CBGP
Centre de Biologie pour la Gestion des Populations

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Salle de réunion + visio

WOLBACHIA IN NATURAL POPULATIONS OF *DROSOPHILA* FROM UKRAINE – EIGHTEEN YEARS OF INVESTIGATIONS

par
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Wolbachia is one of the most common endosymbiotic bacteria, infecting between 20 to 76% of all arthropod species. It is found in many species of *Drosophila*, but accurate estimates continue to update. The bacterium is transmitted predominantly transovarially, however cases of horizontal transmission are also documented. In arthropods to ensure its dispersal in the host populations *Wolbachia* influences sexual reproduction through cytoplasmic incompatibility, male killing, feminization of genetic males and parthenogenesis induction. But only cytoplasmic incompatibility and male killing have been described in *Drosophila*. *Wolbachia* was shown to influence many other fitness traits, for example antiviral protection and behavior phenotypes.

We investigated Wolbachia infection dynamics in different *Drosophila* species in natural populations from Ukraine predominantly in *Drosophila melanogaster* and *Drosophila simulans*. Main goals of our studies are to analyze mechanisms of *Wolbachia* maintenance in natural insect populations and to understand features of bacterial influence to host`s adaptation. I will talk about our most important results and general conclusions.

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