

SALVATORE D'AQUINO

(*Curriculum Vitae*)

Institute of Sciences of Food Production of the Italian National Research Council, territorial unit of Sassari, Traversa La Crucca 3, Regione Balduina, 07040, Li Punti, Sassari, Italy, Tel 0039 079 2841708; salvatore.daquino@ispa.cnr.it

EDUCATION

- 1987 Master in Agricultural Science, "Istituto di Coltivazione Arborea", University of Catania, Italy.
- 1988-1989 Research investigations on flowering, pollination and fruiting of avocado and other tropical species in Sicily. - "Istituto di Coltivazione Arborea", University of Catania, Italy.
- 1989 Training on enzyme staining and electrophoretic procedures as tools to determine the degree of nucellar embryony in citrus species. - "Istituto Sperimentale per l'Agrumicoltura", Acireale, Catania, Italy.
- 1990-1991 Study grant sponsored by the Italian National Research Council for studies and training activities related to postharvest physiology and handling of horticultural commodities. - "Istituto per lo Studio dei Problemi Bio-Agronomici delle Colture Arboree Mediterranee- CNR, Sassari, Italy .
- 1990 Research activities focusing on subjects related to chilling injury and market quality evaluation of fruit of tropical and sub-tropical origin. - Stage (8 months) at the postharvest group of the 'USDA-ARS' of Orlando (Florida).
- 1992-1994 Studies (as researcher volunteer) focusing on postharvest physiology of fruit trees of the Mediterranean region and activities related to the preservation (location, individuation, introduction in collecting fields) and quality evaluation (chemical characterization of the juice, firmness, storability) of old cultivars of fruit of the local germplasm. - "Istituto per lo Studio dei Problemi Bio-Agronomici delle Colture Arboree Mediterranee- CNR, Sassari, Italy.

POSITION HELD

- 1994- 1997 Temporary scientist at the "Istituto per lo Studio dei Problemi Bio-Agronomici delle Colture Arboree Mediterranee" of the Italian National Research Council - Sassari, Italy.
- 1997- 2009 Permanent scientist at the Institute of Sciences of Food Production of the Italian National Research Council, territorial unit of Sassari, Italy (previous "Istituto per lo Studio dei Problemi Bio-Agronomici delle Colture Arboree Mediterranee" of the Italian National Research Council – Sassari).
- From 2010 Senior Research Scientist in the same Institution.

MAIN RESEARCH LINES

Maintenance of postharvest quality and shelf-life of horticultural commodities of importance for the Italian industry is the main objective of my research.

Use of physical methods integrated with generally recognized as safe compounds (GRAS) in combination with new safer fungicides in order to improve safety for consumers and reduce the risk of selection of resistant strains of the main postharvest fungi to conventional fungicides.

Impact of modified atmosphere packaging on postharvest physiology, decay and quality of fresh produce, with particular emphasis on high perishable fruit of the Mediterranean area (early season pears, figs, cactus pears, pomegranates, citrus fruits).

Pre- and post-harvest treatments with fungicides, GRAS, coatings and growth regulators in order to reduce postharvest decay, physiological disorders and ameliorate the overall quality of horticultural products.

Quality evaluation and attitude to cold storage and handling of fruits of native species.

PROJECT - RESEARCHER LEADER

1998-2000 Progetto strategico CNR "Valorizzazione delle cultivar autoctone di pero e melo del germoplasma autoctono" (responsabile scientifico)

2001-2007 Impiego del condizionamento in atmosfera controllata e di trattamenti con composti biocompatibili ad attività fungicida -"Piano Agrumicolo Nazionale - Ricerche e sperimentazioni nel settore dell'agrumicoltura italiana " granted by MiPAAF.

2002-2007 Impiego di composti a basso impatto ambientali per ridurre l'insorgenza delle fisiopatie della buccia dei frutti di agrumi -"Piano Agrumicolo Nazionale - Ricerche e sperimentazioni nel settore dell'agrumicoltura italiana " granted by MiPAAF

2007-2010 Difesa postraccolta dei frutti di agrumi mediante trattamenti di termoterapia combinati con formulati alternativi ai fungicidi tradizionali - Ricerche avanzate in agrumicoltura e loro applicazioni (RAVAGRU)" granted by MiPAAF.

2009-2011 Define fresh cherry tomatoes and peach fruit (and a broader relevant category of fresh horticultural produce) quality design requirements for preserving quality characteristics and prolonging shelf-life under biodegradable EMAP conditions - Development of innovative biodegradable packaging system to improve shelf life, quality and safety of high-value sensitive horticultural fresh produce - EUROPEAN COMMISSION - 7th Framework Programme on Research, Technological Development and Demonstration.