

## **Topics of dissertations for the academic year 2021/2022**

Doctoral Study Program Silviculture  
Faculty of Forestry and Wood Sciences  
Czech University of Life Sciences Prague

Silvicultural potential of selected introduced tree species, including assessment of environmental risks and growth potential with respect to ongoing climate change.

Effect of global climate change on the growth dynamics and silviculture of pine stands.

Possibilities of increasing quantitative and value production by applying selective principles in pine stands.

Analysis of interspecies relations between trees in mixed stands with regard to quality, vitality and growth.

Use of progressive methods and supportive substances in forest seed production.

Introduction of broad-leaved tree species into forest stands in specific forest sites.

Identification and forest utilization of selected representatives of the Betula family.

Influence of the type of mixture on the quality and growth of trees.

Effect of different silvicultural systems on water regime of forest stands.

Influence of site and stand conditions on the growth and health of silver fir.

The potential of wood ash as a fertilizer in the forest management of the Czech Republic.

Deriving parameters to determine the trees' maturity when applying a singletree selection.

Forest reclamation of spoil banks.

Analysis of the structure, growth and regeneration of forest stands at the stage of their conversion, modelling of the target state.

Influence of different forest structure on tree vitality, growth and stand microclimate.