

AN ATTEMPT TO REVISE THE GENUS *PERONIA* BRÉB. ET ARN. EX KITTON WITH TWO SPECIES NEW TO SCIENCE

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Peronia Brébisson et Arnott ex Kitton is a small freshwater genus belonging to the Eunotiales Silva, and shares basic characteristics with other genera within this group, e.g. the presence of a rudimentary raphe, the absence of a central nodule, and the ecology. It usually occurs in very low abundances in oligotrophic and dystrophic water, growing as a periphyton attached to the surface by mucilage. Although the genus *Peronia* includes 12 described taxa, only a couple of species are commonly reported. Besides that, they appear to have been confused in the past, with various authors having different concepts for them. After our investigation, it appears that there are only three species of *Peronia*: *Peronia fibula* (Brébisson in Kützing) Ross, *Peronia heribaudi* Hustedt and *Peronia brasiliensis* Hustedt. Despite this resolution, observations on the type material, original drawings in the classical literature and photographs in the modern literature, it still seems that the concept of those few species is still not clear, probably also due a considerable variability in *Peronia* valve shapes. Our goal was to look at available type material and other populations from the North America (mostly from the collection of slides at the Academy of Natural Sciences in Philadelphia), and to demonstrate the morphological variability within the *Peronia* populations. In addition, we present two forms of *Peronia* from our samples morphologically different from all the recognized species: one from the Northeastern U. S., having a drawn - out, acute head pole; the second one from Roraima Tepui (on the border of Venezuela, Brazil and Guayana), which has a bluntly capitate head pole. These *Peronia* forms are presented as new to science.