

## Bachelor Thesis Topic:

### **“Characterizing the circadian clock of the spotted wing *Drosophila*”**

#### **Background**

The spotted wing *Drosophila* (*D. suzukii*) originated in tropical region and is nowadays colonizing higher latitude environments such as southern and northern Europe. In order to adjust to such a broad range of environmental conditions, *D. suzukii* shows strong phenotypic plasticity in response to environmental cues as temperature and day length. Is the circadian clock involved in modulating phenotypic plasticity in *D. suzukii*?

#### **Aim of the work**

In order to understand the role of the circadian clock in modulating phenotypic plasticity in *D. suzukii*, we will have to start characterizing its structure at the anatomical, molecular and behavioral level.

#### **Methods**

The work will mostly rely on 1) recordings and analysis of locomotor activity data of flies kept under different environmental conditions, 2) histology and confocal microscopy in order to investigate the neuronal features of *D. suzukii* circadian clock.

**If you are interested on this project, contact us!**

[pamela.menegazzi@uni-wuerzburg.de](mailto:pamela.menegazzi@uni-wuerzburg.de)

