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Characterization of immune genes and responses to entomopathogens in *Aedes albopictus* larvae

Maria Carmen Valoroso¹, S. Pitton², L. Colombo², S. Caccia²

¹Department of Agricultural Sciences, University of Napoli Federico II, 80055 Portici, Italy

²Department of Biosciences, University of Milan, Milan, 20133, Italy

Due to climate change and globalization, mosquitoes are expanding in non-endemic regions, causing an increasing number of tropical diseases. The Asian tiger mosquito *Aedes albopictus* is a vector of several arboviruses, spread worldwide and adapted to domestic and peridomestic environments. In this context, mosquito control efforts are needed to limit mosquito and arbovirus diffusion.

Studies on the larvae of lepidopteran pests revealed that the RNAi-mediated immune suppression increases their susceptibility to microbial bioinsecticides. An in-depth study of immune genes and their responses in mosquito larvae is pivotal to extending this approach to integrated vector control since larvae immunity is still neglected. To identify potential RNAi targets in mosquito larvae, we identified the full-length mRNA of several putative immune genes in *Ae. albopictus* larvae and characterized their expression after exposure to entomopathogens. The results obtained suggested the involvement of these transcripts in humoral and cellular immune responses in *Ae. albopictus* larvae and further work will be performed to functionally characterize their precise role.