



RODALE
INSTITUTE™



RODALE INSTITUTE IS
FUTURE-PROOFING
THE FOOD SYSTEM THROUGH
REGENERATIVE ORGANIC AGRICULTURE



THE BEGINNING OF RODALE INSTITUTE

The Institute, founded by **J.I. Rodale** in **1947**, has historically produced revolutionary research that has enabled farmers to eliminate harmful contaminants from the food system.

J.I.'S RODALE'S FORMULA:
HEALTHY SOIL =
HEALTHY FOOD =
HEALTHY PEOPLE





THE RESEARCH

AREAS OF FOCUS:

- ❑ MAXIMIZING SOIL HEALTH
- ❑ EXPANDING REGENERATIVE ORGANIC AGRICULTURE
- ❑ MITIGATING THE EFFECTS OF CLIMATE CHANGE
- ❑ ADAPTING TO NEW WEATHER PATTERNS
- ❑ IMPROVING THE ECONOMICS OF FARMING
- ❑ ADVANCING THE NUTRITIONAL QUALITY OF CROPS

LANDMARK LONG-TERM
RESEARCH PROJECTS

FARMING SYSTEMS TRIAL



Started in 1981, America's longest running, side-by-side comparison of organic and chemical agriculture.

A 12-acre, 72-plot trial focused on grains.

Provided the scientific data underpinning recommendations being made to the newly forming **National Organic Program** in the 1980s.



FARMING SYSTEMS TRIAL



DECADES-LONG RESEARCH
HAS SHOWN THAT ORGANIC SYSTEMS:

ARE COMPETITIVE WITH
CONVENTIONAL YIELDS

AFTER A **5-YEAR** TRANSITION PERIOD

PRODUCE YIELDS UP TO
40% HIGHER
IN TIMES OF **DROUGHT**

EARN **3-6X**
GREATER PROFITS
FOR FARMERS

LEACH NO TOXIC
CHEMICALS

INTO WATERWAYS

USE **45%**
LESS ENERGY

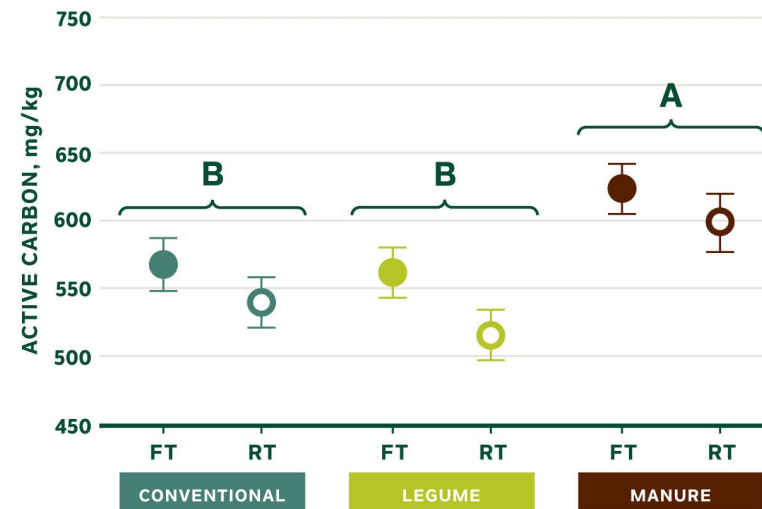
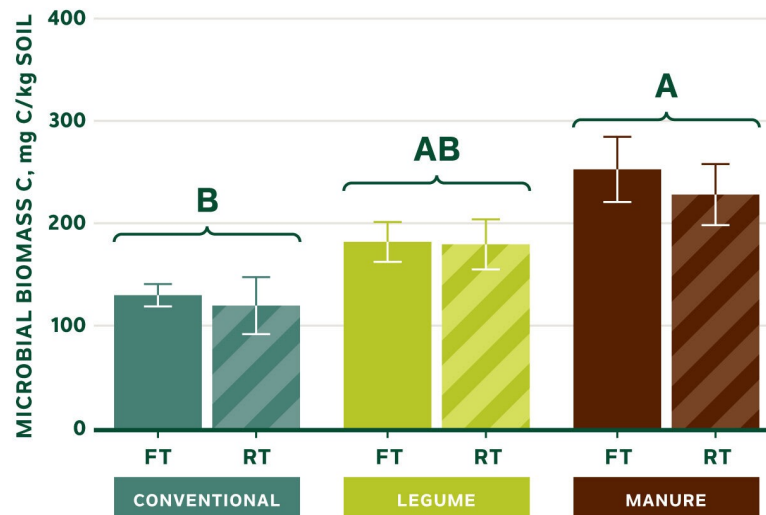
RELEASE **40%**
FEWER
CARBON EMISSIONS

FST RESULTS

ORGANIC AGRICULTURE & CLIMATE CHANGE

40+ years of research revealed organic production models can increase carbon sequestration and build soil resiliency

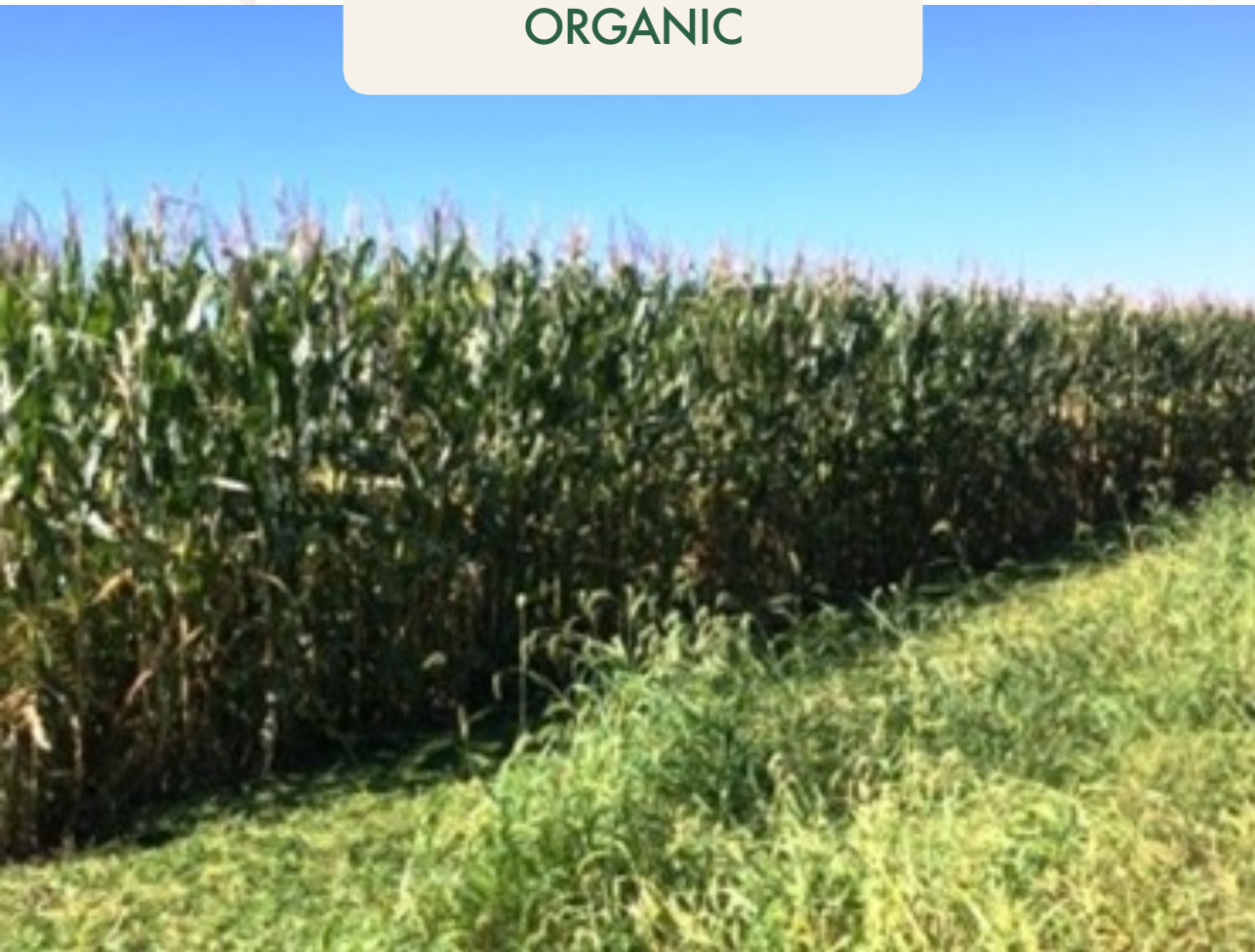
- The soil organic carbon stocks in the organic systems were between 23% and 40% greater than the conventional system.
- The organic systems produce yields up to 40% larger than conventional during drought, are more resistant to floods, use 45% less non-renewable energy, and release 40% fewer carbon emissions.



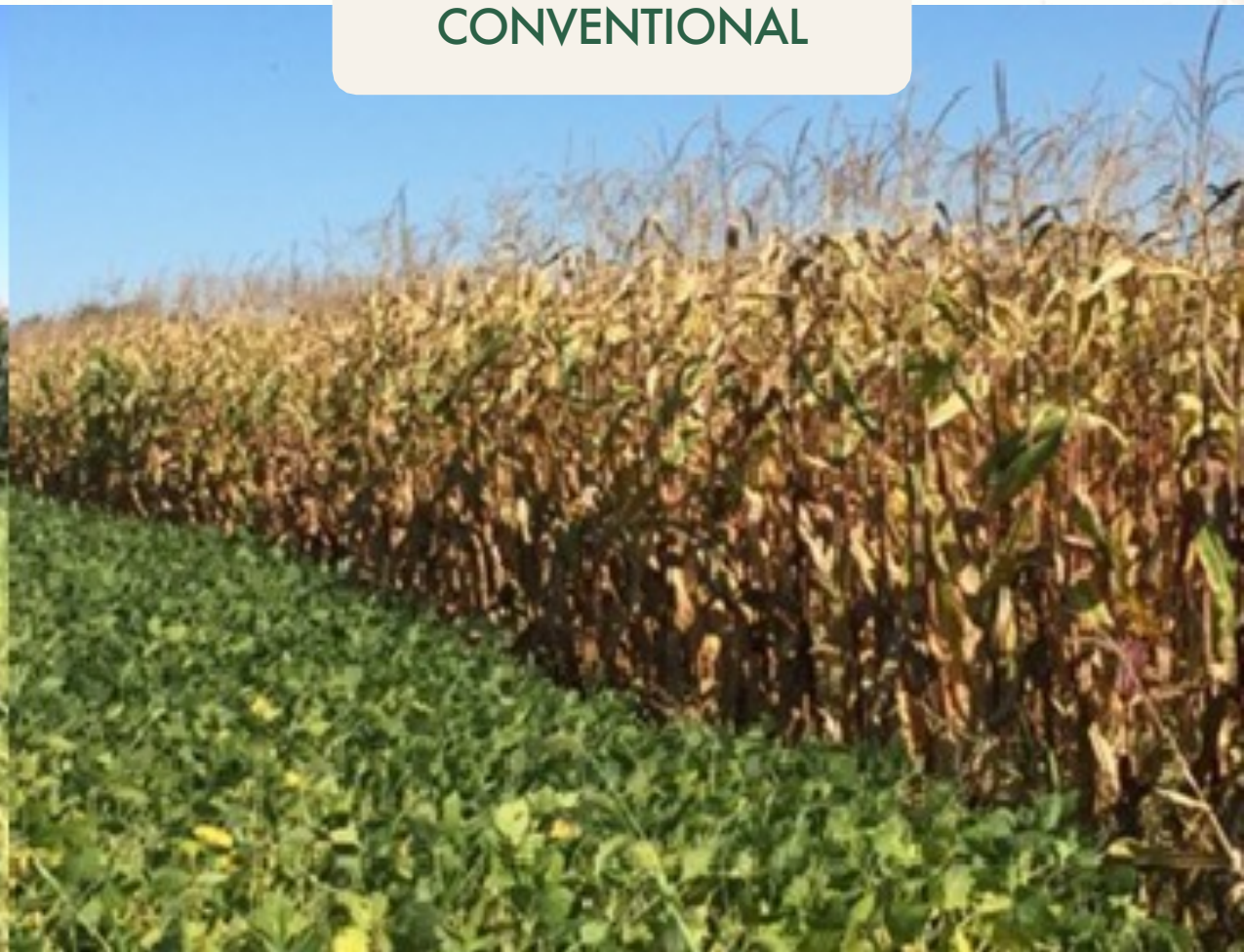
AGROECOSYSTEM RESILIENCE

CORN FIELDS AT RODALE INSTITUTE'S FARMING SYSTEMS TRIAL (SUMMER 2016)

ORGANIC



CONVENTIONAL



WATER USE EFFICIENCY

WHEAT FIELDS AT RODALE INSTITUTE'S FARMING SYSTEMS TRIAL (SUMMER 2018)

ORGANIC

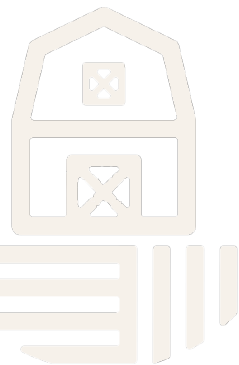


CONVENTIONAL



LANDMARK LONG-TERM
RESEARCH PROJECTS

VEGETABLE SYSTEMS TRIAL



Started in 2017, VST is a side-by-side comparison of conventional and organic methods for growing vegetables.

The Trial is intended to run for more than 20 years.

VST is specifically designed to analyze nutrient density in finished crops.

It's the first of its kind—no other crop comparison study has been focused on exploring the links between soil health and human health.



Recent data from VST has further substantiated the promise of organic agriculture as a means to sequester carbon

- Carbon levels have increased in the top 4-inch soil layer in the organic cropping system coupled with reduced management practice and declined in the conventional system with reduced tillage.
- Soil organic matter increased by 1% which is equivalent to 11,600 lbs. or 5.8 tons of carbon.
- This 1% increase will result in holding 20,000 gal of water per acre (187,000 Liters/hectare).
- A 30% increase in labile organic soil carbon (POX-C), from 600 to 900 mg/kg. This is a sign of building resilience towards changes in climate or other stressors.
- Over time, the implementation of intensive tillage depleted soil carbon and increased soil bulk density.

WHAT IS REGENERATIVE ORGANIC AGRICULTURE?



Regenerative
Organic
Certified™



Robert Rodale coined the term "regenerative organic" to distinguish a kind of farming that goes beyond sustainable.

Regenerative organic agriculture prioritizes soil health creating farm systems that work in harmony with nature to improve quality of life for every creature involved.



REGENERATIVE ORGANIC IS





3 PILLARS OF REGENERATIVE ORGANIC CERTIFICATION

(USDA CERTIFIED ORGANIC +)



SOIL
Health



ANIMAL
Welfare



SOCIAL
Fairness



Regenerative
Organic
Certified™

With private sector partners, Rodale Institute introduced a global standard for agriculture certification: *Regenerative Organic Certified (ROC)*.

ROC utilizes USDA Certified Organic as a baseline.

Certification is overseen by the Regenerative Organic Alliance.





Regenerative
Organic
Certified™

IMPACT

- ❑ 144,347 acres of Regenerative Organic Certified® farmland in North America.
- ❑ 5,784,396 acres of Regenerative Organic Certified® farmland globally.



CONTACT

JEFF TKACH

CEO

Jeff.Tkach@RodaleInstitute.org

O: 610-683-1405



611 Siegfriedale Road, Kutztown, PA 19530

610-683-1400 | RodaleInstitute.org