Carabid predator community and diet data used in the article "Diversified cropping strengthens herbivore regulation by providing seasonal resource continuity to predators"

SND-ID: 2024-17. **Version**: 1. **DOI**: https://doi.org/10.5878/7qn6-ec60

Download data

Data_submission_analysisI_and_II.csv *(4.94 KB)*

Data_submission_analysisIII.csv *(3.17 KB)*

Data_submission_BetaDiv_community.csv *(1.19 KB)*

Data_submission_BetaDiv_dietTurnover.csv *(7.38 KB)*

Associated documentation

READme_Data_submission_analysisI_and_II.txt *(2.12 KB)*

READme_Data_submission_analysisIII.txt *(5.27 KB)*

READme_Data_submission_BetaDiv_community.txt *(2.08 KB)*

READme_Data_submission_BetaDiv_dietTurnover.txt *(1.89 KB)*

Download all files

2024-17-1.zip *(~28.04 KB)*

Citation

Heinen, J., & Bommarco, R. (2024) Carabid predator community and diet data used in the article "Diversified cropping strengthens herbivore regulation by providing seasonal resource continuity to predators" (Version 1) [Data set]. Swedish University of Agricultural Sciences. Available at: https://doi.org/10.5878/7qn6-ec60

Creator/Principal investigator(s)

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Research principal

Swedish University of Agricultural Sciences - Department of Ecology

Principal's reference number

SLU.ekol.2024.4.4.IÄ-9

Description

The shared data contain information on predator-prey interaction metrics such as the vulnerability of certain prey, as well as the trophic redundancy of predators in these networks. Further, the datasets contain species richnesses and abundance of Carabid predators, herbivores, soil fauna.

Include data files are:

Data_submission_BetaDiv_community.csv, 19 rows × 8 columns
Data_submission_BetaDiv_dietTurnover.csv, 124 rows × 7 columns
Data_submission_analysisI_and_II.csv, 171 rows × 8 columns
Data_submission_analysisIII.csv, 19 rows × 30 columns

Besides diet based metrics, the file "Data_submission_analysisIII.csv" contains arthropod community sampling data (pitfall, soil extraction, sweep netting), whereas the file "Data_submission_analysisI_and_II.csv" only contains information on Carabids diets, and the individual that were subject to gut content analysis. Based on these individuals, both the turnover in the communities per se ("Data_submission_BetaDiv_community.csv), as well as their diet turnover was assessed (" Data_submission_BetaDiv_dietTurnover.csv").

See the READme files for more information.

Data contains personal data

Yes

Type of personal data

code key (not published) can link field_IDs to coordinates

Code key exists

Yes

Language

English

Time period(s) investigated

2020-05-01 – 2020-07-30

Data format / data structure

Numeric

Text

Species and taxons

Insecta
Arthropoda

Data collection 1

- Mode of collection: Measurements and tests
- Description of the mode of collection: The data were collected using pitfall trapping, sweep netting, soil sampling, and next generation sequencing
- Time period(s) for data collection: 2020-05-01 – 2020-07-30
- Data collector: Swedish University of Agricultural Sciences
- Source of the data: Research data, Biological samples
- Temporal resolution: 1 month

Data collection 2

- Description of the mode of collection: DNA metabarcoding performed through an Illumina NovaSeq6000 SP Flowcell v1.5 PE 2x150 run (Illumina Inc., San Diego, California, USA)
- Time period(s) for data collection: 2020-05-01 – 2020-07-31
- Data collector: Bioname
- Instrument: Illumina NovaSeq6000 SP Flowcell v1.5 PE 2x150 run - Illumina NovaSeq6000 SP Flowcell v1.5 PE 2x150 run
- Sample: Carabid gut contents
  Carabid gut content samples derived through regurgitation of live Carabids.
- Source of the data: Biological samples

Geographic spread

Geographic location: Sweden, Halland County

Geographic description: Data were collected across 19 sites in Halland county ranging from approx. Laholm to Kungsbacka

Responsible department/unit

Department of Ecology

Contributor(s)

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Commissioning organisation

Swedish University of Agricultural Sciences - 202100-2817

Funding

- Funding agency: Swedish University of Agricultural Sciences
- Project name on the application: Senior career funding from the Faculty of Natural Resources and Agricultural Sciences awarded to Riccardo Bommarco

Research area

Natural sciences (Standard för svensk indelning av forskningsämnen 2011)

Environment (INSPIRE topic categories)

Keywords

Ecological community, Insect herbivory, Predation, Management, Agriculture, Intraguild predation, Agricultural and aquaculture facilities, Insects, Beetles, Carabidae, Collembola, Soil mesofauna

Publications

Heinen J., Dominguez V., Aguilera G., Malsher G., Vesterinen E., Roslin T., Bommarco R., Bartomeus I. (2024) Diversified cropping strengthens herbivore regulation by providing seasonal resource continuity to predators. Journal of Applied Ecology (Accepted)

Polygon (Lon/Lat)

12.945328, 56.490079

12.747574, 57.014104

12.066422, 57.578

11.923599, 57.489538

12.54982, 56.725891

12.945328, 56.490079

Accessibility level

Access to data through SND
Data are freely accessible

Use of data

Things to consider when using data shared through SND

License

CC BY 4.0

Versions

Version 1. 2024-04-30

Contact for questions about the data

SLU Arkiv

arkiv@slu.se

This resource has the following relations

Is suplemented by Raw sequencing data

Download metadata

DataCite

DDI 2.5

DDI 3.3

DCAT-AP-SE 2.0

JSON-LD

PDF

Citation (CSL)

File overview (CSV)

Published: 2024-04-30