

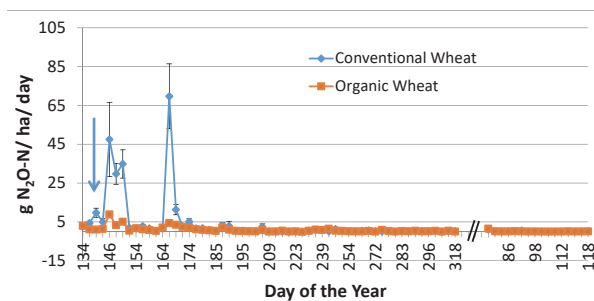
THE GLENLEA LONG-TERM CROP ROTATION STUDY

1992 → 2021

Organic discoveries over 30 years
of continuous field studies

SCIENTIFIC DISCOVERY

We have discovered that the greenhouse gas footprint is lower in organic production than where fertilizers and pesticides are used. For example, when daily emissions per ha are totaled and yield is taken into consideration, average nitrous oxide emissions resulted in 35% lower emissions per bushel



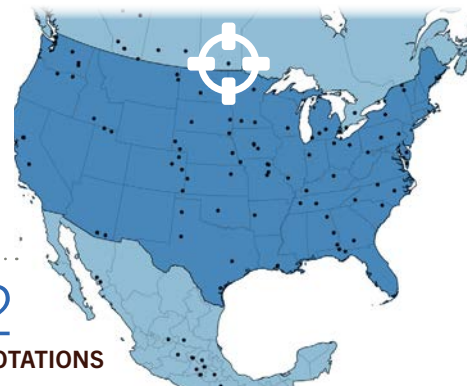
Westphal, M., Tenuta, M. and Entz, M.H., 2018. *Agric., Ecosys & Enviro* 254, pp.41-49.

- RESEARCH LEADS:** Martin Entz, agroecologist, University of Manitoba
- DIG DEEPER!** Organic agriculture deserves a seat at the grown-ups' table
- PUBLISHED RESEARCH:** Nitrous oxide emissions with organic crop production depends on fall soil moisture. 2018. *Agriculture, Ecosystems & Environment*.

MAKEmanitoba.ca

DOING THE FIELDWORK

Glenlea is one of 3 organic sites within the Soil Health Institute's network of long-term studies.



2
ROTATIONS

6
TYPES
OF
CROPS



CONVENTIONAL AND
ORGANIC MANAGEMENT



BUILDING CAPACITY

We are leveraging the knowledge gained from almost 3 decades of organic crop production research to educate professional crop and soil consultants on how to advise organic farmers for success.

SINCE 1992...

120
SUMMER STUDENTS
WORKED AT GLENLEA

24
GRADUATE
THESES

5
INTERNATIONAL
COLLABORATIONS

>2K
VISITORS
SINCE 1992



MANITOBA
Agriculture & Food
KNOWLEDGE
EXCHANGE