SISTER M. VINCENT DE PAUL AND THE TYPIFICATION OF THE NAME POLYGONATUM COMMUTATUM FORMA RAMOSUM MCGIVNEY (CONVALLARIACEAE)

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ABSTRACT

A brief biographical sketch of Sister Vincent de Paul McGivney (1886–1958), a little known Michigan botanist, is elaborated as a prelude to typifying the only plant she named, Polygonatum commutatum forma ramosum, described from Indiana and Michigan.

KEYWORDS: Polygonatum, typification, biography, Sister Vincent de Paul McGivney

Sister Vincent de Paul (Marguerite Helena) McGivney I.H.M. (Jan. 21, 1886–Feb. 19, 1958)—known as Margaret to the I.H.M. (Immaculate Heart of Mary) Community—is one of the least well known of botanists who have spent a large portion of their careers in Michigan. A native of Howell, Michigan, after completing an A.B. degree at the University of Michigan in 1910, she entered the Novitiate I.H.M. Sisters in Monroe, Michigan. She went on to teach at Catholic high schools in Monroe, Detroit, and Flint until 1927. During the summers of 1924 through 1927, she attended the University of Notre Dame where she completed a Master’s degree under J. A. Nieuwland (Notes on our local plants. Notre Dame, Indiana, 1927. 15 pp.). Her chief contributions to Michigan botany were her teaching at Marygrove College, where she was on the faculty from the founding of the school in 1927 until 1957 and founded the Marygrove College herbarium, and her collecting, especially in SE Michigan, during the same period. During her tenure at Marygrove, she worked full-time at the Catholic University of America from September 1934 to January 1937, completing a Ph.D. thesis under Hugh O’Neill. It was published in 1938 as The Catholic University of America Biological Series No. 26: A Revision of the subgenus Eucyperus Found in the United States.

Thanks to the kindness of Marygrove College, the Marygrove College Herbarium now has been incorporated into the University of Michigan Herbarium. Besides many hundreds of her and her colleagues’ collections from Michigan, there are also large numbers of collections from the vicinity of Notre Dame, Indiana, made during her Master’s work, and large numbers from the vicinity of
Washington, D.C., made during her Ph.D. work. While at Marygrove, she exchanged with several herbaria, so the herbarium included exchange material from the University of Kansas (KANU), the Catholic University of America (herbarium now dispersed: see Taxon 38: 196–203. 1989), and Butler University (BUT), and her collections are also in those institutions.

While her major botanical contribution was the publication on *Cyperus* resulting from her Ph.D. thesis, noted above, the only plant she actually named (and the reason her name is in botanical indices such as IPNI) is a remarkable branched form of *Polygonatum biflorum* (Walter) Ell. (Amer. Midl. Naturalist 9(12): 662–664, as *P. commutatum forma ramosum*). This name, however, though of a minor form, presents substantial typification problems. Two collections from the University of Notre Dame Herbarium (ND) were cited: the type, “Planta 22003, Nostrae Dominae, Ind., in sylva sub Quercus die 14 Julii, 1925” and “22002 proxima Lacu Christiana, Mich. australi menses Aug. 10, 1924.” No collector was given for either specimen and the numbers in the publication are suspiciously regular, with the two collections from different years in adjacent states in reverse chronological order, and were presumably invented for this publication to identify specific collections in ND.

ND has six sheets referable to this plant; unfortunately, none of them bear either number, and none have dates that match those cited in the publication. Three sheets can be firmly eliminated from consideration as types because they were collected in years after or before those cited; one from Indiana in 1924, one from Indiana in 1929, and one from Indiana in 1930. A fourth sheet is from the cited locality in Michigan, Christiana Lake (Cass County), but the date is Aug. 7, 1924, instead of Aug. 10. No collector is given on this sheet. The small discrepancy of the date notwithstanding, this specimen may well be a paratype. In any event, it is the only Michigan collection available. The last two of the six ND sheets were collected at Notre Dame, Indiana in 1925. They are apparent duplicates and both bear the date July 10 and were collected by J.A. Nieuwland. One is named *Polygonatum commutatum forma ramosum* and has Nieuwland’s collection number of 15151 and a note by him “about 6 plants found, 4 left only two collected JAN[nieuwland].” The other collection, presumably the second individual alluded to, does not have a collection number, is named only *Polygonatum commutatum*, and has “teratological specimen” in parentheses. At the bottom of the label in pencil in another hand is the small blurry notation “S.M.V. de P.” for Sister M. Vincent de Paul McGivney. The 1924 Indiana sheet was from Notre Dame, dated July 26, and presumably means Nieuwland first found the plant the year before the collection of the type. Interestingly, this sheet suggests that there was more than one patch, since there was a note on the label “300 yards away from 15151.”

This leaves the typification in an unsatisfactory state because of the date discrepancy, the fact that neither specimen at ND has any habitat notation (cited as “in sylva sub Quercus” in the publication), and the lack of connection to Sister Vincent de Paul (except for the mysterious small pencil notation on one of the Nieuwland collections).

As noted above, the University of Michigan recently acquired the Herbarium of Marygrove College, which was for many years the home institution of Sister
Vincent de Paul. Because ND had no Sister Vincent de Paul collections, we believe she brought with her the collections she made in the Notre Dame area. In this collection we located two sheets collected by her and fully labeled Polygonatum commutatum forma ramosum McGivney from near Notre Dame with the date given as “July 1925” and the habitat “woods.”

Despite the original publication noting the type as at ND, we consider the possibility that the good sister kept the specimens longer than intended, and her specimens from the Marygrove Herbarium may represent the type collection. These specimens, though lacking a specific day, at least do not contradict the type citation, have at least the partial habitat “woods,” and are firmly connected to Sister Vincent de Paul. These two sheets clearly represent a gathering different than the Nieuwland collection; the condition and pressing of the Sister Vincent de Paul sheets is quite dissimilar. Since Nieuwland said, on the label of one of his two July 10, 1925 collections, “only two collected,” it appears that Sister Vincent De Paul went out a few days later to the colony and gathered two more in preparation for describing this entity—but evidently failed to follow through with depositing the type specimen at ND with a more complete label appropriate for a type. This action would also account for the published numbers not being placed on any sheets.

Since the Sister Vincent de Paul collections were clearly a different gathering, we checked briefly to see if they might be a better match for the description and illustration of Polygonatum commutatum forma ramosum than the two Nieuwland sheets in ND. Unfortunately, the description was sparse and the illustration somewhat stylized, so our conclusions are only suggestive. Her description calls for “about 15 leaves 8–10 cm long and 4–5 cm wide” and the illustration shows 15 main stem leaves. The two Nieuwland sheets have 16 and 18+ leaves, while the two Sister Vincent De Paul sheets each have 15 leaves. The lengths of the leaves of the Sister Vincent De Paul sheets are also closer to the description—the largest being 9–10 cm long while the two Nieuwland sheets have the largest leaves 11 cm long. The illustration also shows a lower branch with 3 fruits on a common peduncle, which is present on one of the Sister Vincent De Paul sheets but not on either of the Nieuwland sheets.

There can be no doubt that these highly branched specimens represent the same teratology, and probably even the same clone, so in some senses the precise typification is moot. But in the interests of precision, we suggest that the Sister Vincent de Paul sheet from the Marygrove herbarium that appears to most closely match the description is likely the holotype, which we have now deposited in ND, perhaps fulfilling the Sister’s wish posthumously, and the other sheet is an isotype; the full citation is:


There are perhaps other possible scenarios to account for the discrepancies. If the Nieuwland sheets are assumed to be types, we would then have to assume
that the date cited in the publication is wrong, that she failed to note Nieuwland as collector, and that she added information about the habitat from her observations, but did not mention her own collections. But we hope the apparent slightly better match of the Sister Vincent de Paul collections with the publication adds some weight to our scenario being likely.

Because this plant is such a curiosity, we here also reproduce the original illustration published with the description as Fig. 1. Fortunately, the four stems collected in 1925 did not extirpate this remarkable plant, as it evidently became well known to botanists in the late 1920’s, with collections of the same plant having been made by P.E. Hebert in 1929 (ND), M.W. Lyon also in 1929 (MICH), and Nieuwland again in 1930 (ND). The Hebert collection contains the more precise locality: Angela [“Angella”] Ravine. Furthermore, at some point, living material was transferred to a garden at Marygrove College, whence collections were made as recently as 1948 as *Polygonatum biflorum* (Walt.) Ell. forma *ramosum* McGivney (introduced), Marygrove College Campus, Sept. 2, 1948, Sister Vincent de Paul s.n., (KANU).

One final note is that in her paper, she describes the location as “one mile southeast of the University.” However, Angela Ravine is actually ca. 1 mile WSW of the University and those few collections that do give more precise localities than just “Notre Dame” or “near Notre Dame” also give the locality as “west” or “south-west” of the University. We believe that all the collections are from the same general locality, Angela Ravine. Even in 1925, southeast of the University would have been urban/residential with no woods.

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