

# The Magic of Biodiversity



## The Eden Project in Cornwall

When many types of plants are grown together, life in the soil is diverse.  
Plants are healthier and better able to resist pests and diseases.

## Monocultures Versus 6 Species Cover Crop Trials



Two of the six monocultures  
on July 31

Monocultures of

- Oilseed Radish
- Purple top turnip
- Pasja turnip
- Soybean
- Cowpea
- Lupin

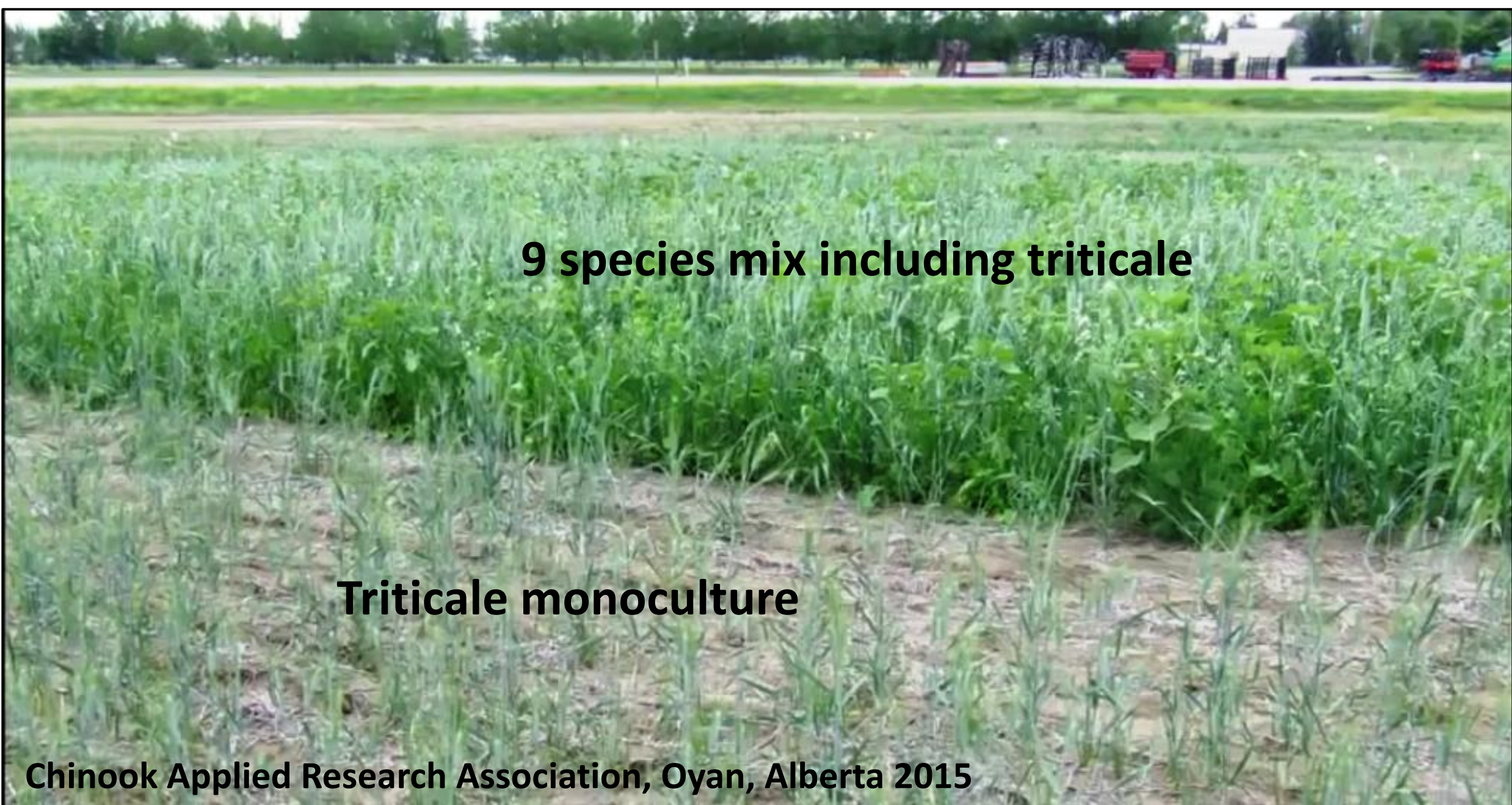
were nowhere near  
as successful as the  
mix of all 6



Gabe Brown <https://www.youtube.com/watch?v=tbwwfl2o9d4>

Burleigh County, North Dakota 2006

## Monoculture Versus Multi-species



9 species mix including triticale

Triticale monoculture

Chinook Applied Research Association, Oyan, Alberta 2015

## Microbes are big players in the diversity of Earth's carbon based life

Life form	% of Earth's total carbon based life
Plants	82.5
Microbes	17.1
ALL THE REST (insects, fish, molluscs, livestock, humans, nematodes, other animals & birds)	0.4

microbes = bacteria, fungi, archaea, protists, viruses

Y. M. Bar-On, R. Phillips, and R. Milo, PNAS, 2018 115 (25) 6506-6511

← One way science  
quantifies biodiversity

All plants and animals are  
embedded in a microbial  
world and have a microbial  
world embedded in them

The natural world is composed of  
interdependent communities  
of organisms



BOWEN ISLAND  
COMMUNITY  
FOUNDATION

IN PARTNERSHIP WITH  
vancouver  
foundation



Neighbourhood  
Small Grants  
Bowen Island



Poster Created by Phil Gregory