

# CAN A PLANT EAT ANOTHER PLANT ? WHAT IS PARASITISM BETWEEN ANGIOSPERM PLANTS ABOUT

## Summary

Parasitism among angiosperms is not a widespread phenomenon as it occurs in approximately 1% of known species. Nevertheless, some parasitic weeds have great economic importance – among them are destructive pathogens of commercially valuable crops and pathogens of coniferous trees in many regions of the world. Parasitic angiosperms are a taxonomically, structurally and physiologically differentiated group of plants that rely on a neighboring plant for partial or total supply of water and nutrients. The common feature uniting parasitic angiosperms is the presence of haustorium, a specialized organ that attaches the parasite to its host and allows for extraction of solutes from the host's vascular system. Parasitic plants are often classified as hemiparasitic or holoparasitic, depending on the extent of their inability to produce their own reduced carbon. Holoparasitic species are obligate parasites and as such lack chlorophyll and have little independent capacity to assimilate carbon and inorganic nu-

trients. Hemiparasites have chlorophyllous and are autotrophic to some extent. They can be further divided into facultative and obligate parasites, depending on whether or not they are capable of completing their lifecycle in the absence of the host. Parasitic plants have different modes of invading host plants, some develop haustoria on the roots whereas others invade aerial parts of the host. They infect their hosts to rob them of water, minerals and nutrients and compete for resources. The direct effect of infestation is the reduction of host's dry matter production, change of its shoot/root allometry, the decrease in reproductive output and sometimes finally killing of the host. Parasitic genera vary considerably in their habits and host ranges and can indirectly influence their hosts by shifting the competitive balance and resource cycling in ecosystems. This can result in change in ecosystems of relative species composition under future CO<sub>2</sub> -rich atmosphere and climate warming, known as the greenhouse effect.