

# CARBOHYDRATE METABOLISM AS A COMPOUND OF TOLERANCE MECHANISMS AGAINST ABIOTIC STRESSES IN PLANTS

## Summary

Changes of carbohydrate concentration in plant tissues have been frequently shown to be involved in plant responses to many abiotic stresses like cold, drought, salinity and waterlogging. Environmental stresses lead to major alterations in carbohydrate metabolism. The sugar signaling pathways interact with stress pathways to modulate metabolism. This review describes the changes in sugar content and

their role during plant growth and development under abiotic stresses. Moreover, recent evidences on the way how plants sense and respond to environmental factors through sugar-sensing mechanisms are presented. The complexity of signaling pathways and importance of several soluble sugars for resistance to abiotic stresses in plants are discussed.