CHERE DAVIS, Dept of Science and Mathematics, Glenville State College, Glenville, WV, 2635. Evolutionary Analysis of Monopyle (Gesneriaceae) from Panama

Monopyle Moritz ex Benth. (Gloxiniinae: Gesneriaceae) is a group of terrestrial understory or facultative epiphytic herbs distributed from Guatemala southward through northern South America. Monopyle is traditionally characterized by differentially swollen internodes, anisophyllous opposite leaves, campanulate flowers, osmophore and the presence of uncinate trichomes (Keene, 2013; Roalson et al. 2005; Weber, 2004). Monopyle Moritz ex Benth. is currently represented by six species and one variety in Central America. The largest percentage of taxa have been confirmed to reside from the premontane to montane forest in Panama and Costa Rica from 300–1300 m. Monopyle puberula C.V. Morton and Monopyle maxonii C.V. Morton have the broadest distribution in the region with other species being narrow endemics. Revisionary work on the genus has led to the identification of several newly discovered species in the region previously lumped within Monopyle macrocarpa Benth. A morphological and molecular assessment of species from this region have shown that Monopyle macrocarpa does not occur in Central America and is actually restricted to an area of Northern Peru. The newly discovered species can be determined by a suite of characters which include density of pubescence, petiole length, calyx shape, and corolla shape coupled with color. My research focuses on separating both Monopyle dichotoma Keene ined. and Monopyle sessilis Keene ined. as new species from previously known taxa.