & al. in Regnum Veg. 146. 2006) states that “In order to be validly published, a name of a new taxon of fossil plants of specific or lower rank published on or after 1 January 1912 must be accompanied by an illustration or figure showing the essential characters, in addition to the description or diagnosis, or by a reference to a previously and effectively published illustration or figure”, and therefore, *Laconiella* as a generic name is validly published (Art. 38.1 does not apply to generic names), and hence disturbing the established use of widely known generic name *Caytonia*, which was published later.

However, Harris (l.c.: 20. 1964) treated the synonymy differently: “In 1920 Krasser published his *Laconiella* and gave diagnosis but no figure; hence this was not valid publication, since the rule requires a figure. [...] *Laconiella* is strictly a nomen nudum.” In reality, this was not true, because the *Montreal Code* (Lanjouw & al. in Regnum Veg. 23. 1961) effective at the time of Harris’ monographic treatise of 1964, had already revised Art. 38 limiting its application to names of species and infraspecific taxa only; generic names escaped being obligatorily illustrated or have any references to illustrations. In former editions of the rules of nomenclature, starting from the *Brussels Rules* (Briquet, Règles Int. Nomencl. Bot., ed. 2. 1912) to the *Paris Code* (Lanjouw & al. in Regnum Veg. 8. 1956), provision of an illustration for valid publication of the name of a fossil taxon applied to a name of *any rank*, and therefore Harris was right in his reference to the existence of such a ‘rule’. Nevertheless, the change of the provisions of the article to limit its application only to names

¹ Börsenblatt für den Deutschen Buchhandel, 13 Dec 1920 (№ 281, S. 15182).