

genus *Cestichis* has the same type as *Stichorkis* sensu Szlachetko & al. and 61 new combinations in *Cestichis* have been proposed recently (Jones & Clements in *Orchadian* 15: 33–42. 2005).

(2) Szlachetko & al.'s concept of *Stichorkis* is at odds with the concept of *Stichorkis* as described in a recent, major reference work on *Orchidaceae* (Pridgeon & al., l.c.), and will therefore cause confusion.

(3) *Stichorkis* sensu Rasmussen is a well-defined, monophyletic group, corresponding to *Liparis* sect. *Distichae*. Judging from the more than 70 new combinations they proposed in it, *Stichorkis* sensu Szlachetko & al. is an ill-defined, paraphyletic or even polyphyletic group, as inferred from the molecular phylogeny of *Liparis* and related genera by Cameron (in *Amer. J. Bot.* 92: 1025–1032. 2005).

(4) Recognition of *Stichorkis* sensu Szlachetko & al. necessitated the establishing of a new genus for *Stichorkis* sensu Rasmussen: *Disticholiparis* Marg. & Szlach., in which no less than 38 new combinations were published (Margonska & Szlachetko in *Orchidee* (Hamburg) 55: 175–179. 2004), apparently without critically evaluating the many extremely similar, problematic species.

(5) The genus name of *Stichorkis* sensu Szlachetko & al. refers to a character state (“flowers arranged in ranks”) which its species do not possess; only in *Stichorkis* sensu Rasmussen are the flowers clearly arranged in (two) ranks.

(6) *Epidendrum cespitosum* was described by Lamarck based on a fruiting specimen without flowers. However, the protologue of *Stichorkis* describes the flowers, while stating about the vegetative parts only that they are small and “singular”, with no mention of the fruits. Therefore, the type specimen of *Epidendrum cespitosum* can

hardly be considered to be the type of *Stichorkis* in any practical sense. When Thouars published *Malaxis cespitosa* (and *Stichorkis cestichis*) in 1822, he illustrated his own, flowering material.

On these grounds, we consider it desirable that *Stichorkis* be conserved with the type proposed by Rasmussen (l.c.), *S. disticha* (Thouars) Pfitzer (basynonym: *Malaxis disticha* Thouars). Rasmussen's lectotypification was well considered and argued, and in agreement with the then valid (Leningrad) *Code* (Stafleu & al. in *Regnum Veg.* 97. 1978) when it was proposed in 1979. Major changes in the pertinent part of the *Code* followed the report of the Special Committee on Generic Typification (McNeill in *Taxon* 30: 200–207. 1981) and subsequent readjustments made at the Berlin Congress in 1987. It is the retroactivity of the changes in Art. 10 in the later *Codes* that makes our proposal necessary.

It should be noted that we regard *Stichorkis distichis* Thouars as an alternative name that, by Art. 11.5, was implicitly rejected when Lindley (in *Bot. Reg.*: sub t. 882. 1825) chose *Malaxis disticha* as a basynonym for *Liparis disticha* (Thouars) Lindl. The epithet *distichis* was deliberately formed by Thouars according to his reformed system; it is, in our opinion, not to be regarded as a mere orthographic variant of *disticha*. Therefore, *S. distichis* Thouars and *S. disticha* (Thouars) Pfitzer are two distinct names; the latter is thus not superfluous.

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(2029) Proposal to conserve the name *Meiogyne* against *Fitzalania* (*Annonaceae*)

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(2029) *Meiogyne* Miq. in *Ann. Mus. Bot. Lugduno-Batavi* 2: 12. 23 Mar 1865 [*Annon.*], nom. cons. prop.

Typus: *M. virgata* (Blume) Miq. (*Unona virgata* Blume)

(=) *Fitzalania* F. Muell., *Fragm.* 4: 33. Oct. 1863, nom. rej. prop.

Typus: *F. heteropetala* (F. Muell.) F. Muell. (*Uvaria heteropetala* F. Muell.)

Meiogyne Miq. is a well-known genus of Asian *Annonaceae* with 17 species presently recognized (Van Heusden in *Blumea* 38: 487–511. 1994; Van Heusden in *Bull. Mus. Natl. Hist. Nat., B, Adansoniana* 18: 77–81. 1996; Jessup in *Wilson, Fl. Australia* 2: 51–55. 2007; Turner in *Malayan Nat. J.* 61: 247–249. 2009). The number of species of *Meiogyne*, however, will surely increase as there are several new species to be described (D.M. Johnson, pers. comm). The genus is found from India through southeast Asia to northern Australia, New Caledonia, and Fiji (Van Heusden, l.c. 1994, l.c. 1996). Several genera (*Ancana* F. Muell., *Chieniodendron* Tsiang & P.T. Li, *Guamia* Merr., *Oncodostigma* Diels, *Polyaulax* Backer) have been synonymised with *Meiogyne* on the basis of gross morphology (Van Heusden, l.c. 1994). *Meiogyne*, including the synonymized genera, exhibits a corrugated

or grooved area at the base of the inner side of the inner petals (Van Heusden, l.c. 1994; Jessup, l.c.). Moreover, the apex of those stamens located in the inner whorls (near the carpels) is usually more elongated than those located in the outer whorls (Van Heusden in *Blumea Suppl.* 7: 98–103. 1992; Jessup, l.c.). These two important features also occur in *Fitzalania* F. Muell., an Australian endemic genus with two species (Van Heusden, l.c. 1992: 108–109; Jessup, l.c.: 45–46). However, the colour and appearance of the (inner) petals of *Fitzalania* (very dark purple and more or less boat-shaped) are somewhat different from those of *Meiogyne* and hence are the main reasons to still recognize this genus morphologically (Jessup, l.c.: 45–46). In addition, one of the two species of *Fitzalania*, *F. bidwillii* (Benth.) Jessup & al., possesses sepal-like outer petals, resembling those of *Heteropetalum* Benth. (now included in *Guatteria* Ruiz & Pav.), *Marsypopetalum* Scheff. p.p., *Miliusa* Lesch. ex A. DC., *Phaeanthus* Hook. f. & Thomson, *Piptostigma* Oliv., and *Polyalthia* Blume sensu stricto p.p.

Recent molecular phylogenetic analyses have shown that *Fitzalania* is nested within *Meiogyne*, a relationship that is strongly supported (Mols & al. in Mols, From *Miliusa* to *Miliuseae* to *Miliusoid*, (Ph.D. thesis, Leiden University): 45–46. 2004). This finding is also

confirmed by the authors (in prep.) as part of the first author's Ph.D. study to understand the phylogenetic relationships of genera in one of the major clades of *Annonaceae*. The genera *Ancana*, *Guamia*, and *Polyaulax*, which have been included in *Meiogyne* by Van Heusden (l.c. 1994), are also found to be embedded in *Meiogyne* with strong support. Unfortunately, no suitable material of *Chieniodendron* and *Oncodostigma* is available for DNA extraction. The two species of *Fitzalania* appeared to be sister to each other with maximum support. Therefore, the different colour and appearance of the (inner) petals are a synapomorphy of *Fitzalania*. The sepal-like outer petals of *F. bidwillii* is apparently an autapomorphy.

The principle of monophyly is pivotal in the classification of *Annonaceae*, and several genera have been re-circumscribed or newly described in the recent past. Applying this principle to the situation of *Meiogyne* and *Fitzalania* would result in the transfer of species of *Meiogyne* to *Fitzalania*, according to Art. 11.3 of the *International*

Code of Botanical Nomenclature (McNeill & al. in *Regnum Veg.* 146. 2006), as *Fitzalania* antedates *Meiogyne*.

However, there are good reasons to conserve the name *Meiogyne* against *Fitzalania*. Firstly, the former genus contains many more species. Secondly, *Meiogyne* is better known as it has a considerably larger distribution area covering many more countries. Finally, *Meiogyne* has lent its name to a dimeric sesquiterpenoid, meiogynin A, isolated from the bark of *Meiogyne cylindrocarpa* (Burck) Heusden, which has significant potential as an anti-cancer agent (Litaudon & al. in *J. Nat. Prod.* 72: 480–483. 2009; Fotsop & al. in *J. Org. Chem.* 75: 7412–7415. 2010). Consequently, to maximize the stability of the names, it is appropriate to conserve *Meiogyne* against *Fitzalania*. Whereas at least 17 new combinations would be required if this proposal is not accepted, only two new combinations will be necessary (from *Fitzalania* to *Meiogyne*) if it is accepted.

(2030) Proposal to conserve the name *Solanum torvum* (*Solanaceae*) with a conserved type

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(2030) *Solanum torvum* Sw., Prodr.: 47. 1788 [*Dicot: Solan.*], nom. cons. prop.
 Typus: “Indiae occidentalis”, *O. Swartz s.n.* (S No. S-R-5814), typ. cons. prop.

Solanum torvum is the name currently in use for the most widespread non-cultivated species of spiny solanums (subg. *Leptostemonum*); it is found in the Americas, Asia, Australia, and Africa. It is thought to be native to the Americas and introduced and naturalized elsewhere (Nee, *Solanaceae* IV: 326. 1999). *Solanum torvum* is cultivated as the “pea-eggplant” in southeast Asia, and is commonly known as “turkey berry” or “devil’s fig” in the United States. The name has been in wide and consistent use in local, national and regional floristic works (e.g., Schulz in *Urban, Symb. Antill.* 6: 236. 1909; Adams, *Fl. Pl. Jamaica*: 656. 1972; D’Arcy in *Ann. Missouri Bot. Gard.* 60: 708. 1973; Heine in *Aubreville, Fl. Nouv.-Calédonie & Dépend.* 7: 168. 1976; Symon in *J. Adelaide Bot. Gard.* 4: 115. 1981; Troupin & Bridson, *Fl. Pl. Lign. Rwanda*: 654, 658. 1982; Whalen in *Gentes Herb.* 12: 237. 1984; Symon in *J. Adelaide Bot. Gard.* 8: 152. 1985; Troupin, *Fl. Rwanda* 3: 375. 1985; Nee in *Fl. Veracruz* 72: 135. 1993; Zhang & al. in *Fl. China* 17: 321. 1994; Knapp in Jørgenson & León-Yanez (eds.), *Cat. Vasc. Pl. Ecuador* 917. 1999; Balick & al. in *Mem. New York Bot. Gard.* 85: 126. 2000; White & al., *Evergreen Forest Fl. Malawi*: 554. 2001; Gonçalves in *Exell & Wild, Fl. Zambes.* 8(4): 116. 2005). *Solanum torvum* is also used in the USDA Natural Resources Conservation Services Plant Database (<http://plants.usda.gov/java/profile?symbol=SOTO4>) and in the USDA Germplasm Resources Information Network (<http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?101441>). It is identified as an invasive weed in the U.S.A. (http://www.aphis.usda.gov/plant_health/plant_pest_info/weeds/downloads/weedlist-2010doc.pdf) and has been declared noxious in the states of Alabama, Florida, Hawaii, Massachusetts,

Minnesota and in Puerto Rico (<http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?101441>). *Solanum torvum* is also listed as a weed in 32 countries and as a serious weed in 7 of these (Holm & al., *Geogr. Atlas World Weeds*, 1979). It has been declared a high-risk invasive by the Pacific Island Ecosystems at Risk (PIER) group (http://www.hear.org/pier/species/solanum_torvum.htm), and is naturalised and considered a pest in Queensland (Batianoff & Butler, *Pl. Protect. Quart.* 17: 27–34. 2002). In agriculture, rootstocks of *S. torvum* are grafted to eggplant/aubergine (*S. melongena* L.) to confer pest resistance, and crosses between the two species are being undertaken in order to introduce disease resistance traits into the cultivated plant.

The original publication of *S. torvum* and its subsequent use in Swartz’s *Florae Indiae Occidentalis* (1797) were both illegitimate, as Swartz cited *Solanum indicum* L. in synonymy. Gooding (*Fl. Barbados*: 380. 1965) recognised this and used the name *S. ficifolium* Ortega for *S. torvum*; *S. ficifolium* is a synonym of *S. ferrugineum* Jacq., a Mexican species of the Torva group. Heine (l.c.) drew attention to the illegitimate publication of the name and noted that although the application of *S. torvum* had never been in question, he could not resolve the situation in the context of his flora account for New Caledonia. Hepper (in *Bot. J. Linn. Soc.* 76: 289. 1978) suggested the name was in fact not illegitimate but that Swartz was explicitly separating the New World elements of Linnaeus’s *S. indicum*; he cited a letter from J. Dandy (BM) to C.V. Morton (US) in which Dandy asserted that the use of “26–27” before *S. torvum* indicated that Swartz was placing his species between “26. *S. insanum*” and “27. *S. ferox*” in Murray’s 14th edition of *Species Plantarum*, and apart from “32. *S. indicum*”. Although this explanation is quite plausible, there is no internal evidence in Swartz’s *Prodromus* (1788) that this is the case, although, later, Swartz (*Fl. Ind. Occ.* 1: 457. 1797) appears to have differentiated his *S. torvum* from *S. indicum* in the observations following the species entry by stating “*S. indico* simillimum, sed differt foliis superne