LIFE +
Environment Policy & Governance

ANNEX A.1.2

Deliverable A1: Database with the resistance status of the IMS in Greece and Italy

June 2014

Deadline of deliverable: 30/06/2014

LIFE CONOPS (LIFE12 ENV / GR / 000466)

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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ONEX	**ONEX S.A.**
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The current report presents a database with the resistance status of the IMS in Greece and Italy, a deliverable (DL) of Action A.1: Database with the resistance status of the IMS in Greece and Italy of the LIFE CONOPS Project.

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SUMMARY

BACKGROUND: The phenomenon of resistance in insects is the ability to tolerate doses of toxicants which would prove lethal to the majority of individuals in a normal population. Insecticide resistance is a major problem in all insect groups that serve as vectors of diseases. Bioassays were conducted, in Italy and Greece, to assess the resistance status of *Aedes albopictus* (the Asian tiger mosquito) populations against commonly used insecticides.

RESULTS: The resistance of wild populations of *Ae. albopictus* in Italy, when larvae were exposed to different dose rates of those insecticides, seemed to be quite low in comparison to the laboratory reared one, which served as the control.

CONCLUSION: The need for a better understanding of resistance in invasive mosquito species and for coordinated strategies for early detection and management of resistance is needed. The bioassays conducted in Greece provided valuable information about indicative sensitivity bases of registered larvicides against *Ae. albopictus* for the first time.