Accepted names, relevant synonyms and typifications of Roxburgh names in Euphorbiaceae, s. I. with reference to Icones at Calcutta

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Abstract: This paper deals with the accepted names, relevant synonyms and typifications of the 92 unpublished Flora Indica drawings drawn by local Indian artists for William Roxburgh in the Calcutta herbarium (CAL) belonging to the family Euphorbiaceae, s. I., including Phyllanthaceae and Putranjivaceae. These drawings represent 33 genera and 79 species. Lectotypes are designated here for 18 accepted names (or their basionyms/ replaced names) and 16 synonyms. A new name, Macaranga williamroxburghii Chakrab. has been applied replacing the illegitimate name Urtica involucrata Roxb.

Key words: Icones Roxburghianae; Euphorbiaceae; Phyllanthaceae; Putranjivaceae; nomenclature; typifications; new name.

Introduction
William Roxburgh (1751–1815) was among one of the first Botanists who gave a definite shape to Indian Botany. He was born in Underwood, Ayrshire, Scotland and studied medicine at the University of Edinburgh. He joined the East India Company’s Madras Medical Service as an Assistant Surgeon on 28 May 1776. After his promotion to the rank of Surgeon in 1780, Roxburgh was stationed at Samalkot and he worked at the Coromandel Coast up to 1793 and during this period he also met Johann Gerhard Konig (pupil of Linneaeus), a doctor and a botanist. They went on several expeditions together for collecting plants. In 1789 he was appointed as Natural Historian of East Indian Company. Roxburgh moved to Calcutta as the Superintendent of the East India Company’s Botanic Garden, the present A. J. C. Bose Indian Botanical Garden at Shibpur, Howrah, near Calcutta (Kolkata). Working here, he started getting world-wide recognition as a botanist. He was instrumental in introducing many plant species to India and simultaneously he sent many plants to Kew, UK. Soon after his arrival in India he began making descriptions of the native plants, and throughout his career he continued methodically describing all the plants that were available to him. At the same time that he wrote his description, he nearly always had life-size drawings of the plants (or specimen thereof) made by Indian artists. In all he described about 2600 species and had drawings made of more than 2500 of them (Sealy, 1956). His voluminous work, ‘Flora Indica’ was published after his death. Roxburgh left for England from Calcutta in 1813 at the age of 62 spending some 37 years in India. He died at Edinburgh in 1815.

As already mentioned by Sealy (1956) and Forman (1997), Roxburgh left copies of his manuscripts and drawings with William Carey, a missionary and botanist who first arranged the printing of ‘Hortus Bengalensis’ in 1814, containing a list of some 3500 species growing in the Botanic Garden at Calcutta, of which over 1500 were Roxburgh’s new species and genera; the second part is a list of about 450 species, mostly new, which were included in the manuscript, Flora Indica but not yet introduced into the Botanic Garden. A selection of 300 of Roxburgh’s drawings and descriptions was published as ‘Plants of the Coast of Coromandel’ in London with the support of the East India
Company under the direction of Sir Joseph Banks. The publication appeared in 12 parts from 1795 to 1820. The first volume of the first edition of Roxburgh’s ‘Flora Indica’ was published in 1820, followed by the second volume in 1824. Roxburgh’s descriptions in this edition were enriched by the invaluable notes and additions of Dr. Wallich identifiable by the initials ‘N.W.’ in the text. The second edition of ‘Flora Indica’ was published in 1832; Roxburgh’s sons were unable to obtain permission to use Wallich’s notes and descriptions, and so the editor William Carey omitted them from the reprint. As a result, the 1832 edition was published in three volumes containing Roxburgh’s manuscripts much as he had left it, and representing Roxburgh’s complete Botanical work in India, except the Cryptogams. As regards the ‘Flora Indica’ drawings, their importance in interpreting Roxburgh’s names was explained by Sealy (1956). The ‘Flora Indica’ manuscript in Kew is bound in three volumes containing 2579 numbered descriptions, not arranged in any systematic sequence. At the time of writing each description, Roxburgh almost always had a life-size watercolour drawings with dissections made by one of his team of Indian artists, and the number of the corresponding description was added to the drawing followed by the name of the species, not always the name finally used in ‘Flora Indica’ (Forman, 1997). More than one copy of each drawing was made; the drawings at Kew often bear Roxburgh’s handwriting, sometimes on the reverse side in pencil, giving the name of the plant depicted, thus proving his personal involvement with the drawings. There is therefore a very close link between Roxburgh’s descriptions and drawings. There are many instances where a Roxburgh drawing is far superior to a corresponding specimen, for the purpose of interpreting the name of the species in question, and therefore the drawing would be far preferable to serve as the type (Forman, 1997). Of the 2579 numbered descriptions in Roxburgh’s manuscript, 2512 are represented by numbered drawings at Kew (Sealy, 1956). Of equal importance to the Kew set are the 2595 drawings at Calcutta, fully listed by Sanjappa et al. (1994). These drawings at Calcutta also bear Roxburgh number as well as his handwriting in pencil. Each drawing sheet at Calcutta measures about 45 × 30 cm, mounted on thicker sheets of the same or slightly larger size (Sanjappa et al. 1994). Each drawing represents almost always the natural size of a single species. Later, A. T. Gage, Superintendent of Calcutta Botanic Garden (1906–1923) got the Roxburgh’s drawings arranged according to the sequence of families, genera and species as in J. D. Hooker’s ‘The Flora of British India’ and got them bound in 35 volumes. Each plate or drawing bears the name of the species with two numbers on either side by an unknown hand but they are written faintly on the face and in ink on the verso in Roxburgh’s hand. These numbers and names were rewritten (by an unknown hand) on the face of the drawing before they were mounted on thick sheets. The original numbers and names can still be read by holding the sheet against bright light (Sanjappa et al. 1994).

The present investigation is a part of the project initiated by the Botanical Survey of India on the interpretation of the unpublished drawings by William Roxburgh in the library of Calcutta herbarium (CAL). There are 92 such drawings at CAL belonging to the Euphorbiceae, s. l., including Phyllanthaceae and Putranjivaceae and as per the present studies they represent 33 genera and 79 species (one species with two varieties). It is hoped that this presentation will be helpful in assigning the correct recognized names to the unpublished ‘Flora Indica’ drawings of the Euphorbiaceae, s. l. preserved at CAL as well as K. The typifications will be helpful in correct application of these names. Lectotypes are designated here for 18 accepted names (or their basionyms/ replaced names) and 16 synonyms. A new name, Macaranga williamroxburghii Chakrab. has been proposed here replacing the illegitimate name Urtica involucrata Roxb.

**Materials and Methods**

The present research is based on the analysis of literature and examination of specimens preserved in several herbaria: A, BM, BR, B-W, C, CAL, G, E, FR, HAL, K, L, LD, LINN, LIV, MO, MPU and P. Except for CAL, the relevant
specimens in all other herbaria and drawings (at K) were examined through digital images. The ICN articles cited throughout the text follow the Shenzhen Code (Turland et al., 2018), with one exception that a personal communication to Dr. John McNeill made in 2017 requesting clarification of the Art. 7.10 of Melbourne Code (McNeill et al., 2012) (Art. 7.11 of Shenzhen Code), in effect that time. The list of Forman (1997) was always consulted for the possible Roxburgh type specimens or drawings. The publications of Sealy (1956) and Sanjappa et al. (1994) were consulted at every step for the corresponding drawing numbers at CAL and K. The names on the drawings are given first for each entry in alphabetical order with their numbers in brackets followed by the accepted names, relevant synonyms and typifications. References to the publications of Roxburgh, especially *Hortus Bengalensis* (1814) and *Flora Indica*, edited by W. Carey (1832a, b) are cited in all cases, if available. Distribution of each species is also indicated. For each holotype, the isotypes, if available, are cited. Similarly, for a lectotype, isolectotypes, the remaining syntypes, if available, have been cited. However, in case of uncited original materials, which are not syntypes, I have cited them as “remaining original material”.

**Nomenclature and typifications**

*(2099)* **Acalypha chinensis**


**Type** (lectotype, designated by Airy Shaw, 1980): Herb. Linn. No. 1139.5 (LINN-HL1139-5!).

= **Acalypha chinensis** Roxb., Fl. Ind. 3: 677. 1832. Type citation: “A native of China. From Canton it was sent to the Botanic garden, where it blossoms and ripens its seed during the rains; and perishes at the approach of the cool weather in December.”

**Type** (lectotype, designated here): [unpubl. icon] Icones Roxburghianae, No. 2099 (CAL!). Remaining original material: Icones Roxburghianae, No. 2099 (KI).

**Distribution:** Native to China, Taiwan, Laos, Vietnam, Japan, Korea and Philippines; introduced into India, Turkey, Tadzhikistan, Ukraine, Russia, Australia (New South Wales, Queensland), Bulgaria, Italy, North America (New York); naturalized in India, Russia, Australia and parts of Europe.

*(271/2)** **Acalypha ciliata**

*Acalypha ciliata* Forssk., Fl. Aegypt. -Arab. 162. 1775; Roxb., Hort. Bengal. 69. 1814; Fl. Ind. 3: 676. 1832; Radcl.-Sm. in Nasir & Ali, Fl. Pakistan 172: 65. 1986. Type citation: “Yemen in montibus inferioribus ad Taes inter fegetes.”

**Type** (lectotype, designated by Radcliffe-Smith, 1986): Yemen, Apr. 1763, Forsskal 902 (C10001553!; isolectotype BM000951486!).

**Distribution:** Tropical Africa, Southern Arabia, Pakistan, India, Sri Lanka, Nepal and Bangladesh.

*(2557, 2550 on drawing)** **Acalypha conferta**


**Type** (lectotype, designated by Radcliffe-Smith, 1986): Specimen cultivated in Copenhagen Botanic Garden in 1806 from seed sent from China, Herb. Hornemann (C10011083!).

= **Acalypha conferta** Roxb. [Hort. Bengal. 69. 1814, nom. nud.] Fl. Ind. 3: 677. 1832. Type citation: “A native of China, from thence introduced into the Botanic garden, where it grows, flowers freely, and ripens its seed during the hot season.”

**Type** (lectotype, designated here): [unpubl. icon] Icones Roxburghianae, No. 2557 (No. 2550 on drawing) (CAL!). Remaining original material: Icones Roxburghianae, No. 2557 (No. 2550 on drawing) (KI).

**Distribution:** Central and East Tropical Africa, Pakistan, Sri Lanka, India, Nepal, China, Taiwan, Thailand and Malesia (Sumatra, Java and Lesser SundaIsl.).

**Note:** As clarified by Sagun et al. (2010: 35), *Acalypha supera*, often associated here, is an imperfectly known species. Seeds of *A. conferta* were brought to Calcutta Botanic Garden from China through Mr. W. Kerr in 1800.

*(271/1)** **Acalypha indica**


**Distribution:** Palaeotropical; introduced in the Neotropics.

**Note:** As explained by Sagun *et al.* (2010: 45), the lectotypification by Radcliffe-Smith (1986: 65) is acceptable rather than that of Coode (1982: 78) which represents *Acalypha lanceolata* Willd., in accordance with Art. 9.14 of the ICN.

**Adelia castanicarpa**


**Type** (lectotype, designated by van Welzen, 1994): [unpubl. icon] *Icones Roxburghianae*, No. 2411 (K!). Remaining original material: *Icones Roxburghianae*, No. 2411 (CAL!).

**Distribution:** Sri Lanka, India, Bangladesh, Myanmar, China, Cambodia, Vietnam, Thailand, Malaysia, Sumatra and Borneo.

**Note:** van Welzen (1994: 98) cited the type of *Adelia castanicarpa* as: “Type: *Wallich 7953B (Hb. Heyne)* (K, holo; iso in BM, K), *India orientalis.*”, thus lectotypifying the name effectively. Roxburgh (1832b) described *Adelia neriifolia* separately and the lectotype designated here is an excellent drawing. There is a specimen at LINN (LINN-HS1566-2!), collected from “Ind. or.” by Buchannan in 1800 bearing annotation “*Adelia neriifolia* R.” but I am not sure whether this is handwriting of Roxburgh.

**Aleurites triloba** (1914) *Ricinus dicoccus*


**Note:** van Welzen (1998: 138) cited the type of *Adelia neriifolia* B. Heyne ex Roth as: “Type: *Wallich 7953B (Hb. Heyne)* (K, holo; iso in BM, K), *India orientalis.*”, thus lectotypifying the name effectively. Roxburgh (1832b) described *Adelia neriifolia* separately and the lectotype designated here is an excellent drawing. There is a specimen at LINN (LINN-HS1566-2!), collected from “Ind. or.” by Buchannan in 1800 bearing annotation “*Adelia neriifolia* R.” but I am not sure whether this is handwriting of Roxburgh.


**Note:** van Welzen (1998: 138) cited the type of *Adelia neriifolia* B. Heyne ex Roth as: “Type: *Wallich 7953B (Hb. Heyne)* (K, holo; iso in BM, K), *India orientalis.*”, thus lectotypifying the name effectively. Roxburgh (1832b) described *Adelia neriifolia* separately and the lectotype designated here is an excellent drawing. There is a specimen at LINN (LINN-HS1566-2!), collected from “Ind. or.” by Buchannan in 1800 bearing annotation “*Adelia neriifolia* R.” but I am not sure whether this is handwriting of Roxburgh.

**Aleurites triloba** (1914) *Ricinus dicoccus*
Type citation: “Some plants were received into the Botanic garden at Calcutta from Amboyna in 1798. Now, in 1808 they have grown to be small trees, about twenty feet high.”

**Type** (lectotype, designated here): Without locality (presumably India, Hort. Bot. Calcutt.), *Roxburgh s.n.* (BR0000008880321!). Remaining original material: Without locality (presumably India, Hort. Bot. Calcutt.), *Roxburgh s.n.* (BR0000008880291!). Icones Roxburghianae, No. 1914 (CAL!, K!).

**Distribution:** Native of tropical Asia and Oceania, from India and China to Polynesia and New Zealand; widely cultivated in the tropics.

**Note:** As pointed out by Jarvis (2007), the name *Jatropha moluccana* was first lectotypified by Fawcett & Rendle (1920) who clearly mentioned: “Type in Herb. Hermann in Herb. Mus. Brit.” Subsequently Radcliffe-Smith (1986) pinpointed the type to a single specimen: Type: Sri Lanka, Hermann Herbarium, Vol. III, p. 27 (BM, lectotype!).” Thus the lectotypification of the name by Stuppy *et al.*, (1999:80) stands superfluous. As regards the name *Aleurites trifolius*, Smith (1981: 548) clearly mentioned: “*Aleurites trifolia* is typified by a J. R. & G. Forster collection made in the Society Islands during Cook's second voyage; one of two sheets at BM, labelled “G. Forster's Herbarium” and “360. *Aleurites trifolia* may be taken as the lectotype.” Here again, Stuppy *et al.*, (1990:80) overlooked this publication and relectotypified the name. Furthermore, Welzen *et al.*, (1999:439) treated *Ricinus dicoccos* (as “dioicus”) as a synonym of *Melanolepis multiglandulosa* (Reinw. ex Blume) Rchb. & Zoll. (Euphorbiaceae) and lectotypified the name to Rumph. Herb. Amb. 4: t. 64, 1743, which refers to *M. multiglandulosa*. However, this is an odd choice as Roxburgh (1832b) provided detailed description to his plant and the original material is available at BR. Hence, the name *Ricinus dicoccos* has been relectotyped here and accommodated under *Aleurites moluccanus* as a synonym.

(2378) **Alnus dioica**


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John McNeill, personal communication).

**Distribution:** India, Nepal, Bhutan, Bangladesh, Myanmar, Ryukyu Islands, Taiwan, Laos, Vietnam, China, Thailand, throughout Malesia to Polynesia.

(1297) *Antidesma paniculata*, (108) *Antidesma pubescens*


= *Antidesma pubescens* Roxb., Pl. Coromandel 2: 35, t. 167. 1802; Fl. Ind. 3: 770. 1832. Type citation: “Pollarie of the Telingas. This also is a large tree, a native of the same places with Stilago diandra, and flowers at the same time.”


**Type** (holotype): India, *Roxburgh s.n.* (B-W18350-010).

**Distribution:** Sri Lanka, India, Pakistan, Nepal, Bhutan, Bangladesh, Myanmar, China, Laos, Cambodia, Vietnam, Thailand, through Malesia to Northern Australia.

(2398) **Bradleia lanceolaria**


**Type** (lectotype, designated by Chakrabarty & Balakrishnan, 2018): Bangladesh, *Roxburgh* 2523 (BM000951386!). Remaining original material: Bangladesh [?], *Roxburgh* 2525 (BM000951387!). Icones Roxburghianae, No. 2398 (CAL, K!).

**Distribution:** India, Nepal, Bhutan, Bangladesh, Myanmar, Thailand, Cambodia, Laos, Vietnam and China.

(1699) **Bradleia multilocularis**


**Type** (holotype): India, *Roxburgh [in Rottler] s.n.* (B-W17938-010).

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Distribution: India, Nepal, Bhutan, Bangladesh and Myanmar.

(471) Bradleia nitida


Type (lectotype, designated here): [unpubl. icon] Icones Roxburghianae, No. 471 (CAL!). Remaining original material: Icones Roxburghianae, No. 471 (K!).

Distribution: India, Sri Lanka, Bangladesh, Myanmar, Thailand and throughout Malesia to N Australia.

Note: Chakrabarty & Gangopadhyay (1995) inadvertently designated a lectotype of Bradleia nitida to a specimen collected by an unknown collector from the Calcutta Botanic Garden, housed in Kew (K001081199!). However, there is no definite evidence (such as handwriting of Roxburgh) that this specimen was used by Roxburgh for describing the species and therefore another lectotype is designated here.

(1700) Bradleia pinnata


Type citation: “Habitat in India orientali.”

Type (lectotype, designated here): India, Roxburgh s.n. (B-W17971-020!). Remaining original material: India, Roxburgh s.n. (B-W17971-010!).

Distribution: Vietnam, Cambodia, Thailand, Malaysia, Java, Sumatra, Borneo and Celebes.

Note: Of the two specimens in B-W, the lectotype is a far better and more complete specimen than the other. Roxburgh (1814: 69) referred to Phyllanthus obscurus in the footnote under Bradleia pinnata and therefore this is a superfluous name.

(2145) Bridelia crenulata, (113) Cluytia spinosa


= Cluytia spinosa Roxb., Pl. Coromandel 2: 38, t. 172. 1802 (as Cluytia). – Bridelia spinosa (Roxb.) Willd., Sp. Pl., ed. 4, 4(2): 979. 1806; Roxb., Hort. Bengal. 69. 1814 & Fl. Ind. 3: 734. 1832. Type citation: “This species is a tree considerably larger than any of the former.”


= Bridelia crenulata Roxb. [Hort. Bengal. 70. 1814, nom. nud.] Fl. Ind. 3: 734. 1832 (as Bridelia). Type citation: “A large timber tree, a native of the mountainous countries near the mouth of the river Megna, from thence sent by Stephen Harris, Esq. to the Botanic garden, where after twelve years, it blossomed in May and the seed ripened in October.”

Type (lectotype, designated here): [unpubl. icon] Icones Roxburghianae, No. 2145 (CAL!). Remaining original material: Icones Roxburghianae, No. 2145 (K!).

Distribution: Pakistan, India, Sri Lanka, Nepal, Bhutan, Bangladesh, Myanmar, China, Laos, Cambodia, Vietnam, Thailand and Sumatra.

Note: The name Cluytia retusa was lectotypified three times by different authors differently. Radcliffe-Smith (1986:5) first designated a lectotype to specimens in the Hermann Herbarium in BM (Vol. 2, fol. 7). Although Radcliffe-Smith did not mention the respective Flora Zeylanica number (No. 367 in this case), he...
clearly used the term “holotype” (correctable to “lectotype” as per Art. 9.10 of ICN) and cited it in the Hermann herbarium in BM, and this is sufficient to identify the species unambiguously. As Herb. Hermann 2: 7, No. 367 contains two specimens, with separate barcodes, this designation by Radcliffe-Smith constitutes first-step lectotypification (Art. 9.17 of ICN). The subsequent designation by Dressler therefore (1996: 289–290) stands superseded. Finally, Chakrabarty & Balakrishnan (2018a) designated a second-step lectotype, which is acceptable, again as per Art. 9.17. Jarvis (2007, 2016) mentioned that the name was lectotypified by Radcliffe-Smith in Kew. Bull. 41: 6. 1986. This is puzzling as no such publication by Radcliffe-Smith exists. As regards the name Bridelila crenulata, Balakrishnan (1961: 39) designated a lectotype to a collection of Wallich (Wallich 7880), collected from Calcutta Botanic Garden (“Hort. Calc.”), deposited in CAL. Later, Dressler (1996: 290) also indicated the same collection (Wallich 7880) in BM, G-DC, K and K-W as the type. Forman (1997) did not include this name. Thus, in absence of any evidence that the Wallich’s collection represents the original material of B. crenulata and in absence of any other original specimen not traceable in spite of best efforts, the name has been relectotypified here with the excellent Roxburgh drawing at CAL.

(10) *Cluytia collina*

*Cleistanthus collinus* (Roxb.) Hook.f., Fl. Brit. India 5: 274. 1887; Chakrab. & N.P. Balakr., Indo-Burmese Phyllanthaceae 137. 2018. – *Cluytia collina* Roxb., Pl. Coromandel 2: 37, t. 169. 1802 (as *Cluytia*) & Fl. Ind. 3: 732. 1832. Type citation: “This is a small tree, a native of the hilly parts of the Circars; flowers during the hot season; seed ripe in December and January.”

Type (lectotype, designated by Chakrabarty & Balakrishnan 2018): India, Roxburgh s.n. (BM000019317!). Remaining original material: [icon] Roxburgh, Pl. Coromandel 2: 38, t. 171. 1802.

Distribution: India – endemic.

(11) *Cluytia montana*

*Bridelia montana* (Roxb.) Willd., Sp. Pl., ed. 4, 4(2): 978. 1806; Roxb., Fl. Ind. 3: 735. 1832; Chakrab. & N.P. Balakr., Indo-Burmese Phyllanthaceae 113. 2018. – *Cluytia montana* Roxb., Pl. Coromandel 2: 38, t. 171. 1802 (as Cluytia). Type citation: “On the interior mountains it grows to a tree, but on the lower lands it is only found of small size.”

Type (lectotype, designated by Chakrabarty & Balakrishnan, 2018): India, Roxburgh s.n. (BM000019317!). Remaining original material: [icon] Roxb., Pl. Coromandel 2: 38, t. 171. 1802.

Distribution: India – endemic.

(2400) *Cluytia oblongifolia*

*Cleistanthus oblongifolius* (Roxb.) Müll.Arg. in DC., Prodr. 15(2): 506. 1966, p.p., quad. var. genuinus, excl. var. scaber); Chakrab. & N.P. Balakr., Indo-Burmese Phyllanthaceae 145. 2018. – Cluytia oblongifolia Roxb., Fl. Ind. 3: 730. 1832 (as Cluytia). Type citation: “A middling sized tree, a native of the forests of Silhet, where it is called Dookesa.”

Type (lectotype, designated by Chakrabarty & Balakrishnan, 2018): [unpubl. icon] Icones Roxburghianae, No. 2400 (CAL!). Remaining original material: Icones Roxburghianae, No. 2400 (K!). Figure 1.

Distribution: Bangladesh – endemic.

(111) *Cluytia patula*

*Cleistanthus patulus* (Roxb.) Müll.Arg. in DC., Prodr. 15(2): 505. 1866; Chakrab. & N.P. Balakr., Indo-Burmese Phyllanthaceae 148. 2018. – *Cluytia patula* Roxb., Pl. Coromandel 2: 37, t. 170. 1802 (as Cluytia). Type citation: “This is a small tree, a native of the hilly parts of the Circars; flowers during the hot season; seed ripe in December and January.”


Distribution: Sri Lanka and South India.

(114) *Cluytia scandens*


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Type (lectotype, designated by Dressler, 1996: 294): India, Roxburgh s.n. (BR00000069996811). Remaining original material: India [East India], Roxburgh s.n. (K000246297T). India, Roxburgh s.n. (BM0000193210!, BM0000833617!, MO-2195589!). India, Roxburgh [in Wallich] 7878A (K0011281661!).


Distribution: India (including Andaman Islands), Sri Lanka, Nepal, Bhutan, Bangladesh, Myanmar, Thailand, S China, Taiwan, Malay Peninsula, W Malesia, Philippines to Lesser Sunda Islands.

(2401) Clutia semperflorens
Trigonostemon semperflorens (Roxb.) Müll.Arg. in DC., Prodr. 15(2): 1110. 1866; Roxb., Fl. Ind. 3: 730. 1832 (as Clutia). Type citation: “a native of Silhet, where it is in flower and seed the whole year round.”

Type (lectotype, designated by Balakrishnan & Chakrabarty, 1991): [unpubl. icon] Icones Roxburghianae, No. 2401 (CAL!). Remaining original material: Icones Roxburghianae, No. 2401 (K!). Figure 2.

Distribution: NE India and Bangladesh.

(1687) Croton aromaticum, (1997) Croton drupaceum

Type (lectotype, designated by Chakrabarty & Balakrishnan, 1997): India, Rottler s.n. (C100111611).

= Croton drupaceus Roxb. [Hort. Bengal. 69. 1814, nom. nud.] Fl. Ind. 3: 683. 1832 (as drupaceum). Type citation: “A native of the country about Dacca.”


Distribution: Pakistan, Sri Lanka, Nepal, Bhutan, Bangladesh, Myanmar, S China, Thailand, Malaysia, Sumatra, Java, Borneo, Philippines, Celebes and Lesser Sunda Islands.

Note: Roxburgh (1814, 1832) never treated the species Croton aromaticus L. but his drawing No. 1997 (both at K and CAL) is marked as “Croton aromaticus”. Sealy (1956) and Sanjappa et al. (1994) clarified that this is referable to C. drupaceus instead, a synonym of C. caudatus and I agree with that. Moreover, there is no record of cultivation of the South Indian and Ceylonese species C. aromaticus in the Calcutta Botanic Garden. Chakrabarty & Balakrishnan (1997: 38) cited the type of Croton drupaceus as: “Type: H.B.C. (A native of country about Dacca), Roxburgh s. n. (BM - left hand side specimen) (Roxburgh, Fl. Ind Icon. No. 1997, CAL).” As they cited two original materials, this was not an effective lectotypification. The specimens Wallich 7720 A at E and Wallich 7720 C at K bear handwriting of Roxburgh.

(2558, 2561 on drawing) Croton bicolor

Type (lectotype, designated by Esser & Veldkamp, 2008): Indonesia, Java, No collector [Blume] s.n. (L0233566!). Remaining original material: Indonesia, Java, Blume 1339 (L0233769); ibid., Blume 1499 (L0233768!).


Type (lectotype, designated by Chakrabarty & Balakrishnan, 1997): [unpubl. icon] Icones Roxburghianae, No. 2558 (No. 2561 on drawing) (CAL!). Remaining original material: Icones Roxburghianae, No. 2558 (No. 2551 on drawing) (K!).

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**Distribution:** India (Andaman & Nicobar Islands), Myanmar, Vietnam, Thailand, Malaysia, Java, Sumatra, Borneo, Lesser Sunda Islands, Celebes, Moluccas, Bali and Philippines.

(1295) *Croton oblongifolium*


**Type** (lectotype, designated by Chakrabarty & Balakrishnan, 2016): Sri Lanka, _Thwaites s.n., CP [Ceylon Plants] 2114 (G00312052!; isolectotypes CAL0000023646!, G0434428!, K000260046!).

Syntype: India, Meghalaya, Khasi Hills,тон. 7735, C. pr. p.).”

**Type** (lectotype, designated by Chakrabarty & Balakrishnan, 2016): India, _Roxburgh s.n._ (lectotype, designated here): [icon] Rheede, _Rheede._

**Distribution:** Afghanistan, India (including Andaman Islands), Sri Lanka, Pakistan, Bangladesh, Myanmar and Thailand; introduced in Java.

(452) *Croton polyandrum*

_Baliospermum solanifolium_ (Burm.) Suresh in Nicolson _et al._, Interpret. Van Rheede’s Hort. Malab. 106. 1988. – *Croton solanifolius* Burm., Fl. Malab. 6. 1769 (as _solanifolium_). Type citation: “Naga danti; Tom. 10, Tab. 76”.

**Type** (lectotype, designated here): [icon] Rheede, Hort. Malab. 10: 151, t. 76. 1690.


**Type** (holotype): India, _Klein s.n._ (B-W17927-010).

**Distribution:** Pakistan, India, Sri Lanka, Bhutan, Nepal, Bangladesh, Myanmar, China, Thailand, Cambodia, Laos, Vietnam, Sumatra, Java, Moluccas and Lesser Sunda Islands.

**Note:** Roxburgh (1832) proposed a new name, _Croton polyandra_, replacing _Jatropha montana_ Willd., as the epithet ‘_montanus_’ was preoccupied under _Croton (C. montanus Willd.)._

(990) *Croton tiglium*


**Distribution:** Sri Lanka, India, Bhutan, Bangladesh, Myanmar, China, Vietnam, Taiwan, Thailand, Japan and throughout Malesia.
(1686) Croton variegatum

*Codiaeum variegatum* (L.) A.Juss., Euphorb. Gen. 80, 111, pl. 9, f. 30. 1824; Merr., Interpr. Herb. Amboin. 325. 1917. – *Croton variegatus* L., Sp. Pl. 2: 1199. 1753 (as *variegatum*); Roxb., Fl. Ind. 3: 678. 1832. Type citation: “Habitat in India.”


**Distribution:** Native of Malesia, now under cultivation throughout tropical and subtropical regions of the World.

(1557) *Euphorbia antiquorum*


**Distribution:** Pakistan, India (including Andaman & Nicobar Islands), Sri Lanka, Bangladesh, Myanmar, China, Vietnam, Thailand, Malaysia and Indonesia (Java).

(654) *Euphorbia dracunculoides*


**Distribution:** India, Bangladesh, China, Pakistan, Afghanistan, Arabia, Egypt to Africa.

1066 & 1972 *Euphorbia ligularia*


**Type** (lectotype, designated by Radcliffe-Smith, 1982): Herb. Linn. No. 630.1 (LINN-HL630-1).


**Type** (lectotype, designated here): [unpubl. icon] Icones Roxburghianae, No. [1666 &] 1972 (CAL). Remaining original material: Icones Roxburghianae, No. [1666 &] 1972 (K!).

**Distribution:** Western Tropical Asia, S & SE Asia, China, Myanmar to Indonesia.

**Note:** Both Sealy (1956) and Sanjappa *et al.* (1994) indicated the drawing numbers 1066 & 1972 as belonging to *Euphorbia ligularia*. In Kew, however, the drawing is of a leafy twig annotated with the number “1066” at the bottom, while in CAL, the drawing is represented by a leafy twig and another floriferous branchlet and sketches of the flowers. Here, the number “1066” is written at the top and “1066 & 1972” at the bottom right hand corner. Thus the numbers 1066 & 1972 are to be considered as an integrated part of the said drawing. Binojkumar & Balakrishnan (2010, pp. 310–313) were possibly confused with the drawing number/s, typification as well as the identity as they cited the type as (p. 312): “Type: Icones Roxburghianae, illus. no. 1972 (epitypes in K, CAL!)” and mentioned futher (p. 313): “Roxburgh indicates the spiral nature of the branches, but his illustration No. 1066 (in CAL!) is exactly similar to the young branch of *E. royleana* Boiss., although illustration No. 1972 (CAL, K!) is similar to *E. neriifolia*. The present study considers No. 1972 of Roxburgh’s Icones as lectotype of *E. ligularia*.”

(1065 & 1971) *Euphorbia neriifolia*


**Distribution:** Pakistan, India, Sri Lanka, Bangladesh and Myanmar.

**Note:** Binojkumar & Balakrishnan (2010: 315) clarified that *Euphorbia neriifolia sensu* Roxb. (1814, 1832a) is a misapplied name for *E. nivulia*.
(1977) *Euphorbia parviflora*


**Distribution**: Asia and Africa.

**Note**: Binojkumar & Balakrishnan (2010: 168–169) clarified that *Euphorbia parviflora sensu* Roxb. (1814, 1832a) belongs to *E. indica*.

(1248) *Euphorbia peltata*

*Euphorbia peltata* Roxb. [Hort. Bengal. 36. 1814, nom. nud.] Fl. Ind. 2: 474. 1832. Type citation: “A native of the interior parts of the Coast of Coromandel; seeds brought from thence to the Company's Botanic garden at Calcutta, grew and have continued sowing themselves, and producing plants every cold season without care.”

**Type** (lectotype, designated here): [unpubl. icon] Icones Roxburghianae, No. 1248 (CAL!). Remaining original material: Icones Roxburghianae, No. 1248 (K!). Figure 3.

**Distribution**: India (Coromandel coast) - endemic.

**Note**: According to Binojkumar & Balakrishnan (2010: 269–271) the species has never been recollected after the type.

(1976) *Euphorbia thymifolia*


**Type** (lectotype, designated by Wheeler, 1941): Herb. Linn. No. 630.10 (LINN-HL630-10!).

**Distribution**: Pantropical; Asia, Australia, Africa and America.

(1975) *Euphorbia tirucalli*


Type citation: “Habitat in India.”


**Distribution**: Probably indigenous from tropical Africa to India; probably introduced into and naturalized in many other countries including China, Indo-China, South-east Asia and Malesia.

(1558 & 1973) *Euphorbia trigona*


= *Euphorbia trigona* Roxb. [Hort. Bengal. 36. 1814, nom. nud.] Fl. Ind. 2: 468. 1832, nom. illeg., non Mill., 1768. Type citation: “This pretty species of *Euphorbia* was brought from the Molucca Islands to the Botanic garden at Calcutta in 1798, where it thrives well, and blossoms in February, March, and April.”

**Type** (lectotype, designated by Esser & Chayamarit, 2001): [unpubl. icon] Icones Roxburghianae, No. 1558 (K!). Remaining original material: Icones Roxburghianae, No. 1558 & 1973 (CAL!).

**Distribution**: Myanmar, Thailand, Laos, Java, Borneo, Philippines and Lesser Sunda Islands.

**Note**: The drawing numbers 1558 and 1973 cited by Sealy (1956) and Sanjappa et al. (1994) are integrated numbers, representing a single drawing both in Kew and Calcutta. While the former contains a leafy twig, the latter, in addition to a leafy twig, also contains a flowering branchlet and drawings of flowers (the same page also contains another drawing, numbered as 1974, dealt separately.)
(1794) Euphorbia sessiliflora

Euphorbia sessiliflora Roxb. [Hort. Bengal. 36: 1814, nom. nud.] Fl. Ind. 2: 471. 1832; Esser & Chayam marit in Harvard Pap. Bot. 6: 265. 2001. Type citation: “This pretty little species was brought from Pegue by the Rev. Mr. Felix Carey to this garden, where it blossoms freely during the month of February, at which time it is perfectly destitute of leaves; like the rest it is abundantly lactescent.”


Distribution: India, Bangladesh, Myanmar, China, Laos, Vietnam, Thailand, Malaysia, Sumatra, Celebes and Lesser Sunda Islands.

Note: According to Ramana et al. (2015: 181), “Euphorbia sessiliflora was described by Jussieu (1824) based on collections of Roxburgh from the Coromandel Coast.” However, there appears to be no evidence in favour of this statement. There is no material in the Jussieu Herbarium in Paris (P-JU), nor in the general herbarium (P) which can be pinpointed as the type. On the other hand there is a specimen in the Kew herbarium (K000247065!) preserved as the ‘type’ of Suregada multiflora. This specimen was collected by an unknown collector from ‘Coromandel’ and was received from the Paris herbarium (“Ex herbario musei Parisiensis”). In absence of any evidence and as the type was not designated by Jussieu (1824), the original drawing is designated here as the lectotype of Euphorbia sessiliflora. The lectotype of G. fasciculatum bears identification by Roxburgh in his own handwriting.

(1792) Excoecaria agallocha


Distribution: India, Sri Lanka, Bangladesh, Myanmar, China, Cambodia, Vietnam, Ryu-Kyu Islands, throughout Malesia to N Australia and the Pacific Islands.

(999) Gelonium bifarium


Type (lectotype, designated by Ramana et al., 2015): India, Roxburgh s.n. (B-W18501-020). Remaining original material: India, Roxburgh s.n. (B-W10501-010!).

Distribution: India (Andaman & Nicobar Islands), throughout Malesia to N Australia (Chakrabarty & Balakrishnan 2015: 365).

(124) Gelonium fasciculatum (as glabrum on drawing)


= Gelonium fasciculatum Roxb. [Hort. Bengal. 73: 1814, nom. nud. (as fasciculatum)] Fl. Ind. 3: 832. 1832. Type citation: “This is rather a small tree, a native of the Circar mountains and Bengal.”

Type (lectotype, designated here): Without locality (presumably India), No collector s.n. [7891] (K001128695!). Remaining original material: Icones Roxburghianae, No. 124 (CAL!, K!).

Distribution: India, Bangladesh, Myanmar, China, Laos, Vietnam, Thailand, Malaysia, Sumatra, Celebes and Lesser Sunda Islands.

Note: According to Ramana et al. (2015: 181), “Gelonium multiflorum was described by Jussieu (1824) based on collections of Roxburgh from the Coromandel Coast.” However, there appears to be no evidence in favour of this statement. There is no material in the Jussieu Herbarium in Paris (P-JU), nor in the general herbarium (P) which can be pinpointed as the type. On the other hand there is a specimen in the Kew herbarium (K000247065!) preserved as the ‘type’ of Suregada multiflora. This specimen was collected by an unknown collector from ‘Coromandel’ and was received from the Paris herbarium (“Ex herbario musei Parisiensis”). In absence of any evidence and as the type was not designated by Jussieu (1824), his original drawing is designated here as the lectotype of Gelonium multiflorum. The lectotype of G. fasciculatum bears identification by Roxburgh in his own handwriting.
Jatropha glandulifera

**Jatropha glandulifera** Roxb. [Hort. Bengal. 69. 1814, *nom. nud.*] Fl. Ind. 3: 688. 1832. Type citation: “This stout shrub is to be met with in a few gardens about Calcutta, where, in from six or seven years they have grown to be from four to eight feet high; from whence they came I cannot learn; but as the juice is used medicinally, I suspect the plant to be well known, if not indigenous at no great distance.”

**Type** (lectotype, designated here): India, *Roxburgh s.n.* (BR0000013052072!). Remaining original material: India, *Roxburgh s.n.* (K000246801!). India, *Roxburgh in Wallich 7802 A* (K001127935!). Icones Roxburghianae, No. 1688 (CAL!, K!).

**Distribution:** Sri Lanka, India, Bangladesh and Myanmar.

**Note:** The specimen at BR is the best specimen among the other available uncited original materials and therefore the same has been designated as the lectotype of the name.

(123 & 2146) Nageia putranjiva

**Putranjiva roxburghii** Wall., Tent. Fl. Napal. 2: 61. 1826. – *Nageia putranjiva* Roxb. [Hort. Bengal. 71. 1814, *nom. nud.*] Fl. Ind. 3: 766. 1832, *nom. illeg.*, *non* Lindl., 1829. Type citation: “A native of the various mountainous countries of Coromandel and Hindoosthan, where it grows to be a large timber tree with an erect straight trunk.”

**Type** (lectotype, designated here): [unpubl. Icon] Icones Roxburghianae, No. 123 & 2146 (CAL!). Remaining original material: India, *Roxburgh s.n.* (G00325636!). Icones Roxburghianae, No. 123 & 2146 (K!). Figure 4.

**Distribution:** Sri Lanka, India, Pakistan, Nepal, Bangladesh, Myanmar, Thailand, Laos, Vietnam, Cambodia, Malaysia, Java, Moluccas, Lesser Sunda Islands, Celebes and New Guinea.

**Note:** Forman (1997) did not include *Nageia putranjiva* in his publication. However, the specimen, *Roxburgh s.n.* (G00325636!) may be regarded as an uncited original material but it is not a good specimen, bearing immature inflorescences. As per Art. 9.12 of the ICN, an uncited original specimen as well a drawing have equal priority in lectotype designation. Hence, the excellent drawing at CAL is designated here as the lectotype of the name.

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Nageia putranjiva. The corresponding drawings both at CAL and K bear two numbers, 123 and 2146 (Sealy 1956, Sanjappa et al. 1994).

(125) Osyris peltata

Type (first-step lectotype, designated by Whitmore, 2008): India, Roxburgh s.n. (BR). Second step lectotype (designated here): India, Roxburgh s.n. (BR00000084949099!); isolectotypes BR00000084949096!, BR00000084940161!). Remaining original material: India, Roxburgh s.n. (BM000645887!). Icones Roxburghianae No. 125 (CAL!, K!).

Distribution: Sri Lanka, India (including Andaman Islands), Bangladesh, Myanmar and Thailand.

Note: I assume the specimens at BR to be of a single gathering (Art. 8.2) because there is no evidence to prove that they belong to different gatherings, and therefore, a second-step lectotype has been designated here as per Art. 9.17 of the ICN.

(1234) Pierardia sapida

Type (lectotype, designated by Haegens, 2000): Vietnam, Hortis Cochinchinae, Loureiro s.n. (BM000031252!). = Pierardia sapida Roxb. [Hort. Bengal. 28. 1814, nom. nud.] Fl. Ind. 2: 254. 1832. = Baccaurea sapida (Roxb.) Müll.Arg. in DC., Prodr. 15(2): 459. 1866. Type citation: “Lutco of the Hindoos, about Tippera, &c. to the eastward of Calcutta, where the tree is indigenous. A few small trees are now in the Company's Botanic garden at Calcutta; they were originally from Tippera”

Type (lectotype, designated by Chakrabarty & Balakrishnan, 2018): India, Roxburgh s.n. (BR00006994082!). Epitype (designated by Chakrabarty & Balakrishnan 2018): India, Hort. Bot. Calcutt., 1836, Wallich 8072 A (K001128918!; isoeptitype K000246748!). Remaining original material: Icones Roxburghianae, No. 1234 (CAL!, K!).

Distribution: India (including Andaman Islands), Bhutan, Bangladesh, Myanmar, China, Cambodia, Laos, Vietnam, Thailand and Malaysia.

Note: While relectotypifying the name Pierardia sapida, Chakrabarty & Balakrishnan (2018a: 103) noted: “Pierardia sapida Roxb. was lectotypified by Burton., Wallich 8072 (K), by Haegens (2000). There are two components in Wallich 8072, viz. 8072 A - Hort. Bot. Calcutt. and 8072 B - Koyua, Burma, collected in 1827. None of these sheets bear the annotation by Haegens. However, as he indicated Burma with a question mark, it is presumed that he designated the specimen 8072 B as the lectotype. The other specimen, 8072 A (K001128918!) bears an annotation Pierardia sapida but this is not Roxburgh’s handwriting and moreover, the date of collection of the duplicate sheet (K000246748) is written as 1836. There is another component, 8072 C, added later, is Herb. Heyne which was collected in 1808 and 1809. The protologue (1832) gives thus: “Lutco of the Hindoos, about Tippera & c. to the eastward of Calcutta, where the tree is indigenous.” In Hortus Bengalensis (1814): “H. Lutka. Chittagong, Before 1794, S. T. 2, 5.” In absence of any evidence that these were the original materials seen by Roxburgh for describing the species, we are designating a sheet in Herb. BR collected by Roxburgh as the lectotype. However, as this specimen is devoid of flowers and fruits, an epitype is also designated.”

(268) Phyllanthus cheramella
Phyllanthus acida Jacq., Pl. Rar. Hort. Schoenbr. 2: 36, t. 194. 1797 (as longifolia); Roxb.,
Hort. Bengal. 69. 1814; Fl. Ind. 3: 671. 1832. Type citation: “Crescit ad Caracas.”


*Phyllanthus cheramela* Roxb. [Hort. Bengal. 104. 1814, nom. nud.].

**Distribution:** Widely cultivated. Probably native to the coastal regions of NE Brazil.

**Note:** In absence of any specimen, the original drawing of *Phyllanthus longifolius* has been designated here as the lectotype.

(260) *Phyllanthus bacciformis*


**Type** (lectotype, designated by Scott, 1982): India, Koenig s.n. Herb. Linn. No. 1105.6 (LINN-HL1105-6).

**Distribution:** Mauritius; India, Sri Lanka, Myanmar, Thailand, China, Vietnam, Malaysia, Borneo, Java, Philippines and Lesser Sunda Islands.


**Type** (neotype, designated by Coode, 1982): Without locality (presumably India), 1777, J.G. Koenig s.n. Herb. Linn. No. 1105.12 (LINN-HL1105-12).


**Type** (holotype): Germany, Berlin Botanical Garden [Hort. bot. Berol.], No collector s.n. (B-W17954-010).

= *Phyllanthus obcordatus* Roxb. [Hort. Bengal. 69. 1814, nom. nud.] Fl. Ind. 3: 656. 1832, nom. illeg., non Willd., 1814. Type citation: “A native of Bengal. Flowering time the close of the rains, and cold season.”

**Type** (lectotype, designated by Chakrabarty & Balakrishnan, 2018a: 302): India, Without locality, Roxburgh in Wallich 7906 A (K001128484!). Remaining original material: Icones Roxburghianae, No. 1683 (CAL!, K!).

= *Phyllanthus graecis* Roxb. [Hort. Bengal. 69. 1814, nom. nud.] Fl. Ind. 3: 655. 1832. Type citation: “A rare, somewhat shrubby plant, growing under the shelter of other bushes, and trees. Teling. Usereeke.”

**Type** (lectotype, designated here): [unpubl. icon] Icones Roxburghianae, No. 266 (CAL!). Remaining original material: Icones Roxburghianae, No. 266 (K!).

**Distribution:** Tropical Africa to Arabia and eastwards to Pakistan, India, Sri Lanka, Bangladesh, Myanmar, China, Java and Australia.

**Note:** Neotypification of the name *Phyllanthus maderaspatensis* by Coode (1982) takes precedence over the designation of the same by Radcliffe-Smith (1985: 658).

(254) *Phyllanthus emblica*

**Phyllanthus emblica** L., Sp. Pl. 2: 982. 1753; Roxb., Hort. Bengal. 69. 1814 & Fl. Ind. 3: 671. 1832. Type citation: “Habitat in India.”


**Distribution:** Pakistan, India, Sri Lanka, Nepal, Bhutan, Bangladesh, Myanmar, Thailand, China, Laos, Cambodia, Vietnam, Taiwan, Malaysia, Indonesia (excl. Borneo) and Lesser Sunda Islands.

(1912) *Phyllanthus kirganelia*


**Type** (neotype, designated by Friedmann, 1994): Mascarene Islands, Ile de France [Mauritius], Dec. 1847, L.H. Boivin s.n. [1560] (P00121748!).


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Ind. 3: 668. 1832. Type citation: “Habitat in Insula Borbonia. Jussieu.” 

Type (lectotype, designated by Coode, 1982): La Réunion, Commerson s.n. (P-JU - n.v.). Syntype: Bourbon Island, A. de Jussieu s.n. (HAL0118943).

Distribution: Aldabra, Comoros, Madagascar, Mauritius and Réunion.

Note: Unfortunately, the lectotype of Phyllanthus kirganelia at P-JU could not be examined due to limited opportunities. Ralimanana & Hoffmann (2011: 349), unaware of the lectotypification by Coode (1982), redesignated a lectotype of the name Phyllanthus kirganelia to a Desfontains collection in B-W (B-W17987-010!). Roxburgh (1832a) mentioned that this is a native of Mauritius and introduced from there into the Botanic Garden at Calcutta by Capt. Tennant in 1802.

(257) Phyllanthus leucopyrus


Type (first-step lectotype, designated by Webster, 1984): India, Klein 64, 401, 576 (B, photographs in DAV!). Second-step lectotype (designated by Chakrabarty & Balakrishnan, 2018): India, Klein s.n. [64] (B-W18342-010!); isolecotypes Klein s.n. [401] (B-W18342-020!); Klein s.n. [576] (B-W18342-030!).

Distribution: Arabia, Pakistan, India, Sri Lanka, Bangladesh, Myanmar, China and Africa.

Notes: Radcliffe-Smith (1986: 21) cited the type as: “Holotype: India, Klein in herb. Willd. No. 18342 & 2 isotypes (B-WILLD); IDC Microfiche No. 7440.30/1334: II. 2-5!” As this statement is not pinpointing a single specimen, this designation also qualifies as first-step lectotypification but it is antedated by that of Webster (1984) by two years.

(259) Phyllanthus multiflorus

Phyllanthus reticulatus Poir., Encycl. 5: 298. 1804 (as reticulata); Radcl.-Sm. in Nasir & Ali, Fl. Pakistan 172: 32. 1986. Type citation: “Cette plante croît dans les Indes, d’où elle a été communiqué au citoyen Lamarck.”

Type (lectotype, designated by Radcliffe-Smith, 1986 or perhaps holotype): Without locality, no collector [Herb. Lamarck] (P-LA - P00381823).


Type (holotype): India, Klein s.n. (B-W17972-010!).

Distribution: Pakistan, India, Sri Lanka, Nepal, Bhutan, Bangladesh, Myanmar, Thailand, China, Vietnam, Laos, Cambodia and through out Malesia to NE Australia; Tropical W Africa.

(261) Phyllanthus niruri


Distribution: Apparently native to the New World, but now a ubiquitous pantropical weed.

Note: Radcliffe-Smith (1986) indicated the type as: “Holotype & 3 isotypes: Ghana, Thonn. 4(C); fragment of holotype, photos of holotype and an isolate (K).” He further clarified (Radcliffe-Smith 1987: 58): “Type: Ghana [Guinea], Thonn. 4 (C, holot., 3 iso., IDC microfiche 2203-2/80: III. 2-6!; 2203-3/83: III. 3, 4!” However, this citation does not pinpoint the lectotype out of the four specimens and therefore I assume this is the first-step lectotypification, narrowed by Webster (1997) to a single specimen by putting his annotation on the sheet. The lectotypification by Mitra & Jain (1987) should also be accepted as a first-step lectotype, but antedated by that of Radcliffe-Smith (1986).

(1684) Phyllanthus patens, (255) Phyllanthus turbinatus


Type (lectotype, designated here): [icon] Perin nirouri, Ma nirouri, Rheedee, Hort. Malab. 5: 85, t. 43. 1685.

= Phyllanthus patens Roxb., [Hort. Bengal. 69. 1814, nom. nud.] Fl. Ind. 3: 667. 1832. Type citation: “A native of Chittagong, and from thence introduced by Mr. William Roxburgh, Jun. into the Botanic garden, where it is in flower all the year, and a very ornamental shrub it is.”

Type (lectotype, designated by Chakrabarty & Balakrishnan, 2018): India, East India, Roxburgh s.n. (K000246633!). Remaining original material: Indonesia, Java, Blume s.n. (A00098581!).

Distribution: Sri Lanka, India, Nepal, Bhutan, Bangladesh, Myanmar, China, Laos, Cambodia, Vietnam, Thailand and Malaysia.

Note: Although [icon] Rheedee, Hort. Malab. 5:85, t. 43. 1685 is the only original material of Phyllanthus retusus, this name still required an effective lectotypification. Phyllanthus turbinatus is an illegitimate name, it included the type of Breyria retusa (the plate of Rheedee), and is there fore a homotypic synonym of Breyria retusa.

(265) Phyllanthus pendulus

Phyllanthus pendulus Roxb., [Hort. Bengal. 69. 1814, nom. nud.] Fl. Ind. 3: 662. 1832.

Type citation: “A most beautiful, somewhat shrubby, erect species, when young not unlike Niruri, a native of the same places, but very rare. Flowering time the latter part of the wet season. Teling. Telia userekeey.”

Type (lectotype, designated here): [unpubl. icon] Ikonox Roxburghianae, No. 265 (CAL!). Remain ing original material: Ikonox Roxburghianae, No. 265 (K!). Figure 5.

Distribution: India – endemic.

Note: Possibly never collected after the type; apparently close to Phyllanthus debilis Klein ex Willd., differing in the male cymules appearing among tufts of bracts and the leafy branches often elongated and pendulous, up to 25 cm long.

(2098) Phyllanthus reclinatus


Type citation: “in fruticetis humidis prope Parong Provinciae Buitenzorg.”

Type (lectotype, designated by Esser in Welzen et al., 2014): Indonesia, Java Blume 1036 (L, herbarium registration number 903.155-99!). Remaining orginal material: Indonesia, Java, Blume s.n. (A00098581!).

Distribution: India, East India, Roxburgh s.n. (BM000560782!). Ikonox Roxburghianae, No. 2098 (CAL, K!).

Distribution: India (Nicobar Islands), Myanmar, Thailand, Malaysia, Sumatra, Java, Borneo, Philippines, Celebes, Lesser Sunda Islands and Bismarck Archipelago.

(1911) Phyllanthus retusus, (256) Phyllanthus virosus


Type citation: “Habitat in India orientali.”

Type (lectotype, designated by Webster, 1845 or perhaps holotype?): India, Nandaradah, 23 Oct. 1794, Klein s.n. [748] (B-W17964-010). Remaining original material: India, Roxburgh s.n. (BM000560782!).

Type (lectotype, designated by Chakrabarty & Balakrishnan, 2018): India, Mentals, Roxburgh s.n.
(K000246632!). Remaining original material: India, East India, Roxburgh s.n. Herb. Linn. No. 1452.5 (LINN-HS1452-5). Icones Roxburghiana, No. 1911 (CAL!, K!).

**Distribution:** Widespread in tropical Asia, Africa and Australia (subsp. melanthesoides).

(267) *Phyllanthus rhamnoides*


**Type** (lectotype, designated by Chakrabarty & Gangopadhyay, 1996 or perhaps holotype): India, J.G. Klein s.n. (B-W17985-010!).

= *Ceratogynum rhamnoides* Wight, Icon. Pl. Ind. Orient. 5(2): 26, t. 1900. 1852. Type citation: “No station is given, the drawing of the plant and the figs. 1, 2 of the analysis were taken from recent specimens, the rest from the dried ones. Roxburgh calls it ‘a small shrub a native of cultivated land, among other shrubs along the coast of Coromandel’.”

**Type** (lectotype, designated by Chakrabarty & Balakrishnan, 2018): [unpubl. icon] Icones Roxburghiana, No. 267 (CAL!). Remaining original material: Icones Roxburghiana, No. 267 (K!).


**Distribution:** Sri Lanka and India (Chakrabarty & Balakrishnan 2018a: 174).

**Note:** The earlier lectotypification of the name *Ceratogynum rhamnoides* by Welzen (2003: 365) is not in accordance with Art. 7.11 of the ICN as he used the phrase “proposed here” instead of “designated here (hic designatus)” or an equivalent (see Note under *Breynia androgyna*).

(263) *Phyllanthus simplex*

*Phyllanthus simplex* Retz., Observ. Bot. 5: 29. 1788; Roxb., Hort. Bengal. 69. 1814 & Fl. Ind. 3: 654. 1832. Type citation: “E Tranquebaria mit Sit Honor, KÖNIG.”

**Type** (lectotype, designated by Fischer, 1932: 65): India, Koenig s.n. (L1742457!). Syntypes: India, Koenig s.n. (C10011341!, C10011342!, C10011343!).

**Distribution:** Sri Lanka and India to SE Asia, S China and Malesia (in Melanesia intergrading with *P. virgatus* G. Forst.).

**Note:** Webster (1997: 213), possibly unaware of the publication of Fischer (1932), inadvertently designated another lectotype in the Copenhagen herbarium. Recently Verwijs et al., (2019: 247) applied a wide concept and treated *P. simplex* as well as *P. narayanswamii* Gamble, a South Indian endemic as synonyms of the Pacific species *P. virgatus* G. Forst., though resorting to a narrow concept in maintaining *P. gardnerianus* (Wight) Baill. as a closely allied distinct species. I have, however, followed here the concept of Webster (1986: 94–95, 1997: 213) who considered *P. simplex* as a distinct species differing from *P. virgatus* in the in the larger seeds, longer fruiting pedicels, papillate ovaries and undissected disc of female flowers. In this context, it may be mentioned that recent collections of *P. narayanswamii* are now available (Satish & Rao, 2019: 20) which show that *P. narayanswamii* is different and distinct from *P. simplex* in the relatively broader coriaceous leaves, slightly thickened along margins and the lateral nerves being much stronger and conspicuously raised on the undersurface. In these characters, *P. narayanswamii* approaches closer to *P. gardnerianus* which, however, does not exhibit such strong lateral venation of the leaves and therefore it seems possible that these two species may ultimately be united, at least as varieties, when further gatherings are made available.

(1685) *Phyllanthus strictus*


= Phyllanthus strictus Roxb. [Hort. Bengal. 69. 1814, nom. nud.] Fl. Ind. 3: 670. 1832. Type citation: “A native of the Malay Islands, to the eastward of the Bay of Bengal.”

Type (lectotype, designated by Chakrabarty & Gangopadhyay, 1996): India, Roxburgh s.n. (K000246333). Remaining original material: Without locality, Roxburgh s.n. (BR000000510 51 821); East India, Roxburgh s.n. (LINN-HS1452-91); Bangladesh, Sylhet, Roxburgh in Wallich 7933 E (BR0000133369671). Icones Roxburghianae, No. 1685 (CAL!, K!).

Distribution: Sri Lanka, India, Bhutan, Bangladesh, Myanmar, Thailand, China, Laos, Cambodia, Vietnam, Malaysia, Java, Sumatra, Borneo, Celebes, Moluccas, Philippines, Lesser Sunda Islands and New Guinea.

Note: Chakrabarty & Gangopadhyay (1996: 519) cited the type of Clutia androgyna as: “Type: India, Cat. No. 1206/14 (LINN: microfiche!).” Thus, they definitely accepted Cat. No. 1206.14 in the Linnaean herbarium as the type, satisfying Art. 7.11 and 9.22 of the ICN. However, Jarvis (2007) overlooked this publication and accepted that the lectotype of the name C. androgyna was designated by Welzen (2003: 340). While doing so, Welzen stated: “Lectotype (suggested here): Hb. Linnaeus 1206.14 (holo LINN).” At this point I had requested (by email dated 24 June 2017) Dr. John McNeill (Edinburgh) for clarification of Art. 7.10 of the ICN (McNeill et al., 2012, being in effect in 2017) with reference to the verbs “selected here”, “suggested here” and “proposed here” used by van Welzen (2003). Eventually, in a personal communication (dated 26 June 2017) Dr. McNeill clarified: “Your question is quite a puzzling one, as much as for why van Welzen used three different verbs in association with his lectotypifications in his paper (van Welzen, P. C. 2003. Revision of the Malesian and Thai species of Sauropsis (Euphorbiaceae: Phyllanthoideae). Blumea 48: 319-391) as to how they should be treated under the Code.”

“I have looked at the paper and on six occasions van Welzen referred to the type being “selected here”. These are on pages 331, 347, 356, 358 (also a “proposed here”), 370, & 372. There is no doubt but that “selected here” is a clear equivalent of “designated here (hic designatus)” and so these are likely to be effective lectotypifications.” “As you note, on one occasion (Clutia androgyna L. on page 340) van Welzen used “suggested here”. To my mind this clearly does not constitute definite acceptance of the type and I would regard this as not an effective lectotypification.” “The four cases (on pages 340, 358, 365, 367) in which van Welzen used “proposed here” are more problematical. On balance and in light of the words “definitely accepted” in Art. 7.10, of which the author should have been aware, I would conclude that these four are not effective lectotypifications. The verb “to propose” implies that some other person or persons will either accept or reject the proposal, so there is a lack of finality, but, equally, there is no suggestion of doubt on the part of the proposer, as there certainly is with the verb “suggested”. Hence some might argue that these four are acceptable. But, as I said, the prescriptive wording of Art. 7.10 that van Welzen has evidently rejected makes me inclined not to accept those typifications that are only “proposed” and not “selected”.

(1913) Phyllanthus tenellus

Phyllanthus tenellus Roxb. [Hort. Bengal. 69. 1814, nom. nud.] Fl. Ind. 3: 668. 1832. Type citation: “Introduced from the Mauritius in 1802, by Captain Tennant.”

Type (lectotype, designated by Mitra, 1987: 156): [unpubl. icon.] Icones Roxburghianae, No. 1913 (CAL!). Remaining original material: Icones Roxburghianae, No. 1913 (K!). Figure 6.

Distribution: Pantropical weed of African origin; native of Mascarene Islands; introduced into New World; India and Sri Lanka.

Note: The list of Forman (1997) does not contain any information on Phyllanthus tenellus. Webster (1957: 54), followed by Coode (1982: 26) designated a specimen Wallich 7892 A, p.p. (K001128401 [top left-hand side specimen!]) as the lectotype of the name. However, Mitra (1987), while redesignating a lectotype, clearly pointed out that the said specimen was not the original material used for describing the species. It was collected by Buchanan-Hamilton from Calcutta Botanic Garden on 20 December 1814.
and that Roxburgh left India in March 1813 and his Flora Indica manuscript and drawings were completed much before he left Calcutta. Buchanan-Hamilton, who was in-charge of Garden from November 1814 to 23 February 1815, left India 5 days after the death of Roxburgh, carrying with him all his botanical specimens of the 1807-14 period and gave the same to the Court of Directors of the Company on reaching London. The specimens were handed back to him in 1820 for arrangement and the above noted specimen was included under serial no. 2084 in his ‘Catalogue of Dried Plants collected, presented to the Museum of the Hon’ble E. India Company’ (MSS 1822). Wallich subsequently incorporated the specimen in his catalogue along with other specimens of Buchanan-Hamilton’s original set left in the Company’s Museum at India House. No doubt the above noted specimen collected by Buchanan-Hamilton appears to be one of the last assemblages of the original population of Phyllanthus tenellus raised in Calcutta Garden in 1802, yet Roxburgh did not have even a chance to see this specimen.

(2396) Phyllanthus tetrandrus

Type citation: “Angrua, the vernacular name in Silhet where it is found, a small ramous shrub, common in the forests of that country; it blossoms in April and May, and the seed ripens in September.”

Type (lectotype, designated by Chakrabarty & Balakrishnan, 2018): [unpubl. icon.] Icones Roxburghianae, No. 2396 (CAL!). Remaining original material: Icones Roxburghianae, No. 2396 (K!). Figure 7.

Distribution: NE India and Bangladesh.

(264) Phyllanthus urinaria


Distribution: Native of South-East Asia but now widespread in tropical and subtropical region (Webster 1986: 104).

Note: The relectotyped specimen by Coode (1982: 27), Herb. Linn. No. 1105.4 (LINN!) from an unspecified locality appears to be a later addition.

(258) Phyllanthus vitis-idaea


Distribution: Pakistan, India (including Andaman Islands), Sri Lanka, Nepal, Bangladesh, Myanmar, China, Cambodia, Taiwan, Vietnam, Ryu-Kyu Islands, Thailand, Malaysia, Sumatra and Philippines.

(1689) Ricinus mappa


Distribution: Moluccas and Celebes.

(1712) Rottlera alba
2: 207. 1786. Type citation: “Cette espèce, que M. Sonnerat nous a communiquée, croît naturellement dans l’Isle de Java; M. de Commerson en a aussi rapporté des échantillons du même pays.”

**Type** (lectotype, designated by Forster, 1999): Indonesia, Java, Commerson s.n. [herb. A. Juss.]


**Type** (lectotype, designated here): Indonesia, *W. Jack* s.n. (E00181493).

**Distribution:** Bangladesh, Myanmar, China, Taiwan, Thailand, Vietnam and throughout Malesia to E Australia and New Guinea; absent in India.

**Note:** It may be mentioned that the manuscript name, *Rottlera alba* was validated by Jack (1820) who had a copy of Roxburgh’s ‘Hortus Bengalensis’ (Merrill 1952: 212) and Nathaniel Wallich helped him in matching his collections in relation to Roxburgh’s names. Roxburgh applied the name to a cultivated plant in Calcutta Botanic Garden obtained from “Pulo Pinang”. Sierra & Welzen (2005: 261) designated a lectotype of the name *Rottlera alba* to a collection of Roxburgh from Calcutta Botanic Garden (BR0000008494030!). However, the same has been relectotypified here because an original specimen by Jack is available at E.

(480) *Rottlera dicocca*


**Distribution:** Sri Lanka and peninsular India.

**Note:** The conclusion of Chakrabarty & Balakrishnan (1997: 24) that Croton *laccifer* is conspecific with *C. aromaticus* is followed here and as the dates of publication of both the species are same, the name *C. aromaticus*, chosen by Geiseler (1807: 21), who first united these species is retained here as the accepted name for the combined species. Jarvis (2007) indicated that Chakrabarty & Balakrishnan designated the first-step lectotype of the name *C. aromaticus* and subsequently Webster (1993) designate the second step lectotype. In this context, it may be mentioned that the said paper by Chakrabarty & Balakrishnan was actually published in 1997. Furthermore, Webster’s designation of Herb. Hermann 1: 63, No. 345 should be considered as the first-step lectotype of *C. aromaticus* as there are two specimens mounted on that page with different barcodes, now to be narrowed to a single specimen in a second-step lectotypification as done here (Art. 9.17 of ICN).

(480) *Rottlera ferruginea*, (2408) *Rottlera tetracocca*

*Mallotus tetracoccus* (Roxb.) Kurz in J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 42(4): 245. 1874. – *Rottlera tetracocca* Roxb. [Hort. Bengal. 73. 1814, nom. nud.] Fl. Ind. 3: 826. 1832. Type citation: “Marleya is the vernacular name in the Silhet district, where it grows to be a useful timber tree, of considerable size. It flowers in April and May; and the seeds ripen in August.”

**Type** (lectotype, designated here): [unpubl. icon] Icones Roxburghianae, No. 2408 (CAL). Remaining original material: Icones Roxburghianae, No. 2408 (K!). **Figure 8.**

= *Rottlera ferruginea* Roxb. [Hort. Bengal. 73. 1814, nom. nud.] Fl. Ind. 3: 828. 1832. – *Mallotus ferrugineus* (Roxb.) Mull.Arg. in DC., Prodr. 15(2): 982. 1866. Type citation: “A native of the Malay Islands. The male plant flowers during the hot
season in the Botanic garden at Calcutta.”


**Distribution**: Sri Lanka, India, Bangladesh, Myanmar, China and Thailand.

**Note**: Airy Shaw (1972: 298) correctly interpreted and circumscribed *Mallotus tetracoccus* and added *Rottlera ferruginea* as its synonym. Hence, as per Art. 11.5 of ICN, this treatment is to be followed. There is no drawing of *R. ferruginea* at Kew (Sealy, 1957).

**Type** (first-step lectotype, designated by Sierra et al., 2005): India, Roxburgh in Wallich 7832 A (K).


**Distribution**: Pakistan, India (including Andaman Islands), Sri Lanka, Nepal, Bhutan, Bangladesh, Myanmar, China, Laos, Cambodia, Thailand and throughout Malesia to North Australia.

**Note**: Sierra et al., (2005) cited the type of *Rottlera tinctoria* as: “Lectotype (selected here): Wallich Numer. List 7832A (holo K (photo in L); iso K (photo in L), Icon Ined. 106 (CAL, K), India.” This constitutes the first-step lectotype as they did not indicate which specimen out of the two are being designated as the lectotype. Hence Art. 9.17 of the ICN has been applied here to designate a second-step lectotype.

**Type** (lectotype, designated here): Bangladesh, Sylhet, Roxburgh s.n. (P00716422l). Remaining original material: Bangladesh, Sylhet, Roxburgh s.n. (A00055227l). Icones Roxburghianae, No. 2397 (CAL!, K!).

**Distribution**: India (including Andaman & Nicobar Islands), Nepal, Bhutan, Bangladesh, Myanmar, China, Laos, Cambodia, Vietnam, Thailand, Malaysia, Sumatra and Borneo.

**Note**: The lectotypification by Esser (1999: 155–156) was not effective as he cited two specimens at two herbaria as well as a drawing.

**Type** (lectotype, designated by Airy Shaw, 1980): Philippines, Sonnerat s.n. (P-LA, P00279571l).

= *Rottlera tinctoria* Roxb., Pl. Coromandel 2: 36, t. 168. 1802 & Hort. Bengal. 73. 1814 & Fl. Ind. 3: 827. 1832. Type citation: “Wassunta-gunda of the Telings. It is a native of the inland mountainous parts of the Circars; I never found it anywhere else.”
Type (lectotype, designated by Esser, 1999): India, Buchanan Hamilton [Herb. Roxburgh] s.n. (B-W17946-010).


Type (lectotype, designated by Esser, 1999): India, Roxburgh s.n. (G00414527!). Remaining original material: India, [Herb.] Roxburgh s.n. (BM000951568!, BM000951569!, BR0000013052348!). India, Roxburgh in Wallich 7963 A (K000247116!). Icones Roxburghianae, No. 1296 (CAL!, K!).

Distribution: Sri Lanka, India (including Andaman Islands), Bangladesh, Myanmar, China, Vietnam, Thailand and Malesia (excl. Philippines) to Solomon Islands.

Note: As explained by Esser (1999: 188), the name Sapium bingiricum is possibly a homotypic synonym of S. indicum.

(233) Sapium cordifolium

Type (lectotype, designated by Chakrabarty & Balakrishnan, 2016): Nepal, 1821, Wallich 7825 (K000246984!; isolecotypes G00325595!, K001128023!, K001128024!).

= Sapium cordifolium Roxb. [Hort. Bengal. 104. 1814, nom. nud.] Fl. Ind. 3: 693. 1832. Type citation: “A small tree, a native of moist values among the Circar mountains.”

Type (lectotype, designated by Chakrabarty & Balakrishnan, 2016): [unpubl. icon] Icones Roxburghianae, No. 233 (CAL!). Remaining original material: Icones Roxburghianae, No. 233 (K!).

Distribution: India, Nepal, Bhutan and China.

(989) Sapium sebiferum

Type citation: “Habitat in Chinae humidis. Osbeck.”

Type (lectotype, designated by Radcliffe-Smith, 1986): China, Osbeck in Herb. Linn. No. 1140.9 (LINN-HL1140-9).

Distribution: Native to China and Taiwan; often cultivated in the warmer regions of the World and sometimes naturalizing.

(107) Stilago diandra, (2561, 2564 on drawing)
Stilago lanceolaria

Type (lectotype, designated by Fischer, 1932): India, Koenig s.n. (LD1740409!).

= Stilago diandra Roxb., Pl. Coromandel 2: 35, t. 166. 1802 & Fl. Ind. 3: 759. 1832. Type citation: “A large tree; a native of the mountainous parts of the Circars; flowers in June.”

Type (lectotype, designated by Hoffmann, 2006): India, Roxburgh s.n. (BM – n.v.). Remaining original material: India, Roxburgh s.n. (BR0000006993719!, BR0000006994648!). India, No collector [Roxburgh] s.n. (E00314313!, E00314314!). [icon] Roxburgh, Pl. Coromandel 2: 35, t. 166. 1802.

= Stilago lanceolaria Roxb. [Hort. Bengal. 71. 1814, nom. nud.] Fl. Ind. 3: 760. 1832. Type citation: “a native of Chittagong. In the Botanic garden it blossoms during the rainy season.”

Type (lectotype, designated by Hoffmann, 2006): [unpubl. icon.] Icones Roxburghianae, No. 2561 (No. 2554 on drawing) (K!). Remaining original material: Icones Roxburghianae, No. 2561 (No. 2554 on drawing) (CAL!).


(269) Tragia cannabina

Type (lectotype, designated here): [icon] Plukenet, Phytographia t. 220, f. 2. 1694.

Tragia cannabina L.f., Suppl. Pl. 415. 1782; Roxb., Fl. Ind. 3: 575. 1832, nom. superfl.

Distribution: Sri Lanka and India; Africa.
Note: As elucidated by Jarvis (2007), the name Croton hastatus required a formal lectotypification.

(270) Tragia involucrata

Tragia involucrata L., Sp. Pl. 2: 980. 1753; Roxb., Fl. Ind. 3: 576. 1832. Type citation: “Habitat in India.”


Distribution: Sri Lanka, India and Bangladesh.

Note: The designated lectotype is the best specimen among the duplicates.

(441) Tragia mercurialis

Micrococca mercu rialis (L.) Benth. in W.J. Hooker, Niger Fl. 503. 1849; Radcl.-Sm. in W.J. Hooker, Niger Fl. 503. 1849; Radcl.-Sm. in W.J. Hooker, Niger Fl. 503. 1849; Radcl.-Sm. in Kew Bull. 37: 425. 1982. – Tragia mercurialis L., Sp. Pl. 2: 980. 1753; Roxb., Fl. Ind. 3: 576. 1832. – Claoxylon mercurialis (L.) Thwaites, Enum. Pl. Zeyl. 271. 1861. – Microstachys mercurialis (L.) Dalzell & A.Gibson, Bombay Fl. 227. 1861. Type citation: “Habitat in India.”


Distribution: Celebes, Moluccas, New Guinea, Bismarck Archipelago, N Australia, Solomon Islands and Vanuatu.

Note: I agree with the previous authors (e.g. Pax & Hoffmann 1914: 374, Airy Shaw 1982: 27, Whitmore 2008: 160) that Baillon (1858: 432) transferred Urtica involucrata to Macranga, making a new combination because it cannot be proved that he gave a new name replacing Roxburgh’s illegitimate name. Forman (1997) indicated the possible type in BR and Wallich Cat. 4621 A at Kew. The lectotype designated here at BM is the best among the available original specimens bearing identification by Roxburgh in his own handwriting and matching well with the short description in the protologue.

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Figure 1. Lectotype of Clutia oblongifolia – Icones Roxburghianae, No. 2400 (CAL) (© Director, BSI, Kolkata).

Figure 2. Lectotype of Clutia semperflorens – Icones Roxburghianae, No. 2401 (CAL) (© Director, BSI, Kolkata).

Figure 3. Lectotype of Euphorbia peltata – Icones Roxburghianae, No. 1248 (CAL) (© Director, BSI, Kolkata).

Figure 4. Lectotype of Nageia putranjiva – Icones Roxburghianae, No. 123 (CAL) (© Director, BSI, Kolkata).
Figure 5. Lectotype of *Phyllanthus pendulus* – Icones Roxburghianae, No. 265 (CAL) (© Director, BSI, Kolkata).

Figure 6. Lectotype of *Phyllanthus tenellus* – Icones Roxburghianae, No. 1913 (CAL) (© Director, BSI, Kolkata).

Figure 7. Lectotype of *Phyllanthus tetrandrus* – Icones Roxburghianae, No. 2396 (CAL) (© Director, BSI, Kolkata).

Figure 8. Lectotype of *Rottlera tetracocca* – Icones Roxburghianae, No. 2408 (CAL) (© Director, BSI, Kolkata).