

## Twelfth International Symposium on Pollination (ISPXII)

Inspiring new ways

16 - 20 October 2023

Kirstenbosch Botanic Gardens, Cape Town, South Africa

## CITIZEN SCIENCE AS A "HANDS-ON" TOOL TO LINK SCIENCE LEARNING TO CONSERVATION ON POLLINATORS AND POLLINATION SERVICE

<u>Fabiana Oliveira da Silva<sup>1,2,3</sup></u>, Juan Ruiz-Esparza<sup>2</sup>, Flavio Marques Castanho Barrero<sup>3</sup>, Blandina Felipe Viana<sup>4</sup>

<sup>1</sup> Universidade Federal de Sergipe (UFS), INCT-INTREE/ PRODEMA, Nossa Senhora da Glória, Brazil.

<sup>2</sup> Universidade Federal de Sergipe, INCT-INTREE, Nossa Senhora da Gloria, Brazil.
<sup>3</sup> Universidade Federal de Sergipe, Nossa Senhora da Gloria, Brazil.
<sup>4</sup> Universidade Federal da Bahia/INCT-INTREE, Salvador, Brazil.

fabianaosilva@academico.ufs.br

## ABSTRACT

The approximation between the scientific knowledge generated in academia and its application is gaining relevance to address conservation problems such as pollinator and pollination service loss. In this perspective citizen science is a valuable approach to promote engagement and building science literacy.

This on-going research applies the Citizen Science project Guardiões dos Sertões as a teaching tool in the curricular component Science of Life, of the agrarian science courses at Federal University of Sergipe (UFS), in semiarid Sergipe, Northeast, Brazil. From September 2022 to April 2023, students performed observations in private gardens, due to their importance for pollinator's conservation in urban context.

The 125 engaged students provided 159 records on interactions between flower visitors and plants. Mostly bees and butterflies were recorded and pollination was the main recognized interaction. So, the "Guardiões" project was successfully integrated into the pedagogic practice, as a hands-on teaching method of didactic transpositions, providing field experience and training in observations using scientific protocols. The data generated by the students are used to discuss ecological concepts, while provide field data for the monitoring of the interactions between animals and flowering plants from semiarid Caatinga.

Keywords: Participatory process, biodiversity, ecosystem services, agroecosystem, conservation.