

The Arid Zones Experimental Station (EEZA-CSIC) would require the incorporation of a postdoctoral researcher within the EMERGIA program (4-year contract; https://www.juntadeandalucia.es/eboja/2020/134/BOJA20-134-00040-7487-01_00174852.pdf) with the following profile: **an experimental ecologist with experience in both lab and field studies and interested in the study of plant-animal interactions, specifically in the interactions between plant and pollinators, and in the study of plant signaling traits and plant rewarding.** Experience in the analysis of volatile organic compounds would be an asset.

The general **line of research** would be the study of the **“Phenotypic plasticity in floral signalling and rewards and its effects on pollinator networks”**.

Phenotypic plasticity (PP) is a pervasive feature of life. Although it has been profusely studied in plants, and many traits are already known to be plastic, how PP in key floral traits influences ecological networks remains largely unexplored. Our lab works with *Moricandia* (Brassicaceae), an arid plant that exhibits within-individual floral plasticity fostering a significant shift in pollination niche. During the mild spring, it produces large, cross-shaped, UV-reflecting lilac flowers attracting mostly long-tongued large bees. During the hot and dry summer it produces small, rounded, UV-absorbing white flowers attracting many generalist pollinators. Here, we offer a postdoctoral position to explore the occurrence of PP in some floral signalling and rewards critical to understand these observed changes in the interaction with pollinators. Specifically, the goal of this position is to study the within-individual PP in nectar and pollen production as well as in floral volatile emissions, and to quantify how these plastic changes modify the visitation rate, behaviour, and effectiveness of main pollinators. This information will be fundamental to understand how PP reshapes pollinator networks and help plants to cope with changing environments.

For further information and contact:

Gomez et al (2020) *Within-individual phenotypic plasticity in flowers fosters pollination niche shift*. Nature Communications, in press.

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