

ENCONTRO SCIENTIA

February 06

12h00

Online

The role of mating systems on the adaptive response of *Drosophila* to warming

Rising temperatures have a detrimental effect on many organisms, particularly ectotherms. Reproduction is often negatively affected at lower temperatures than survival. In many taxa this is due to male sterility, with females only being affected at warmer temperatures than males. This means that females can buffer the effect of heat on male fertility. However, this rescue should be conditional on populations' mating system.

Here we will address how different mating systems affect the evolution of reproductive traits (fertility, behavioural, and functional) in both sexes under rising temperatures. This will be done by 1) performing a comparative analysis among *Drosophila* species with different mating systems and 2) studying the real-time evolution of a *Drosophila* pest species subjected to different mating systems and thermal regimes. This is a presentation about my PhD project, but do not worry, we also have some data to show you.



**Afonso
Grandela**

**Local Adaptation
in *Drosophila*,
CE3C,
Ciências ULisboa**

