# TRILLIUM SUBG SESSILIUM RAF. (1830), AN EARLIER NAME FOR TRILLIUM SUBG PHYLLANTHERUM (SCHULT. & SCHULT.F.) J.D. FREEMAN (MELANTHIACEAE: PARIDEAE).

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#### ABSTRACT

Our recent effort to ascertain the first valid place of publication for *Trillium* subg. Phyllantherum, now in common use and typified by T. sessile L., demonstrated that this name, long attributed to Rafinesque's invalid 1820 publication, was inadvertently validated by J.D. Freeman in 1975. Continued review of Rafinesque names brought to our notice that Rafinesque validly established Trillium subg. Sessilium in 1830, based on the same type species, T. sessile, without any mention of his earlier "name." Accordingly, the 1830 subgeneric name has priority over the long-established name Trillium subg. Phyllantherum.

We (Reveal & Gandhi 2014: 1) recently reported on the validity of a commonly used subgeneric name for the sessile-flowered species of *Trillium* L. subg. *Phyllantherum*. That name was initially proposed by Rafinesque (1820: 72), who did not provide a description or diagnosis. He circumscribed the subgenus to include three species, *T. sessile* L., *T. petiolatum* Pursh, and *T. tinctorium* Raf., but only provided a French diagnosis for *T. sessile*.

Rafinesque's (1820) invalidly published subgeneric name was first validated as an unranked infrageneric name, Trillium [unranked] Phyllantherum, by Schultes and Schultes f. (1830: 1497). Unfortunately, that valid name remained essentially unknown. Later, the sessile-flowered trilliums were distinguished by Salisbury (1866: 61) as the genus Esdra, typified by T. sessile. He did not refer to either Rafinesque (1820) or Schultes and Schultes f. (1830). Subsequently, Nieuwland (1913: 112) proposed Phyllantherum at the rank of genus, validating it, albeit as a superfluous name because he cited Esdra, Salisbury's earlier generic name, in synonymy. As a consequence, when Freeman (1975: 2) took up "Trillium subg. Phyllanatherum Raf." (1820) as an accepted name, he inadvertently validated it (see Reveal & Gandhi 2014 for details). Although Freeman did not refer to the basionym, his citations of Estra and T. subg. Sessilium (mistakenly cited as genus "Sessilium Raf.") provide the requirements for the validity of his subgeneric name.

We assumed that we resolved the nomenclature and that the hitherto widely used *Trillium* subg. *Phyllantherum* would continue to be the correct name for the taxon. Clearly, we failed to appreciate the nomenclatural chaos that is synonymous with Constantin Samuel Rafinesque (1783–1840).

One possible reason for Freeman's mistake of using "Trillium subg. Phyllanatherum Raf." (1820) can be attributed to Merrill (1949: 93), who considered T. subg. Phyllanatherum to have been validly published in 1820. Perhaps this impression was influenced by Fernald (1944: 17-18) who mentioned Rafinesque's T. subg. Sessilium without actually commenting on its nomenclatural significance. Whatever the reason for the failure, including ourselves for not finding the 1830 name earlier, the majority of the blame can be laid at the feet of Rafinesque for not mentioning his 1820 name in 1830 (p. 97) or in 1840 (p. 132) when he treated Trillium in detail. Thus, the relationship between Rafinesque's 1820 and 1830 subgeneric names simply has gone unnoticed by monographers of the genus. It is not, however, clear to us how Freeman mistook Trillium subg. Sessilium as genus "Sessilium Raf."

There is no question that Rafinesque effectively validated, and typified Trillium subg. Sessilium. Under Trillium, he recognized three subgeneric names including Sessilium.

1. Sessilium. Petals erect, anthers adnate, filaments flat, stigmas sessile. Flowers sessile, erect. (the Tr. sessile of L.[sic., )].

Unless the 1830 Rafinesque name is proposed for rejection under provisions in Art. 56 of the International Code of Nomenclature (McNeill et al. 2012) and is conserved, the correct name at the rank of subgenus for the sessile-flowered trilliums, a monophyletic group (Kato et al. 1995), is as follows:

Trillium L. subg. Sessilium Raf., Med. Fl. 2: 97. Jun-Dec 1830. - TYPE: T. sessile L.

Trillium [unranked] Phyllantherum Schult. & Schult.f. in J.J. Roemer., Syst. Veg. 7(2): 1497. Oct-Dec 1830. - Type: not cited; Designated type: T. sessile L. (vide J.D. Freeman, 1975: 2).

Esdra Salisb., Gen. Pl. 60-61. Apr-Mai 1866. – TYPE: T. sessile L.

Phyllantherum (Schult. & Schult.f.) Nieuwl., Amer. Midl. Naturalist 3: 112. Jul 1913, nom. superfl.  $\equiv Esdra$  Salisb.

Trillium subg. Phyllantherum (Schult. & Schult.f.) J.D. Freeman, Brittonia 27: 2. 30 Mar 1975, nom. superfl. = Trillium subg. Sessilium Raf.

Trillium subg. "Phyllantherum" Raf., J. Phys. Chim. Hist. Nat. Arts 91: 72. 1820, nom. inval. (as "Jrillium")

Note: For purposes of typification of generic and infrageneric names, Article 10.1 of the International Code of Nomenclature mentions the terms "citation" (cited in the protologue of a taxon) and "designation" (= lectotypification). Also, in Art. 9.2 and the glossary, the term "lectotype" is restricted to a specimen or an illustration, not to a name. Accordingly, we choose to use the term "designated type" (instead of "lectotype") to denote the designation of a type for generic and infrageneric names.

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