

Understanding factors responsible for species rarity is crucial for their effective conservation. Do rare and endangered species possess any specific traits, which differentiate them from species that are common and which could be the cause of their rarity and endangerment? To answer this question, I analyzed biological and ecological traits of critically endangered plant species of the Czech Republic (CR category of the Red list of vascular plant species, Procházka 2001). I compared vegetative, generative and ecological traits of CR species with traits of species that are closely related but common (due to phylogenetic correction), with common closely related species from the same habitat (because many differences in species traits can be caused by adaptation to specific habitat type) and with traits of all plants of the Czech Republic. Information about species traits was mainly obtained from literature and databases; a small part was assessed experimentally. The comparison with closely related common species has shown that CR species are smaller, flower for shorter period, have higher proportion of autocompatibility and higher terminal velocity. CR species differ also in the mode of dispersion, in ecological traits and in traits connected with distribution (lower proportion of cstrategy, greater Ellenberg indicator values for light, temperature and soil reaction, lower values for nitrogen, smaller distribution ranges). The results suggest that critically endangered species are small, competitively inferior species, with some differences in generative part of their life cycle, that occur mainly in the open, unproductive habitats (such as alpine treeless habitats and some types of wetlands).