

LIFE + Environment Policy & Governance

ANNEX B.3.6

<u>Deliverables B.3</u>: Technical report for the large quantity production of the EO isolated from unripe Juniperus *phoenicea* berries, selected for the implementation of the pilot scale repellency tests

September 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.

Implementation period: 1.7.2013 until 31.12.2017

Project budget: 2,989,314 €

EU financial contribution: 1,480,656 €

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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 from unripe *Juniperus phoenicea* berries, selected for the implementation of the pilot scale repellency tests, 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 obtained from the summer collection of unripe *Juniperus phoenicea* berries (**J 17**), as the most suitable for the implementation of pilot scale repellency tests, Thus, present report refers to the methodologies implemented for the pilot scale isolation of *J. phoenicea* EO.

RESULTS: A sum of 6.875 Kg of unripe fruits of *Juniperus phoenicea* were collected from the territories of Antikyra in Sterea Hellas Prefecture and Parnon mountain in Peloponnese Prefecture (both collections on August 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 80.75 mL of EO <u>J-17</u> was obtained (11.74 % yield) from the collected plant material of *Juniperus phoenicea* and delivered for the implementation of Action B-6 of the project.