ANNOTATED CHECKLIST OF CYRTANDRA (GESNERIACEAE) OF SUMATRA, INDONESIA

Received June 8, 2022; accepted October 3, 2022

QING WEN WANG
Royal Botanic Garden Edinburgh, 20A Inverleith Row, Edinburgh EH3 5LR, UK.

GEMMA L. C. BRAMLEY
Royal Botanic Gardens Kew, Richmond, London TW9 3AE, UK. Email: g.bramley@kew.org.  
https://orcid.org/0000-0003-0893-6789.

HANNAH J. ATKINS
Royal Botanic Garden Edinburgh, 20a Inverleith Row, Edinburgh EH3 5LR, UK. Email: hatkins@rbge.org.uk.  
https://orcid.org/0000-0002-3523-1883.

ABDULROKHMAN KARTONEGORO
Herbarium Bogoriense, Research Center for Biosystematics and Evolution, National Research and Innovation Agency (BRIN), Jln. Raya Jakarta-Bogor Km. 46, Cibinong, Bogor 16911, Indonesia.  
Email: abdu049@brin.go.id.  
https://orcid.org/0000-0003-4701-3266.

ABSTRACT

WANG, Q. W., BRAMLEY, G. L. C., ATKINS, H. J. & KARTONEGORO, A. 2022. Annotated checklist of Cyrtandra (Gesneriaceae) of Sumatra, Indonesia. Reinwardtia 21(2): 63‒80. — There are 53 species and three varieties of Sumatran Cyrtandra (Gesneriaceae) included in the checklist. Thirty-three lectotypes and four neotypes have been assigned, including for two excluded species. Two species are designated as incertae sedis due to a lack of type material or any associated specimens. A new name of C. jackii is proposed here to replace the illegitimate C. glabra Jack. Most of the species included in the checklist are endemic to Sumatra, with some species distributed in neighboring islands in Malesia. The next step for Cyrtandra in Sumatra is to carry out a full taxonomic revision to better understand distribution patterns and species limits and also to assign appropriate neotypes for those species still missing original material.

Key words: Cyrtandra, endemic, Southeast Asia, Sumatra, typification.

INTRODUCTION

Cyrtandra J.R.Forst. & G.Forst. is the largest genus in the Gesneriaceae with ca. 800 species (Atkins et al., 2013). It is distributed throughout Southeast Asia and across the islands of the Pacific to Hawaii. Its high species number, tendency to restricted endemism and widespread distribution make it an excellent model genus for biogeographic and ecological studies (Atkins et al., 2013; 2020). However, for this potential to be realised basic taxonomic work is required, particularly on the biodiverse islands of Southeast Asia, such as Sumatra.

The first account of Cyrtandra from Sumatra was provided by William Jack in 1823 based on his own collections (Jack, 1823). He described 11 species, mostly from the area around Bengkulu Province. Three years later, Blume proposed 12 Cyrtandra species mostly from Java, some of which were subsequently found to occur in Sumatra (Blume, 1826; Clarke, 1883; Bakhuizen van den Brink, 1950; Backer & Bakhuizen van den Brink, 1965). This was followed shortly afterwards
by three species from Sumatra described by Mi-quel (1858). Clarke (1883) was the first botanist to attempt a monograph of the genus across its distribution, and in that account, he also described a further thirteen species from Sumatra. Ridley (1917, 1923, 1926) then described a further eight species and Moore (1925) added five new species and two varieties from the island. Subsequently, Bramley & Cronk (2003) carried out a revision of the genus on Mount Kerinci on the border between West Sumatra and Jambi Province where they described three new species. Since then, there has been one new species described in 2020 (Smith et al., 2020) and one new name for a later homonym for a Sumatran species (Olivar et al., 2022).

No systematic review of Cyrtandra across the island has ever been undertaken. This comprehensive annotated checklist of the genus in Sumatra is an important step towards a full taxonomic account and a significant contribution to our overall knowledge of Cyrtandra.

MATERIALS AND METHODS

A provisional set of Cyrtandra names from Sumatra was assembled from the Gesneriaceae Resource Centre (GRC, 2022). All protologues were subsequently checked; the type status was confirmed and if appropriate, a lectotype was chosen from the original material if no holotype had been specified. Further discussion on type designation is given below: in general, where a lectotype was selected, it was checked against the protologue to ensure it matched the author’s description of the species; decision making related to particular authors is set out in detail. Information on taxonomic status was taken from floras and other publications (Jack, 1823; Blume, 1826; De Candolle, 1845; Miquel, 1858; Clarke, 1883; Bakhuizen van den Brink, 1950; Bramley & Cronk, 2003; Bramley et al., 2004; Atkins & Kartonegoro, 2021; GRC, 2022; POWO, 2022; Olivar et al., 2022) and no additional taxonomic decision-making was undertaken at this time, although where there is some uncertainty about status this has been indicated in the discussion following the name entry. The checklist entry for each name follows the standard abbreviations for authors (IPNI, 2022) and journals and books (TL2, 2022). Most of the research for this paper was carried out during the restrictions of the Covid-19 pandemic using online resources from the following herbaria (A, BM, FI, G, L, M, MEL, SING, US, WU, abbreviations following Thiers, 2021) and online resources such as JSTOR plants (JSTOR, 2021). Physical collections were checked in herbaria of the home institutions of the authors (BO, E, K) and at the Natural History Museum, London (BM).

Wherever they are available the most recent 2D barcodes in the form L.2821876 on the sheets held at L are cited in preference to the older barcodes in the form L0538544 although some specimens, e.g. L0003263 (type of C. longepetiolata), only have the older ones. Where there are differences, locality details and spelling in type citations are taken from the specimen labels and not from the protologues. The original spelling of names is followed in the checklist except for those exceptions, detailed in Art. 60 of the Code (Turland et al., 2018), where corrections are allowed such as for the removal of a hyphen (Art. 60.11) – e.g. C. longepetiolata.

RESULTS AND DISCUSSION

Sumatran Cyrtandra species

There are 53 species and three variety names which are considered to be accepted at the current time. Of these, 39 species and three varieties are known to be endemic to Sumatra and 15 species are also distributed on neighbouring islands. Of the 15 non-endemic species, 13 have a distribution that includes Java, with a few also known from Peninsular Malaysia (3), Southern Thailand (1), Borneo (1), Sulawesi (2) or the Lesser Sunda Islands (3) (Atkins & Kartonegoro, 2021; Bakhuizen van den Brink, 1950; Bramley et al., 2004; Girmansyah et al., 2013; Olivar et al., 2022; GRC, 2022). See Appendix for distribution information. Some of the endemic species in Sumatra are distributed widely on the island. However, there are also some species known only in restricted areas such as the Kerinci Range, Leuser Mountains, Mentawai Islands, and North Sumatra (Ridley, 1917, 1926; Bramley & Cronk 2003; Smith et al., 2020). Some of the species are based only on type specimens and two species are of uncertain status due to lack of types or any associated specimens.

Type designation of Sumatran Cyrtandra

To avoid repetition in the text, here we discuss the major collectors and authors of Sumatran Cyrtandra and outline our decision-making regarding typification.

Jack (1823) did not cite specimens when he described his species but sometimes gave information about locality. Almost all of Jack’s collections and some of his manuscripts were burned in a ship fire in 1824 (Ridley, 1917; Merrill, 1952; Hughes & Girmansyah, 2011). A small number of his Sumatran collections are, however, in the Delessert Herbarium at Geneva (G) and also at the Natural Biodiversity Center in Leiden (L) from the Hasskarl private herbarium (Merrill, 1952). When it has been possible to locate Jack collections and link them unambigu-
viously with the names, these have been lectotypified here. Following Hughes & Girmansyah (2011) it is necessary to neotypify the names where it has not been possible to locate Jack’s own collections. This is done in this study when possible or will be carried out as part of a planned full revision of Sumatran Cyrtandra and may require fieldwork to the collecting localities of the type material.

Blume (1826) did not cite types for his proposed Cyrtandra taxa from Java, so it has been necessary to choose lectotypes for these names and, whenever possible, we have selected Blume’s own collections. Blume was the first Director of the Rijksherbarium in Leiden (L) which was founded in 1830 (Veldkamp, 1980), and the top set of his collections are held there, now the Naturalis Biodiversity Center, with some duplicates elsewhere. When there were no Blume collections associated with the species, the lectotype was chosen from specimens collected by Reinwardt, Kuhl or Van Hasselt where the type is held in the Naturalis Biodiversity Center Herbarium (L). When Blume left Java, he took the herbaria of Reinwardt, Kuhl, and van Hasselt with him (Van Steenis-Kruseman, 2022).

All of the Sumatran Cyrtandra species described by De Vriese (1856) were based on the collections of C.G.C. Reinwardt which were sent to De Vriese to study in Amsterdam (Veldkamp, 1980). De Vriese usually gave details of a collection when the species was described but cited no herbarium. Reinwardt’s herbarium was later bequeathed to the Rijksherbarium Leiden now the Naturalis Biodiversity Center (Van Steenis-Kruseman, 2022). Reinwardt’s collections in L which link to these names have either been treated as holotypes if there is no ambiguity or have been lectotypified here where clarification is helpful.

Miquel (1858) cited specimens when describing his species but did not specify a herbarium so it has been necessary to select a lectotype for his names. All Miquel’s Sumatran Cyrtandra species are based on the collections of J.E. Teijsmann.
which he worked on in Utrecht (Van Steenis-Kruseman, 2022) and are all now incorporated into the herbarium of the Naturalis Biodiversity Center, with some duplicates stored in Herbarium Bogoriense (BO).

Clarke (1883) usually listed multiple specimens for his Sumatran Cyrtandra species as he was attempting to provide a comprehensive list of all of the material available at that time from the thirteen herbaria that he consulted for his monograph (Clarke, 1883). For all but two of his species, *C. anisophylla* and *C. integrifolia*, where a single collection from a named herbarium was listed, it has been necessary to select a lectotype from the list of specimens provided by Clarke. Clarke cites a lot of material collected by O. Beccari which he describes as being ‘beautifully collected’ and supplying ‘far more novelties than any other collection’. These are listed as being ‘in h. propr.’ i.e. ‘in Beccari’s own herbarium’, which is in the Museum of Natural History in Florence (FI) (Cecchi et al., 2021).

Ridley (1917; 1923; 1926) usually cited localities when he described species but did not give collection numbers or herbaria. Turner (2012) observed that ‘a high proportion of Ridley’s taxa need lectotypification because he rarely designated types from among the various specimens he cited when publishing taxa. He was also inconsistent in annotating the specimens he saw’. Thus, following Turner (2012), the choice of lectotype chosen here has been the specimen of highest quality from among candidate syntypes for Ridley’s names.

Moore cited a collection when he described a new species but did not specify a herbarium (Moore, 1925). All of his names are based on the collections of H.O. Forbes’s expeditions to Java and Sumatra (Rendle, 1925). According to Ridley (1917), the ‘type set’ of Forbes’s collections are held at the Natural History Museum (BM), and thus these specimens are considered here to be the holotypes and any duplicates to be isotypes.

Type designations included in more recent works (Bramley & Cronk, 2003; Smith et al., 2020; Olivar et al., 2022) have usually been retained but a small number of errors relating to species from Mount Kerinci have been corrected here.

**Checklist**

There are 53 species and three varieties accepted in the checklist and the names are listed alphabetically since there is currently no effective infrageneric classification for *Cyrtandra* (Atkins et al., 2021). Where a specimen (or its high resolution digital image) has not been seen, *n.v.* (indicating not seen) is noted after the specimen. Where possible, lectotypes and neotypes have been designated or we have indicated where further neotypification based on further research will be necessary.

1. **CYRTANDRA ANISOPHYLLA** C.B.Clarke *Cyrtandra anisophylla* C.B.Clarke in ADC. & C.DC., Monogr. Phan. 5(1) (1883) 249. — Type: INDONESIA. In Sumatra occidentale [West Sumatra Prov.] nel “Padangsche bovenlanden” sul Monte Singalan [Mount Singgalang], 1,700 m, 6 Jul 1878, O. Beccari s.n. (holotype: FL [F1013134, image seen]; isotype: K [K000831535!]).

**Distribution.** Endemic to Sumatra (Clarke, 1883; Bramley & Cronk, 2003; Bramley, 2005).


**Distribution.** Sumatra (Jack, 1823); Sumatra and Java (Clarke, 1883; Bakhuizen van den Brink, 1950; Backer & Bakhuizen van den Brink, 1965).

**Notes.** We have managed to find a number of Jack’s Sumatran *Cyrtandra* collections at G and L but none that link to this species. Here we select a new type for the species collected from Tapanuli, North Sumatra (*Alston 14832*, BO) which is a good match with Jack’s original description of this species.

*Cyrtandra cordifolia* de Vriese is considered to be a synonym of *C. aurea* by Clarke (1883) and also by Bakhuizen van den Brink (1950). De Vriese (1856) cites a Reinwardt collection with the description of *Cyrtandra cordifolia* as ‘Herb Reinw. no 516 sub nomine: *Rhynchoscarpi cordifolii*’ and a specimen matching these details is considered to be the holotype.


4. CYRTANDRA BECCARI C.B.Clarke

**Cyrtandra beccari** C.B.Clarke in A.DC. & C.DC., Monogr. Phan. 5(1) (1883) 249. — Type: INDONESIA. In Sumatra occidentale [West Sumatra Prov.] net “Padangshe bovenlanden” sul Monte Singalan [Mount Singgalang], 1,700 m, 6 Jul 1878, O. Beccari PS 327 (lectotype: K [K000831536!], designated here; islectotypes: FI [FI013136, image seen], L [L0278249, image seen]).

Notes.

- Distribution. Endemic to Sumatra (Clarke, 1883; Bramley, 2005).
- Notes. In the protologue of this species, Clarke (1883) cited one specimen with the description of the species, which is Beccari 327 from Sumatra and cited two herbaria, K and Beccari’s own herbarium which is now in Florence. The specimen in K has Clarke’s writing on it and is selected here as the lectotype.

5. CYRTANDRA BICOLOR Jack


Notes.

- Distribution. Sumatra (Jack, 1823); Peninsular Malaysia, Sumatra (Clarke, 1883).
- Notes. The only specimen found of *C. bicolor* collected by Jack is selected here as the lectotype. Clarke (1883) expands the range of this species to include Peninsular Malaysia although further work is required to clarify the distribution of this species and species limits as it is similar to *C. pendula* Blume.

6. CYRTANDRA BREVICAULIS Ridl.

**Cyrtandra brevicaulis** Ridl., J. Fed. Malay States Mus. 8(4) (1917) 70. — Type: INDONESIA. [West Sumatra Prov.], Tapan, Barong Baru, 4,000 ft, 7 Jun 1914, H.C. Robinson & C.B. Kloss s.n. (lectotype: BM [BM000600363!], designated here; iselectotype: K [K000831553!]).


Notes.

- Notes. Ridley (1917) states that this species is collected at ‘Barong Bharu, on the west side Barisan Range’, at 4,000 ft. There are two specimens of Robinson & Kloss s.n. from the Korinchi expedition one each at K and BM which are marked as Types and have both *C. brevicaulis* and Barong Bharu written on them. The specimen at BM, which is the most complete, is designated here as the lectotype.

7. CYRTANDRA CARNOSA Jack


Notes.

- Notes. The only specimen found of *C. carnosa* collected by Jack is selected here as the lectotype. *Cyrtandra carnosa* was moved into the genus *Whitia* Blume in 1826 (Blume, 1826), with a location in Java ‘in sylvis montium Seribu’ given but no specimen cited. *Cyrtandra carnosa* was listed as a synonym, although strictly this is the basionym as this is a recombination.

Bakhuizen van den Brink (1950) later contended that, in fact, *C. carnosa* and *Whitia carnosa* (Jack) Blume are different species and he provided another name in *Cyrtandra, C. rufa* Bakh.f., to accommodate his understanding of *Whitia carnosa*. Bakhuizen van den Brink (1950) stated that he could not find Blume’s original specimen from Mount Seribu but that Blume’s description ‘and the Javanese specimen doubtless cover each other’. Bakhuizen van den Brink also stated that *C. carnosa* differs by its unilateral disc. He listed Reinwardt’s collection from Mount Moenara as the type of this species and the lectotype of *Whitia carnosa* and also cited a Kuhl & van Hasselt specimen from Mount Pangrango.

As *Whitia carnosa* is a recombination of *Cyrtandra carnosa*, however, these species should share the same type, which we believe is a Jack collection now in the herbarium in G. It was, therefore, not correct, under the Code (Article 7.3 (Turland et al., 2018)), for Bakhuizen van den Brink (1950) to treat *Whitia carnosa* and *Cyrtandra carnosa* as different taxa and designate a Reinwardt (or Blume) collection as a lectotype for *Whitia carnosa*. We therefore treat *Whitia carnosa* as a synonym of *Cyrtandra carnosa* here and *Cyrtandra rufa* as an unrelated species with the Reinwardt collection from Java as its type. Whether *C. rufa*, based on the Javan material, is present in Sumatra, remains to be confirmed through fieldwork and revisionary work.

8. CYRTANDRA DISPAR DC.

**Cyrtandra dispar** DC., Prodr. 9 (1845) 282. — *Cyrtandra frutescens* Wall., Numer. List [Wallich] (1829) n. 807, nom. nud. — Type: MALAYSIA. Penang, 1829, N. Wallich Cat. 807 (lectotype: K [K000831502!], designated by Bramley et al. (2004); iselectotypes: BM [BM00075553!], ...
BM000755534!], E [E00062408!, E00062409!, E00062410!], K [K000831500!, K000831501!], L, S [S11-10989, image seen], SING). 

**Cyrtandra squamulata** Korth. nom.nud.: C.B.Clarke, in A.DC. & C.DC., Monogr. Phan. 5 (1) (1883) 203. nom. nud.

**Distribution.** Peninsular Malaysia (De Candolle, 1845); Peninsular Malaysia and Sumatra (Clarke, 1883); Southern Thailand, Peninsular Malaysia, Sumatra (Bramley et al., 2004).

**Notes.** In the protologue, de Candolle cited one specimen from the East India Company herbarium, *Wall. Cat. 807*, which had the name *C. frutescens* Wall. associated with it, which is a later homonym of *C. frutescens* Jack from which it is very distinct. Bramley selected the K-Wallich specimen as lectotype (Bramley et al., 2004). Clarke (1883) cited many specimens with the description of the species and expanded the distribution to include Sumatra. *Cyrtandra squamulata* is an unpublished manuscript name of Korthals that was listed as a synonym of this species by Clarke (1883).

9. **CYRTANDRA DISSIMILIS** C.B.Clarke *Cyrtandra dissimilis* C.B.Clarke, in A.DC. & C.DC., Monogr. Phan. 5(1) (1883) 207. — Type: INDONESIA. Provincia di Padang in Sumatra occidentale [West Sumatra Prov.], Ayer Mancioir [Air Mancur], 360 m, Aug 1878, *O. Beccari* PS 731 (lectotype: FI [FI013139, image seen], designated here; isolecotype: K [K000831512!]).

**Distribution.** Sumatra and Java (Clarke, 1883).

**Notes.** Clarke (1883) cited four specimens with the description of *C. dissimilis*: two from Java and two from Sumatra. Specimens of *Beccari 731* from K and FI and *Korthals 189* from L, both from Sumatra, have been traced. The most complete of the Beccari collections from Florence has been selected here as the lectotype.


**Distribution.** Endemic to Sumatra (Clarke, 1883; Bramley & Cronk, 2003).

**Notes.** In the protologue of *C. fenestrata*, Clarke listed three *Beccari* collections: 65 (in K and FI), and 150 and 253 (in FI). The most complete of these, *Beccari* 253, with both fruits and flowers, in FI is selected as the lectotype here. Duplicates of this collection have also been found at BM, K, and L and these are designated as isolecotypes here.


11a. **CYRTANDRA FLABELLIFOLIA** var. **FLABELFOLIA**

**Distribution.** Endemic to Sumatra [Mount Dempo] (Moore, 1925).


**Distribution.** Endemic to Sumatra [Mount Dempo] (Moore, 1925).


**Distribution.** Endemic to Sumatra [Korinchi Range] (Ridley, 1917; Bramley & Cronk, 2003).

**Notes.** In the protologue, Ridley gave the locality for the species as Siolak Daras at 4,400 ft in Sumatra but did not cite any specimens. A holotype and isotype were listed by Bramley & Cronk (2003), although these specimens have the collection details of ‘Sungai Kumbang’ which does not match the locality given in the protologue. Specimens of *C. flabelligera* collected by Robinson and Kloss were found at A, K, and US with the collecting details ‘Siolak Daras’ which match the protologue. The most complete of these held at Kew is designated here as the lectotype. Ridley (1917) thought that this species is allied to *C. oblongifolia*, Benth., but ‘with large fan-shaped bracts and a rather long peduncle’. Whether this
species is truly distinct from *C. oblongifolia* requires further study as part of a full taxonomic revision.

13. **CYRTANDRA FRUTESCENS** Jack


**Distribution.** Endemic to Sumatra (Jack, 1823).

**Notes.** The only specimen found of *C. frutescens* collected by Jack is selected here as the lectotype.

14. **CYRTANDRA GRACILENTA** Kraenzl.

*Cyrtandra gracilenta* Kraenzl., J. Linn. Soc., Bot. 37 (1906) 278. — Type: INDONESIA. Sumatra, near Datar [Tanah Datar], 1897, *C. Curtis 455* (holotype: K [K000831566!]).


**Notes.** Kraenzlin (1906) cited one specimen with the description of *C. gracilenta*, which was *Curtis s.n.* from near ‘Datar (Dater?)’ as written by Kraenzlin, which he assumed to be in Borneo. As noted by Burtt (1970, 1978), and also handwritten on the sheet at E on which a photograph of the K specimen is mounted, the correct spelling of the collecting locality has been a cause of confusion but that it is a place in Sumatra, not Borneo, and that Kraenzlin (1906) was incorrect about the locality. We give our interpretation of the locality name as written on the specimen label.

15. **CYRTANDRA GRANDIS** Blume var. *AMPLA* (C.B.Clarke) Bakh.f.


**Distribution.** Sumatra (Clarke, 1883); Sumatra, Java (Bakhuizen van den Brink, 1950; Backer & Bakhuizen van den Brink, 1965).

**Notes.** Clarke (1883) cited two specimens with the description of *C. ampla*. One was *Beccari 173* from Sumatra and the other was *Horsfield 18* from Java. Specimens of *Beccari 173* have been seen from K, L, BM, and FI but no specimens of *Horsfield 18* have been traced, although Clarke records that part of this specimen is at BM (Clarke, 1883). The specimen of *C. ampla* at K is selected here as the lectotype as it has the name in Clarke’s handwriting on it.

16. **CYRTANDRA HIRSUTA** Jack


**Distribution.** Endemic to Sumatra (Jack, 1823).

**Note.** The only specimen found of *C. hirsuta* collected by Jack is selected here as the lectotype.

17. **CYRTANDRA HOLODASYS** Miq.


**Distribution.** Endemic to Sumatra [West Sumatra] (Miquel, 1858; Clarke 1883).

**Note.** In the protologue for *C. holodasys*, Miquel (1858) cited one specimen with the description of the species, which was a *Teijsmann* specimen from Palembayan in Sumatra, although no herbarium was cited. There are specimens matching this description in BO, K and L. The most complete specimen matching these details in K is selected here as the lectotype.

18. **CYRTANDRA IMPRESSIVENIA** C.B.Clarke

*Cyrtaandra impressivenia* C.B.Clarke in A.DC. & C.DC., Monogr. Phan. 5 (1) (1883) 212. — Type: INDONESIA. In Sumatra occidentale [West Sumatra Prov.] nel “Padangseche bovenlanden” sul Monte Singalan [Monte Singgalang], 1,700 m, Jun—Jul 1878, *O. Beccari PS 177* (lectotype: FI [Fl013157, image seen], designated here; isolectotype: K [K000831521!]).

**Distribution.** Endemic to Sumatra [West Sumatra] (Clarke, 1883).

**Notes.** In the protologue, Clarke (1883) cited one specimen with the description of the species, which was *Beccari 177* from Sumatra, but listed collections from both K and FI. The specimen at FI is selected here as the lectotype, as it is the most complete specimen.

19. **CYRTANDRA INCOMPTA** Jack

Sumatra, *W. Jack s.n. (not found).* West Sumatra, Gunung Sago, from Puncak Pato, 1,200 m, 9–12 Mar 1989, *Mulyati* 06 (neotype: BO [BO-1871010!], designated here; isoneotypes ANDA, BO [BO-1871009!, BO-1871011!]).

**Distribution.** Endemic to Sumatra (Jack, 1823).

**Notes.** It has not been possible to find any Jack collections of this species, including at G and L (Clarke, 1883; Merrill, 1952). Thus, following Art 9.8 of the Code (Turland et al., 2018) a neotype is selected from BO which matches Jack’s description for the species. No locality is given in the protologue but some of Jack’s collections are from West Sumatra.


**Distribution.** Endemic to Sumatra [Mentawai Islands] (Ridley, 1926).

**Notes.** This species was described in a paper on the Flora of the Mentawai Islands based on Cecil Boden-Kloss collections (Ridley, 1926). *Kloss 13075* is cited as the type; there are duplicates of this gathering at BO, K and SING. Ridley was at Kew from 1913 (Turner, 2012), so we assume his description was based on the K specimen which we list as the holotype. The specimens had been collected under Singapore Field Numbers and presumably distributed from there, with one set remaining at Singapore and unseen by Ridley. The fact that the SING duplicate has fruits rather than flowers, yet Ridley’s description does not include fruit characters, supports this hypothesis.


**Distribution.** Endemic to Sumatra [West Sumatra] (Clarke, 1883).


**Distribution.** Sumatra (Jack, 1823); Sumatra, Java (Bakhuizen van den Brink, 1950).

**Notes.** *Cyrtandra glabra* Jack was published illegitimately because it is a later homonym of *Cyrtandra glabra* Banks ex C.F.Gaertn. from the Pacific (Gaertner, 1807). In the protologue, Jack (1823) cites the location as being ‘inland from Bencoolen’. However, no specimen is cited and it has not been possible to trace any of his collections of this species (Clarke, 1883; Merrill, 1952). A new name, *C. jackii* is proposed here to legitimise the species and a new type specimen is designated collected from close to the locality given by Jack and is a good match to the original description.

23. **CYRTANDRA LOCUPLES** S.Moore *Cyrtandra locuples* S.Moore, J. Bot. 63[Suppl.] (1925) 75. — Type: INDONESIA. Resident Palembang [South Sumatra Prov.], Mt. Dempo, 5,500 ft, 1881, *H.O. Forbes* 2264 (holotype: BM [BM000600342!]; isotype: WU [WU-0046015, image seen]).

**Distribution.** Endemic to Sumatra [South Sumatra] (Moore, 1925).


**Distribution.** Endemic to Sumatra (Jack, 1823).

**Notes.** The only specimen found of *C. macrophylla* collected by Jack is selected here as the lectotype.


**Distribution.** Endemic to Sumatra [Kerinci Range] (Ridley, 1917).

**Notes.** Ridley (1917) cited three collecting localities for *C. membranacea* (Barong Bharu, Barisan Range at 4,000 ft; Sungei Kumbang at
4,500 ft; Siolak Daras at 3,000 ft) Herbarium specimens with matching details have been found at BM, K and US. As Ridley did not explicitly designate a type or a herbarium, following Article 9.11 of the Code (Turland et al., 2018), it is necessary to select a lectotype from this original material. The choice is further complicated because some sheets have multiple pieces of plant with multiple labels (e.g. K000831574, K000831575). After careful consideration, we select the specimen at the BM [BM000600362] from Siolak Daras (in Ridley’s handwriting) as lectotype here. Bramley & Cronk (2003) incorrectly listed this specimen as the holotype and that is corrected here.

26. CYRTANDRA MINOR S.Moore

_Cyrtandra minor_ S.Moore, J. Bot. 63[Suppl.] (1925) 75. — Type: INDONESIA. Res. Palembang [South Sumatra Prov.], Mt. Siminoeng [Seminung], 3,900 ft, 1880, H.O. Forbes 2146 (holotype: BM [BM000600391]; isotypes: L [L0003255, L0003254, images seen]).

**Distribution.** Endemic to Sumatra [South Sumatra] (Moore, 1925).

27. CYRTANDRA NAVICELLATA Zipp. ex C.B.Clarke

_Cyrtandra navicellata_ Zipp. ex C.B.Clarke in A.DC. & C.DC., Monogr. Phan. 5(1) (1883) 240. — Type: INDONESIA. Sumatra, 1882, P.W. Korthals 255 (lectotype: K [K000831532], designated here; isolecototype: L [L0278284, image seen]).

**Distribution.** Endemic to Sumatra (West Sumatra) (Clarke, 1883).

**Notes.** This species was published in 1883 based on an unpublished Zippelius name (Clarke, 1883). In the protologue, Clarke cited two specimens with the description of the species, which were _Korthals 173_ and 253 from Sumatra. There is a single sheet with specimens of both _Korthals 173_ and 255 mounted on it at Kew. Leiden also has sheets of _Korthals 173_ and 255. _Korthals 255_ at Kew is the most complete specimen and is selected as the lectotype and the specimen in Leiden becomes the isolecototype.

28. CYRTANDRA NEMOROSA Blume


**Distribution.** Java (Blume, 1826; Clarke, 1883); Sumatra, Java (Bakhuizen van den Brink, 1950).

**Notes.** Reinwardt’s collection from Java labeled _C. nemorosa_ is selected as lectotype because there were none of Blume’s own collections found for the species. Bakhuizen van den Brink (1950) placed _C. reticosa_ in synonymy and automatically added Sumatra to the distribution of this species.

29. CYRTANDRA OBLONGIFOLIA (Blume) Benth. & Hook.f. ex C.B.Clarke


**Distribution.** Java (Blume, 1823); Sumatra, Java, Borneo, Philippines (Clarke, 1883; Merrill, 1923); Sumatra, Java, Borneo (Burt, 1970).

**Notes.** This species was first described in the genus _Whitia_ by Blume (1823). Bentham & Hooker (1876) later questioned the distinctiveness of _Whitia_ in their large work on genera, although the species was only formally moved into _Cyrtandra_ by Clarke (1883).

Blume (1823, 1826) did not cite any specimens or a location but states that the species grows ‘in sylvis montanis’. Here, we choose one of Blume’s own specimens (L.2825707) from among several specimens labeled as _Whitia oblongifolia_ in the Naturalis Biodiversity Center (L) and New York Botanical Garden (NY), and this is selected here as the lectotype.

30. CYRTANDRA OLIGANTHA Korth. ex C.B.Clarke


**Distribution.** Endemic to Sumatra (Clarke, 1883; Moore, 1925).

**Notes.** This species was published in 1883 (Clarke, 1883), based on an unpublished Korthals’s name. In the protologue, Clarke cited ‘_Korthals, n. 1036_ in h. Mus. Lugd. n. 109’. There are two sheets in the herbarium in Leiden which
have ‘Korthals’ and both of these collection numbers (109 and 1036) written on them. One of the sheets (L.2826139) has Korthals’s writing on it and is selected here as the lectotype with the second becoming the isolecotype.

31. CYRTANDRA PANDURATA Ridley. 


**Distribution.** Endemic to Sumatra [North Sumatra] (Ridley, 1923).

**Notes.** Ridley (1923) did not cite a type but he gave the locality of the species as Berastagi. There is one specimen of this species in the herbarium at Kew which was collected by Ridley in 1921 from Berastagi. As no other collections have been found, this is designated here as the lectotype.

32. CYRTANDRA PATENTISERRATA Bramley & Cronk


**Distribution.** Endemic to Sumatra [Kerinci Range] (Bramley & Cronk, 2003).

33. CYRTANDRA PAUCIFLORA Ridley. [Fig. 1e]


**Distribution.** Endemic to Sumatra (North Sumatra) (Ridley, 1923).

**Notes.** There was no type specimen recorded in the protologue for this species but the location details are given as ‘in a wooded ravine, Berastagi’. There are four specimens in the Kew herbarium collected by Ridley, without collection numbers, from Sumatra. One of these (K000831585) has exactly the same location details as in the protologue, and has flowers and fruits. It is selected here as the lectotype.

34. CYRTANDRA PELTATA Jack


**Distribution.** Endemic to Sumatra, Bengkulu Prov., Ketahun, Sungai Gembong, c. 150 m, 12 Oct 1993, *J.J. Afrisiastini* 2643 (neotype: BO [BO-1350518!], designated here; isolecotype: L [L.3794481, image seen]).

**Distribution.** Endemic to Sumatra (Jack, 1823).

**Notes.** No Jack collections of this species have been found in any herbaria consulted, and thus a neotype has been selected from all Sumatran collections in BO. *Afrisiastini* 2643 is chosen as neotype for the species here as the collection was made very close to Jack’s collecting site in Bengkulu, Sumatra and its appearance closely matches Jack’s description. The rest of Sumatran species were collected from West Sumatra.

35. CYRTANDRA PENDULA Blume [Fig. 1a]

*Cyrtandra pendula* Blume, Bijdr. Fl. Ned. Ind. 14 (1826) 768. — Type: INDONESIA. Java, C.L. Blume 2038c (lectotype: L [L.2826033, image seen], designated here).


**Distribution.** Java (Blume, 1826); Sumatra and Java (Clarke, 1883); Peninsular Malaysia, Sumatra, Java (Bramley et al., 2004).

**Notes.** Blume (1826) did not cite any specimens or a location when he described *C. pendula* but stated that the species grows ‘in humidis montanis’. A flowering specimen collected by Blume, *Blume* 2038c, and incorrectly listed in Bramley et al. (2004) as the holotype rather than being proposed as the lectotype, is formally designated here.

*Cyrtandra rotundifolia* Ridley was described from Peninsular Malaysia (Ridley, 1911). This was considered a synonym of *C. pendula* by Bramley et al. (2004). Ridley (1911) did not cite any specimens but gave the locality as ‘Temengoh’. The most complete specimen at SING, and marked as a type, is selected as the lectotype and the specimens at K and BM become the isolecotypes.

36. CYRTANDRA PERPLEXA S.Moore

*Cyrtandra perplexa* S.Moore, J. Bot. 63[Suppl.] (1925) 74. — Type: INDONESIA. Res. Palembang [South Sumatra Prov.]., Mt. Dempo, 6,500 ft., 1880, H.O. Forbes 2493a (holotype: BM [BM000600347!]; isolecotype: L [L.0003261, image seen]).

**Distribution.** Endemic to Sumatra [South Sumatra] (Moore, 1925).
37. CYRTANDRA PICTA Blume


Distribution. Java (Blume, 1826); Sumatra, Java (Clarke, 1883; Bakhuizen van den Brink, 1950).

Notes. The lectotype for Cyrtandra picta was taken from Blume’s own collections at L with his handwriting on the label. For C. longepetiolata described by de Vriese, one of Reinwardt’s collections, annotated with the manuscript name ‘Rynchocarpus glaber Rwdt’ mentioned in the protologue, has been selected as De Vriese was working on Reinwardt’s herbarium (Van Steenis-Kruseman, 2022).

Bakhuizen van den Brink (1950) considered C. longepetiolata to be a synonym of C. picta. Bramley & Cronk (2003) stated that C. longepetiolata may be distinct from C. picta but it is placed back in synonymy here.

38. CYRTANDRA PILOSA Blume


Distribution. Java (Blume, 1826); Sumatra, Java (Clarke, 1883).

Notes. Blume’s own collection from Java in L with his handwriting on the label, is chosen as lectotype. This name has been applied to specimens across a wide distributional range from Java, Sumatra, Singapore, Myanmar and Peninsular Malaysia (Clarke, 1883; Burtt, 1978). Although, the Peninsular Malaysian specimens are now considered to be C. wallichii (C.B.Clarke) B.L.Burtt (Burtt, 1978; Bramley et al., 2004). Further work is required across the distribution to determine how widely distributed this species is and to confirm its presence in Sumatra.

39. CYRTANDRA POPULIFOLIA Miq.

Cyrtandra populifolia Miq., Fl. Ned. Ind. 2 (1858) 741. — Type: INDONESIA. [West Sumatra Prov.], in de kloof van den Singgalang [Mt. Singgalang], J.E. Teijeüsmann HB 1197 (lectotype: U [U0002253, image seen], designated here; isolecotypes: BO [BO-1886854!, BO-1886855!], L [L0003267, image seen]).

Distribution. Sumatra (Miquel, 1858); Sumatra, Java (Clarke, 1883; Bakhuizen van den Brink, 1950).

Notes. In the protologue for C. populifolia, Miquel cited a Teijssmann specimen from Mount Singgalang with the description of the species. A Teijssmann collection of this species from U, where Miquel was based (Van Steenis-Kruseman, 2022) and marked as ‘Typus’, is designated here as the Lectotype. A duplicate at L, marked as ‘Typ. Dupl’ and less complete, is designated here as the isolecotype along with two sheets in BO.

40. CYRTANDRA RHYNCANTHERA C.B.Clarke


Distribution. Endemic to Sumatra (Clarke, 1883; Bramley & Cronk, 2003).

41. CYRTANDRA ROSEA Ridl. [Fig. 1b]


Notes. Ridley (1917) gave details of two localities in the protologue of this species. One was Siolak Daras, at 3,000 ft.; the other was Korinchi Peak, 7,300 ft. A Robinson & Kloss collection from Siolak Daras specimen was incorrectly listed as the holotype by Bramley & Cronk (2003), rather than being proposed as a lectotype. Here, we formally designate it as lectotype.

42. CYRTANDRA ROSTRATA Blume


Distribution. Java (Blume, 1826); Sumatra,
Java (Clarke, 1883; Moore, 1925); Sumatra, Java, Lesser Sunda Islands (Girmansyah et al. 2013).

**Notes.** This species was described from Java but its distribution was later extended to include Sumatra (Clarke, 1883; Moore, 1925) and the Lesser Sunda Islands (Girmansyah et al., 2013). One of Blume’s own collections marked as *Cyrtandra rostrata* in his handwriting is selected as the lectotype.

42b. CYRTANDRA ROSTRATA var. SUBSESILIS S.Moore


**Distribution.** Endemic to Sumatra [Lampung] (Moore, 1925).

**Notes.** The specimens at BM and WU both have the number 1382 written on a label that is marked as ‘SOUTH EAST JAVA’. The protologue states, however, that the specimen was collected in ‘Kotta Djawa, Lampong’ in Sumatra.

43. CYRTANDRA RUBRIFLORA P.E.Sm. & H.J.Atkins [Fig. 1c]


**Distribution.** Endemic to Sumatra [Kerinci Range] (Bramley & Cronk, 2003).

48. CYRTANDRA SULCATA Blume

_Cyrtandra sulcata_ Blume, Bijdr. Fl. Ned. Ind. 14 (1826) 770. — Type: INDONESIA. [West Java Prov.], Megamendung, C.L. Blume 221 (lectotype: L [L2826829, image seen], designated by Atkins & Kartonegoro (2021)).

**Distribution.** Java (Blume, 1826; Clarke, 1883); Sumatra, Java, Sulawesi (Atkins & Kartonegoro, 2021).

50. CYRTANDRA TRICHODON Ridl.

_Cyrtandra trichodon_ Ridl., J. Fed. Malay States Mus. 8 (1917) 70. — Type: INDONESIA. Suma-
tra, Korinchi Peak, 6 May 1914, H.C. Robinson & C.B. Kloss, s.n. (lectotype: BM [BM000600356!], designated here; isolecotype K [K000831595!]).

**Distribution.** Endemic to Sumatra [Kerinci Range] (Ridley, 1917; Bramley & Cronk, 2003).

**Notes.** Ridley (1917) did not cite any specimens in the protologue but gave a location of ‘Korinchi Peak, 7,300 ft’ for this species. There are two duplicates of a Robinson & Kloss s.n. collection with these locality details: one at the BM and one at K. As Ridley did not explicitly designate a type or a herbarium and because we cannot be sure that Ridley was not working closely with both sheets (his handwriting is on the labels of both), following Article 9.11 of the Code (Turland et al., 2018), it is necessary to select a lectotype. Bramley & Cronk (2003) incorrectly cited the BM duplicate as the holotype and the Kew duplicate as the isotype. We correct that here by formally designating the BM specimen as the lectotype and the Kew specimen as the isolecotype.

51. **CYRTANDRA VIRIDESCENS** C.B.Clarke

*Cyrtandra viridescens* C.B.Clarke in A.DC. & C.DC., Monogr. Phan. 5(1) (1883) 247. — Type: INDONESIA. In Sumatra occidentale [West Sumatra Prov.], nel “Padangshe bovenlanden” sul Monte Singalan [Mount Singgalang], 1,600 m, Jun -Jul 1878, O. Beccari PS 25 (lectotype: FI [FI013180, image seen] designated here; isolecotype: K [K000831533!]).

**Distribution.** Endemic to Sumatra (Clarke, 1883).

**Notes.** Clarke (1883) listed Beccari 25 for this species deposited in FI and K. The collection from FI is selected as the lectotype here as it has flowers.

**UNCERTAIN SPECIES**

Two names described by Jack (1823) have been placed here. It was not possible to locate any collections made by Jack linked to these names or identify any material appropriate for neotypification. Further research will be carried out as part of a full revision of Sumatran *Cyrtandra* and may require fieldwork to the collecting localities of the type material.

52. **CYRTANDRA MACULATA** Jack


**Distribution.** Endemic to Sumatra (Jack, 1823).

53. **CYRTANDRA RUBIGINOSA** Jack


**Distribution.** Endemic to Sumatra (Jack, 1823).

**EXCLUDED SPECIES**

1. **CYRTANDRA HORSFIELDII** Miq.


**Notes.** *Cyrtandra horsfieldii* was transferred to *Pentaphragma* in the account for the genus in Malesia (Airy Shaw, 1953).

2. **CYRTANDRA DECURRENS** de Vriese


**Notes.** This species was described by De Vriese (1856) from a specimen from the Moluccas, Reinwardt 1266 at Reinwardt’s herbarium, now Naturalis Biodiversity Center (L). A Reinwardt collection from Ambon (Ambonia) at the herbarium in Leiden is considered to be the lectotype. In 1883, Clarke expanded the distribution of the species to include Sumatra and also described three varieties: one from Peninsular Malaysia, one from Borneo and Papua and one from Sulawesi. The varieties from Sulawesi and Peninsular Malaysia have subsequently been raised to species-level as *C. polyneura* (C.B.Clarke) B.L.Burtt (Burtt, 1990) and *C. wallichii* (C.B.Clarke) B.L.Burtt (Burtt, 1978) respectively. The specimens listed by Clarke (1883) as *C. decurrens* when he expanded the distribution of the species to include Sumatra (*Korthals 119 & 128*) are now considered to be *C. pandurata*, and *C. decurrens* is not thought to be present in Sumatra.

**AUTHOR CONTRIBUTIONS**

QWW, GLCB, HJA, and AK set the ideas for this research and all authors contributed equally as main authors to the manuscript.
ACKNOWLEDGEMENTS

We thank the Directors/Curators of the following herbaria (abbreviations following Thiers 2021) for permission to access and view specimens physically and online images: A, BM, BO, E, FI, G, K, L, MEL, S, SING, U, US, WU, and to Ranee Prakash and Jacek Wajer (BM) for assistance during a visit to BM and the subsequent databasing and imaging of type material for inclusion here. We also would like to thank to RBGE Staff Sadie Barber, Mark Hughes and Peter Wilkie for permission to use their photographs. The Royal Botanic Garden is supported by the Rural and Environment Science and analytical Services Division (RESAS) of the Scottish Government.

REFERENCES


BLUME, C. L. 1823. Catalogus van eenige der merkwaardigste zoo in- als uit-geheime gewassen te vinden in ’s Lands Plantentuin te Buitenzorg. Lands Drukkerij, Batavia [Jakarta].


Appendix. List of all Sumatran *Cyrtandra* names with status, distribution, and types and their status and deposition (accepted name in bold).

<table>
<thead>
<tr>
<th>Name</th>
<th>Accepted name</th>
<th>Distribution</th>
<th>Type and status</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Cyrtandra ampla</em> C.B.Clarke</td>
<td><em>Cyrtandra grandis</em> var. <em>ampla</em> (C.B.Clarke) Bakh.f.</td>
<td>Sumatra</td>
<td>Holo Fl; iso K</td>
</tr>
<tr>
<td><em>Cyrtandra anisophylla</em> C.B.Clarke</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra aurea</em> Jack</td>
<td></td>
<td>Sumatra, Java</td>
<td>Neo BO, designated here</td>
</tr>
<tr>
<td><em>Cyrtandra aureotinctoria</em> Bramley &amp; Cronk</td>
<td></td>
<td>Sumatra (Kerinci Range)</td>
<td>Holo E; iso BIOT, BO</td>
</tr>
<tr>
<td><em>Cyrtandra beccarii</em> C.B.Clarke</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra bicolor</em> Jack</td>
<td></td>
<td>Peninsular Malaysia, Sumatra</td>
<td>Lecto G, designated here</td>
</tr>
<tr>
<td><em>Cyrtandra brevicaulis</em> Ridl.</td>
<td></td>
<td>Sumatra (West)</td>
<td>Lecto BM, designated here; isolec K</td>
</tr>
<tr>
<td><em>Cyrtandra carnosa</em> Jack</td>
<td></td>
<td>Sumatra</td>
<td>Lecto G, designated here</td>
</tr>
<tr>
<td><em>Cyrtandra chiritoides</em> Ridl.</td>
<td><em>Cyrtandra siporensis</em> Olivar</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra cordifolia</em> de Vriese</td>
<td><em>Cyrtandra aurea</em> Jack</td>
<td></td>
<td>Holo L, n.v.</td>
</tr>
<tr>
<td><em>Cyrtandra decurrens</em> de Vriese</td>
<td></td>
<td>Moluccas</td>
<td>Holo L</td>
</tr>
<tr>
<td><em>Cyrtandra dispar</em> DC.</td>
<td></td>
<td>Thailand, Peninsular Malaysia, Sumatra</td>
<td>Lecto K; isolec BM, E, K, L, S, SING</td>
</tr>
<tr>
<td><em>Cyrtandra dissimilis</em> C.B.Clarke</td>
<td></td>
<td>SUMatra, Java</td>
<td>Lecto Fl, designated here; isolec K</td>
</tr>
<tr>
<td><em>Cyrtandra elongata</em> Korth.</td>
<td><em>Cyrtandra decurrens</em> de Vriese</td>
<td></td>
<td>nomen nudum</td>
</tr>
<tr>
<td><em>Cyrtandra fenestrata</em> C.B.Clarke</td>
<td></td>
<td>Sumatra</td>
<td>Lecto Fl designated here; isolec BM, Fl, K, L</td>
</tr>
<tr>
<td><em>Cyrtandra flabellifolia</em> S.Moore</td>
<td></td>
<td>Sumatra (Mt. Dempo)</td>
<td>Holo BM; iso L</td>
</tr>
<tr>
<td><em>Cyrtandra flabellifolia</em> var. <em>cordata</em> S.Moore</td>
<td></td>
<td>Sumatra (Mt. Dempo)</td>
<td>Holo BM</td>
</tr>
<tr>
<td><em>Cyrtandra flabelligera</em> Ridl.</td>
<td></td>
<td>Sumatra (Kerinci Range)</td>
<td>Lecto K, designated here; isolec A, US</td>
</tr>
<tr>
<td><em>Cyrtandra frutescens</em> Jack</td>
<td></td>
<td>Sumatra</td>
<td>Lecto G, designated here</td>
</tr>
<tr>
<td><em>Cyrtandra frutescens</em> Wall.</td>
<td><em>Cyrtandra dispar</em> DC.</td>
<td></td>
<td>nomen nudum</td>
</tr>
<tr>
<td><em>Cyrtandra glabra</em> Jack</td>
<td><em>Cyrtandra jackii</em> Q.W.Wang &amp; Karton.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra gracilenta</em> Kraenzl.</td>
<td></td>
<td>Sumatra (West)</td>
<td>Holo K</td>
</tr>
<tr>
<td><em>Cyrtandra grandis</em> var. <em>ampla</em> (C.B.Clarke) Bakh.f</td>
<td></td>
<td>Sumatra</td>
<td>Lecto K, designated here; isolec BM, Fl, L</td>
</tr>
<tr>
<td><em>Cyrtandra hirsuta</em> Jack</td>
<td></td>
<td>Sumatra</td>
<td>Lecto G, designated here</td>
</tr>
<tr>
<td>Species</td>
<td>Location</td>
<td>Lectotype</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------</td>
<td>----------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra holodasy</strong></td>
<td>Sumatra</td>
<td>Lecto K; designated here;</td>
<td></td>
</tr>
<tr>
<td>Miq.</td>
<td></td>
<td>isolec K, BO, L</td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra horsfieldii</strong></td>
<td>Sumatra</td>
<td>Lecto K, designated here</td>
<td></td>
</tr>
<tr>
<td>Miq. (Pentaphragma horsfieldii Miq.)</td>
<td>Airy Shaw</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra impressivenia</strong></td>
<td>Sumatra (West)</td>
<td>Lecto FI, designated here;</td>
<td></td>
</tr>
<tr>
<td>C.B.Clarke</td>
<td></td>
<td>isolec K</td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra incompta</strong></td>
<td>Sumatra</td>
<td>Neo BO, designated here;</td>
<td></td>
</tr>
<tr>
<td>Jack</td>
<td></td>
<td>isoneo ANDA, BO</td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra insularis</strong></td>
<td>Sumatra (Mentawai</td>
<td>Holo K; iso BO, SING</td>
<td></td>
</tr>
<tr>
<td>Ridl.</td>
<td>Islands)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra integrifolia</strong></td>
<td>Sumatra (West)</td>
<td>Holo K; iso MEL</td>
<td></td>
</tr>
<tr>
<td>C.B.Clarke</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra jackii</strong></td>
<td>Sumatra, Java</td>
<td>Neo BO, designated here;</td>
<td></td>
</tr>
<tr>
<td>Q.W.Wang &amp; Karton.</td>
<td></td>
<td>isoneo BO, L</td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra locuples</strong></td>
<td>Sumatra (South)</td>
<td>Holo BM; iso WU</td>
<td></td>
</tr>
<tr>
<td>S.Moore</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra longepetiolata</strong></td>
<td>Sumatra (West)</td>
<td>Lecto G, designated here;</td>
<td></td>
</tr>
<tr>
<td>de Vriese</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra picta</strong></td>
<td>Blume</td>
<td>Lecto L, designated here</td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra macrophylla</strong></td>
<td>Sumatra</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jack</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra maculata</strong></td>
<td>Sumatra</td>
<td>Neotype required</td>
<td></td>
</tr>
<tr>
<td>Jack</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra membranacea</strong></td>
<td>Sumatra (Kerinci</td>
<td>Lecto BM, designated here;</td>
<td></td>
</tr>
<tr>
<td>Ridl.</td>
<td>Range)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra minor</strong></td>
<td>Sumatra (South)</td>
<td>holo BM; iso L</td>
<td></td>
</tr>
<tr>
<td>S.Moore</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra navicellata</strong></td>
<td>Sumatra (West)</td>
<td>Lecto K, designated here;</td>
<td></td>
</tr>
<tr>
<td>Zipp. ex C.B.Clarke</td>
<td></td>
<td>isolec L</td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra nemorosa</strong></td>
<td>Sumatra, Java</td>
<td>Lecto L, designated here</td>
<td></td>
</tr>
<tr>
<td>Blume</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra oblongifolia</strong></td>
<td>Sumatra, Java,</td>
<td>Lecto L, designated here</td>
<td></td>
</tr>
<tr>
<td>Benth. &amp; Hook.f. ex C.B.Clarke</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra oligantha</strong></td>
<td>Sumatra</td>
<td>Lecto L, designated here;</td>
<td></td>
</tr>
<tr>
<td>Korth. ex C.B.Clarke</td>
<td></td>
<td>isolec L</td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra pallescens</strong></td>
<td>Sumatra (North)</td>
<td>Lecto K, designated here</td>
<td></td>
</tr>
<tr>
<td>Jack</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra pandurata</strong></td>
<td>Sumatra (North)</td>
<td>Lecto K, designated here</td>
<td></td>
</tr>
<tr>
<td>Ridl.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra patentiserrata</strong></td>
<td>Sumatra (Kerinci</td>
<td>Holo L; iso BO</td>
<td></td>
</tr>
<tr>
<td>Bramley &amp; Cronk</td>
<td>Range)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra pauciflora</strong></td>
<td>Sumatra (North)</td>
<td>Lecto K, designated here</td>
<td></td>
</tr>
<tr>
<td>Ridl.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra pilosa</strong></td>
<td>Blume</td>
<td>nomen nudum</td>
<td></td>
</tr>
<tr>
<td>Jack</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra pendula</strong></td>
<td>Sumatra</td>
<td>Lecto L, designated here</td>
<td></td>
</tr>
<tr>
<td>Blume</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra perplexa</strong></td>
<td>Sumatra (South)</td>
<td>Holo BM; iso L</td>
<td></td>
</tr>
<tr>
<td>S.Moore</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyrtandra picta</strong></td>
<td>Sumatra, Java</td>
<td>Lecto L, designated here</td>
<td></td>
</tr>
<tr>
<td>Species</td>
<td>Location</td>
<td>Designation</td>
<td></td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------------------------------</td>
<td>------------------------------------</td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra pilosa</em> Blume</td>
<td>Sumatra, Java</td>
<td>Lecto L, designated here</td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra populifolia</em> Miq.</td>
<td>Sumatra, Java</td>
<td>Lecto U, designated here; isolecto BO, L</td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra repens</em> var. monantha C.B.Clarke</td>
<td>Sumatra, Java</td>
<td>Lecto L, designated here</td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra picta</em> Blume</td>
<td>Holo L, n.v.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra reticosa</em> C.B.Clarke</td>
<td>Sumatra</td>
<td>Lecto L, designated here</td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra nemorosa</em> Blume</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra rhyncantha</em> C.B.Clarke</td>
<td>Sumatra</td>
<td>Lecto K</td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra rosea</em> Ridl.</td>
<td>Sumatra (Kerinci Range)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra rostrata</em> Blume</td>
<td>Sumatra, Java, Lesser Sunda Islands</td>
<td>Lecto L, designated here</td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra rostrata</em> var. sub-sessilis S.Moore</td>
<td>Sumatra (Lampung)</td>
<td>Holo BM.; iso WU</td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra rotundifolia</em> Ridl.</td>
<td><em>Cyrtandra pendula</em> Blume</td>
<td>Lecto SING, designated here; isolecto K</td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra rubiginosa</em> Jack</td>
<td>Sumatra</td>
<td>Neotype required</td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra rubriflora</em> P.E.Sm.</td>
<td>Sumatra (Mt. Leuser)</td>
<td>Holo E; iso BO</td>
<td></td>
</tr>
<tr>
<td>&amp; H.J. Atkins</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra sandei</em> de Vriese</td>
<td>Sumatra, Java, Lesser Sunda, Sulawesi</td>
<td>Lecto L</td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra scutata</em> S.Moore</td>
<td>Sumatra (Mt. Dempo)</td>
<td>Holo BM</td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra siporensis</em> Olivar</td>
<td>Sumatra (Mentawai Islands)</td>
<td>holo K; iso BO, SING</td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra squamulata</em> Korth.</td>
<td><em>Cyrtandra dispar</em> DC.</td>
<td>nomen nudum</td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra stenoptera</em> Bramley</td>
<td>Sumatra (Kerinci Range)</td>
<td>Holo E; iso BIOT, BO</td>
<td></td>
</tr>
<tr>
<td>&amp; Cronk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra sulcata</em> Blume</td>
<td>Sumatra, Java, Lesser Sunda, Sulawesi</td>
<td>Lecto L</td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra teysmannii</em> Miq.</td>
<td>Sumatra (West)</td>
<td>Lecto BO, designated here; isolecto U</td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra trichodon</em> Ridl.</td>
<td>Sumatra (Kerinci Range)</td>
<td>Lecto BM, designated here; isolecto K</td>
<td></td>
</tr>
<tr>
<td><em>Cyrtandra viridescens</em> C.B.Clarke</td>
<td>Sumatra</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Rhyynchocarpus cordifolius</em> Reiw. ex Blume</td>
<td><em>Cyrtandra aurea</em> Jack</td>
<td>nomen nudum</td>
<td></td>
</tr>
<tr>
<td><em>Whitia carnosa</em> (Jack) Blume</td>
<td><em>Cyrtandra carnosa</em> Jack</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Whitia longifolia</em> Blume</td>
<td><em>Cyrtandra oblongifolia</em> (Blume)</td>
<td>nomen nudum</td>
<td></td>
</tr>
<tr>
<td>Benth. &amp; Hook. ex C.B.Clarke</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Whitia oblongifolia</em> Blume</td>
<td><em>Cyrtandra oblongifolia</em> (Blume)</td>
<td>nomen nudum</td>
<td></td>
</tr>
<tr>
<td>Benth. &amp; Hook. ex C.B.Clarke</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Whitia pilosa</em> Zipp.</td>
<td><em>Cyrtandra oblongifolia</em> (Blume)</td>
<td>nomen nudum</td>
<td></td>
</tr>
<tr>
<td>Benth. &amp; Hook. ex C.B.Clarke</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>