



## Nomenclatural transfers for some northeastern USA desmids

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The lectotype type species of the genus *Arthrodesmus* Ehrenberg ex Ralfs, *nom. illeg. non Arthrodesmus* Ehrenberg, *nom. illeg.* (cf. Compère 1976), *Arthrodesmus convergens* Ehrenberg ex Ralfs (Bicudo 1973, 1975), is currently referred to the genus *Staurodesmus* Teiling as *Staurodesmus convergens* (Ehrenberg ex Ralfs) S.Lillieroth; other species of *Arthrodesmus* Ehrenberg ex Ralfs have been referred to *Staurodesmus*, *Bourrellyodesmus* Compère and *Octacanthium* (Hansgirg) Compère.

However, several *Arthrodesmus* names from the older US literature have not been referred to appropriate genera. For an upcoming paper on Zygnematophyceae from the New Jersey Pine Barrens, three such taxa require reassignment. *Arthrodesmus fragilis* Wolle 1880 is a monosporous form, which, according to Bicudo & Compère (1976), is referable to *Staurodesmus*, as is *Arthrodesmus ovalis* Wolle. *Arthrodesmus rauii* Wolle (Wolle 1883: 17) should be a *Xanthidium* according to Bicudo & Compère (1978) and Prescott, Bicudo & Vinyard (1982), but they did not effect a transfer, citing a poor description and illustration. However, based on the original drawing and their description, a move to *Xanthidium* is justified.

***Staurodesmus fragilis*** (Wolle) Fairbanks, *comb. nov.*

Basionym: *Arthrodesmus fragilis* Wolle, *Bulletin of the Torrey Botanical Club* 7(4): 47, 1880.  
Type locality: Hammonton, New Jersey, August, 1879.

***Staurodesmus fragilis* var. *ovalis*** (Wolle) Fairbanks, *comb. nov.*

Basionym: *Arthrodesmus ovalis* Wolle *Bulletin of the Torrey Botanical Club* 10(2): 18, 1883  
Synonym: *Arthrodesmus fragilis* var. *ovalis* (Wolle) C.E.M.Bicudo (in Prescott & al. 1982: 17)  
Type locality: Mount Everett, Massachusetts.

***Xanthidium rauii*** (Wolle) Fairbanks, *comb. nov.*

Basionym: *Arthrodesmus rauii* Wolle, *Bulletin of the Torrey Botanical Club* 10(2): 17, pl. XXVII: figs 17, 17a.  
Type locality: pond near Newfield, New Jersey; collected by E.A. Rau, August, 1882.

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