

Multiplication of nuclear genome is considered one of the most important processes in the plant evolution. Neopolyploids arise in a diploid population by merging of two unreduced gametes or through „triploid bridge“. However establishment of a new polyploid in the current population is not easy. Polyploid has to overcome through various mechanisms (like a self-pollination, nonrandom pollination, etc.) „the minority cytotype exclusion“ and increase their frequency in the population. Diploids and polyploids differ in ecological demands and competition abilities. There is no correlation between ploidy and wide ecological amplitude or competition abilities. With the current knowledge, we can not determine in which case is the mixed population stable. There is an assumption that the population contains two closely related species simply can not be stable, and therefore all cytotype mixed populations are unstable.