ENCONTROS SCIENTIA

Beyond the silent effects of extinction: Changes in plant interactions in human-altered landscapes

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Imagine pandas, rabbits and bumblebees - we are all quite familiar with them, aren't we? Now imagine a world where the habitat where they sleep, eat, mate or breathe no longer exists. Changes in species distribution as a consequence of altering environmental conditions can be the direct result of phenological responses. But changing environmental conditions are obviously more complicated than that: they are bound to affect biotic factors as well, including interactions between species. If species A moves up in elevation while species B starts to emerge later, what will happen to the interaction between them?* What will be the likelihood that those changes will disrupt or eliminate beneficial ecological interactions between species even before extinctions occur?

Plant-pollinator relationships provide a good example of how human impacts can affect species interactions. We know that plants can exhibit changes in phenology, mating systems and general reproductive patterns in response to human changes. Pollinators respond to these changes too. In this talk we will see examples of my past and current projects showing how the network of plant-pollinator interactions might be particularly susceptible to human activities. How does pollinator species composition change with land uses? Are disturbance-sensitive pollinators replaced with disturbance-associated pollinators, leading to biotic homogenization?

*PS: Add in all the other possible interactions between species in a given site, and you get an even more complicated network of interactions!

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

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