of value is a point open to question since the transmission of the glass can not be measured extremely accurately and visibility curves appear very different for different observers. But in the case of the transmission, absolute values are not required, merely the form of the curve needs to be known. And in the case of the visibility, only a short range of the curve is important, and over this range the slope of the visibility curves of various observers is in good agreement.

In a more complete paper which will be published at an early date several specific pyrometer glasses are considered. One of these glasses is a black absorption glass used with optical pyrometers for extrapolating the temperature scale to say 2500°C. The calibration of such a glass by the usual method necessarily tacitly involves the visibility or scope of the visibility curve over a small range of color. Different observers obtain practically the same calibration of the glass which would indicate that the effective wave length of the system could be determined with greater accuracy than one would ordinarily expect. Also the values of the effective wave length of a red glass obtained by Hyde, Cady, and Forsythe by different methods show such excellent agreement that a more accurate method of computing the data is warranted.

In conclusion the writer desires to thank Dr. Waidner, Dr. Kanolt, and Mr. Crittenden for suggestions given him in this work.

BOTANY.—*On the application of the generic name Nauclea of Linnaeus.* E. D. MERRILL, Bureau of Science, Manila, P. I. (Communicated by WILLIAM R. MAXON).

It sometimes happens that the current and universally accepted concept of a genus is quite different from that of the genus as originally described. This is due to misconception or to misinterpretation of the group on the part of later authors; sometimes because the original genus is subdivided, the various species being referred to other genera until all or most of them are dissociated from the original generic name; and sometimes because certain species have been added after the original de-

scription of the genus, by the original author or by others, which later botanists have interpreted as representing the genus, even when these are generically distinct from the original type. The case presented by *Nauclea* is of especial interest as illustrating this latter type of interpretation, for the genus was originally based on a single species, a plant thoroughly well known, and one generically distinct from *Nauclea* as this genus has been interpreted by all modern botanists. Use of the generic name *Nauclea* for the genus so called by all botanists during the past century is logically incorrect and is not permissible under any rules of botanical nomenclature; but *Nauclea* in the original Linnaean sense is entirely valid. It is, however, decidedly unfortunate that, in revising the nomenclature of the group, *Nauclea* must be used for those species now placed by all botanists in *Sarcocephalus*, while those species now placed under *Nauclea* must receive a new generic name.

Haviland[1] has given us a very careful and critical revision of this group and in connection with his work has examined most of the types of the species considered and determined the types of most of the genera. His position as to nomenclature can best be indicated by the following quotation from the introduction to his paper:

> I have also assumed that rules of priority were made to help and not to hinder; if they were exactly followed, *Uncaria* would be *Ourouparia*, *Sarcocephalus* would be *Nauclea*, *Nauclea* would have to be renamed, and probably *Mitragyna* would be *Mamboga*.

From my knowledge of the Philippine flora and of the genera and species described by Blanco, I can definitely state that *Mamboga* of Blanco is identical with *Mitragyna* of Korthals and antedates Korthals' name by two years. The status of *Uncaria* and *Mitragyna*, however, is determined by the list of *nomina conservanda* adopted by the Vienna Botanical Congress, these two generic names being retained in preference to *Ourouparia* and *Mamboga*. The case presented by *Nauclea* and *Sarcocephalus* is entirely different, and it is really unfortunate that Haviland

[1] A revision of the Tribe Naucleeae (Nat. Ord. Rubiaceae). Journ. Linn. Soc. Bot. **33**: 1–94, *pl. 1–4*. 1897.

did not solve this problem of nomenclature in his revision of the group. Britten,[2] in his appreciative review of Haviland's paper, states:

> The retention of *Nauclea* necessitates the statement "typus nullus" after the name; then, after a definition of the genus as now understood, comes a reference to "*Nauclea* Linn. Sp. Pl. ed. 2, 243," followed by the remark, "none of the plants called *Nauclea* by Linnaeus are now in this genus, although there is no doubt he would have called those in it *Nauclea* if he had seen them." But as Mr. Haviland tells us elsewhere that "Linnaeus founded his *Nauclea orientalis* on two species of *Sarcocephalus*" it is difficult to see how the retention of his name for the plants he described could be regarded as a hindrance.

To be strictly accurate, *Nauclea orientalis* Linn. involves three different species of *Sarcocephalus*, rather than two. Haviland's stand on this simple question had led him illogically to retain *Sarcocephalus* as the valid name for what should be *Nauclea;* he has quoted the type of genus *Nauclea* as a synonym of *Sarcocephalus cordatus* Miq.; and as to *Nauclea* itself, while still crediting Linnaeus as authority for the genus, he retains nothing in the genus placed there by Linnaeus himself, and is obliged to admit that *Nauclea* as interpreted by him, following modern usage, has no type. Others[3] have solved the dilemma by illogically and incorrectly crediting the authorship of *Nauclea* to Korthals.

The history of this nomenclatural anomaly begins with the publication of the genus *Cephalanthus* by Linnaeus;[4] but the type of the genus *Cephalanthus* is perfectly clear, although Linnaeus included in the first edition of his Species Plantarum two generically distinct species, *Cephalanthus occidentalis* Linn. and *C. orientalis* Linn. The type of the genus is clearly indicated as the former by Linnaeus: "Character desumtus est a specie occidentali, quum orientalis fructus nobis non dum sufficienter innotuit."

In the second edition of the Species Plantarum Linnaeus separated *Cephalanthus orientalis* from the genus *Cephalanthus,*

[2] Notes on the Naucleeae. Journ. Bot. **35**: 336–340. 1897.

[3] Dalla Torre and Harms, Genera Siphonogamarum, 495. 1905.

[4] Genera Plantarum, 61. 1737; ed. 5, 42. 1754.

making it the type and only species of the genus *Nauclea*. The genus *Nauclea*, then, must be interpreted solely by a consideration of the original publication of the name.[5] Unfortunately *Nauclea orientalis* Linn. is *Sarcocephalus* of all modern authors, but the mere fact that a genus has been consistently misinterpreted is no logical reason for ignoring the original application of the name. Although *Nauclea orientalis* Linn. is in itself a mixture of three species, the five references given by Linnaeus are congeneric.

The first reference is "Cephalanthus foliis oppositis Fl. zeyl. 53. Sp. pl. I. p. 95," and this is *Sarcocephalus cordatus* Miq. (= *Nauclea orientalis* Linn.), and this number of the Flora Zeylanica is represented in Hermann's herbarium by a drawing, according to Trimen.[6] This reference I consider typifies the species. The second reference is to "Platanocephalus citri foliis bijugis, capite majore. Vaill. act. 1722, p. 259," which in turn is based on "Katou Tsjaca, Rheede, Hortus Malabaricus 3:29, *t. 33*," and is *Nauclea missionis* W. & A. (*Sarcocephalus missionis* Havil.).[7] The third reference is to "Arbor indica, fructu aggregato globoso. Raj. hist. 1441," which is also based on the same figure and description of Rheede as the above reference. The fourth reference is directly to "Katu Tsiacca Rheed. Mal. 3, p. 29, *t. 33*," which, as noted above, is *Nauclea missionis* W. & A. (*Sarcocephalus missionis* Havil.). The fifth reference is a doubtful one to "Bancalus Rumph. amb. 3, p. 84, *t. 55*?" and Kuntze has adopted *Bancalus* for the generic name in place of *Nauclea*. *Bancalus* of Rumphius, however, is a *Sarcocephalus* (=*Nauclea* of Linnaeus, not of other authors), a species closely allied to *Sarcocephalus junghuhnii* Miq., *S. mitragynus* Miq., and *S. tenuiflorus* Havil. *Cephalanthus orientalis* Linn.,[8] on which *Nauclea orientalis* Linn.[9] is based, presents the first, second, and fourth of these citations.

The generic nomenclature of *Nauclea* is as follows:

[5] Linnaeus, Species Plantarum, ed. 2, 243. 1762.

[6] Hermann's Ceylon Herbarium and Linnaeus's "Flora Zeylanica." Journ. Linn. Soc. Bot. **24**: 129–155. 1887.

[7] See Haviland, Journ. Linn. Soc. Bot. **33**: 32. 1897.

[8] Species Plantarum, 95. 1753.

[9] Species Plantarum, ed. 2, 243. 1762.

NAUCLÆA Linn. Sp. Pl. ed. 2, 243. 1762.

Sarcocephalus Afzel. ex R. Br. in Tukey's Congo App. 267. 1818.

Cephalina Thonn. in Schumm. Beskr. Guin. Pl. 125. 1827.

Platanocarpum Endl. Gen. 557. 1838; Korth. Obs. Naucl. Ind. 18. 1839.

Bancalus O. Ktze. Rev. Gen. Pl. 1:276. 1891.

The type of the genus *Nauclea*, and the sole species cited under this name in the original publication, is *Nauclea orientalis* Linn. (*Sarcocephalus cordatus* Miq.).

The type of the genus *Cephalina* Thonn. is *Cephalina esculenta* Thonn., the only species cited (= *Sarcocephalus esculentus* Afzel.).

The type of the genus *Platanocarpum* Endl. is not indicated by that author; but he cites "*Naucleae*, sectio *Nauclearia*, §. 1. DC. Prodr. IV. 343," the description applies to *Nauclea* of Linnaeus (*Sarcocephalus* Afzel.), and the first three of the four species placed by DeCandolle in the first section of *Nauclearia* are *Nauclea* of Linnaeus (*Sarcocephalus* Afzel.). Interpreting the genus upon the first species cited by DeCandolle, the type would be *Nauclea undulata* Roxb. (*Sarcocephalus undulatus* Miq.). Korthals' interpretation of *Platanocarpum* a year later is based on two species: the first, *Platanocarpum subditum* Korth. (= *Sarcocephalus subditus* Miq.); the second, *Platanocarpum cordatum* Korth. (=*Sarcocephalus cordatus* Miq. = *Nauclea orientalis* Linn.).

Bancalus of O. Kuntze was based on "*Bancalus* Rumph. Herb. Amb. 3:84, *t. 55.* 1743," ostensibly because *Bancalus* is an older name than *Nauclea*. Kuntze included in *Bancalus* species of *Sarcocephalus* and of *Nauclea* as currently understood by modern botanists; but whether *Bancalus* be typified by the Rumphian plant or by the type of the Linnaean genus *Nauclea*, it is a synonym of *Sarcocephalus* Afzel. (= *Nauclea* Linn.). Dalla Torre and Harms are wrong in referring *Bancalus* O. Ktze. to *Nauclea* Korth. as a synonym; it is a synonym of *Nauclea* Linn. If *Bancalus* is to be interpreted as an exact equivalent of *Nauclea* of Linnaeus, the type is *N. orientalis* Linn., cited by O. Kuntze as *Bancalus orientalis* (Linn.) O. Kuntze. If typified by the plant Rumphius actually described and figured under

Bancalus, the type is also a true *Nauclea* (*Sarcocephalus*), for Rumphius' description refers unmistakably to *Sarcocephalus:* "fructus . . . non facile manibus confringendus, lentus enim ac tenax est, interna substantia similis est, sed siccior praecedente" [*Arbor noctis* = *Sarcocephalus*!]. Most of the species transferred by Kuntze to *Bancalus*, however, belong in *Nauclea* as currently interpreted, but not in *Nauclea* (*Sarcocephalus*) as defined by Linnaeus.

Nauclea as here interpreted in the original Linnaean sense consists of the following species, extending from tropical Africa through tropical Asia and Malaya to tropical Australia and Polynesia, nearly 25 being known.

NAUCLEA Linnaeus.

Nauclea annamensis (Dubard & Eberh.)
Sarcocephalus annamensis Dubard & Eberh. Bull. Mus. Hist. Nat. Paris **15:** 493. 1909.
Indo-China.

Nauclea dasyphylla (Miq.)
Sarcocephalus dasyphyllus Miq. Fl. Ind. Bat. **2:** 133. 1856.
Sumatra.

Nauclea diderrichii (Wildem.)
Sarcocephalus diderrichii Wildem. in Masui État Indep. Congo Expos. Brux. 439. 1897 (*nomen*); Rev. Cult. Colon. **9:** 7. 1901.
Tropical Africa.

Nauclea elmeri nom. nov.
Sarcocephalus ovatus Elm. Leafl. Philip. Bot. **1:** 33. 1906; non *Nauclea ovata* Merr. 1913.
Philippines.

Nauclea esculenta (Afzel.)
Sarcocephalus esculentus Afzel. ex R. Br. in Tukey, Congo App. 467. 1818.
Nauclea sambucina Winterb. Acc. Sierra Leone 45. 1803 (*nomen*).
Tropical Africa.

Nauclea gilletii (Wildem.)
Sarcocephalus gilletii Wildem. in Rev. Cult. Colon. **9:** 8. 1901.
Tropical Africa.

Nauclea glaberrima Bartl. ex DC. Prodr. **4:** 28. 1830.
Sarcocephalus glaberrimus Miq. Fl. Ind. Bat. **2:** 133. 1856.
Philippines and Celebes.

Nauclea hirsuta (Havil.)
Sarcocephalus hirsutus Havil. Journ. Linn. Soc. Bot. **33:** 32. 1897.
Borneo.

Nauclea junghuhnii (Miq.)
Sarcocephalus junghuhnii Miq. Fl. Ind. Bat. **2:** 133. 1856.
Malay Peninsula and Cambodia to Sumatra, Borneo, and the Philippines.

Nauclea maingayi Hook. f. Fl. Brit. Ind. **3:** 27. 1880.
Sarcocephalus maingayi Havil. Journ. Linn. Soc. Bot. **33:** 33. 1897.
Bancalus maingayii O. Ktze. Rev. Gen. Pl. **1:** 277. 1891.
Malay Peninsula and Borneo.

Nauclea missionis W. & A. Prodr. 392. 1834.
Sarcocephalus missionis Havil. Journ. Linn. Soc. Bot. **33:** 32. 1897.
Bancalus missionis O. Ktze. Rev. Gen. Pl. **1:** 277. 1891.
India.

Nauclea mitragyna (Miq.)
Sarcocephalus mitragynus Miq. Ann. Mus. Bot. Lugd.-Bat. **4:** 180. 1868-69.
Ceram.

Nauclea multicephala (Elm.)
Sarcocephalus multicephalus Elm. Leafl. Philip. Bot. **5:** 1896. 1913.
Philippines.

Nauclea orientalis Linn. Sp. Pl. ed. 2, 243. 1762.
Cephalanthus orientalis Linn. Sp. Pl. 95. 1753.
Nauclea cordata Roxb. Fl. Ind. ed. Carey **1:** 509. 1832.
Sarcocephalus cordatus Miq. Fl. Ind. Bat. **2:** 133. 1856.
Platanocarpum cordatum Korth. Obs. Nauel. Ind. 16. 1839.
Bancalus orientalis O. Ktze. Rev. Gen. Pl. **1:** 277. 1891.
Sarcocephalus orientalis Merr. Philip. Journ. Sci. Bot. **3:** 436. 1908.
India through Malaya to tropical Australia. The type of the genus.

Nauclea pacifica (Reinecke)
Sarcocephalus pacificus Reinecke, Bot. Jahrb. Engler **25:** 684. *pl. 13, f. C.* 1898.
Samoa.

Nauclea parva (Havil.)
Sarcocephalus parvus Havil. Journ. Linn. Soc. Bot. **33:** 31. 1897.
Borneo.

Nauclea pobequini (Pobéquin)
Sarcocephalus pobequini Pobéquin, Ess. Fl. Guin. Fr. 313. 1906.
Tropical Africa.

Nauclea pubescens (Valet.)
Sarcocephalus pubescens Valet. Bot. Jahrb. Engler **44**: 550. 1910.
Borneo.

Nauclea ramosa (Lauterb.)
Sarcocephalus ramosus Lauterb. Bot. Jahrb. Engler **41**: 235. 1908.
Samoa.

Nauclea robinsonii nom. nov.
Sarcocephalus pubescens C. B. Rob. Philip. Journ. Sci. Bot. **6**: 225. 1911; non Valet. 1910.
Philippines.

Nauclea subdita (Korth.)
Platanocarpum subditum Korth. Obs. Naucl. Ind. 19. 1839 (*nomen*); Verh. Nat. Gesch. Bot. 133, *pl. 32*. 1840.
Sarcocephalus subditus Miq. Fl. Ind. Bat. **2**: 133. 1856.
Malay Peninsula, Borneo, Sumatra, and Java.

Nauclea tenuiflora (Havil.)
Sarcocephalus tenuiflorus Havil. Journ. Linn. Soc. Bot. **33**: 32. 1897.
New Guinea.

Nauclea trillesii (Pierre)
Sarcocephalus trillesii Pierre ex Wildem. Not. Pl. Util. Congo 37. 1903.
Tropical Africa.

Nauclea undulata Roxb. Fl. Ind. ed Carey, **1**: 508. 1832.
Sarcocephalus undulatus Miq. Fl. Ind. Bat. **2**: 133. 1856.
Malay Archipelago and New Guinea.

Having demonstrated that logically, historically, and under all rules of botanical nomenclature those species which have been described under *Sarcocephalus* must be transferred to *Nauclea*, it becomes necessary to establish a new generic name for the more numerous species that have been described by many authors since Linnaeus under the latter generic name. In my quest for a published name I have even looked up the original publications of the various synonyms placed under *Cephalanthus* Linn., but none of them are available for the species that have up to this time been placed under *Nauclea*. *Acrodryon* Spreng. (Syst. **1**: 386. 1825) is based on *Cephalanthus orientalis* Lour.[10]

[10] Loureiro, Flora Cochinchinensis, 67. 1790, under *Cephalanthus occidentalis:* "Si cum Ceph. Americano (mihi non obvio) non conveniat, vocetur Ceph. orientalis."

and *C. angustifolius* Lour. From Loureiro's description the former is a true *Nauclea* (*Sarcocephalus*), for the fruits are described as edible and baccate, while the latter is a true *Cephalanthus*, the type of which Haviland has examined in the herbarium of the British Museum. *Axolus* Rafinesque (Sylv. Tellur. 61. 1838) is based on *Cephalanthus angustifolius* Lour., and is a proper synonym of *Cephalanthus*. *Eresimus* Rafinesque (loc. cit.) is based on *Cephalanthus stellatus* Lour., which is cited by Haviland as a synonym of *Cephalanthus angustifolius* Lour. *Gilipus* Rafinesque (loc. cit.) is based on *Cephalanthus montanus* Lour., which Loureiro has described as having alternate leaves. If Loureiro's description is correct, *Gilipus* does not even belong to the *Rubiaceae*, and from other characters given, such as leaves crenate, rough, and flowers dioecious, the plant even if rubiaceous can scarcely belong to the *Naucleeae*. *Silimanus* Rafinesque (op. cit. 60) is based on *Cephalanthus procumbens* Lour., which like *Gilipus* cannot be a rubiaceous plant, if Loureiro's description is correct, as the leaves are described as alternate; the description otherwise as to habit, flowers dioecious, and other characters, at once removes the plant from the *Naucleeae*.

The list of synonyms of *Sarcocephalus*, *Nauclea*, and *Cephalanthus* being exhausted, and none of them being applicable to the numerous species that have erroneously been placed in *Nauclea*, I propose for these species the new generic name **Neonauclea** as a substitute for *Nauclea* as described by Korthals,[11] by Bentham and Hooker,[12] by K. Schumann,[13] and by Haviland.[14]

Neonauclea as now constituted contains nearly 50 species, and extends from India to New Guinea. Unlike *Nauclea* proper (*Sarcocephalus* Afzel.) no species have been reported from tropical Africa, from tropical Australia, or from Polynesia. I transfer to *Neonauclea* the following species.

[11] Observationes de Naucleis Indicis, 17. 1839.
[12] Genera Plantarum, **2**: 31. 1873.
[13] In Engler and Prantl, Natürlichen Pflanzenfam. **4**[4]: 57. 1891.
[14] Revision of the Tribe Naucleeae. Journ. Linn. Soc. Bot. **33**: 48. 1897.

NEONAUCLEA Merrill.

Neonauclea angustifolia (Havil.)
Nauclea angustifolia Havil. Journ. Linn. Soc. Bot. **33**: 55, *pl. 3*. 1897.
Borneo.

Neonauclea ategii (Elm.)
Nauclea ategii Elm. Leafl. Philip. Bot. **5**: 1877. 1913.
Philippines.

Neonauclea bartlingii (DC.)
Nauclea bartlingii DC. Prodr. **4**: 344. 1830.
Bancalus bartlingii O. Ktze. Rev. Gen. Pl. **1**: 276. 1891.
Philippines.

Neonauclea bernardoi (Merr.)
Nauclea bernardoi Merr. Philip. Journ. Sci. Bot. **10**: 101. 1915.
Philippines.

Neonauclea calycina (Bartl.)
Nauclea calycina Bartl. in DC. Prodr. **4**: 346. 1830.
Nauclea purpurascens Korth. Verh. Nat. Gesch. Bot. 158. 1840.
Philippines and Borneo.

Neonauclea celebica (Havil.)
Nauclea celebica Havil. Journ. Linn. Soc. Bot. **33**: 54. 1897.
Celebes.

Neonauclea chalmersii (F. Muell.)
Nauclea chalmersii F. Muell. Notes Papuan Pl. **8**: 44. 1886.
New Guinea.

Neonauclea cordatula (Merr.)
Nauclea cordatula Merr. Philip. Journ. Sci. Bot. **8**: 40. 1913.
Philippines.

Neonauclea cyclophylla (Miq.)
Nauclea cyclophylla Miq. Ann. Mus. Bot. Lugd.-Bat. **4**: 181. 1868-69.
Moluccas.

Neonauclea cyrtopoda (Miq.)
Nauclea cyrtopoda Miq. Fl. Ind. Bat. **2**: 342. 1856.
Borneo and Sumatra.

Neonauclea excelsa (Blume)
Nauclea excelsa Blume, Bijdr. 1009. 1826.
Java.

Neonauclea fagifolia (Teysm. & Binn.)
Nauclea fagifolia Teysm. & Binn. Cat. Hort. Bogor. 117. 1866 (*nomen*); Havil. in Journ. Linn. Soc. Bot. **33**: 63. 1897.
Amboina.

Neonauclea formosana (Matsum.)
Nauclea formosana Matsum. Bot. Mag. Tokyo **14:** 127. 1900.
Formosa.

Neonauclea forsteri (Seem.)
Nauclea forsteri Seem. Fl. Vit. 121. 1865–73.
Bancalus forsteri O. Ktze. Rev. Gen. Pl. **1:** 277. 1891.
Philippine, Society, Tonga, Samoa, and Fiji Islands.

Neonauclea gageana (King)
Nauclea gageana King, Journ. As. Soc. Beng. **72**[2]**:** 123. 1903.
Andaman Islands.

Neonauclea gigantea (Valet.)
Nauclea gigantea Valet. Bot. Jahrb. Engler **44:** 549. 1910.
Borneo.

Neonauclea gracilis (Vidal)
Nauclea gracilis Vidal, Phan. Cuming. Philip. 176. 1885.
Bancalus gracilis O. Ktze. Rev. Gen. Pl. **1:** 277. 1891.
Philippines.

Neonauclea griffithii (Hook. f.)
Adina griffithii Hook. f. Fl. Brit. Ind. **3:** 24. 1880.
Nauclea griffithii Havil. Journ. Linn. Soc. Bot. **33:** 51. 1897.
India.

Neonauclea hagenii (K. Schum. & Lauterb.)
Nauclea hagenii K. Schum. & Lauterb. Fl. Deutsch. Schutzgeb. Südsee 557. 1901.
New Guinea.

Neonauclea havilandii (Koord.)
Nauclea havilandii Koord. Meded. Lands Plant. Buitenz. **19:** 498. 1898.
Celebes.

Neonauclea jagori (Merr.)
Nauclea jagori Merr. Philip. Journ. Sci. Bot. **4:** 326. 1910.
Philippines.

Neonauclea kentii (Merr.)
Nauclea kentii Merr. Philip. Journ. Sci. Bot. **8:** 43. 1913.
Philippines.

Neonauclea lanceolata (Blume)
Nauclea lanceolata Blume, Bijdr. 1010. 1826.
Bancalus affinis O. Ktze. Rev. Gen. Pl. **1:** 276. 1891.
Java.

Neonauclea media (Havil.)
Nauclea media Havil. Journ. Linn. Soc. Bot. **33**: 56. 1897.
Philippines.

Neonauclea mindanaensis (Merr.)
Nauclea mindanaensis Merr. Philip. Journ. Sci. Bot. **8**: 44. 1913.
Philippines.

Neonauclea mollis (Blume)
Nauclea mollis Blume, Bijdr. 1010. 1826.
Bancalus mollis O. Ktze. Rev. Gen. Pl. **1**: 277. 1891.
Java.

Neonauclea moluccana (Miq.)
Nauclea moluccana Miq. Ann. Mus. Bot. Lugd.-Bat. **4**: 183. 1868–69.
Buru.

Neonauclea monocephala (Merr.)
Nauclea monocephala Merr. Philip. Journ. Sci. Bot. **8**: 44. 1913.
Philippines.

Neonauclea morindaefolia (Blume)
Nauclea morindaefolia Blume, Bijdr. 1011. 1826.
Java.

Neonauclea nicobarica (Havil.)
Nauclea nicobarica Havil. Journ. Linn. Soc. Bot. **33**: 59. 1897.
Nicobar Islands.

Neonauclea nitida (Havil.)
Nauclea nitida Havil. Journ. Linn. Soc. Bot. **33**: 53. 1897.
Philippines.

Neonauclea obtusa (Blume)
Nauclea obtusa Blume, Bijdr. 1009. 1826.
Bancalus obtusus O. Ktze. Rev. Gen. Pl. **1**: 277. 1891.
Bancalus cordatus O. Ktze. op. cit. 276. 1891.
Java and Sumatra.

Neonauclea ovata (Merr.)
Nauclea ovata Merr. Philip. Journ. Sci. Bot. **8**: 42. 1913.
Philippines.

Neonauclea pallida (Reinw.)
Nauclea pallida Reinw. ex Blume Cat. Gew. Buitenzorg 38. 1823.
Sumatra and Java.

Neonauclea peduncularis (G. Don)
Nauclea peduncularis G. Don, Gen. Syst. **3**: 469. 1834.
Bancalus peduncularis O. Ktze. Rev. Gen. Pl. **1**: 277. 1891.
Malay Peninsula and Borneo.

Neonauclea philippinensis (Vidal)

Adina philippinensis Vidal, Rev. Pl. Vasc. Filip. 148. 1886.
Nauclea philippinensis Havil. Journ. Linn. Soc. Bot. **33:** 52. 1897.
Philippines.

Neonauclea puberula (Merr.)

Nauclea puberula Merr. Philip. Journ. Sci. Bot. **8:** 41. 1913.
Philippines.

Neonauclea reticulata (Havil.)

Nauclea reticulata Havil. Journ. Linn. Soc. Bot. **33:** 62. 1897.
? *Nauclea formicaria* Elm. Leafl. Philip. Bot. **3:** 989. 1911.
Philippines.

Neonauclea sessilifolia (Roxb.)

Nauclea sessilifolia Roxb. Fl. Ind. ed. Carey **1:** 515. 1832.
India and Cochin China.

Neonauclea strigosa (Korth.)

Nauclea strigosa Korth. Verh. Nat. Gesch. Bot. 157. 1840.
Bancalus strigosus O. Ktze. Rev. Gen. Pl. **1:** 277. 1891.
Borneo and the Philippines.

Neonauclea synkorynes (Korth.)

Nauclea synkorynes Korth. Verh. Nat. Gesch. Bot. 160. 1840.
Bancalus synkorynes O. Ktze. Rev. Gen. Pl. **1:** 277. 1891.
Borneo, Celebes, and Cambodia.

Neonauclea tenuis (Havil.)

Nauclea tenuis Havil. Journ. Linn. Soc. Bot. **33:** 55. 1897.
New Guinea.

Neonauclea venosa (Merr.)

Nauclea venosa Merr. Philip. Journ. Sci. Bot. **8:** 45. 1913.
Philippines.

Neonauclea vidalii (Elm.)

Nauclea vidalii Elm. Leafl. Philip. Bot. **1:** 16. 1906.
Philippines.

Neonauclea wenzelii (Merr.)

Nauclea wenzelii Merr. Philip. Journ. Sci. Bot. **9:** 386. 1914.
Philippines.

Neonauclea zeylanica (Hook. f.)

Nauclea zeylanica Hook. f. Fl. Brit. Ind. **3:** 26. 1880.
Bancalus zeylanicus O. Ktze. Rev. Gen. Pl. **1:** 277. 1891.
Ceylon.