Abstract

The extensive climatic oscillations of the Pleistocene caused strong cycles of contraction-expansion of plant populations, which likely affected biodiversity patterns. These migration waves left species/populations in climatic refugia situated in the South of the Mediterranean, the Macaronesian archipelagos, the Maghreb Mountains, the central Saharan sky islands and the eastern African Ranges. Some of these refugia were inter-linked by migration corridors or expansion routes. Here we study the recent evolution of the African clade of *Campanula*, founding that it includes six major lineages, two of them distributed across the NE-SW Saharan corridor and other four distributed across the Maghreb mountain ranges. Chromosome numbers increased by duplication in both Saharan lineages, suggesting that neopolyploidy facilitated range expansions. *C. edulis* and *C. bordesiana*, distributed across the Sahara, show a few widespread haplotypes, while the group of *C. mollis*, inhabiting northern coastal mountains, present many more, restricted to small areas. These data suggest strong differences in dispersal abilities among lineages.