



LIFE + Environment Policy & Governance

ANNEX B.3.5

Deliverables B.3: Technical report on the large quantity production of the EO of *Origanum onites*, selected for the simultaneous larvicidal and repellent pilot scale experiments

June 2015

Deadline of deliverable: 31/03/2015 (Activity extended due to the limited seasonal availability of the required plant material)

LIFE CONOPS (LIFE12 ENV / GR / 000466)

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



The **LIFE CONOPS** project “Development & demonstration of management plans against - the climate change enhanced - invasive mosquitoes in S. Europe” (LIFE12 ENV/GR/000466) is co-funded by the EU Environmental Funding Programme **LIFE+ Environment Policy and Governance**.

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LIFE CONOPS’ Participating Beneficiaries:

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This deliverable was implemented in the terms Action B.3 and concerns the: Technical report for the large quantity production of the EO originated *Origanum onites*, selected for the simultaneous larvicidal and repellent pilot scale experiments, which will be implemented in the framework of LIFE CONOPS PROJECT.

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SUMMARY

BACKGROUND: Main objective of this action concerns the large scale production of novel, environmentally sound and easily biodegradable EOs of natural origin that will be incorporated in pilot scale experiments for the efficient control of mosquito populations, diminishing the spread of their corresponding vector diseases. In the terms of Action B3 implementation, we have already selected among the various EOs obtained from diverse aromatic and culinary plants, the EO of *Origanum onites* (**V-12**), as the most suitable for the performance of the simultaneous repellent and larvicidal pilot scale tests. Thus, present report refers to the methodologies implemented for the pilot scale isolation of *Origanum onites* EO.

RESULTS: 4.65 Kg of the herb was collected from the outskirts of Levedia in Sterea Hellas Prefecture (June 2015) and subjected to hydro-distillation to afford the respective EO with the desired characteristics (chemical composition) for the pilot scale experiment.

CONCLUSION: A sum of 31.26 mL of EO **V-12** was obtained (6.72% yield) from the collected plant material of *Origanum onites* and delivered for the implementation of Action B-6 of the project.