

The top corners of the slide feature decorative hexagonal patterns. The top-left corner has a cluster of white hexagons with one solid brown hexagon. The top-right corner has a cluster of white hexagons with one black and white striped hexagon. The top-center has a single white hexagon with a brown and white striped pattern above it.

Relation between honey bee abundance and wild bee communities in Moroccan agro-ecosystems

The bottom corners of the slide feature decorative hexagonal patterns. The bottom-left corner has a cluster of white hexagons with one brown and white striped hexagon. The bottom-right corner has a cluster of white hexagons with one solid brown hexagon. The bottom-center has a single white hexagon with a black and white striped pattern above it.

Ahlam Sentil, William Fiordaliso, Denis Michez

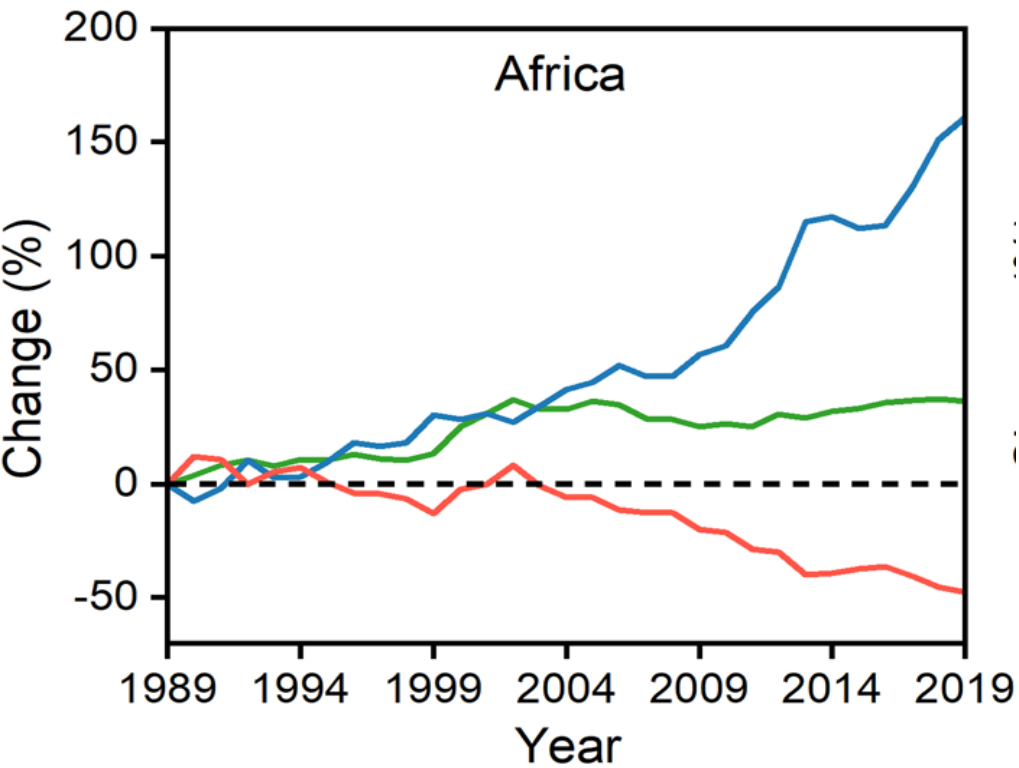
University of Mons, laboratory of zoology, Mons, Belgium

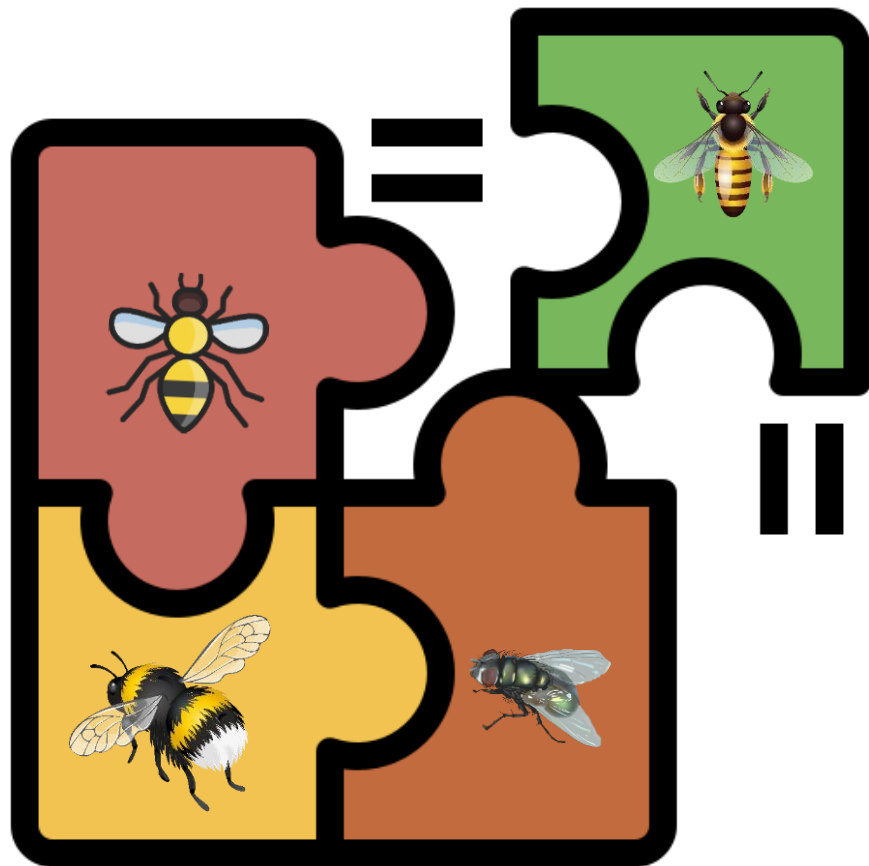
The number of honey bee colonies worldwide is
101.6 million



47% augmentation compared to 1990

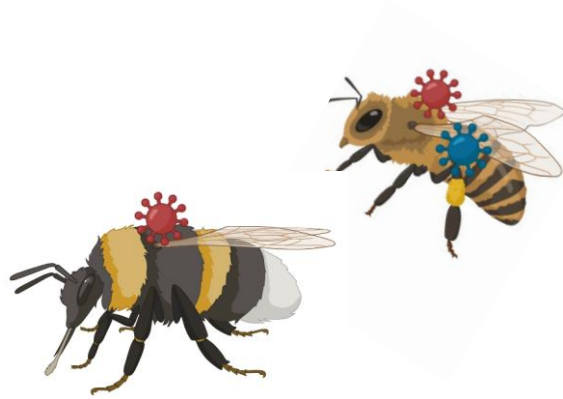




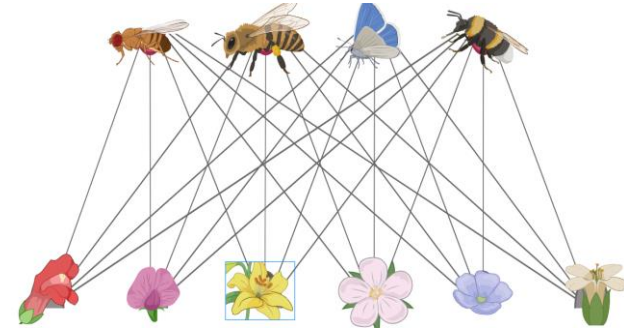




Competition



Pathogens' transmission



Distruption of the native network





932 bee species

Lhomme et al. 2021



2138 bee species

Chisbian et al. 2023



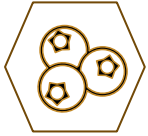
932 bee species

Lhomme et al. 2021





Evaluate the impact of honey bee on the abundance and the species richness of the wild bees visiting crops



Test if the effect of honey bee on wild bee communities varies between crops



Assess whether the effect of honey bee on wild bees varies between monoculture fields and fields surrounded with diverse habitat plants

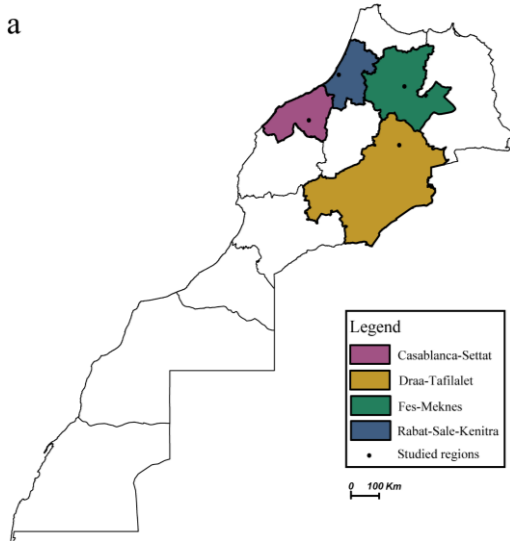




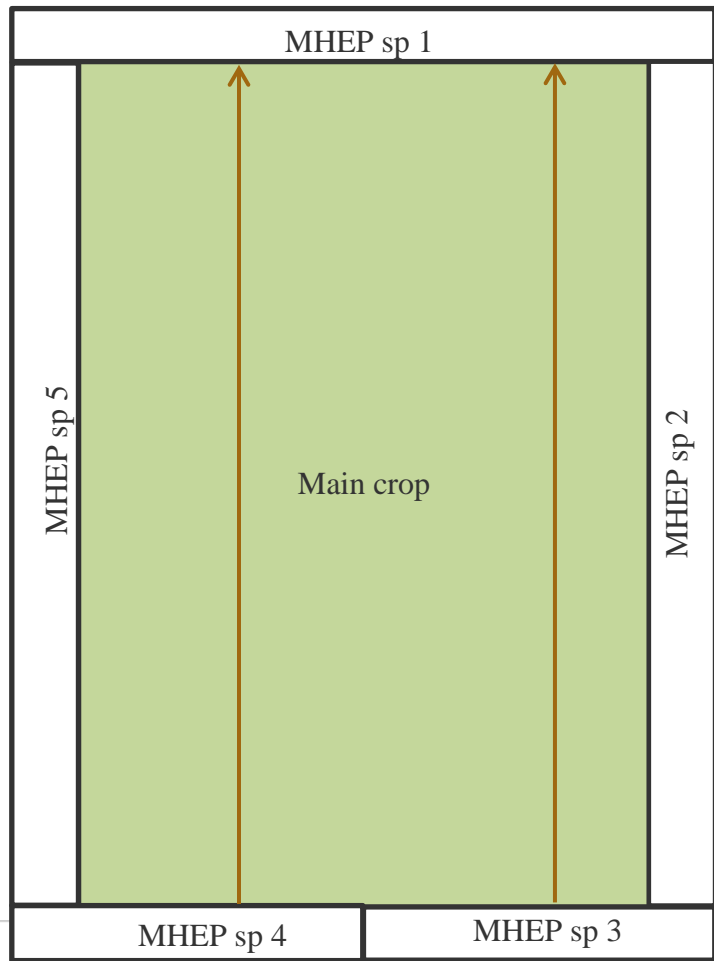
2018

2019

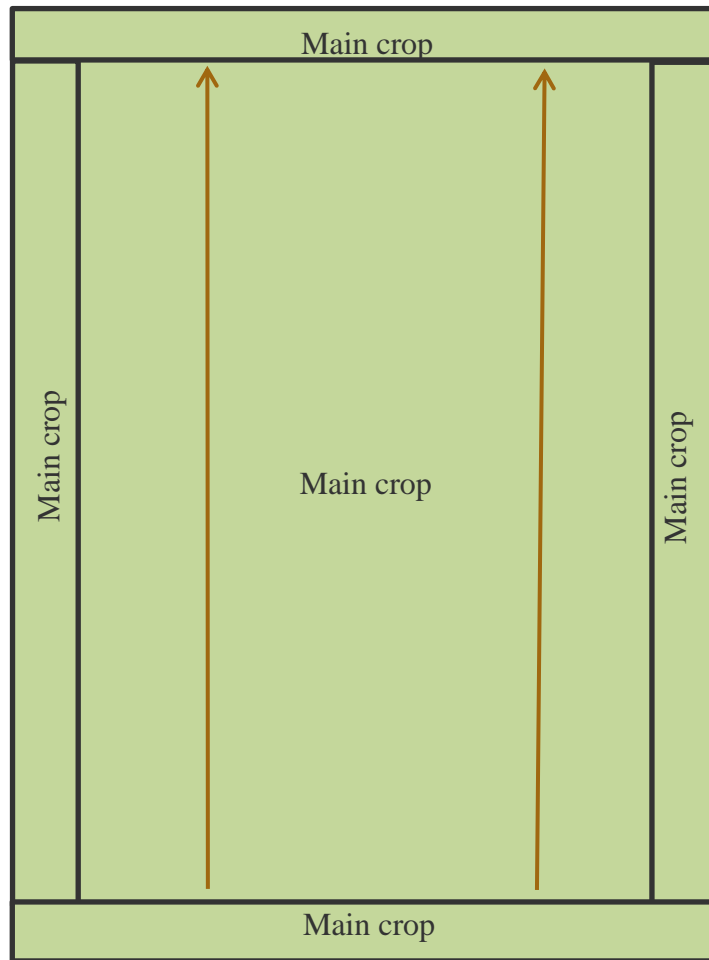
a

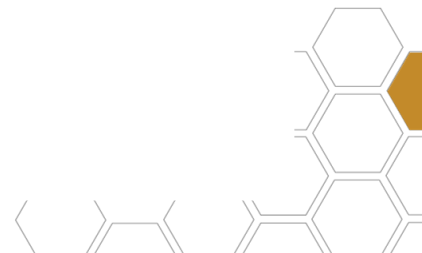


5 FAP fileds



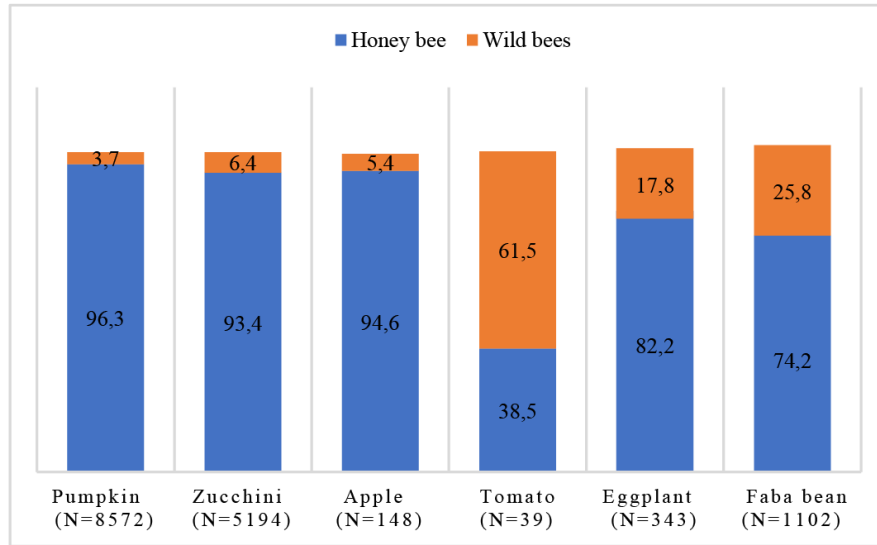
3 control files







Evaluate the impact of honey bee on the abundance and the species richness of the wild bees visiting crops



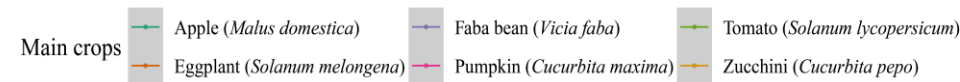
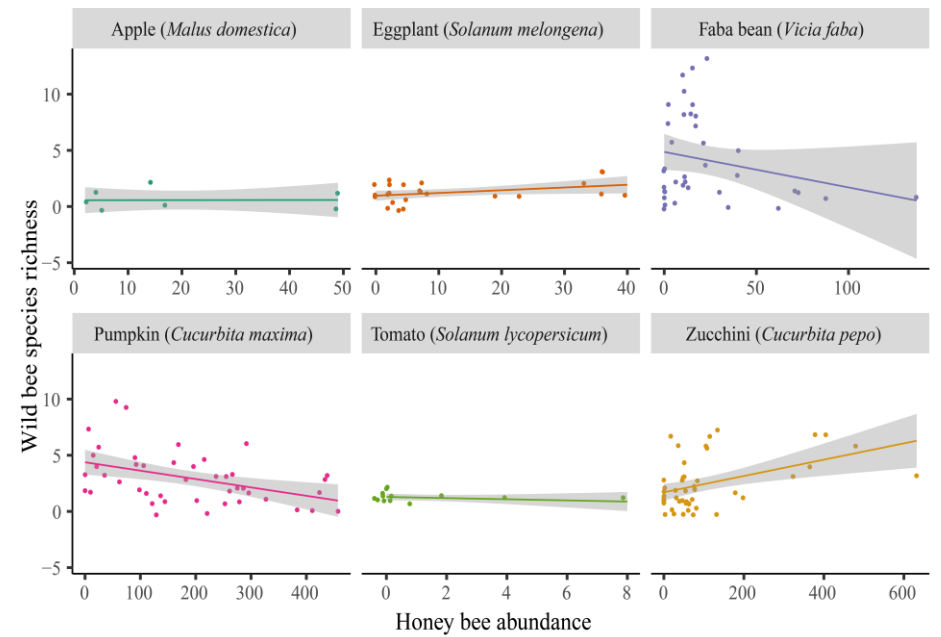
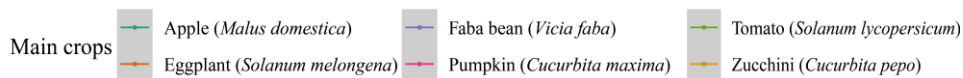
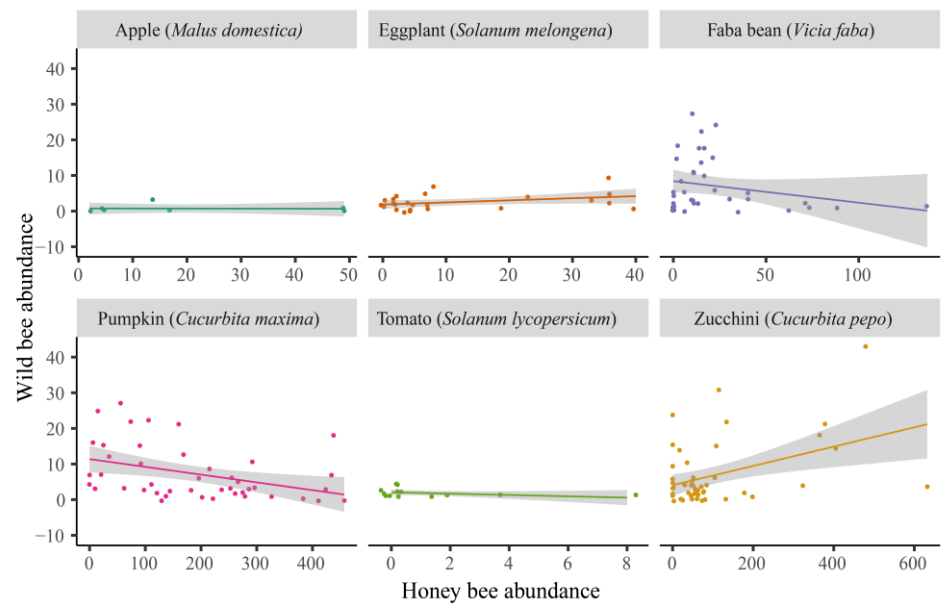
Neutral effect of honey bee on wild bee abundance and richness





Test if the effect of honey bee on wild bee communities varies between crops





Assess whether the effect of honey bee on wild bees varies between monoculture fields and fields surrounded with diverse habitat plants



FAP field



Control field



Availability of floral resources



Heterogeneity of the landscape



Low or intermediate honey bee abundance



- Wild bee abundance and richness were not influenced by honey bee regardless of the crop
- The response of wild bees to honey bee did not vary between monoculture fields and fields with additional habitat plants



Moroccan agro-ecosystems are not experiencing a strong competition between wild and honey bees



The slide features decorative hexagonal patterns in the corners. The top-left and bottom-right corners have clusters of white-outlined hexagons, with one hexagon in each cluster filled with a solid brown color. The top-right and bottom-left corners have similar clusters, but with one hexagon filled with a black and white diagonal striped pattern. In the center, there is a single hexagon with a brown and white horizontal striped pattern, positioned above a white-outlined hexagon.

Thank you!

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