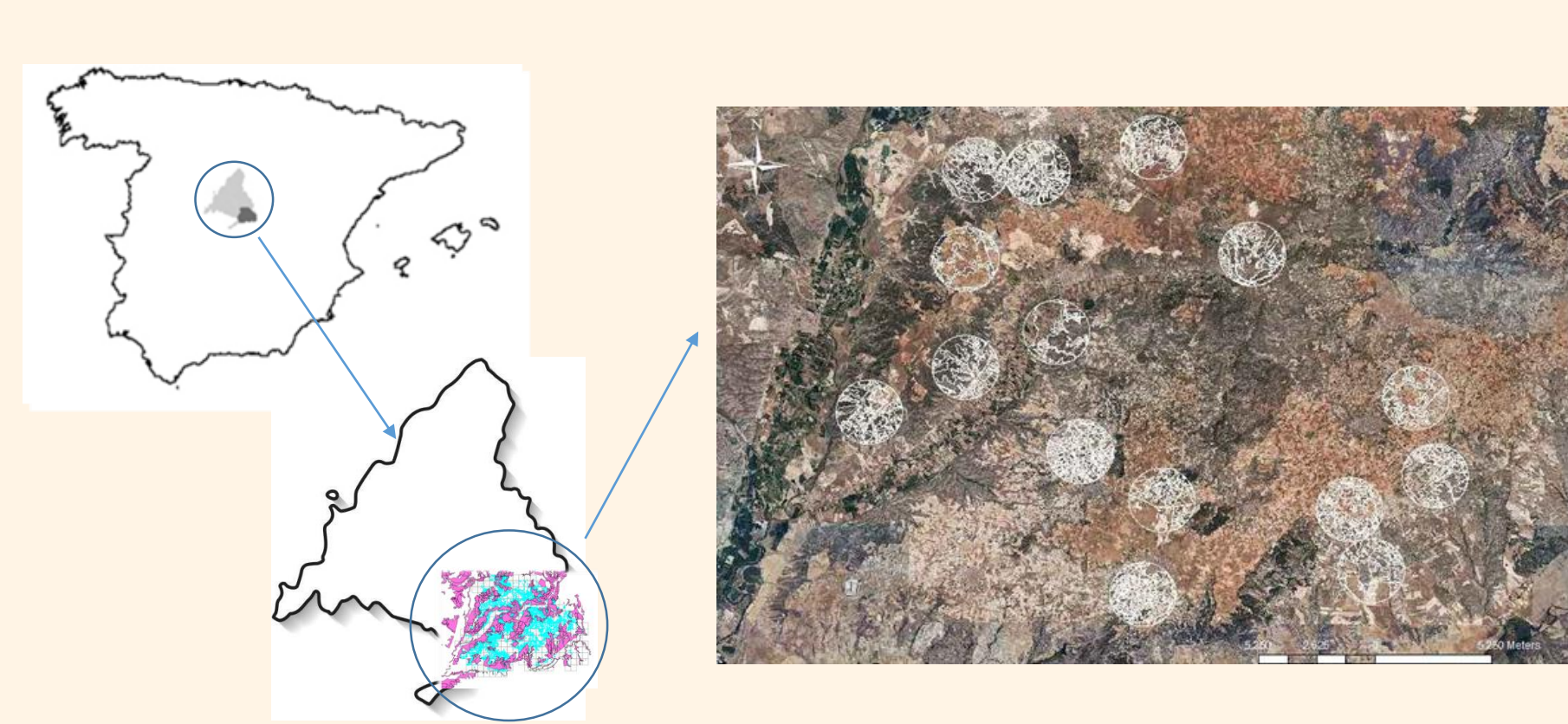
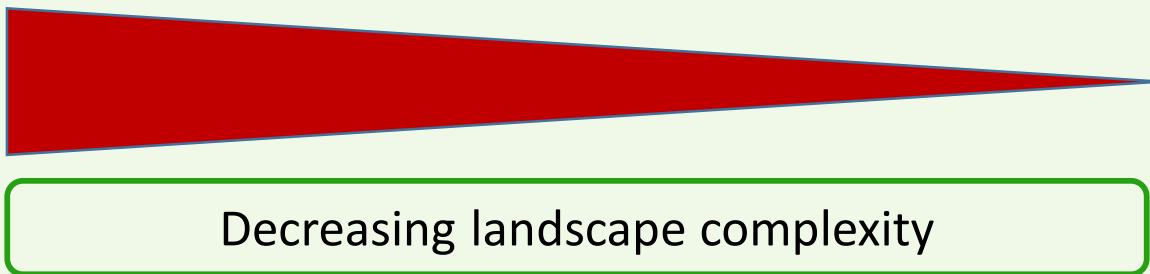
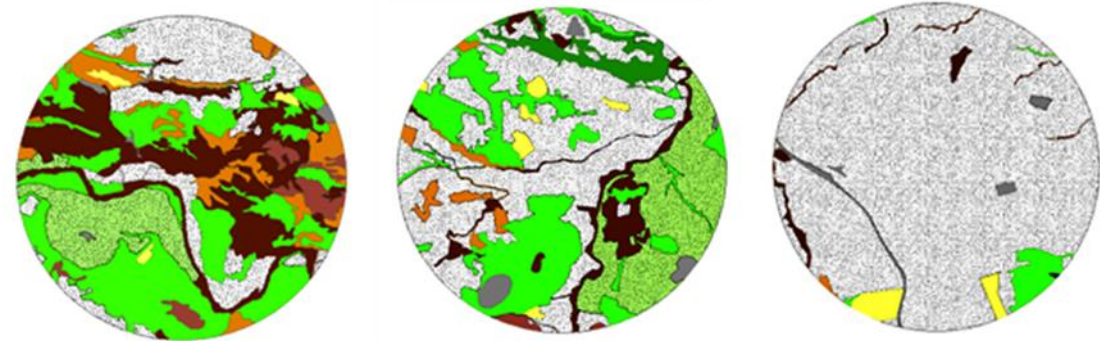


DIPTERAN ABUNDANCE AND FAMILY RICHNESS IN DIFFERENT OLIVE LANDSCAPE CONTEXTS



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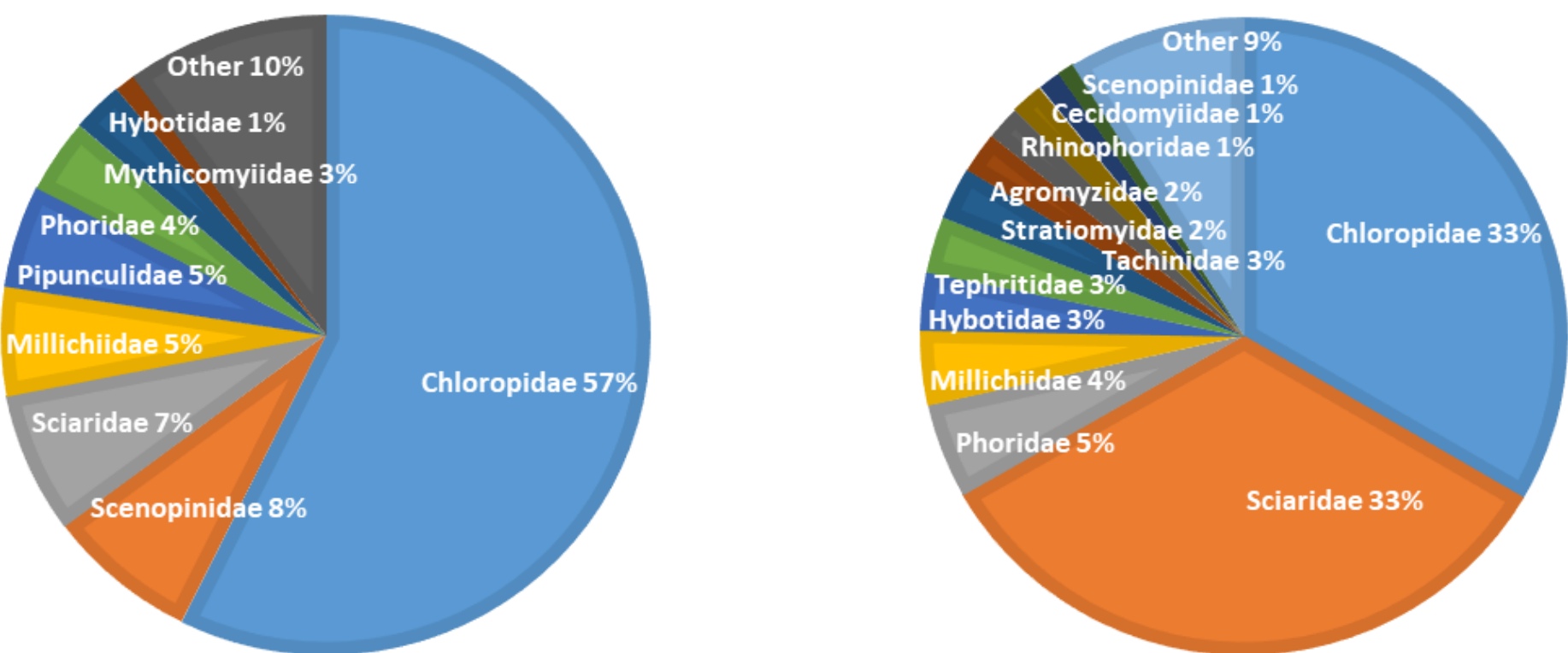
- ✓ **15 Olive groves** in a landscape structure gradient
- ✓ Diptera captured by **yellow stichy traps**
- ✓ **Four traps** por olive grove
- ✓ Traps **1 week** active at beginning summer 2015 & 2016
- ✓ Landscape **indices** in **500m radius** buffer area
 - ✓ Area of olive groves (CAO), schrubland área (SA), Shannon's evenness index (SHEI), mean shape index (MSI), total edges (TE)
- ✓ **Data analysis:** R, Generalized Linear Mixed Models using Template Model Builder (**glmmTMB**), **Dharma** residual diagnostics



COMPOSITION

1762 individuals 2015

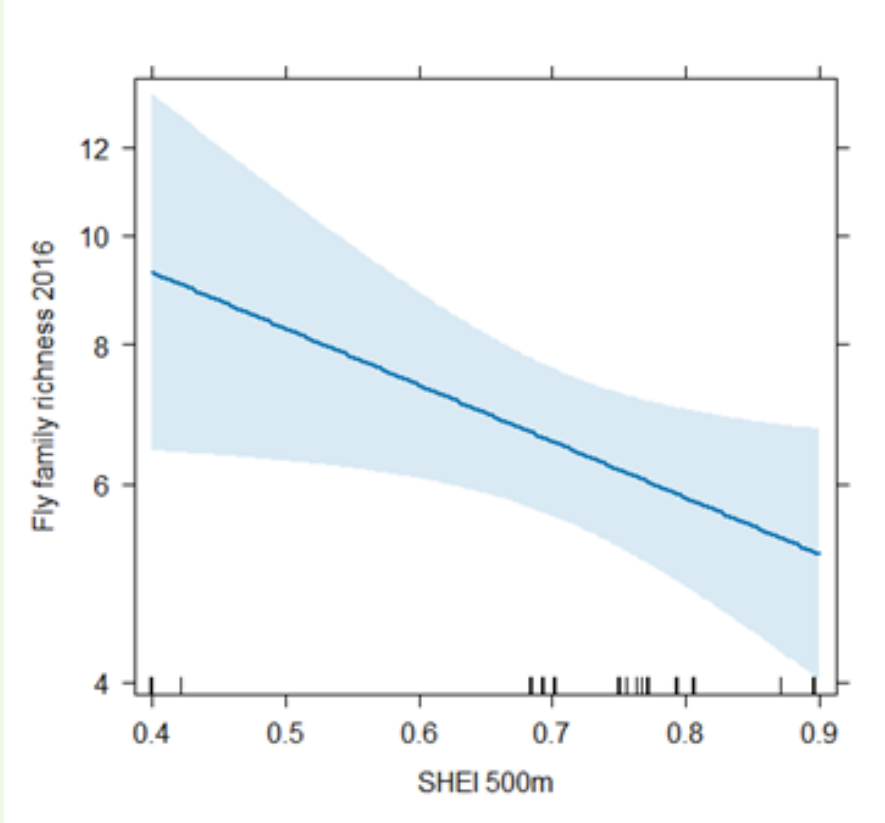
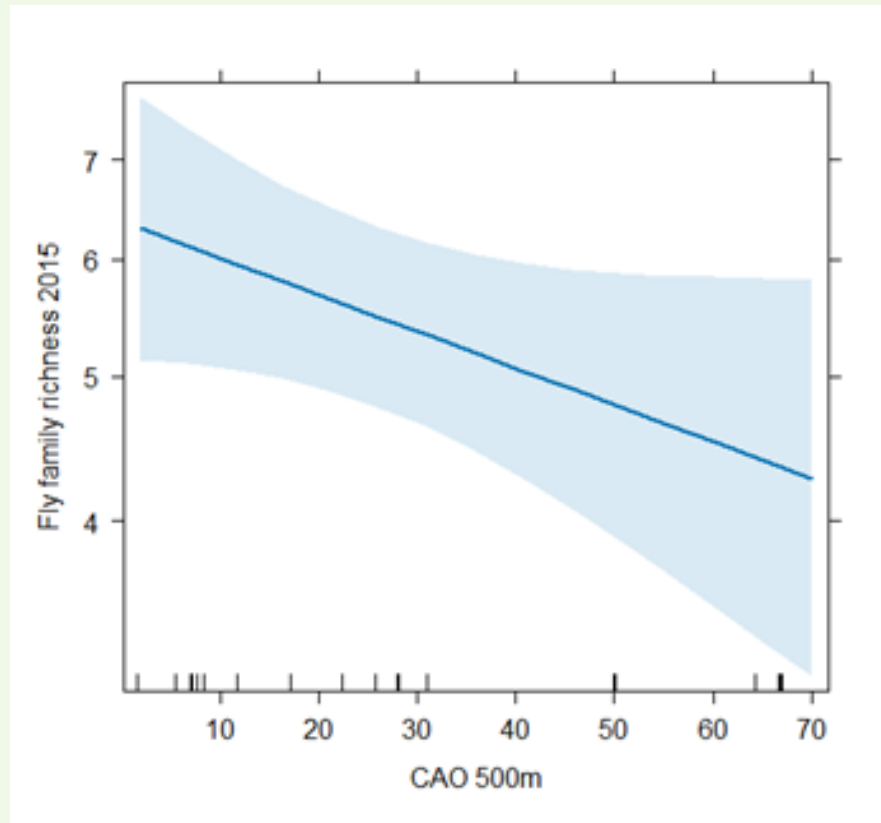
1725 individuals 2016



Families with predatory or parasitoid behaviour
Dolichopodidae (0.2-0.4) Hybotidae (1-3%) Mythicomyiidae (0-3%) Pipunculidae (0.1-5%)
Rhiniphoridae (0.2-1%) Syrphidae (0.1%) Tachinidae (0.5-3%)

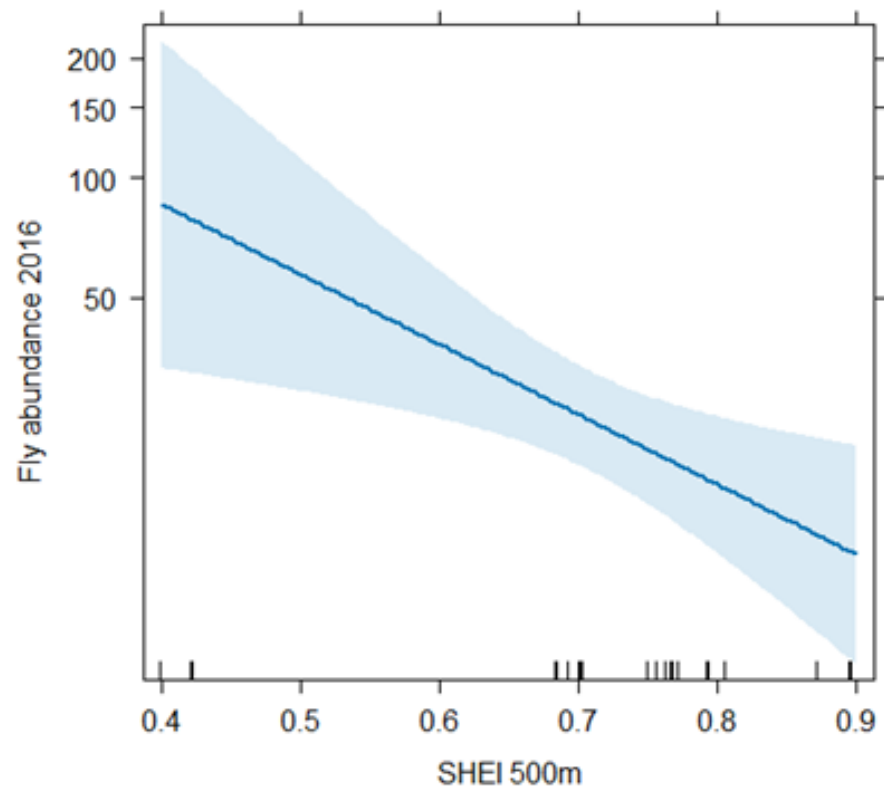
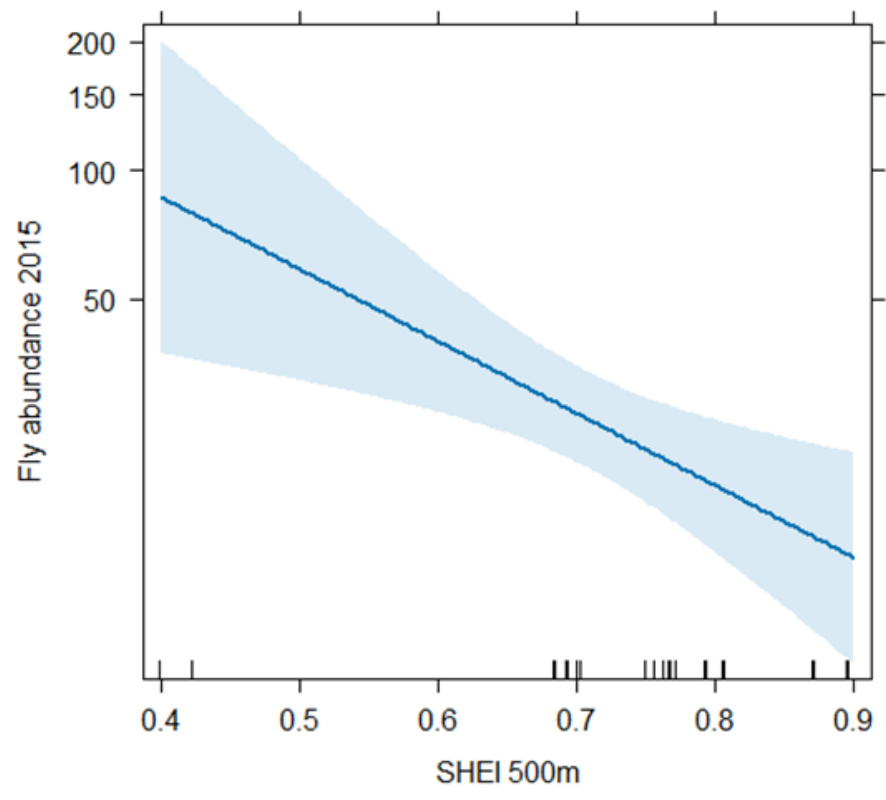
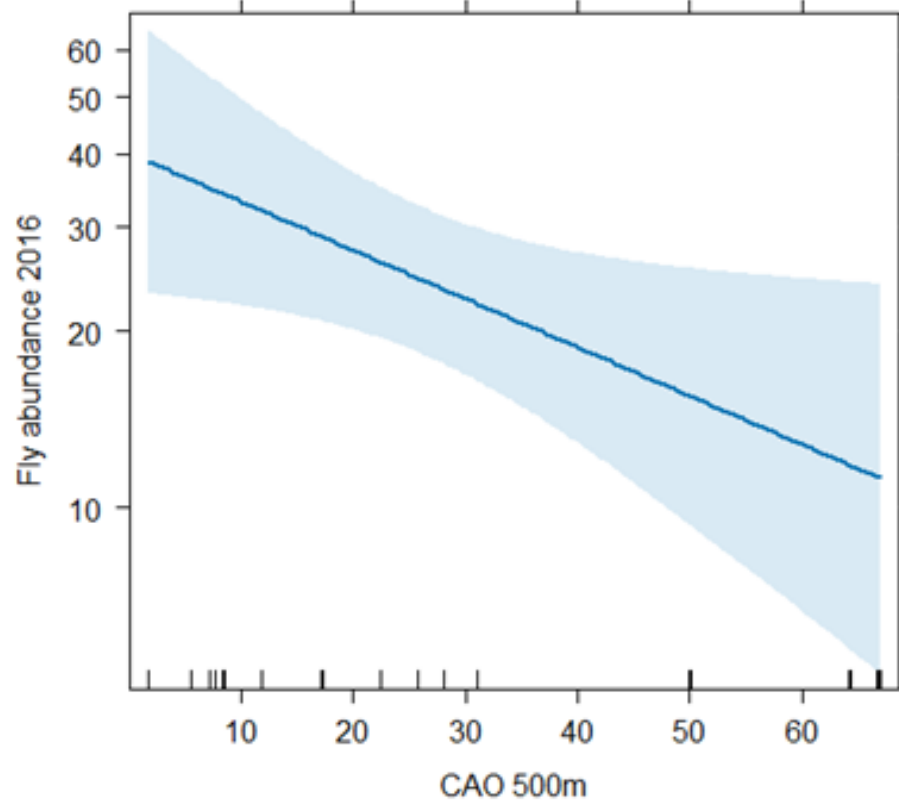
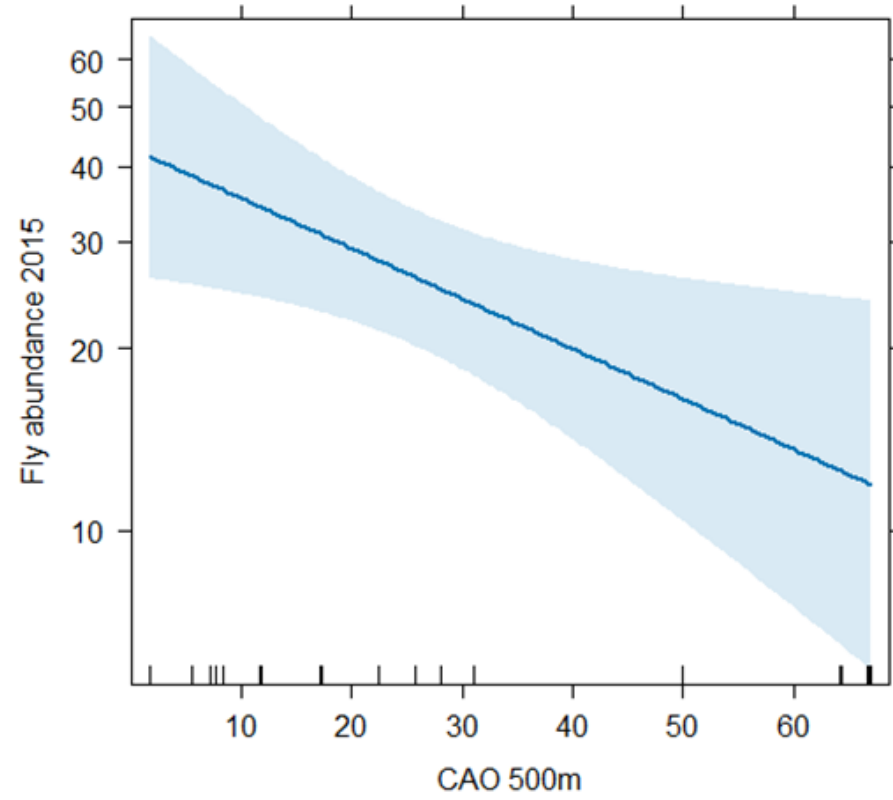
RELATIONSHIP FLY FAMILY RICHNESS-LANDSCAPE STRUCTURE

No significant with most landscape indices
Exceptions:



RELATIONSHIP FLY ABUNDANCE-LANDSCAPE STRUCTURE

Identical response both seasons studied. No significant with most landscape indices.
Exceptions:



CONCLUSIONS

- Dipteran populations as a whole are quite stable in different landscape contexts, without a strong dependence on resources outside the olive groves
- This ensures the presence of alternative prey for predators, contributing to the biological control of pests and the resilience of the olive grove agroecosystem.

Acknowledgments: project RTA2013-00039-C03-03: Biological control of *Bactrocera oleae*: Effect of landscape structure and importance of predation.

