Open Room 4, Ecolfor 2021 – Thursday May 27th, 11.30-13.15

Floral plasticity and implications for pollination and evolution

We have recently seen increased interest in the role of floral phenotypic plasticity in flower-pollinator interactions. Plastic variation in flower morphology, chemistry and phenology can result as the product of changes in water or nutrient availability, herbivory, etc. These changes can in turn have effects on interactions with pollinators and reproductive success. What are the implications for the evolution of flowers, if any? For example, can environmental variation lead to genetic accommodation in floral traits, as seen for other plant traits? Can variation in this process across populations lead to differentiation (along with adaptive evolution)? What are the best study systems and experimental approaches to study the potential role of plasticity in flower evolution?

Maria Clara Castellanos (University of Sussex) – Introduction

Short talks (5 to 15 minutes)

- **Ana García Muñoz (Universidad de Granada)** "Is phenotypic plasticity an adaptive trait? The case of a selfing and multiploidy complex species"
- **Quint Rusman (University of Zurich | UZH)** "Ecological and evolutionary implications of specificity in herbivore-induced flower plasticity"
- **Rubén Torices (Universidad Rey Juan Carlos)** "Floral advertising shows plasticity to the local neighbourhood environment"
- **Jose Maria Gomez (EEZA, CSIC) "**Phenotypic plasticity triggers rapid floral convergence**"**

Discussion