

## Seasonal Changes in Organic Carbon Content of Leaves of Deciduous Trees

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### Summary

Changes in organic carbon content were investigated during the course of one growing season in the leaves of beech (*Fagus sylvatica* L.) and oak (*Quercus robur* L.). Considerable alterations in leaf carbon content were found not only during the course of the growing season, but also as a function of tree height. Until about August, leaf carbon content of oak gradually increased and then showed a decline as the leaves yellowed in October. In beech sun leaves there was a gradual increase in organic carbon content with increasing foliage age, whereas shade leaves showed the opposite trend. The results demonstrate that leaf carbon content may vary during leaf ontogenesis, and that the character of ontogenetic changes in carbon content depends not only on plant species but also on canopy position.

### Keywords

- Beech;
- carbon content;
- deciduous trees;
- *Fagus sylvatica* L.;
- oak;
- *Quercus robur* L.;
- seasonal changes