

The project's main objective is to assess the interaction of symbiotic microorganisms with plants under biotic and abiotic stress conditions, in the context of maintaining sustainable agriculture with emphasis on greening of agriculture through the reduction of consumption of plant protection products. These interactions will be investigated using molecular techniques and phenotyping of spring barley as one of the strategic raw materials of the Czech Republic. Another aim of the project is to develop the species spectrum of endophytes used and to optimize their practical introduction using specific carriers regarding the quality of the soil environment and enhanced carbon sequestration.