

Education

Born at Strambino (Turin) on 9th March 1957.

- Dipartimento di Valorizzazione e Protezione delle Risorse Agroforestali (Di.Va.P.R.A.) - Settore Entomologia e Zoologia applicate all'Ambiente "Carlo Vidano", Faculty of Agriculture of the University of Turin.
- Teacher of Agricultural Entomology, Systematic Entomology, IPM and Biological Control, and Grapevine Entomology.

Research

Author of many scientific papers written singly or in cooperation.

The sectors in which his research activity is carried out are:

Current worrying pests.

- Investigations on outbreaks and dynamics of acquired or endemic worrying pests. Classification and studies on ethology, ecology, phytopathology and chorology of new pests for Italy.

Biology and ecology of natural enemies of pests.

- Studying natural enemies, such as fungi, predators and parasitoids, of worrying pests of agriculture or of the ecosystems close to crops, with the aim at using them in IPM and biological control programmes. Checking and studying new biocoenoses made of autochthonous predators and parasitoids of exotic pests incidentally introduced into Italy.

IPM and biological control of pests.

- Investigations of natural enemies of plant pests of agricultural interest, above all of vegetables and flowers. In particular IPM trials were carried out in greenhouses against thrips, noctuids, and leafminer flies.
- IPM trials against worrying plant bugs in floriculture.
- District experimental application of the sexual confusion and the "Attract and kill" methods against peach and apple leafroller moths. Census of the main apple leafroller moths (carpophagous and phyllophagous) with the aim to point out the most efficient control methods; ascertainment of their natural enemies.
- Check of the spread of chestnut spermophagous leafroller moths and set up of defense strategies.
- Control of the corn borer *Ostrinia nubilalis* for the containment of the presence of micotoxins in the grains.
- Evaluation of the undesired effect of pesticides on natural enemies.
- Study of the bioethology of exotic natural enemies to be employed in IPM programmes.

Education

Auchenorrhincha.

- Taxonomic, faunistic and biological studies on Auchenorrhyncha species of trees and shrubs, of agricultural agro-ecosystems, of forest ecosystems and humid areas. Classification of Auchenorrhyncha collected by other Italian and foreign researchers.

Auchenorrhincha vectoring phytoplasmas with a particular attention on the vineyard agro-ecosystem.

- Research on the diffusion and the importance of Auchenorrhyncha species vectoring phytoplasmas in vineyards. Study of population dynamics and spatial distribution in vineyards of Auchenorrhyncha vectors and potential vectors by means of chromotactic traps and samplings.
- Transmission trials, in particular concerning grapevine yellows. Transovarial transmission of phytoplasmas.
- Detection of phytoplasmas in tissues of Auchenorrhyncha vectors and infected plants. Molecular hybridization assays and DNA amplification in plants and insect vectors.
- Study of the bacterial flora of deltocephaline vectors, in particular of organisms potentially antagonistic of phytoplasmas in *Scaphoideus titanus*.

Sternorrhincha vectoring phytoplasmas with a particular attention on Apple proliferation and on the role of Psyllids.

- Research on the diffusion of the phytoplasmosis known as Apple proliferation or witch's broom and on the role of psyllid vectors. Study on bioethology, population dynamics, and spatial distribution in apple orchards of the vector *Cacopsylla melanoneura*.
- Ascertainment of the role of other vectors of this phytoplasma and of wild rosaceae as hostplants of potential vectors and of the causal agent of the apple phytoplasmosis.
- Transovarial transmission of phytoplasmas.