



The contribution of edges of vegetation in fields of intensive agriculture to the conservation of wild bees

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Introduction

The intensification of agriculture has negative effects on bee communities: mortality due to pesticides, destruction of nesting sites, elimination of plants providing nectar and pollen, etc. "Operation Pollinator" aims to enhance habitats for wild bees in areas of intensive agriculture.



Almería, southern Spain 2011-2012

Materials and Methods

Sampling of vegetation

Treatments: Three types of margins were assayed in intensively managed vegetable fields.



Non-revegetated margins: "Control"

x3

Herbaceous plants: "Herbs"

x3



Borago

Diplotaxis catholica

Calendula



Nigella Salvia verbenaca damascena

> Silene Vicia



% Plant cover & % Blossoming. 3 replicates per plot \bullet

Sampling of insects





- 3 pan traps per plot collected every two weeks from March to July.
- The specimens were identified to genera/subgenera.

Salvia

Thymus



vulgaris sativa





Lasioglossum *(Evylaeus)* sp.

Halictus sp.

• No significant differences among treatments were found for most genera.

•Lasioglossum and Panurgus were more abundant in plots of aromatic plants than in controls.

•Lasioglossum and Andrena were more abundant in plots of herbaceous plants than in controls.



• Richness and diversity were higher in revegetated margins than in controls.

• The number of captures was directly related to plant blossoming but trend was different in "Aromatics" and "Herbs".

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