Mapping plant-pollinator interactions across Europe

Abstract

Pollinators play a crucial role in maintaining Earth's terrestrial biodiversity and human food production by mediating sexual reproduction for most flowering plants. However, their diversity and role as pollinators are increasingly compromised by rapid human-induced environmental changes. To preserve pollinators, we need robust data across space and time that allow us to understand their environmental responses and conservation status. However,

the different global change pressures (e.g., habitat loss or climate change). One of the major drawbacks to understand the conservation status and the underlying ecological processes of plant-pollinator communities is the lack of robust generalisable data across space and time. Although recent efforts have progressed towards this goal, Europe, one of the continents with higher number of plant-pollinator studies, still lacks an open access and homogenised dataset of plant-pollinator interactions that serves as a baseline for future ecological research. Here, we provide

and explore the first European metaweb of plant-pollinator interactions. This is a continent-level metaweb that comprised of xxx plants xxx pollinators and xxxx interactions which covers xxxx different countries. We show that plant and pollinator species are xxxxx and have xxxxxxx. For instance, we cover xxx% of European bee species and xxx% of flowering plants that rely on pollinators.

Introduction

1st paragraph

General introduction of how global change impacts plant-pollinator interactions

Maybe expand on some drivers? Climate change, habitat fragmentation, agricultural intensification, urbanization, pollution, pesticides and species' invasions

Highlight the relevance of large scale datasets

2nd paragraph

3rd paragraph

4paragraph

Introduce research questions

LIST THEM HERE (Main ideas so far)

Questions that we would like to answer:

1) What are the most common plant a pollinator species? Are those shared across networks? Most common interactions across Europe? Interaction fidelity

2) Is generalization the rule? Or specialization? How this impacts indirect interactions? Go in the direction of pollinator importance?

Methods

Results

Discussion