

# Abstract

This bachelor's thesis is a review summarizing the effects of heat stress on the reproductive development of flowering plants and their tolerance mechanisms. Plants are continuously exposed to changing environmental conditions and ever-increasing temperatures.

Reproduction, especially the development of the male gametophyte, is particularly sensitive to these changes. This leads to defective development, sterile pollen, and fewer seeds, which affects crop productivity and yield. Therefore, it is essential to understand these changes, and especially the tolerance mechanisms.

Keywords: reproduction, flowering plants, heat stress, tolerance, male gametophyte, female gametophyte