

# Innovations into supply chain of ornamental plants market: packaging and transport of nursery products

Riferimenti

Tipo di progetto

Gruppo Operativo

Acronimo

IN.TRA.VIVA.

Tematica

Logistica

Information

Time frame

2019 - 2021

Durata

32 months

Partners (no.)

11

Regione

Toscana

Comparto

Florovivaismo

Localizzazione

ITI13 - Pistoia

ITI18 - Arezzo

ITI19 - Siena

Costo totale

€363.054,18

Fonte di finanziamento principale

Programma di sviluppo rurale

Programma di sviluppo rurale

2014IT06RDRP010: Italy - Rural Development

Programme (Regional) - Toscana

Parole chiave

Supply chain, marketing and consumption

Sito web

<https://www.intraviva.it/>

Project status

completed



## Objectives

The aim is to contribute to increasing the added value for the regional sector of ornamental plants through the introduction of technological, process and organizational innovations in the phase of plant transport from the nursery to the customer.

## Activities

- Laboratory test on how the most frequently transported plant varieties react to the typical transport stresses;
- laboratory identification of volatile compounds which signal stress conditions;
- realization of simulated haul transports: a container will be loaded with the most frequently transported plant varieties, blocked, closed and subject to the weather conditions of a hypothetical itinerary. Plants will be loaded on the container wrapped in an innovative packaging, equipped with micro-sensors obtainable in the market and programmed to detect the identified volatile compounds.

The data collected by the micro-sensors will be transmitted in real-time to active modified RFID Tags.

## Context

The plant nursery sector sells and delivers its products not only within the borders of the European Union, but also all over the world. As a result, guaranteed punctuality of delivery and maintenance of the optimal plant health during long transport (mainly by road, but also by sea) become key competitive factors. It is not infrequent that the environmental conditions during transport and/or the used loading method adversely affect the plant health, undermining the confidence and trust of customers.

In this context, the project of the Operational Group focuses on the experimentation and promotion throughout the regional nursery sector of

procedural and technological innovations (such as, the use of miniaturized sensors, RFID Tags, biological antiperspirant products, new ecological packaging, and a new computer model of loading), in order to maintain a high level of production from the nursery to the customers.

## Partenariato

Role	Azienda	Address	Telephone	E-mail
Leader	Impresa Verde Pistoia srl	Via dell'Annona, 211 51100 Pistoia PT Italy	0573 991041	michele.bellandi@coldiretti.it
Partner	Società Agricola G&G. Baldetti	Loc. Pietraia 92 52044 Cortona AR Italy	0575 67646	
Partner	Società Agricola Floramiata	Loc. Casa del Corto 53025 Piancastagnaio SI Italy	0577 781702	
Partner	Scuola Superiore Sant'Anna di Pisa	Piazza Martiri della Libertà, 33 56127 Pisa PI Italy	050 883521	alberto.mantino@santannapisa.it
Partner	CREA-VIV - Unità di ricerca per il vivaismo e la gestione del verde ambientale ed ornamentale	Via dei Fiori 8 51017 Pescia PT Italy	0572 451033	viv@crea.gov.it
Partner	Università degli Studi della Tuscia - Dipartimento per la Innovazione nei sistemi Biologici, Agroalimentari e Forestali (DIBAF)	Via San Camillo de Lellis snc 01100 Viterbo VT Italy	0761 3571	dibaf@unitus.it

## Innovazioni tecnologiche e di processo nella fase post produzione di confezionamento e Trasporto dei prodotti Vivaistici

<https://www.innovarurale.it/pei-agri/gruppi-operativi/bancadati-go-pei/innovazioni-tecnologiche-e-di-processo-nella-fase-post>

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Role	Azienda	Address	Telephone	E-mail
Partner	PackLAB - Università di Milano	Via Divisione Acqui 2/4 46030 San Giorgio di Mantova MN Italy	0376 372300	
Partner	Università di Pisa - Polo Universitario Sistemi Logistici di Livorno	Via dei Pensieri 60 57128 Livorno LI Italy		els@adm.unipi.it
Partner	Società Agricola Romiti Vivai	Via Ronciona 16/A 51100 Chiazzano PT Italy	0573 532031	info@romitivivai.it
Partner	CAICT srl - Centro Assistenza Imprese Coldiretti Toscana	Viale Fratelli Rosselli 20 50123 Firenze FI Italy	055 32357213	caict.formazione.toscana@coldiretti.it
Partner	Società Agricola Giorgio Tesi Vivai	Via di Badia 14 51100 Bottegone PT Italy	0573 530051	info@giorgiotestisigroup.it

Pratice abstract

Link utili

Titolo/Descrizione	Url	Tipologia
Sito web del progetto	<a href="https://www.intraviva.it/">https://www.intraviva.it/</a>	Sito web
Video CONTAINER UNLOADING	<a href="https://www.youtube.com/watch?v=DclG6l8v79c">https://www.youtube.com/watch?v=DclG6l8v79c</a>	Materiali utili
Video interview with the partners (in italiano)	<a href="https://www.youtube.com/watch?v=mo2XroTTVY">https://www.youtube.com/watch?v=mo2XroTTVY</a>	Materiali utili
Videi di presentazione del progetto	<a href="https://www.youtube.com/watch?v=t2Au25eGvf4">https://www.youtube.com/watch?v=t2Au25eGvf4</a>	Materiali utili

