

Bulletin of the *Cupressus* Conservation Project

Volume 6 No 2 - 28 February 2017

Contents

Volume 6 Number 2

Comments on the decision of the Nomenclatural Committee on the proposal to reject <i>Cupressus tortulosa</i> Griff.	43
D. Maerki	
<i>Abstract</i> : Recently the Nomenclatural Committee for Vascular Plants published its decision on proposal #1920, rejection of the binomial <i>Cupressus tortulosa</i> Griffith. This report explains the motives of the votes (13 to "not recommend" the proposal, 2 to "recommend" it and 3 abstentions). Every point of this report is commented on and discussed in detail, while analysing the writings of the relevant authors of the 19th century. The conclusion is reached that <i>Cupressus tortulosa</i> Griff. (1854) remains the correct binomial for the Tsenden, the national tree of Bhutan. The type of <i>Cupressus corneyana</i> Carrière is formally designated.	
Neotypification appearing in Bull CCP 6 (2)	
Cupressus cornevana Carrière – Neotypification by D. Maerki	47

This Bulletin is edited by the *Cupressus* Conservation Project, a non-profit organisation based in Geneva, Switzerland. It deals mainly with *Cupressus* species, but accepts manuscripts on other species of conifers. Emphasis is given to threatened and endangered taxa. Manuscripts are accepted in the following languages : English, French, German, Spanish, Italian and Russian. The Bulletin is peer reviewed.

Responsible Editors : Didier Maerki & Michael Frankis (England) - Contact by email : bulletin@cupressus.net

Editors : Keith Rushforth (England), Jeff Bisbee (USA), Thierry Lamant (France), Joey Malone (USA), Patrick Perret (Switzerland).

All articles (texts and photos) are copyrighted by the Cupressus Conservation Project and their authors.

Reference : Bull. Cupressus Conservation Proj.

Prices : online pdf version : free access ;

printed version : 30 CHF or 26 Euro per issue. Airmail shipping worldwide included. Publication is irregular. Payment after delivery. After one's subscription, the next issues will be sent automatically, unless cancellation of the subscription takes place before shipping. <u>www.cupressus.net/subscription.html</u>

Web site : <u>www.cupressus.net</u> – Bulletin web site : <u>www.cupressus.net/bulletin.html</u> Online PDF Version : ISSN 2235-400X

Bulletin No 14

Cover photo : *Cupressus tortulosa*, wild, Bhutan. 29 September 2011. © Rinchen Yangzom.

Comments on the decision of the Nomenclatural Committee on the proposal to reject *Cupressus tortulosa* Griff.

In *Taxon* 65: 1154, the Nomenclatural Committee for Vascular Plants published its decision (inserts in blue text, below) more than six years after the proposal #1920 was submitted (February 2010 – October 2016). This proposal deals with the rejection of *Cupressus tortulosa* Griff., conserving *Cupressus cashmeriana* Carrière when the latter is considered (in this author's judgement, erroneously) as a synonym of the former.

(1920) To reject *Cupressus tortulosa* Griff. (Cupressaceae). Proposed by A. Farjon in Taxon 59 (1): 297. 2010. Votes: 2–13–3 (not recommended; see discussion below).

The decision not to recommend the rejection of *Cupressus tortulosa* is quite welcome whatever the reasons which led to that decision. These reasons are commented in detail below.

This is a complicated older proposal that the Committee was not able to deal with definitively in the past. The facts laid out in the proposal are as follows: *Cupressus tortulosa* Griff. pertains to a Himalayan species now called *C. cashmeriana* Royle ex Carrière.

If this was possibly not openly contested when the proposal was written (but see Carrière 1855, 1867), it is not the case today as *Cupressus tortulosa* was clearly separated from *Cupressus cashmeriana* (Maerki 2014b). Moreover *Cupressus cashmeriana* is now neotypified with material from the Jardin des Plantes in Paris where Carrière was working (Maerki 2013, 2014d).

The first published name for the species was *C. pendula* Griff., an illegitimate later homonym of *C. pendula* Thunb. Griffith later [posthumously] published *C. tortulosa* as a replacement name for *C. pendula* Griff., but it was rarely adopted and appears in very little literature.

The published name by Griffith is *Cupressus tortulosus* (corrected to *tortulosa*). The information in the middle of the 19th century was not as readily available as it is today, especially as Griffith papers were published posthumously not in Europe, but in Calcutta (India) in 1854. In England a plant became available under the name *Cupressus corneyana* Hort. (Knight & Perry 1850). In 1855, this taxon was formally described by Carrière under the same name. This explains why the Bhutan Cypress became more widely known in Europe as *Cupressus corneyana* Carrière rather than under Griffith's name. Further confusion arose when the Bhutan Cypress was mistaken for *Cupressus cashmeriana* (Kent 1900; Elwes & Henry 1910; Dallimore & Jackson 1923: 194; Farjon 1994, 2005; Farjon & Filer 2013; etc.). Noteworthy are the few authors like Grierson & Long (1983) and Rushforth (1987: 111) who kept the two species distinct.

Additional reasons presented for favoring rejection of C. tortulosa included the following:

(1) It is confusingly similar to *C. torulosa* D. Don [ex Lamb.], another species from the same region. Both species are used in horticulture.

Cupressus tortulosa can already be clearly distinguished from *Cupressus torulosa* at the seedling stage and by several other characters (Maerki 2014b). The two species are separated by more than 600 km in a straight line and over numerous valleys and summits which are seldom below 2000 m. It is difficult to call this 2400 km long mountain range the "same region" as the conifer vegetation is quite different from western (*Cedrus deodara, Abies pindrow, Pinus gerardiana, Picea smithiana*) to eastern Himalaya (*Tsuga dumosa, Abies densa, Pinus bhutanica, Larix griffithii, Picea spinulosa*).

Cupressus torulosa is not currently known to be available in horticulture, as virtually all seeds purchased by nurseries are wrongly labelled. They are mostly *Cupressus lusitanica* Mill. from seeds collected in exotic cypress orchards planted in the Himalayan foothills by the English when they ruled India. The same is true of seeds of *Cupressus cashmeriana* of the same origin which can be anything from *Cupressus lusitanica* to *Cupressus glabra* Sudw. *Cupressus tortulosa* and *Cupressus cashmeriana* can be found in nurseries that grow these species from cuttings or by grafting, or from

seeds collected on cultivated trees in Europe. They are not hardy below USDA zone 8, and even in this zone they can be severely damaged or killed during cold waves with lows to -15°C.

(2) The publication of *C. tortulosa* cites a simultaneously published plate (Icon. Pl. Asiat. 4:

t. 372. 1854), which is captioned "*torulosis*". The orthography of that variant would be correctable to "*torulosa*", a later homonym of *C. torulosa*.

Cupressus tortulosa is the valid name for *Cupressus pendula* Griff. [non Thunb.] (1848) in Griffith 1854 (*Notulae*: 26), but is also present with the same spelling in the index p. 750 and in the index of *Ic. Pl. Asiat.* p. iii, with the references to the plate and to the diagnosis. We have three occurrences of *Cupressus tortulosa* vs. one of "*Cupressus torulosis*". We could speculate if Griffith knew the species described by D. Don, but the situation looks like a classical mistake with the engraving of a plate with a wrong name. Another evidence of the difficulty to edit the posthumous papers of Griffith, no more.

(3) Typification has been confused, though original material is available. Farjon tried twice to designate a type for *C. pendula* Griff., but admits that neither attempt was effective. Both he and a later author designated Griffith 27 at K as the lectotype of *C. tortulosa*, but those publications did not treat *C. tortulosa* as a nomenclatural synonym of *C. pendula* Griff.

The "later" author's name is John Silba (2009). If there was any doubt, the correct typification was done in 2014 (Maerki 2014a, 2014c).

Extensive discussions within the Committee, both in the past and during the past year, raised several concerns about this proposal, among them that *Cupressus cashmeriana* may have been originally applied to a different species and that the name has not been adopted in Bhutan.

The species described by Carrière in 1867 is not the same as the one growing wild in Bhutan. As already mentioned above, Carrière described the Bhutan Cypress in 1855 under the name *Cupressus corneyana*. He was competent enough to distinguish both species. He later (in 1867) reduced *Cupressus corneyana* to a variety of *Cupressus torulosa*, but he was not aware of the complete biogeography of both species as the name 'Boutan' ¹ (whichever the spelling) was used much more extensively than nowadays to include Indian areas where *Cupressus torulosa* is growing (Maerki 2013).

A third issue, and ultimately definitive in this round of voting, was that most of the Committee came to believe that *C. tortulosa* had no nomenclatural standing. Griffith did not state that he intended to publish a replacement name for *C. pendula* Griff., nor did he mention *C. pendula* Thunb.

This is a very strange belief. If *Cupressus tortulosa* has no standing, what about *Taxus contorta* and possibly other species described by Griffith? In both cases the species are described in the *Itinerary Notes* (Griffith 1848) and these descriptions are referenced in the *Notulae*. From India, L'Héritier described a *Cupressus pendula* L'Hér. (= *Cupressus lusitanica*). It has no bearing whether Griffith understood he had to replace Thunberg's or L'Héritier's Latin tree name. The fact is that he validated *Cupressus tortulosa*, with his *Cupressus pendula* (1848) listed as a synonym. This is acknowledged by the following comment of the Nomenclatural Committee.

He placed his *C. pendula* within the synonymy of a species called in one place "*C. tortulosa*" and in another "*C. torulosis*", without any authorial attribution indicating that he intended to publish a new name.

It is difficult to find any author's name in Griffith's posthumous publications. The fact is that the new name is published in the same way as *Taxus contorta*.

Several important early references assumed that Griffith had intended to place *C. pendula* Griff. in synonymy of *C. torulosa* D. Don, and that the two other epithets appearing in the work were simply orthographic variants of that name.

It is interesting to understand which are these "[s]everal important early references". The first one is Gordon (1858). He mentions "*C. pendula* Griffith" as synonym of "CUPRESSUS TORULOSA

¹ Carrière 1855: 118.

Don the Twisted or Bhotan Cypress"² together with "Syn. Cupressus cashmeriana, *Hort*." and "Nepalensis *Loudon*." Is Gordon a reliable source of information? He lists *Cupressus corneyana* under a variety of *Juniperus chinensis* (1858: 117 – see Maerki 2017: 27 for details)³. About *Cupressus torulosa*, Gordon writes (1858: 70): "[I]n South-East Gurhwal [Uttarakhand, India] it is in abundance at from 7000 to 8000 feet of elevation. It is [...] the Weeping Cypress of travellers", setting up another confusion with *Cupressus pendula/tortulosa* as the description by D. Don (1824) of *Cupressus torulosa* does not mention pendulous branches⁴. A further example of confusion is the assimilation by Gordon of old specimens of *Cupressus torulosa* with *Cupressus tortulosa* on the sole basis of the weeping habit. He states about *Cupressus funebris* (p. 60): "it assumes, as it gets older, very much the appearance of the Indian Cypress (Cupressus torulosa), which also becomes quite weeping, when old, on the hills of India."

Hooker & Thomson (*Flora Indica*, 1855) give a detailed account of two different cypress species growing on the Himalayan slopes between north-west India and Bhutan (p. 195): "The Western Himalaya has four species which are not found in Nipal or the Eastern Himalaya. [...] 3. *Cupressus torulosa*, which is probably the wild state of the common cypress ; it is a rare plant in the Himalaya, but is found at Niti, near Simla, and at Naini Tal, and may perhaps occur in Western Nipal."

The Veitch's *Manual of the Coniferae* (1881: 40) quotes Hooker (1854a): "Referring to the distribution of Himalayan Conifers, Sir J. D. Hooker remarks that the Deodar has not been seen east of Nepaul, nor *Pinus Gerardiana*, nor *Cupressus torulosa*." ⁵ Further (p. 239) about the habitat of *Cupressus torulosa*: "The north-western Himalayas, at heights varying from 6,000 to 12,000 feet", thus excluding again Bhutan. *Cupressus corneyana* is acknowledged as a variety following Carrière with this precision: "Carrière [...] states that it is a native of the Himalayas, but gives no authority."

Then Hooker (1888: 645-646) compiles the available information. Under *Cupressus torulosa*, Hooker cites Griffith's *Itinerary Notes* p. 240⁶ and the Plate 372 ("*Cupressus torulosis*") in *Ic. Pl. Asiat.*, but there is no mention of the *Notulae* where *Cupressus tortulosa* is replacing *Cupressus pendula*. Interesting is the range given: "from Nepal to Chamba", thus still excluding Bhutan and corresponding to the actual *Cupressus torulosa* distribution range (West Nepal, Uttarakhand, Himachal Pradesh). Further, under *Cupressus funebris*, Hooker lists: "*Griff. Itin. Notes* 131, 143, No. 679 a". Page 131, #529 and page 143, #679a are both accessions of *Cupressus pendula*. Hooker separates both taxa under different names and recognises that they are distinct confirming his descriptions of the *Himalayan Journals*. He comments further: "*C. pendula* is the first name given to this species, but it was preoccupied for *Thuja pendula*, Lamb., the *Biota pendula*, Endl., which

² The common name given by D. Don to *Cupressus torulosa* is "Bhotan Cypress" (see Maerki 2013 for the discussion on "Bhotan"). In the 19th century, the authors are quoting the *Prodromus Florae Nepalensis* (1825) where D. Don gives: "*Hab.* in Bhotaniae alpibus." To make it short: the Bhotan alps are not equivalent to the country of Bhutan. Hence the link with *Cupressus pendula* Griff. native to Bhutan, which is enough to explain Gordon's synonymy not based on specimen examination, but on a mistaken locality understanding.

³ On the possible confusion between genera (*Juniperus excelsa* Royle [= *J. recurva* Buch.-Ham] viz. *Cupressus pendula*), Gordon wrote (1858: 108-109): "No Indian Conifer seems to have been more confused or mixed up in the cloudy regions of conjecture, than this species, both by European and Indian writers. The Indian travellers confounding it with Cupressus torulosa, a tree which in general appearance it very much resembles when old, and may easily be confounded with, by common observer". By their foliage already, it is not possible to mistake one of these two weeping species for the other. And so easier for botanists who never travelled to Himalaya to confuse *Cupressus tortulosa* with the species described by D. Don.

⁴ "*Ramuli* confertissimi, teretes, divaricati, patentes, torulosi, 2-6-pollices longi, undique foliis crebrè imbricati." Moreover Gordon ignores Hooker's *Himalayan Journals* (1854) where the later is identifying the observed cypresses planted around temples in Sikkim and Bhutan not as *Cupressus torulosa*, but as *Cupressus funebris* (see below) demonstrating that it is not possible to confound the two cypresses in the field.

⁵ But also listing it, in a footnote, among "the twelve Sikkim or Bhotan Conifers", another misunderstanding... as Hooker states (1854a: 256): "Of the twelve [...] Sikkim and Bhotan *Coniferae* [...] eight are common to the Northwest Himalaya (west of Nepal), and four are not" among which *Cupressus funebris*, thus with two distinct ranges too for the two Himalayan cypresses known in Great Britain.

⁶ Afghanistan flora, #327: "Cupressus.—Arbuscula densa, sempervirens, floribus capitulis masculis terminalibus, fuscis sub rotundis, snowy mountain Sinab, descends as low as 6500 ft." It fits the description and locality of a *Juniperus*.

genera are now reduced to *Cupressus*." Such confusion and mistake make no sense, except for the scarcity of material and lack of knowledge and accuracy at the end of the 19th century.

In 1868, Parlatore (in De Candolle, *Prodromus*) mentioned *Cupressus pendula* under *Cupressus torulosa*, but with a question mark.

Jackson (1893) for the first time listed *Cupressus pendula* as a synonym of *Cupressus torulosa*, referencing "Griffith, Notul. iv. 26", but failed to address the name *tortulosa*. The *Index Kewensis* is "an enumeration of the genera and species of flowering plants from the time of Linnaeus to the year 1885 inclusive together with their authors's names, the works in which they were first published, their native countries and their synonyms." This index is a compilation (several volumes) of the available literature ⁷; it has no taxonomic value.

Masters (1896) followed Hooker (*torulosa* = wild in Western Himalaya, *funebris* = cultivated in Sikkim and Tibet – p. 324), although listing *Cupressus pendula* in the same way as Jackson (p. 361). He failed to consider *Cupressus cashmeriana* Carrière, and put "*cashmiriana*, hort." under *torulosa*. When Kew received a specimen of *Cupressus tortulosa* from Isola Madre, Masters (1896a: 37) did not recognise it as the same species as Griffith's "*Cupressus pendula*" (or as *Cupressus torulosa*! – cf. *Griffith 529*) and named it – again partially after Hooker – "*Cupressus funebris* var. *glauca*" ("*C. kashmiriana*, Hort."), ignoring Carrière and starting a new round of confusion⁸.

In 1900, Kent acknowledged three taxa under *Cupressus torulosa*, *Cupressus torulosa* var. *corneyana* Carrière and *Cupressus torulosa* var. *cashmeriana* [kashmiriana] (Carrière) Kent (\equiv *Cupressus cashmeriana* Carrière). Unfortunately the two later taxa are the same species, one of them a glaucous cultivar.

Thus three taxa were identified after Carrière, but two of them designated wrongly the same species. This error was reproduced by different authors (see above) and led to proposal #1920.

To summarise what is possible to learn with the "important early references": only two authors "assume" – on an erroneous basis – the synonymy of *Cupressus pendula* with *Cupressus torulosa*. And Jackson in 1893 was the only author (from the ones quoted here) to mention the *Notulae*⁹. Is it necessary to validate a long series of mistakes from authors of more than a century ago?

Working with living material and not from assumptions, Carrière ¹⁰ could distinguish and identify three different taxa growing along the southern Himalayan range. His diagnoses find confirmation today.

Because the publication was posthumous, Griffith would have had no opportunity to correct spelling errors. There is no independent support for the view that Griffith intended to publish a new name, and if this is a mere orthographic variant, there is no need to reject it.

This is working both ways: there is no independent support for the view that Griffith did not intend ¹¹ to publish a new name, when in Bhutan there is no way to confuse the Tsenden with a *torulosa* (cf. Hooker, *Himalayan Journals*). The fact is that *Cupressus tortulosa* is validly published and now typified. It is by no way a "mere orthographic variant" ¹².

In a recent article by Bhutanese authors (Kaka et al. 2014), the name Cupressus tortulosa is accepted.

⁷ But forgets *Cupressus cashmeriana* Carrière, lists *Cupressus lusitanica* as a synonym of *Cupressus glauca*, gives *Prodromus Florae Nepalensis* instead of Lambert for D. Don's diagnosis of *torulosa*.

⁸ *Cupressus tortulosa* was thus first confused with *Cupressus torulosa* or *Cupressus funebris*, and then with *Cupressus cashmeriana*. The same mistake is done time and again (see Gordon viz. *Juniperus chinensis* var. *corneyana*): to care about the foliage and to forget to study the cones.

⁹ Masters (1896) copies Jackson.

¹⁰ For "CUPRESSUS PENDULA, Griffith, *ex* Gord. *Pinet*. 69." as synonym of *Cupressus torulosa*, Carrière (1867: 150) just copies Gordon. It has no value as an independent reference.

¹¹ Is it worth discussing the intentions of Griffith? Has the Nomenclatural Committee the intention to question all Griffith's binomials which do not have more to offer than *Cupressus tortulosa*?

¹² Considering the examples listed under article 53.3 Ex. 12 of the Melbourne code, there is no more reason to confuse *tortulosa* with *torulosa* than for instance *peplis* with *peplus* or *napaeifolius* with *napifolius*, etc.

Conclusion

Cupressus tortulosa Griff. (1854) is the correct binomial for the Tsenden, the national tree of Bhutan: - the lectotype was collected in Bhutan and the *locus classicus* is recorded; a quest for trees seen by Griffith is still possible: this species is very long lived and Griffith's itinerary can be retraced;

- Long (1980), Grierson & Long (1983) and Rushforth (1987) describe unambiguously three *Cupressus* species along the southern Himalayan range. *Cupressus tortulosa* is identified as *Cupressus corneyana*. Franco (1969: 187) is the first to discuss *Cupressus corneyana* as the Bhutan cypress and writes:

From what above explained, *Cupressus corneyana* Carr. (1855) must be taken as the correct name for the weeping cypress also known as *C. pendula* W. Griff. (1848), non Thunb. (1783), and *C. cashmeriana* Carr. (1867) ^[13]. As no type-specimen is available, I should propose as neotype the specimen, in fruit, from the herbarium George Gordon, preserved at Kew and labelled «*Cupressus Corneyana*».

As the "proposition" is conditional, the neotypification is not done, although the sample intended by Franco is indeed a *Cupressus tortulosa*. At the same time Franco considers *Cupressus corneyana* Carrière as a nomenclatural synonym of *Cupressus pendula* Griff. above and here also as a homotypic synonym (Franco 1969: 192 – red emphasis added):

Cupressus corneyana [Hort. ex Knight & Perry, Syn. Conif. 19 [1850], nom. nud.] Carr., Tr. Conif. 128. Jun. 1855; Gord., Pinet. Suppl. 23. 1862.
Juniperus sp. W. Griff., Itin. Notes: 100, n° 27. 1848.
Cupressus pendula W. Griff. op. cit.: 131, sub n° 529; 143, sub n° 679a. 1848 [...]

It follows that the type of *Cupressus pendula* Griff. – *Griffith 27* – is automatically applied to *Cupressus corneyana* Carrière and **formally here designated** (see also synonym list below).

- Although some authors are still considering *Cupressus tortulosa* and *Cupressus cashmeriana* as the same species, the presented evidence (Maerki 2013, 2014b) should bring an end to the confusion of the two species.¹⁴

The Bhutanese know that their national tree is different from the one growing in Arunachal Pradesh, India. Out of respect for them and after the Nomenclatural Committee does not recommend the proposal #1920 – *ipso facto* accepting *Cupressus tortulosa* – the case is settled.

Synonym list:

Cupressus tortulosa Griff., Not. Pl. Asiat. 4: 26. 1854.

- *≡ Cupressus pendula* Griff., Itin. Notes: 131, #529. 1848 [non Thunb. 1784].
- *≡ Cupressus corneyana* Knight & Perry, Syn. Conif. Pl.: 19. 1850 [nom. nudum].
 - = Cupressus corneyana Carrière, Traité Gén. Conif.: 128. 1855.

≡ Cupressus torulosa var. *corneyana* (Carrière) Carrière, Traité Gén. Conif. ed. 2: 151. 1867.

Lectotype: Bhutan: Dewangiri [now Deothang], Samdrup Jongkhar District, 6.I.1838, Griffith 27

- (K! [K000088093]) (designated by Maerki 2014a, 2014c).
- Syntypes: Griffith, Ic. Pl. Asiat. 4: tab. 372; Griffith 529.

Epitype: s.l., s.d., Griffith 1001/1 (P! [P06489919]) (designated by Maerki 2014a, 2014c).

= *Cupressus himalaica* Silba in Phytologia 64: 80. 1987.

Holotype: Bhutan: Norbding, below Pele La, 2250 m, Grierson & Long 1079 (E).

Cupressus cashmeriana Carrière, Traité Gén. Conif. ed. 2: 161. 1867.

≡ Cupressus torulosa var. *cashmeriana* [*kashmiriana*] (Carrière) Kent in Veitch, Man. Conif. ed. 2: 234. 1900.

Neotype: Y. Pauthier s.n., December 2011 (P!) (designated by Maerki 2013: 50).

= Cupressus pseudohimalaica Silba in J. Int. Conifer Preserv. Soc. 1(1): 23. 1994.

Holotype: France: Saint-Jean-Cap-Ferrat, cultivated, August-September 1994. S. Marnier Lapostolle s.n. (NY! [NY00038495-NY00038496]).

¹³ See note 8.

¹⁴ This confusion took its origin in the fact that the Isola Madre tree is a cultivar of *Cupressus tortulosa* (its foliage is similar to the one of *Cupressus cashmeriana* – but see note 8).

Bibliography

Applequist, W.L. (2016). <u>Report of the Nomenclature Committee for Vascular Plants: 68</u>. *Taxon* 65: 1153-1165. Carrière, E.-A. (1855). *Traité Général des Conifères*. Chez l'auteur, Paris, France.

Carrière, E.-A. (1867). Traité Général des Conifères. Nouvelle éd. – Première Partie. Chez l'auteur, Paris, France.

Dallimore, W. & A.B. Jackson (1923). *A handbook of Coniferae including Ginkgoaceae*. E. Arnold, London, UK. De Candolle, A. (1868). *Prodromus*. Part 16. V. Masson, Paris, France.

- Don, D. (1825). A handbook of Coniferae including Ginkgoaceae. E. Arnold, London, UK.
- Elwes, H.J. & A. Henry (1910). The trees of Great Britain and Ireland. Vol. 5. Edinburgh, Scotland, UK.
- Farjon, A. (1994). 253. Cupressus cashmeriana, Cupressaceae. Bot. Mag. (Kew Mag.) 11: 156-166.
- Farjon, A. (2005). A Monograph of Cupressaceae and of Sciadopitys. Kew Publishing, Richmond, Surrey, UK.
- Farjon, A. (2010). [1920] Proposal to reject the name Cupressus tortulosa (Cupressaceae). Taxon 59: 297.
- Farjon, A. (2013). 765. Cupressus torulosa, Cupressaceae. Curtis's Bot. Mag. 30: 166-176.
- Farjon, A. & D. Filer (2013). An Atlas of the World's Conifers: An Analysis of Their Distribution, Biogeography, Diversity, and Conservation Status. Brill, Leiden, Netherlands.
- Franco, J.D.A. (1968-1969). On Himalayan-Chinese Cypresses. Portugaliae Acta Biol., Ser. B, 9: 183-195.
- Gordon, G. (1858). The Pinetum. Assisted by Robert Glendinning. Henry G. Bohn, London, UK.
- Grierson, A.J.C. & D.G. Long (1983). Flora of Bhutan. Vol. 1, Part 1. Royal Botanic Garden, Edinburgh, UK.
- Griffith, W. (1848). Itinerary Notes of Plants Collected in the Khasyah and Bootan Mountains, 1837-38, in Affghanisthan and Neighbouring Countries. 1839 to 1841. Posthumous Papers Bequeathed to the Honourable, the East India Company and Printed by Order of the Government of Bengal. Vol. II Arranged by John McClelland. J.F. Bellamy, Calcutta, India Orientali.
- Griffith, W. (1854). *Notulae ad Plantas Asiaticas. Part IV. Dicotyledonous Plants.* Posthumous Papers Bequeathed to the Honourable, the East India Company, and Printed by Order of the Government of Bengal. Arranged by John McClelland. C.A. Serrao, Calcutta, India Orientali.
- Griffith, W. (1854a). Icones Plantarum Asiaticarum. Part IV, Dicotyledonous Plants. Coshan, Calcutta, India Orientali.
- Hooker, J.D. (1854). Himalayan Journals. Vol. 1 & 2. J. Murray, London, UK.
- Hooker, J.D. (1888). The Flora of British India. Assisted by Various Botanists. Vol. 5. Chenopodiaceae to Orchideae. L.Reeve &Co, London, UK.
- Hooker, J.D. & T. Thomson (1855). Flora Indica. Vol. 1. W. Pamplin, London, UK.
- Jackson, B.A. (1893). Index Kewensis. Part 2. Clarendon Press, Oxford, UK.
- Kaka, D.B. Gurung, Y. Khandu, O. Katel, P.B. Chhetri & P. Wangda (2014). Population Structure of *Cupressus* tortulosa Griffith along the Altitudinal Gradients of Tsendenanag Ridge in Punakha, Bhutan. *Bhutan Journal* of Natural Resources & Development 1: 24-31.
- Kent, A.H. (1900). Veitch's Manual of the Coniferae. 2nd ed. J.Veitch & Sons, Royal Exotic Nursery, Chelsea, UK.
- Knight & Perry (1850). Synopsis of the Coniferous Plants sold by Knight and Perry, Exotic Nursery, King's Road, Chelsea. Longman & Co, London, UK.
- L'Héritier, C.L. (1784). *Stirpes Novae descriptionibus et iconibus illustratae*. Fasc. 1, 15-16, Plate 8, ex typographia Philippi-Dionysii Pierres, Paris, France.
- Long, D. G. (1980). Notes relating to the Flora of Bhutan: IV, The weeping cypress, *Cupressus corneyana* Carrière. *Notes Roy. Bot. Gard. Edinburgh* 38: 311-31
- Maerki, D. (2013). Which Latin name for the Tsenden? Bull. Cupressus Conservation Proj. 2: 39-71.
- Maerki, D. (2014a). Typification of Cupressus tortulosa Griff. Bull. Cupressus Conservation Proj. 3: 69-75.
- Maerki, D. (2014b). <u>Two distinct Himalayan cypress species</u>: *Cupressus tortulosa* and *Cupressus cashmeriana*. *Bull. Cupressus Cons. Proj.* 3: 99-115.
- Maerki, D. (2014c). Note on the epitypification of Cupressus tortulosa. Bull. Cupressus Conservation Proj. 3:115.
- Maerki, D. (2014d). Cupressus cashmeriana Neotype. Bull. Cupressus Conservation Proj. 3: 116.
- Maerki, D. (2017). Taxonomic note on Cupressus funebris. Bull. Cupressus Conservation Proj. 6: 27-29.
- Masters, M.T. (1896). A general view of the genus Cupressus. J. Linn. Soc., Bot. 31: 312-363.
- Masters, M.T. (1896a). Hand-list of Coniferae, grown in the Royal Botanic Gardens. Kew, London, UK.
- Rushforth, K. (1987). Conifers. Christopher Helm, London, UK.
- Silba, J. (1987). Nomenclature of the Weeping Himalaya Cypress (*Cupressus*, Cupressaceae). *Phytologia* 64: 78-80.
- Silba, J. (2009). <u>The Taxonomy of the Griffith Cypress (Cupressus tortulosa Griffith)</u>. J. Int. Conif. Preserv. 16, with add.: 45-50.
- Thunberg, C.P. (1784). Flora Japonica, sistens plantas insularum japonicarum. I.G. Müller, Leipzig, Germany.
- Veitch, J. (1881). A Manual of the Coniferae. J. Veitch & Sons, Royal Exotic Nursery, Chelsea, UK.