FINKA

Enhancement of the biodiversity of insects in arable farming by reducing synthetic herbicides and insecticides

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Hans Tüllmann, Kompetenzzentrum Ökolandbau Niedersachsen

Das Finka-Projekt wird gefördert von:

leben.natur.vielfalt
das Bundesprogramm

Bundesministerium für Umwelt, Naturschutz, nukleare Sicherheit und Verbraucherschutz

Bundesamt für Naturschutz

Weitere Unterstützer:

NLWKN

Niedersachsen

Partners & Funding Providers

Kompetenzzentrum Ökolandbau Niedersachsen GmbH

NAN Netzwerk Ackerbau Niedersachsen e.V.

Landvolk Niedersachsen Landesbauernverband e.V. gemeinsam stark...

LIB Leibniz-Institut zur Analyse des Biodiversitätswandels

GEORG-AUGUST-UNIVERSITÄT GÖTTINGEN IN PUBLICA COMMODA SEIT 1737

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BfN Bundesamt für Naturschutz

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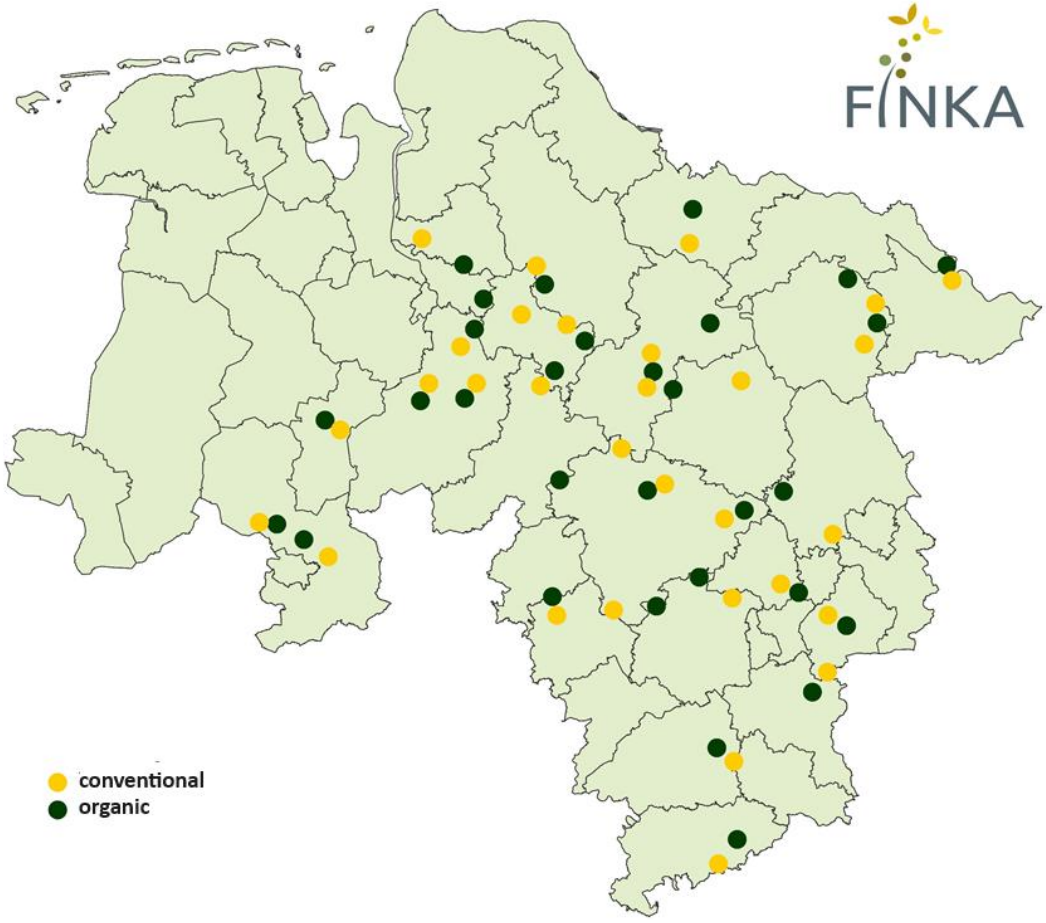
Niedersachsen

Overview of the FINKA-Farms



- 60 farms in Lower Saxony
- Duration 5 years
- Project based on a Partnership: conventional farmer + organic farmer = **Farm-couple**
- Cooperation & knowledge transfer (farmers, advisors, coaches, companies)

Source: KÖN

Conventional partner

Knowledge transfer on both sides

Machinery for mechanical weed control

Organic partner

Conventional site

Management as usual

FINKA site

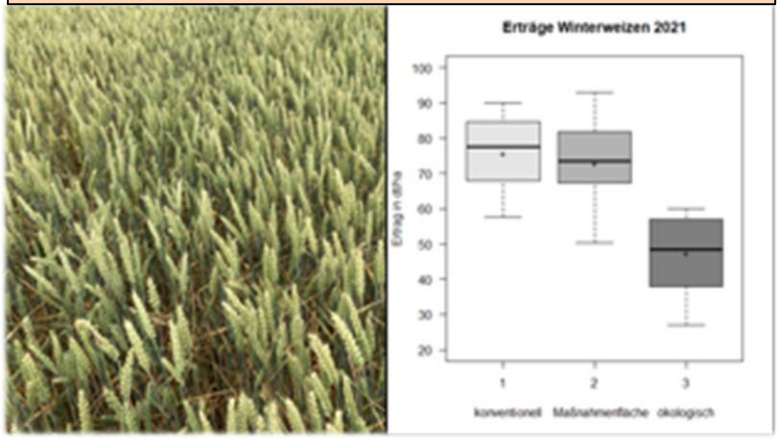
Without synthetic herbi- and insecticides

Organic site

On the partners farm

Insects & accompanying vegetation
→ Ecological evaluation of the actions

Returns, costs and contribution margin
→ Economic evaluation of actions



Research on insect diversity

- What‘s the effect of reducing/banning synthetic insecticides and herbicides on the diversity of insects?

Flytraps	Nesting boxes	Ground traps	Evaluation

Pictures: Tempel/NAN Picture:: Brauckhoff/Landvolk

Research on accompanying field flora

Whats the effect of reducing synthetic herbicides and insecticides on the **accompanying field flora**?

Picture: Brauckhoff/Landvolk

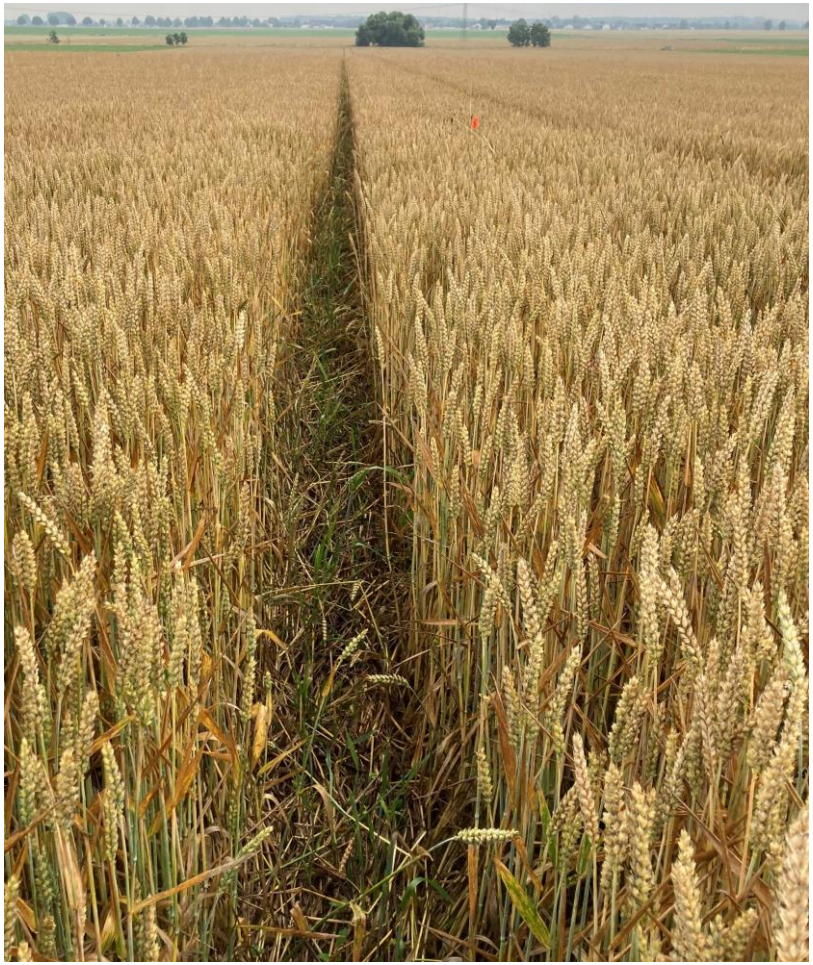
Picture: Tempel/NAN

Economical evaluation

What's the **economical effect** in each variation?

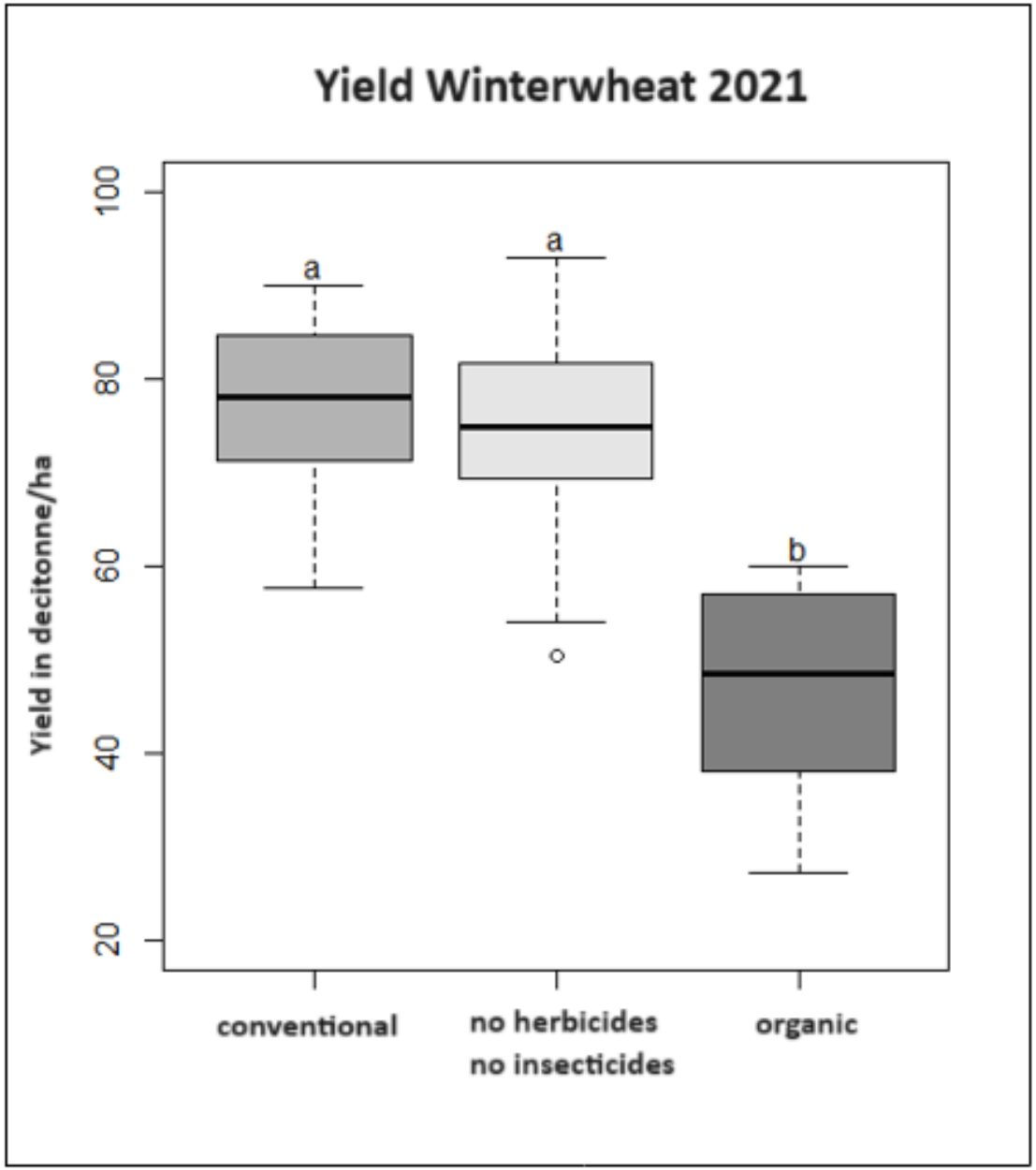
- Collection of data regarding yield, revenue and costs
- Saving potential regarding pesticides
- Variation in labour costs
- Contribution margin of each culture in each variation

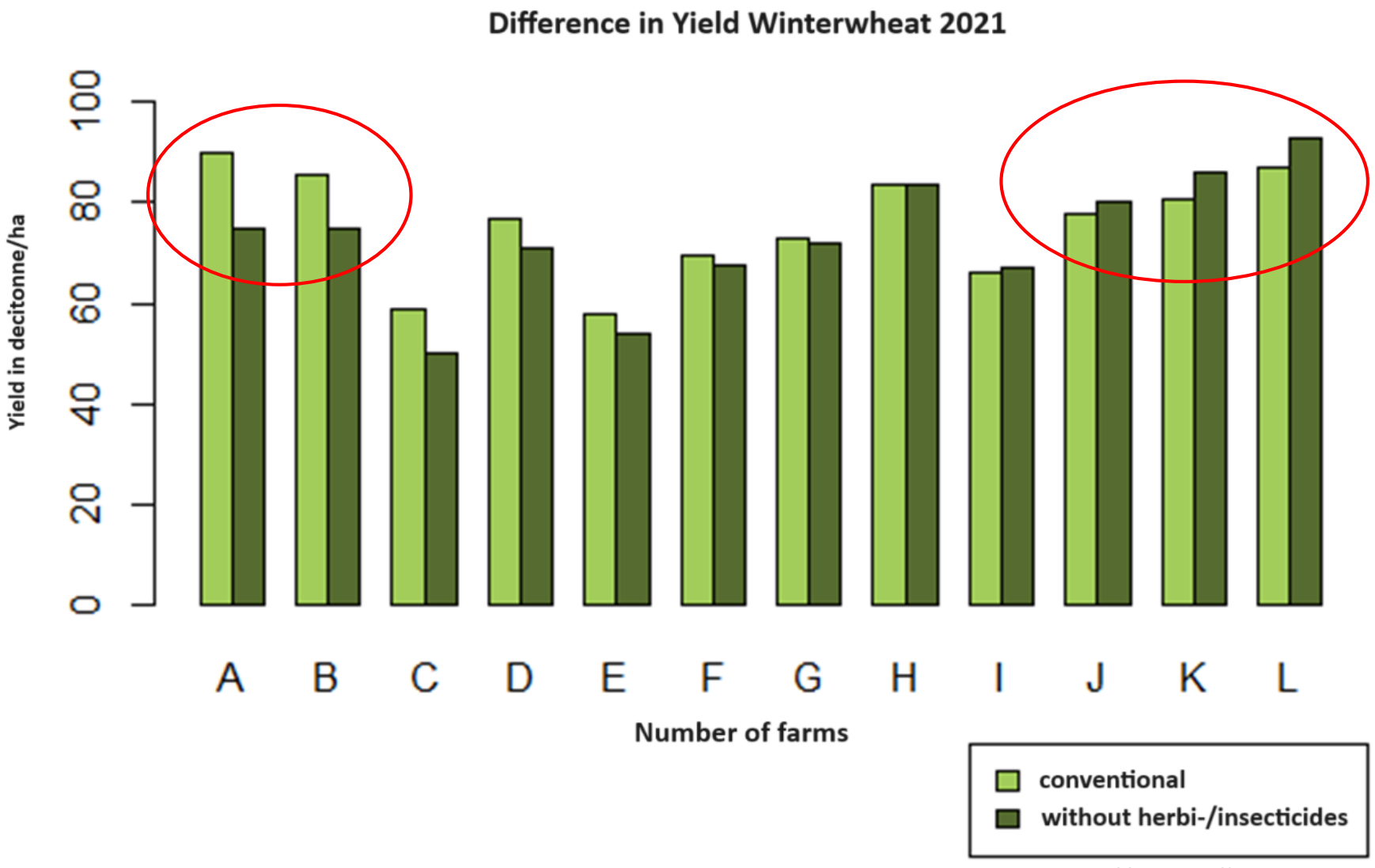
Yield 2021 – Winterwheat



Results from first year! No Significance!

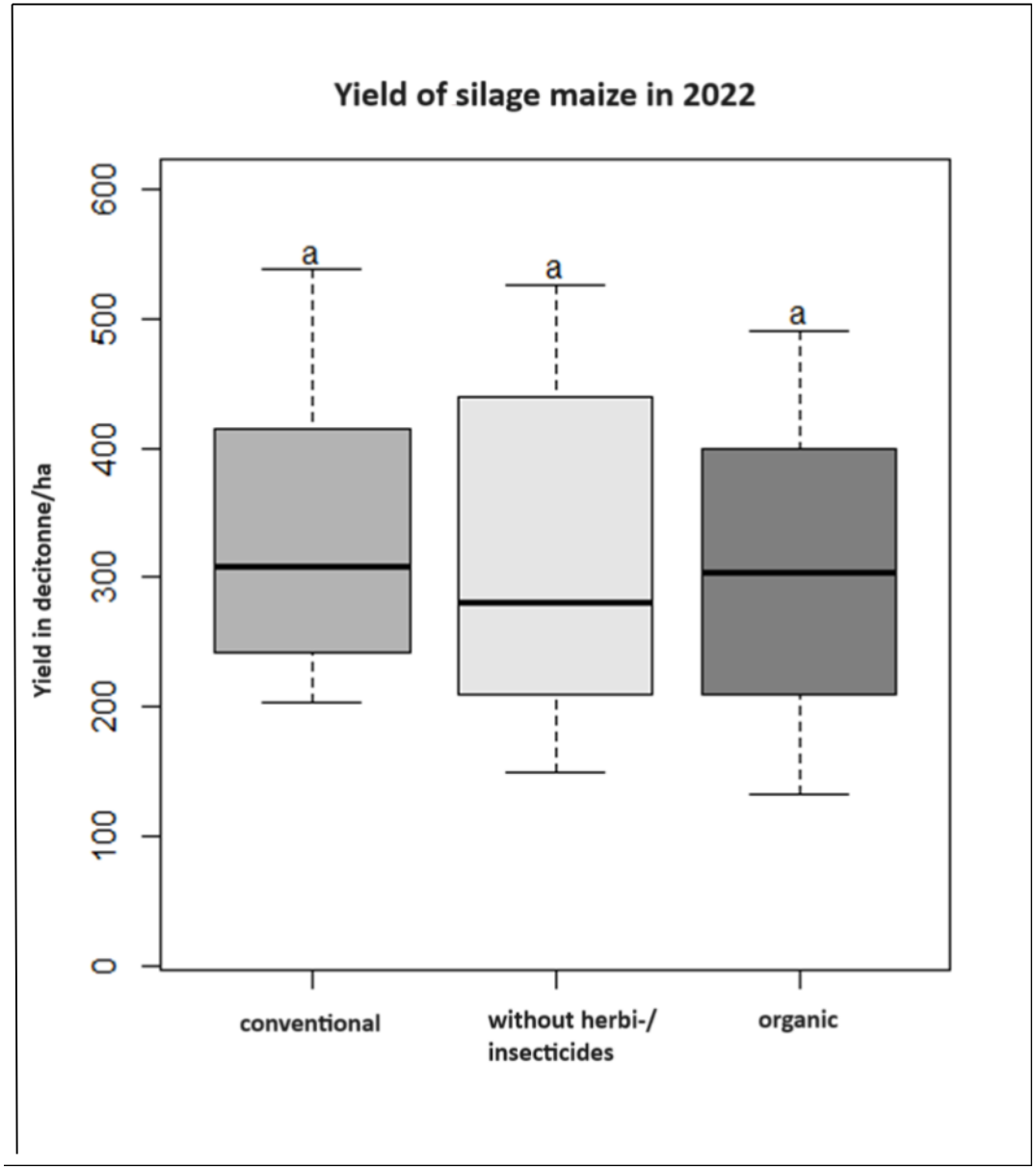
Picture: NAN





Graphic: Tempel/NAN

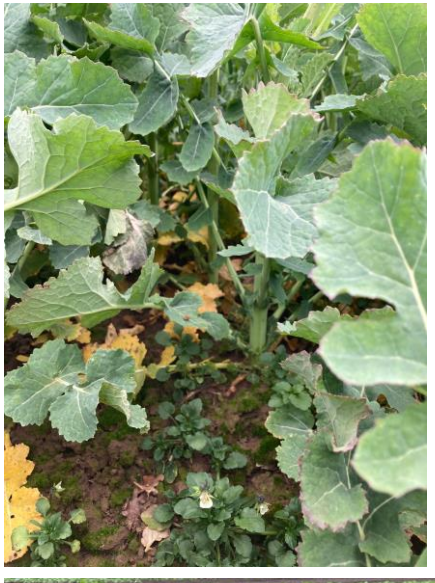
Yield 2022 – Silage maize



Results from first year! No Significance!

Picture: Tempel

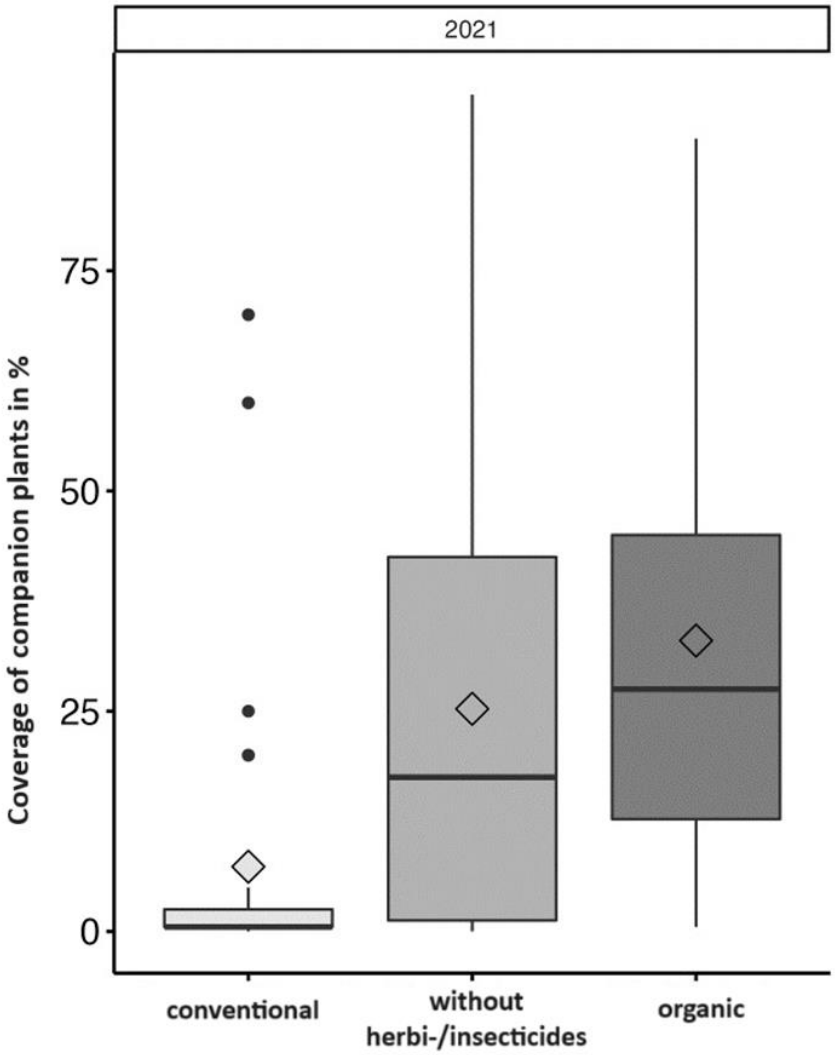
Results depend massively on the crop

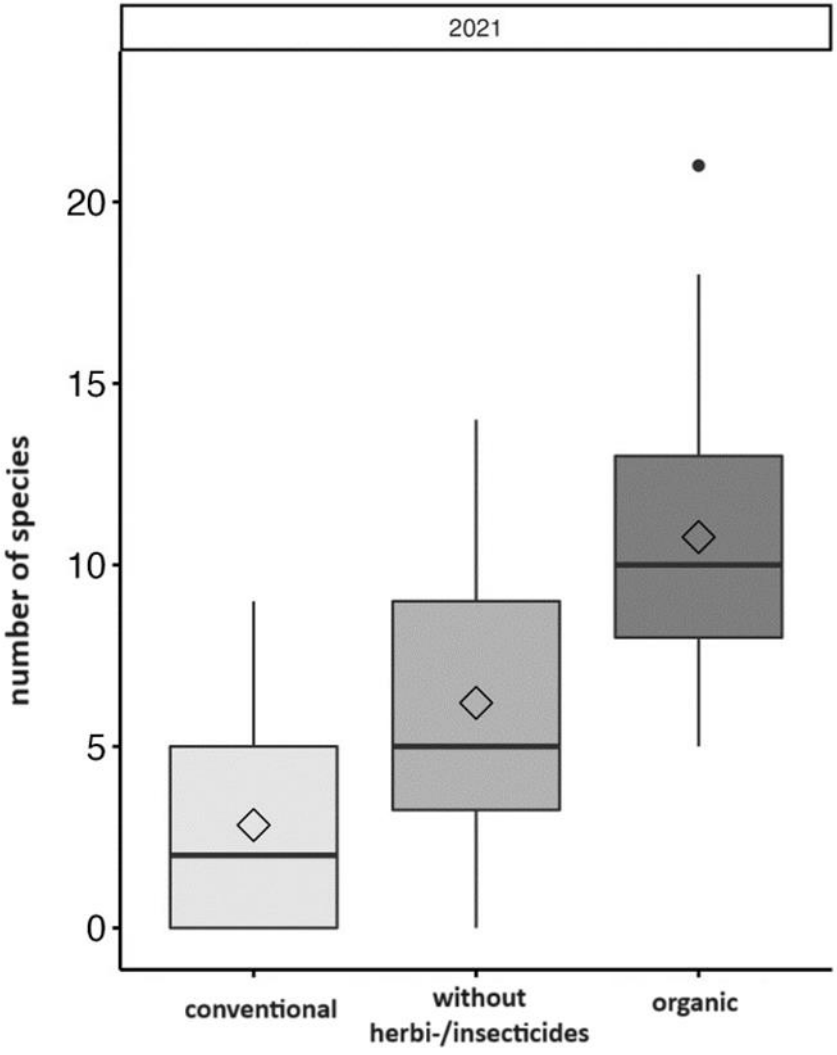


- How high is the risk?
- Stability of the crop?
- Cost-efficiency (labour)
- Pesticide-intensity?

Pictures: NAN

Preliminary results for the accompanying field flora 2021 – Winterwheat





Results from first year! No Significance!

Grafiken: Stefan Meyer

FINKA – it´s a communication project!

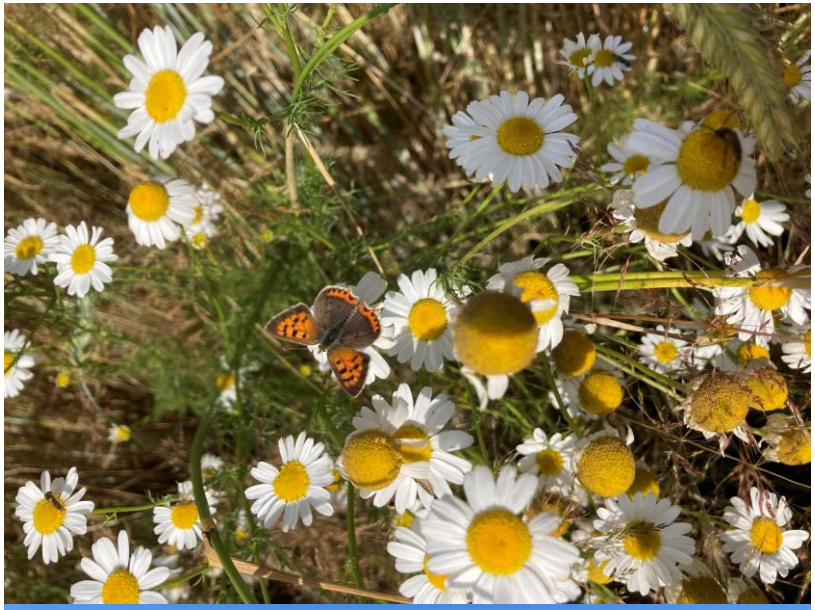
Conventional partner

Knowledge transfer on both sides

Machinery for mechanical weed control

Organic partner

Meeting with partner, advisors & colleagues	Networking with all FINKA-farmers	Field schools and seminars



Pictures: NAN

Space for discussion

Support of insects

- Why do we need insects?
- What environment do insects need?
- What can farmers do to enhance the biodiversity of insects?

Successful implemenation of a reduction strategy

- Crop rotation
- Crop varieties
- Sowing time
- Mechanical weed control

Several meetings at FINKA-Sites

Pictures: Tempel

Thank you very much for your attention

More information:

www. finka-projekt.de

www.facebook.com/FINKAProjekt

www.instagram.com/finka_projekt

Picture: Scherber

Befragung im Projekt teilnehmender konventionell wirtschaftender Betriebe

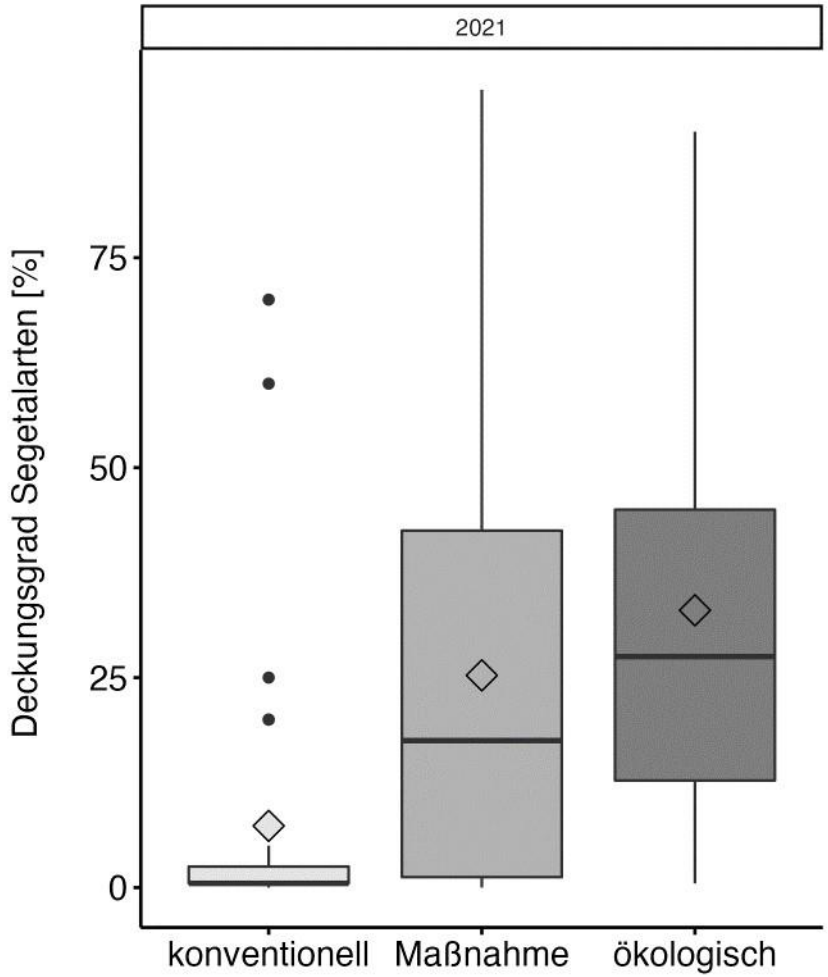
Motivation

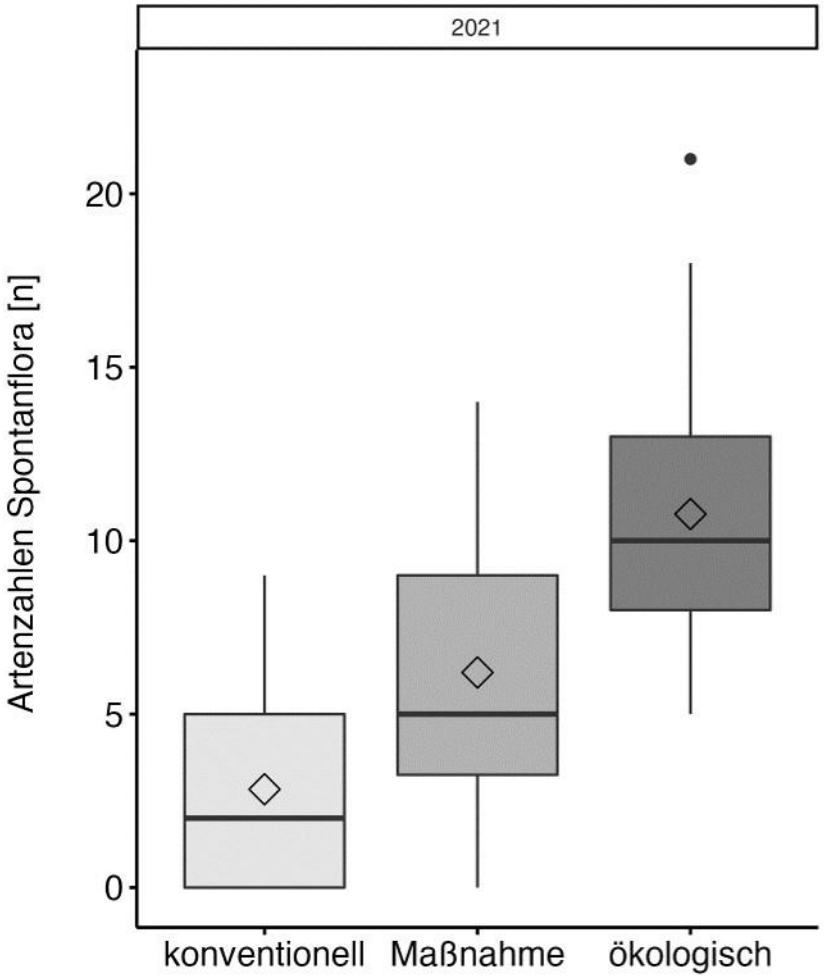
- Resistenzen unerwünschter Kräuter und Gräser
- Forderungen der Politik und öffentliches Interesse
- Interesse am Ausprobieren/Kennenlernen alternativer Bewirtschaftungsmethoden
- Austausch untereinander
- Neugier an wissenschaftlichen Ergebnissen
- Insektensterben

Hindernisse

- Teilweise Rücksprache mit Verpächtern notwendig
- Akzeptanz für Ackerbegleitflora (LandwirtInnen + Bevölkerung)

Vorläufige Ergebnisse zur Ackerbegleitflora 2021 – Wintergetreide





Grafiken: Stefan Meyer

Untersuchungen der Ackerbegleitflora 2022

- 2022 und 2023 verschiedenste Kulturen auf den FINKA-Flächen
- Große Unterschiede je nach Standort und Kultur!

Fotos: Tempel