

Title of Dataset: LANDSCAPE AFFECTS PESTS AND CROP YIELD

File description: This file contains the abundance and incidence of insect pest, parasitoid-host ratios, plant damage, and crop yield in cabbage fields located across a gradient of landscape complexity in the Finger lakes region, NY, USA. This data is associated with the publication: Perez-Alvarez R., B. Nault, and K. Poveda. (2018). "Contrasting effects of landscape composition on crop yield mediated by specialist herbivores". Ecological Applications.

Files: CSV files

Landscape affects pests and crop yield.csv: Contains all data from insect collected from experimental fields and the composition of the surrounding landscape.

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Date of data collection: June-September 2014, June-October 2015.

Geographical location of data collection: the field work was conducted in 44 experimental fields in the Finger Lakes Region, NY, USA.

Information about funding sources that supported the collection of the data: Project No. NYC1397485 received from the National Institute of Food and Agriculture (NIFA) United States Department of Agriculture.

Methods description: For full description of methods see: Perez-Alvarez R., Nault B., and Poveda K. (2018). "Contrasting effects of landscape composition on crop yield mediated by specialist herbivores". Ecological Applications.

Data specific information

Number of variables: 20

Number of cases/rows: 44

Description of headings

Heading	Description, units and/or options in the response variable
Farm_ID	Unique ID for each farm in the study
Year	Year when the data collection was conducted
Plot_ID	Unique number for each plot in the study
FreshHead_biomass	Mean fresh weight biomass of harvested cabbage heads (g)
Plant_damage	Mean Percentage of insect overall damage per plant.
FleaBeetles_abundance	Mean Abundance of Flea beetles collected in pitfall traps.
FleaBeetles_incidence	Mean proportion (0 to 1) of plants infested with at least one adult flea beetle based on visual inspection.

Lepidoptera_abundance	Mean number of lepidopteran larvae per plant based on visual inspection.
Lepidoptera_incidence	Mean proportion (0 to 1) of plants infested with at least one pest larvae based on visual inspection.
Aphid_incidence	Mean proportion (0 to 1) of plants infested by more than ten aphids based on visual inspection.
ParasitoidHostRatio	Total number of parasitoid cocoons divided by the total number of lepidopteran larvae at each experimental field.
nat_250	Proportion of semi-natural areas at 250 m radius around each experimental plot.
ag_250	Proportion of cropland at 250 m radius around each experimental plot.
mead_250	Proportion of meadows at 250 m radius around each experimental plot.
nat_500	Proportion of semi-natural areas at 500 m radius around each experimental plot.
ag_500	Proportion of cropland at 500 m radius around each experimental plot.
mead_500	Proportion of meadows at 500 m radius around each experimental plot.
nat_1000	Proportion of semi-natural areas at 1000 m radius around each experimental plot.
ag_1000	Proportion of cropland at 1000 m radius around each experimental plot.
mead_1000	Proportion of meadows at 1000 m radius around each experimental plot.

Missing data codes

Code/symbol=N/A or blank Definition: Data is not applicable to that observation or missing data