

**Proposal to conserve 7892 Rhytidophyllum and its spelling
against Codonophora (Gesneriaceae).**

Taxon 39: 693-694.

REFNO: 1895

KEYWORDS:

Codonophora, Gesneria, Paliavana, Rhytidophyllum

(4 dec. 90)

Xu, Nicholson & Skog 1990

81
693

NOVEMBER 1990

The species described in *Nautilocalyx*, or once transferred to it, all still belong to it with only one exception. This is a very unusual consistency among the American Gesneriaceae for a genus of nearly 50 described taxa. Contrary to *Nautilocalyx* which was always used in a consistent way, *Centrosolenia* brings with it a long history of confusion, and was not used, as a genus, in the sense of *Nautilocalyx* since 1852. For taxonomic reasons *E. hirsuta* should be placed in *Nautilocalyx*. It is the type of *Centrosolenia*, a name that predates *Nautilocalyx*. *Nautilocalyx* now includes 48 species, and many of them do not have a name in *Centrosolenia*. Since Wiehler (1978), workers have avoided the transfer of 42 species. More than 25 species of *Nautilocalyx* are currently in cultivation as ornamental indoor or greenhouse plants. The use of *Nautilocalyx* would preserve clarity and stability. Therefore, we propose that *Nautilocalyx* Lind. ex Hanst. be conserved against *Centrosolenia* Benth.

Literature Cited

- Bentham, G. 1846. *London J. Bot.* 5: 357-364.
———. 1850. *Bot. Mag.* 76: t. 4552.
———. 1876. Gesneriaceae. In: G. Bentham & J. D. Hooker, *Genera Plantarum* 2: 990-1025.
Fritsch, K. 1893-1894. Gesneriaceae. In: A. Engler & K. Prantl, *Die natürlichen Pflanzenfamilien* 4(3b): 133-185.
Hanstein, J. 1854. ("1853"). *Linnaea* 26: 145-216.
———. 1865. *Linnaea* 34: 225-462.
Hooker, W. J. 1852. *Bot. Mag.* 78: t. 4675.
Leeuwenberg, A. J. M. 1958. *Acta Bot. Neerl.* 7: 291-444.
———. 1969. *Acta Bot. Neerl.* 18: 585-588.
Martius, C. G. P. von. 1829. *Nova Genera et Species Plantarum* vol. 3: 27-73.
Morton, C. V. 1938. *Publ. Field Mus. Nat. Hist., Bot. Ser.* 18: 1137-1187.
———. 1942. *Ann. Missouri Bot. Gard.* 29: 35-58.
———. 1945. *J. Wash. Acad. Sci.* 35: 126-131.
——— & D. Denham. 1972. *Taxon* 21: 669-678.
Planchon, J. E. 1851. *Fl. Serres Jard. Eur.* 6: 320-323.
Sprague, T. A. 1912. *Bull. Misc. Inform.* 1912: 85-90.
Wiehler, H. 1973. *Phytologia* 27: 307-329.
———. 1978. *Selbyana* 5: 61-93.
———. 1983. *Selbyana* 6: 1-219.

Proposed by: Christian Feuillet (ORSTOM) and Laurence E. Skog, Department of Botany, National Museum of Natural History, Smithsonian Institution, Washington, DC 20560, U.S.A.

(992) Proposal to conserve 7892 *Rhytidophyllum* and its spelling against *Codonophora* (Gesneriaceae)

- Rhytidophyllum* C. F. P. Martius, Nov. Gen. Sp. 3: 38. Jan-Jun 1829, "*Rytidophyllum*", l.c. [Index] 196. 1832, nom. et orth. cons. prop. T: *R. tomentosum* (Linnaeus) C. F. P. Martius (*Gesneria tomentosa* Linnaeus).
(=) *Codonophora* J. Lindley, Bot. Reg. 13: sub t. 1110. Mar-Dec 1827, nom. rej. prop. LT: *C. lanceolata* J. Lindley (*Gesneria tomentosa* Linnaeus) (vide L. Pfeiffer, Nomencl. Bot. 1(2): 809. 1874).

The generic name *Rhytidophyllum* Mart. has long been applied in the sense of *R. tomentosum* (L.) Mart. and with this spelling. However ING (*Index Nominum Genericorum*, 1979) pointed out that this spelling only appeared in the Index (published in 1832) and accepted the original (1829) spelling *Rytidophyllum*. Also, it has been found that an earlier generic name, *Codonophora* Lindl., has been lectotypified on what is taxonomically the same species (*C. lanceolata* Lindl. = *Gesneria tomentosa* L. = *Rhytidophyllum tomentosa* (L.) Mart.). Conservation is needed to avoid many otherwise unnecessary name changes.

The alternative spellings, *Rhytidophyllum* vs. *Rytidophyllum* and *Gesneria* vs. *Gesneria*, are very confused in the literature. We retain the spelling used by each author when his work is cited or mentioned in the text.

When Linnaeus validated Plumier's *Gesneria* in 1753 (*Sp. Pl.* 612) as *Gesneria*, he recognized only two species: *G. tomentosa* L. and *G. humilis* L. In the following decades, many new species were discovered in West Indies and Brazil, and assigned to *Gesneria*. In 1827, Lindley first segregated two new genera: *Codonophora* Lindl. and *Pentarhaphia* Lindl. His circumscriptions, although very brief, were sufficient to validate the two generic names. *Pentarhaphia* was based solely on "*P. longiflora* (*Gesneria ventricosa* Sw.)". For *Codonophora*, he listed two species: "Sp. 1. *Codonophora lanceolata* (*Gesneria tomentosa* L.); and Sp. 2. *Codonophora grandiflora* (*Gesneria prasinata* Ker)".

Two years later, Martius (1829: 38) also subdivided *Gesneria* L., but he did not follow Lindley's treatment, rather he abandoned Lindley's generic name "*Codonophora*". Martius wrote (original in Latin, translated by D. Nicolson and B. Burt):

For the same reasons the renowned Lindley has separated two genera, *Codonophora* and *Pentarhaphia* from the ancient genus *Gesneria*. However his names must be abandoned (*attamen ejus nomine deserenda videbantur*) because they introduce uncertainty or error. In one case, because one of the species accepted as *Codonophora* (*G. prasinata* Ker) is inconsistent with the generic character of the other, and in the other, because the name *Pentarhaphia* does not fit all the species that should be referred there.

In his treatment, Martius accepted the three groups of species formerly put in *Gesneria* L.: 1) *Gesneria* Mart. (including most of the species); 2) *Conradia* Mart. (only *G. ventricosa*); and 3) *Rytidophyllum* Mart. (including 3 species: *Gesneria tomentosa* L., *G. grandis* Sw., and *R. berterioanum* Mart. = *G. scabra* sensu Spreng. pro parte). Since Martius (1829), most botanists have accepted *Rhytidophyllum* (= *Rytidophyllum*) Mart. as the legitimate generic name for a group of about 20 Caribbean species (Xu and Skog, in prep.) closely related to *Gesneria* L. (ca. 50 sp., Skog 1976, Smithsonian Contr. Bot. 29).

Martius's *Conradia*, because it included *G. ventricosa* Sw., is an illegitimate renaming of *Pentarhaphia* Lindl., based solely on the type of that species name. This has no consequence since both names fall within the concept of *Gesneria* as currently understood. However, the nomenclatural relationship between Martius' *Rytidophyllum* and Lindley's *Codonophora* is troublesome. The facts are: 1) *Codonophora* was based on both *G. prasinata* Ker and *G. tomentosa* L., 2) Martius maintained *G. prasinata* in *Gesneria*, 3) Martius put *G. tomentosa*, along with two other species, in *Rytidophyllum*, and 4) Martius simply abandoned the name *Codonophora* because of its "faulty circumscription", treating it neither as a synonym of *Gesneria* nor of *Rytidophyllum*. However, as neither *Codonophora* Lindl. nor *Rytidophyllum* Mart. contained the holotype or all syntypes of any other generic name, we must accept both as legitimate names when they were published (ref. ICBN Art. 63, 1988).

Subsequent workers mostly accepted Martius's treatment, and cited *Codonophora* Lindl. as a synonym of *Rytidophyllum* (or *Rhytidophyllum*). Even Lindley himself cited *Codonophora* as a synonym of *Rytidophyllum*, but made no mention of the species (*Intro. Nat. Syst. ed.* 2, 287. 1836).

George Don (*Gen. Syst.* 4: 645. 1837) did not cite generic synonyms, but he (l.c. 648) cited *Codonophora grandiflora* Lindl. in the synonymy of *Gesneria prasinata* Ker and (l.c. 650) cited *Codonophora lanceolata* Lindl. in the synonymy of *Rytidophyllum tomentosum*.

Endlicher (*Gen. Pl.* 722. Mar. 1839) mentioned one of the two key species, citing "*Codonophora* Lindley in *Bot. Mag.* [sic, err. pro *Bot. Reg.*] n. 1110. excl. sp." as a synonym of *Rytidophyllum*. From his inclusion of "*Gesneria tomentosa* Linn.", as illustrated in citations of Jacquin, Gaertner, and *Bot. Reg.*, it is implicit that *G. prasinata* Ker was excluded but *G. prasinata* is not explicitly mentioned anywhere.

De Candolle (*Prodr.* 7: 524. Dec. 1839) repeated the same information about *Codonophora*, "excl. sp. 2a" (i.e., *G. prasinata*), in the synonymy of *Rytidophyllum*. Moreover, he elsewhere (l.c. 532) explicitly accounted for *G. prasinata*, accepted as *Gesneria prasinata* in "*Gesneria* Mart. Sect. II. *Prasanthea*. — *Paliavana* Vand."

However, none of these workers effectively lectotypified the two generic names under the current Code because they did not use the term "type" or an equivalent required by Art. 8.3. (ICBN, 1988). It was Hanstein (*Linnaea* 26: 205. 1854; 34: 308–311. 1865) who, as the first specialist of *Gesneriaceae*, laid the foundation of the current concepts of these two genera. He listed, under the heading of "Species typicae", "*C. prasinata* Lindl., *Gesneria prasinata* Ker. DC." for *Codonophora* Lindl., and "*Rh. tomentosum* Mart." for *Rhytidophyllum* Mart. This would have allowed *Codonophora* to sink into the

synonymy of *Paliavana* Vand. and freed *Rhytidophyllum* from the threat of earlier *Codonophora* if his "lectotypification" were accepted. Unfortunately, under his "species typicae", he sometimes listed two or more species for other genera (e.g., in *Gesneria* Mart., l.c. 203) and so his "lectotypification" is not acceptable according to ICBN (Art. 8.3.) (McNeill, pers. comm., 1988).

It was not until 1874 that Pfeiffer (Nomencl. Bot 1(2): 809.1874) first validly lectotypified *Codonophora* Lindl. (1827) with *G. tomentosa* L. and *Rytidophyllum* Mart. (1829) with the same species (*G. tomentosa* L.). Although "Pfeiffer is the first reference book to indicate type species" and is accepted by ICBN (Stafleu and Cowan, *Tax. Lit.* ed. 2, vol. 4, 1983 under "Pfeiffer"), we feel it difficult to justify his lectotypification of these generic names. He, under "*Codonophora* Lindl.", also listed "Hanst. 1853. *Linnaea* XXVI. P. 205: g. *Rhytidophyllear.* (*Gesneria prasinata* Ker.)" as a correct citation, but clearly indicated "Synon. *Paliavana* Vell.; *Prasanthea* DC.", while under "*Rytidophyllum*" he did not cite "Synon. *Codonophora* Lindl.". It is clear that Pfeiffer did not clarify the relationship of *Codonophora* Lindl. and *Rytidophyllum* Mart. (as Hanstein had done), and just simply listed what happened to be in the literature. Even worse, he contradicted himself, and made Hanstein's clear treatments confused. However, we understand here that Pfeiffer's lectotypifications were clear, even if his circumscriptions were faulty, and thus, we have to accept this fact.

Nearly all subsequent workers followed Hanstein's treatments (as well as his spelling "*Rhytidophyllum*") despite Pfeiffer's valid lectotypification, and in 1925, N. L. Britton and P. Wilson (*Sci. Surv. Porto Rico* 6: 207) again lectotypified *Rhytidophyllum* Mart. with *R. tomentosum* Mart. (*Gesneria tomentosa* L.) [a lectotypification is, unfortunately, supersedable under Article 8.1(c) of ICBN (1988), and is antedated by Pfeiffer's lectotypification]. After Britton and Wilson (1925), no one has clarified this nomenclatural problem although in the 1960s this problem was raised and discussed again by D. L. Denham and L. E. Skog (pers. corr.). To avoid this complicated nomenclatural problem, Denham argued that he would rather combine the two genera, *Gesneria* and *Rhytidophyllum* (Denham, pers. corr.). Wiehler (1983, *Selbyana* 6: 151-153, 198-203) also proposed the combination of the above two genera, but he did not clarify the nomenclature of *Rhytidophyllum*. Howard (1989, *Fl. Lesser Antilles* 6:354) accepted *Rhytidophyllum* and cited "Lectotype: *Gesneria tomentosa* L. = *Rhytidophyllum tomentosum* (L.) C. Martius", which follows Britton and Wilson (l.c.). Since *Rhytidophyllum* is accepted taxonomically as a separate genus from *Gesneria*, and a revision of *Rhytidophyllum* is in preparation, by Xu and Skog, we wish to propose conserving *Rhytidophyllum* Mart. against *Codonophora* Lindl. to stabilize the historic usage and to lay to rest this nomenclatural problem.

The question of the spelling of the generic name, originally *Rytidophyllum* (used in Martius' 1829 publication and discussion) vs. subsequently *Rhytidophyllum* (used in the 1832 index of his *Nov. Sp. Pl.*), has vexed literature, and both usages were found in the early days. For example, a study of Pfeiffer (*Nom. Bot.* 2: 1011. 1874), who accepted *Rytidophyllum*, indicates mixed usage. Several authors, such as Martius, Endlicher, and Lindley, used both spellings at one time or another. In fact, it was again Hanstein (1854), in accepting *Rhytidophyllum*, who established what has come to be modern usage. The question of transliterating the Greek *rho* with or without the aspirate *h* is not a matter of correctness but of preference. Use of the *h* is formally usual (thus *rho*, not *ro*), but is often omitted, thus *raphe* and *raphides* are more usual than *rhaphe* and *rhaphides*. As the spelling of *Rhytidophyllum* has been used in the literature since Hanstein (1854) and thousands of sheets of specimens have been consistently annotated as *Rhytidophyllum* and deposited in the herbaria all over Europe and America, we propose conserving this spelling of *Rhytidophyllum* to provide another measure of stability.

Acknowledgments

We want to acknowledge the work of D. L. Denham whose correspondence with L. E. Skog has provided much information concerning this issue. We are extremely grateful to Prof. J. McNeill and Mr. B. L. Burt who have given valuable comments on this matter and reviewed earlier versions of the draft.

Proposed by: Z. R. Xu, D. H. Nicolson, and L. E. Skog. Botany Department, National Museum of Natural History, Smithsonian Institution, Washington, DC 20560, U.S.A.

At present *Guatteria* is conserved with *G. eriopoda* DC. as type and no nomen rejiciendum, while *Aberemoa* is rejected against *Duguetia* A. St.-Hil. However, taxonomic revision now shows that *Aberemoa* is a taxonomic synonym of *Guatteria*, not of *Duguetia*. Conservation of *Guatteria* against *Aberemoa*, and deletion of *Aberemoa* as a nomen rejiciendum against *Duguetia*, are recommended. The first lectotypification of *Guatteria* was by Hutchinson in 1923, but in 1926 M. L. Green gave the type as *G. eriopoda* which is consequently now given as type in Appendix III of the *Code*. The two species are in different sections of the genus. Art. 7.17 allows change of a conserved type, and the proposal to reinstate *G. glauca* as type is also recommended.

(991) Conserve 7857a *Nautilocalyx* Linden ex Hanst. against *Centrosolenia* Benth. (*Gesneriaceae*) (proposed by Feuillet & Skog in *Taxon* 39: 691-693. 1990). Votes: 12 : 0 (recommended).

The genus *Centrosolenia* included only one species, *C. hirsuta* Benth., when the name was originally published in 1846. In the next 100 years some 14 other species were variously transferred to the genus, but also the genus was often sunk into *Episcia*. Recently some stability in generic concepts seems to have been reached, but, although most species which have been included in *Centrosolenia* are now placed in *Episcia*, the one original species, *C. hirsuta*, is currently referred to *Nautilocalyx*, a genus of 48 species. Unfortunately *Centrosolenia* is an earlier name than *Nautilocalyx*. Some 25 species in the genus are cultivated. Conservation as proposed is recommended.

(992) Conserve *Rhytidophyllum* Mart., with that spelling, against *Codonophora* Lindl. (*Gesneriaceae*) (proposed by Xu & al. in *Taxon* 39: 693-695. 1990). Votes: 4 : 5 to conserve against *Codonophora*, (not recommended); 11 : 0 to conserve spelling *Rhytidophyllum* (recommended).

Codonophora was published by Lindley in 1827 with two species to which he gave illegitimate names: *C. lanceolata*, based on *Gesneria tomentosa* L., and *C. grandiflora*, based on *Gesneria prasinata* Ker. The first of these is now referable to *Rhytidophyllum* Mart. 1829, and the second to *Paliavana* Vell. ex Vand. 1788. The name *Codonophora* has virtually never been used since its publication, having been given as a synonym of *Rhytidophyllum* by Bentham & J. D. Hooker, and others. The proposers stated that, if Hanstein's 1854 lectotypification of *Codonophora* by *Gesneria prasinata* were accepted, the name would fall conveniently into synonymy of *Paliavana*. However, they rejected this lectotypification on the grounds that Hanstein sometimes listed two or more species as types for other genera and so his work would not be acceptable as a source of lectotypifications under Art. 8.3. The Committee has considered this, but has not found anything in Art. 8.3 to rule that Hanstein's types may not be accepted where he nominated only one species (which is much the greater number of cases), voting 11 : 1 in favour of accepting Hanstein's typification. This means that the type of *Codonophora* is *G. prasinata* and the name falls into synonymy of *Paliavana*. Conservation of *Rhytidophyllum* against *Codonophora* as proposed is therefore considered unnecessary and is not recommended. However, the Committee has voted in favour of conserving the spelling *Rhytidophyllum* in preference to the original spelling, *Rytidophyllum*. Conservation of *Rhytidophyllum* is recommended, but not rejection of *Codonophora*.

(993) Conserved by recomme

The Linn onym was ir either the R an early illu species C. 1 There are tv americana, demonstrate Linn. No. 2: these specin 980, above) Herb. Linn. being accep should be w be considere 221.13 (LIN

Unpublis Soderstr. (C should be tr favour of the

The name published fc (Syst. Myco The Commi and recomm

Unpublis Schott and Submitted b their not bei

Philodera species rang tum (L.) K. use for a di lingua (ton; meanings). l the epithets as homonym