

Marcello Verdinelli
Curriculum Vitae

Marcello Verdinelli has been working as a permanent researcher since 1997. He spent part of his formative period in various research institutes such as the Department of Genetics and Molecular Biology of the University of Rome, the National Centre for Scientific Research "Demokritos" of Athens and the International Atomic Energy Agency of Seibersdorf, Wien. During this period, he studied insect population genetics before his attention focused on applied ecology and more specifically on the assessment of biological control methods in agricultural and forest ecosystems. In 1994 he contributed to the realization of the Rearing Laboratory of Useful Insects of the Agrarian Regional Centre of Sardinia. He carried out tests on the inundative release of mass-reared *Opius concolor* Szep. to suppress the olive fly (*Bactrocera oleae* Gmel.). As a part of his activity, he studied sampling methods of arthropods in forests. A sequential sampling method was defined for *Malacosoma neustria* L. populations and its efficacy was tested in Mediterranean ecosystems. This study involved the analysis of the relationships among the damage caused by caterpillars, pest control and the resulting long-term damage from the insect impact by GPS-GIS application. Microbial control tests were performed in the field against harmful insects by using *Bacillus thuringiensis kurstaki* formulations and laboratory bioassays were conducted in order to test toxic activity of commercial formulations of Btk in comparison with Bt isolates from soils of Sardinia. Within an agreement between the National Research Council and the Ministry of the Environment, Marcello Verdinelli studied the actual consequences on beneficial insects of genetically modified maize. In the last years his interest has been oriented towards standard methods for biodiversity measuring and monitoring. Marcello Verdinelli is studying the composition and structure of ant communities as indicators of environmental risk.