



ANNEX A.1.1

Deliverable A1: Database with the Dengue and Chikungunya virus status in adult females of IMS in Greece and Italy

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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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The current report presents a database with the Dengue and Chikungunya virus status in adult females of IMS in Greece and Italy, a deliverable (DL) of Action A.1: Database with the Dengue and Chikungunya virus status in adult females of IMS in Greece and Italy of LIFE CONOPS Project.

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SUMMARY

BACKGROUND: The aim of this Action was to present a database with the Dengue and Chikungunya virus status in adult females of IMS in Greece and Italy. For this reason, the theoretical model for calculating the number of new cases arising from each singular case is given.

RESULTS: The results demonstrate a higher risk for the Chikungunya mutated virus (mutation on the envelope protein gene E1-A226V) followed by the non-mutated Chikungunya strain and by Dengue. The vector competence of an established population of *Aedes albopictus* in Athens was also evaluated in the laboratory regarding both viruses and proved to be relatively low. The results confirmed that *Ae. albopictus* is more efficient vector for CHIKV than DEN 2.

CONCLUSION: The risk assessment results are very useful to predict the possibility of outbreak occurrence in case of introduction of the pathogen throughout an infected person and also serve as a guidance to better evaluate the cost / effectiveness of vector control measures, to optimize the investments and to evaluate the impact of control strategies in the long term.