

LIFE+ Environment Policy & Governance

Deliverable C.2.4:

Final Report on the Assessment of the management plans' environmental impacts

February 2019

LIFE CONOPS (LIFE12 ENV / GR / 000466)

Development & demonstration of management plans against - the climate change enhanced - Invasive Mosquitoes in S. Europe



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LIFE CONOPS' Participating Beneficiaries:

ΜΠΕΝΑΚΕΙΟ ΦΥΤΟΠΑΘΟΛΟΓΙΚΟ ΙΝΣΤΙΤΟΥΤΟ	Benaki Phytopathological Institute (Coordinating Beneficiary)
	Agricultural University of Athens
SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA Azienda Unità Sanitaria Locale di Cesena	Azienda Sanitaria Locale Cesena
SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA Azienda Unità Sanitaria Locale di Ravenna	Azienda Unità Sanitaria Locale Ravenna
CENTRO agricolturambiente 'Giorgio Nicoli'	Centro Agricoltura Ambiente "G.NICOLI" S.R.L.
DEMOKRITOS NATIONAL CENTER FOR SCIENTIFIC RESEARCH	NCSR Demokritos
ONEX	ONEX S.A.
Regione Emilia Romagna SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA Azienda Unità Sanitaria Locale di Ravenna	Regione Emilia-Romagna Public Health Service
terra nova	TERRA NOVA Environmental Engineering Consultancy Ltd.
(A)	Urban Environment and Human Resources Institute of Panteion University

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Abbreviations

IMS Invasive Mosquito Species
IGR Insect Growth Regulator

DFB Diflubenzuron

CREO Carvacrol Rich Essential Oil

Terminology

LD₅₀ (Lethal Dose $_{50}$) is the dose of a substance (in mg, μ g or ng) per Kg of an organism's body weight that is lethal to 50% of the test organisms within a stated study time.

Units: ppm (mg/Kg), ppb (µg/Kg), ppt (ng/Kg)

LC₅₀ (Lethal Concentration $_{50}$) is the amount of a substance (in mg, μ g or ng) present in one (1) liter of aqueous solution that is lethal to 50% of the test organisms within a stated study time.

Units: ppm (mg/lt), ppb (µg/lt), ppt (ng/lt)

EC₅₀ (Effective Concentration $_{50}$) is the amount of a substance (in mg, μ g or ng) present in one (1) liter of aqueous solution that produces a specific measurable effect in 50% of the test organisms within a stated study time.

Units: ppm (mg/lt), ppb (µg/lt), ppt (ng/lt)

The LIFE CONOPS' team which participated in the development of the current Report consists of the following scientists:

Name	Speciality	Beneficiary
Ioannis Spanos Andreas Sotiropoulos Ioannis Tsikos Stavroula Barafaka Giorgos Anagnostopoulos Costis Dramitinos	Chemical Engineer, MSc Environmental Scientist, MSc. Environmental Scientist, MSc. Chemical Engineer, MSc. Environmental Scientist Environmental Scientist	TERRA NOVA Ltd. Environmental Engineering Consultancy 39 Kaisareias str., 11527, Athens, Greece Tel.: +30 210 7775597 Fax: +30 210 7775572 www.terranova.gr spanos@terranova.gr sotiropoulos@terranova.gr
Antonios Michaelakis Dimitrios Papachristos Angeliki Stefopoulou Dionyssia Maselou	Entomologist, PhD Project Coordinator Entomologist, PhD Agronomist, PhD Agronomist, PhD	Benaki Phytopathological Institute Stefanou Delta 8, 14561, Kifissia, Greece Tel.: +30 210 8180248 Fax: :+30 210 8077506 www.bpi.gr a.michaelakis@bpi.gr
Romeo Bellini Luciano Donati Marco Carrieri	Medical entomologist, PhD Entomologist Senior Entomologist	Centro Agricoltura Ambiente "G.Nicoli" Via Argini Nord 3351 40014 Crevalcore, Italy Tel.: +39 051 6802211 Fax: +39 051 981908 www.caa.it/entomology rbellini@caa.it

1. Executive Summary

The current Report presents the results of the assessment of the environmental impacts of the application of the CONOP's Invasive Mosquito Species Management Plans.

Moreover, it presents an assessment of the impacts of DFB operational use in urban areas for mosquito larvae control.

Finally, the results of the trials that were performed for the finalization of the natural mosquito larvicide product that was developed in the context of the LIFE CONOPS project as well as the assessment of the potential environmental impacts due to its application, are presented.