

Abstract

Because of their low genetic variability and limited ability to respond to the changing environment, clonal plants are often considered an evolutionary dead end. On the other hand, numerous recent studies showed that clonal plants can react to the changing environment through epigenetic mechanisms, especially through DNA methylation. Moreover, epigenetic information in clonal plants can be transferred to future generations (so-called transgenerational memory). As a result, epigenetics can ensure better fitness of the next clonal generation. The aim of this work is to summarize the knowledge about the role of epigenetic variability in the life of clonal plants performing limited genetic variability.

Key words: epigenetics, DNA methylation, epigenetics variation, clonal plants, transgeneration memory