

Integrative approach unravels the Evo history of Western Mediterranean cicadas

Gonçalo Costa

Master Student (CBPG Group)

Cicadas are no strangers to people in Summer. Despite being difficult to spot among the vegetation they are well-known for the loud songs males produce to attract a potential mate and these are useful to tell species apart. Unfortunately many cicada descriptions lack this precious information, halting taxonomic endeavors. Our group has been on the forefront of Iberian cicada studies. Since 2011, we have been working on the CicadaCON project to investigate the cicada genus Tettigettalna, which comprehends several species endemic to the south of Iberia. With intensive fieldwork and an integrative approach of acoustic, morphological and genetics, we generated valuable data that has changed our view on these poorly known species. One expedition to Morocco resulted in the description of two new small-sized cicada species: Tettigettalna afroamissa and Berberigetta dimelodica. The description of T. afroamissa as the first Tettigettalna outside Europe raised some questions on the origin and diversification of this group of cicadas. To ascertain the evolutionary history of these species, sampling was geographically expanded and five genetic loci were sequenced. We will discuss which evolutionary scenarios best explain current patterns of distribution and genetic diversity of *Tettigettalna* spp. alongside with divergence time estimates.

Thursday, May 11, 2017

FCUL (Building C2), 12h00-13h00, room 2.2.14

