

Abstract

Flowering is a crucial event in a life cycle of every single plant. Various plant species are differently affected by weather in this time of their life cycle. Weather may have an impact on flower opening speed and timing and also on flower longevity. Timing of flower opening is very important. If flower opening takes place when weather conditions are unsuited, it can be for such plant terminal, or more precisely terminal for its ability to reproduce. Flower can be very important for male fitness protection. Flower opening is regulated by phytohormones and some other signal pathways – pathways of vernalization, gibberellins, photoperiod and an autonomous one which is independent from photoperiod. Phytohormones and regulation pathways mentioned above may respond to exogenous factors, namely temperature, light, air humidity and rain. Furthermore, an anther dehiscence is the key stage of flowering. Its timing and process have a huge effect on success of plant reproduction. It is also controlled by changing of weather conditions and by phytohormones, jasmonic acid is the main trigger of this process. Environmental factors influence on anther dehiscence was not examined in detail.

Key words: flower opening, anther dehiscence, environmental factors