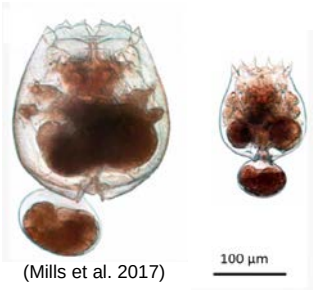
VNIVERSITAT DE VALÈNCIA

ICBiBE
Institut Universitari Cavanilles de Biodiversitat i Biologia Evolutiva

ICBiBE-UV
Ph.D. Students Coffee Time



(Mills et al. 2017)

PhD Students Coffee Time

Thursday 19/01/2023

Sala de Reuniones Semisótano

15:00

Cristina Arenas

Biología Evolutiva

Different dispersal capacity in Brachionus plicatilis *species complex: a wind tunnel experiment with rotifers*

Dispersal is a key factor in the survival of plankton inhabiting temporary environments, which have to survive a period of adverse conditions. In the zooplankton, diapausing eggs are generally the dominant dispersal propagules. Despite small zooplankters, like rotifers, are expected to be more readily dispersed by wind, measurements of wind dispersal are rare. With this idea I did a research stay of three months in the KU Leuven, Belgium. I used two rotifer cryptic species from the *Brachionus plicatilis* complex: *B. plicatilis* s.s. and *B. rotundiformis*, to assess the wind dispersal capacity of their diapausing eggs. A wind-tunnel experiment using artificial substrates that differ in grain was performed and several morphological traits of the diapausing eggs assumed to have a role in dispersal were characterized. Our results show differential dispersal capacity between the diapausing eggs of the species studied mediated by differences in their size, as well as an effect of substrate grain offering conditions of greater or lesser exposure to the wind in a different way for each species.