

The **Institute for Sustainable Plant Protection** of the National Research Council of Italy (ISP-CNR) was founded in May 2014 from the merger between the Institute of Plant Virology (IVV-CNR) and the Institute for Plant Protection (IPP-CNR).

The **mission** of the IPSP is the study of the plant response to biotic and abiotic stresses, in order to identify resistance mechanisms, adaptation processes and protection methods.

The activities are aimed at promoting plant health in agriculture and forestry, that means strengthening of natural antagonisms and beneficial microorganisms in integrated pest management, the qualitative and quantitative improvement of agri-food productions, the selection and recovering of valuable plant germplasm, the characterization and production of bio-molecules of agro-industrial interest, the mitigation of the impacts of global change and, ultimately, a sustainable and environmentally friendly growth.

Main areas of the research activities

BIODIVERSITY OF AGRO-FOREST ECOSYSTEMS

Characterization of the biodiversity of organisms and microorganisms associated with agricultural and forest systems (holobionts, insects, fungi, bacteria, viruses, viroids, weeds and nematodes) for knowledge/description purposes and in order to support the defense of production chains from adverse biotic and abiotic environmental factors.

PLANT PROTECTION DIAGNOSTICS

Development and validation of diagnostic tools to detect plant pathogens via both direct and indirect methods. Support to plant health monitoring programs to prevent, limit and manage the spread of pests and epidemic events.

INTERACTION OF PLANTS WITH BIOLOGICAL AGENTS

Study of plant-parasite-antagonist-symbiont interactions in natural, agricultural and forest ecosystems through a multidisciplinary approach that aims at expanding the molecular, biochemical, physiological knowledge about the mode of action of microbial biological control agents against plant diseases.

