

GIUSEPPE SERRA

CURRICULUM VITAE

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Giuseppe Serra is a permanent researcher of the Institute of Ecosystem Study (ISE) of the Italian National Council of Researches (CNR). He obtained the Degree in Agricultural Science at the University of Sassari. Since 1994 its field of interest is the applied entomology.

His current researches are focused on the genetic characterization of populations of the oak defoliator *Tortrix viridana* and studies on the physiological and genetic polymorphism related to the host plants and embryonic development. He is also making trials on the use of pheromone traps in the assessment of the abundance of *T. viridana* and a long-term study of population dynamics at local and regional scale. Further studies are focused on the ecology and population distribution of the vine mealybug *Planococcus ficus* and in the application of integrated control strategies with newly formulated insecticides and innovative techniques (mating disruption).

His scientific activity has developed in the agricultural and forestry entomology. In the forestry field, studies have mainly been concerned with development of sampling methods of populations of the defoliating moths *Tortrix viridana* and *Malacosoma neustria*. Further studies have been made on the effectiveness of aerial treatments with *Bacillus thuringiensis* (*Bt*) against the main defoliating caterpillars of oaks. In the agricultural field, he has studied the damaging aspects of the infestation of the olive fly (*Bactrocera oleae*) and carried out research of the impact of Bt-Maize (GMO) on useful and pest insect fauna. He has studied damages of the leafhopper *Jacobiasca lybica* on vines and the impact of different soil management techniques on insect pests to vines. Additional studies have been made on the integrated pest management on traditional mountain orchards (hazelnut, walnut, cherry, chestnut). Researches are also performed on the composition of some natural and anthropic biocoenoses with particular regard to its arachnofauna and on auxiliary and non-target insects.

Coordinator of the project “*Tortrix viridana* & *Quercus*:genetic characterization of Sardinian green oak leaf roller moth populations and its related oaks” (founded by the Sardinian Regional Council, 2013/15). Currently cooperate at the project “Biological control of the chestnut gall-wasp” (Prov. NU and Sardinian Regional council, 2010-). He collaborated in several research programmes as: Multiregional Operation Programme “DiBoMed” (National Institute of Agricultural Economics, 1999/01); F.A.R. ex 60% (University of Sassari Research projects, 2002-2005-2006); project “G.M.O. and biodiversity” (PA CNR/Italian Ministry of Environmental, 2002); project “Co.Ri.Bio” (Italian Ministry of Agriculture, 2004/07); International Cooperation Sardinia-Tunisia (Sardinian Regional Council, 2005/06). Responsible for the “Service Contract for applied research activity for the conversion of the flower nursery productions to organic agriculture” (Italian Ministry of Agriculture, 2002/04) and responsible for implementing the activity of ISE-CNR for the project “Eco-compatible protection management in traditional fruit orchards (walnut, cherry)” (Sardinian Regional Council, 2005/08); project “Integrated pest management in Sardinian viticulture” (APQ vine-viticulture chain – CONVISAR and Sardinian Regional Council, 2008/11).

Component of the scientific committee at the ISE-CNR; associated-researcher at the Dept. of Plant Protection of the University of Sassari (2009/11); Member of technical committees concerning pest diseases (Sardinian Regional Council, CNR). Co-tutor of several degree theses in Agricultural Science and tutor (2002/03) in the Masters programme of the Faculty of Agriculture of the University of Sassari, of “Technical experts in the management of food production lines from organic agriculture in the Mediterranean environment”. Author of over 40 publications on international and national scientific journals and of several communications at national and international meetings.

Selected publications:

- Lentini A., **Serra G.**, Ortu S., Delrio G. 2008 - Seasonal abundance and distribution of *Planococcus ficus* on grape vine in Sardinia. *IOBC wprs Bull.*, Vol. 36, 2008: 267-272;
- Serra G.**, Lentini A., Verdinelli M., Delrio G., 2006 - Effects of cover crop management on grape pests in a Mediterranean environment. *IOBC wprs Bull.*, Vol. 29 (11), 2006: 209-214;
- Verdinelli M., **Serra G.**, Cao O.V., Luciano P., 2005 – Sequential sampling to estimate *Malacosoma neustrium* (L.) population density. In *Entomological Research in Mediterranean Forest Ecosystem*. Ed. by F. Lieutier, D. Ghaïoule - INRA editions, Paris, France: 237-245;
- Delrio G., Verdinelli M., **Serra G.**, 2004 - Monitoring of pest and beneficial insect populations in summer sown Bt maize. *IOBC wprs Bull.*, Vol. 27(3) 2004: 43-48;
- Serra G.**, Luciano P., Gilioli G., 2002 (ed. 2003) – Observations on the spatial distribution of the gree oak leaf-roller moth eggs in Sardinian forests. Third contribution: sampling design in *Quercus pubescens* Willd. Forest stands. *REDIA*, LXXXV: 213-227;
- Delrio G., Lentini A., **Serra G.**, 2001 – Spatial distribution and sampling of *Jacobiasca lybica* on vine. *IOBC wprs Bull.*, Vol. 24 (7) 2001: 211-216;
- Delrio G., Lentini A., Vacca V., **Serra G.**, 1995 - Effects of *Bactrocera oleae* (Gmel.) infestation on the production and quality of olive oil. *La Rivista Italiana delle Sostanze Grasse* - Vol. LXXII: 5-9;