

# CarbonBuilder<sup>TM</sup> Barley



## CarbonBuilder Barley

CarbonBuilder increases your stable soil carbon, resulting in long-term soil health and agronomic benefits while requiring minimal practice change.

The CarbonBuilder technology is a new class of microbial seed treatment that enhances soil health and boosts farm productivity by leveraging the potential of beneficial fungi.

### Delivering on your agronomic and business goals by offering:

#### Long-Term Soil Health Gains



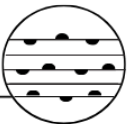
Increasing carbon enables better soil structure, water holding capacity and nutrient retention.

#### Increased soil carbon



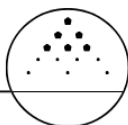
Captures atmospheric carbon, increasing total organic carbon within soil.

#### Promotion of soil carbon stabilisation



Stores carbon for long-lasting gains, reducing risks in carbon projects.

#### Easy application



Seamless integration into existing practices as a direct air inject product.

**CarbonBuilder is designed to increase your soil health, soil carbon and bottom line.**

## The Results

### 2021 & 2022 Field Trials

By increasing the Total Organic Carbon (TOC), you increase the number of carbon credits that you can generate in a carbon project.

CarbonBuilder Barley was tested over a range of sites and environments in the 2021 & 2022 growing seasons to assess the change in soil carbon.

**3.2T**  
Additional tonnes  
of CO<sub>2</sub>e/ha

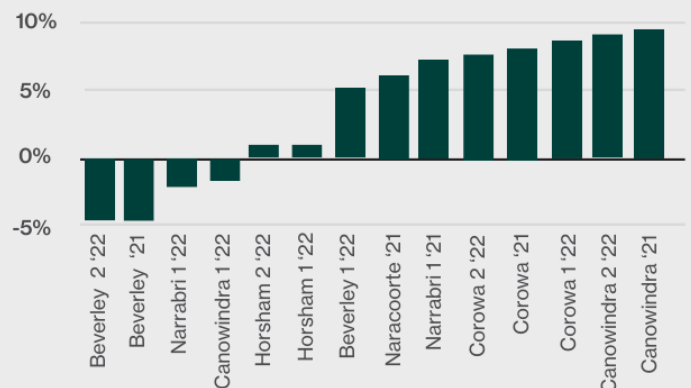


**2.9%**  
Grain yield increase

**71%**  
Product win-rate

#### Barley Small Plot Trials

Total carbon % over uninoculated control



# The Science

## Stable Soil Carbon Capture Mechanism

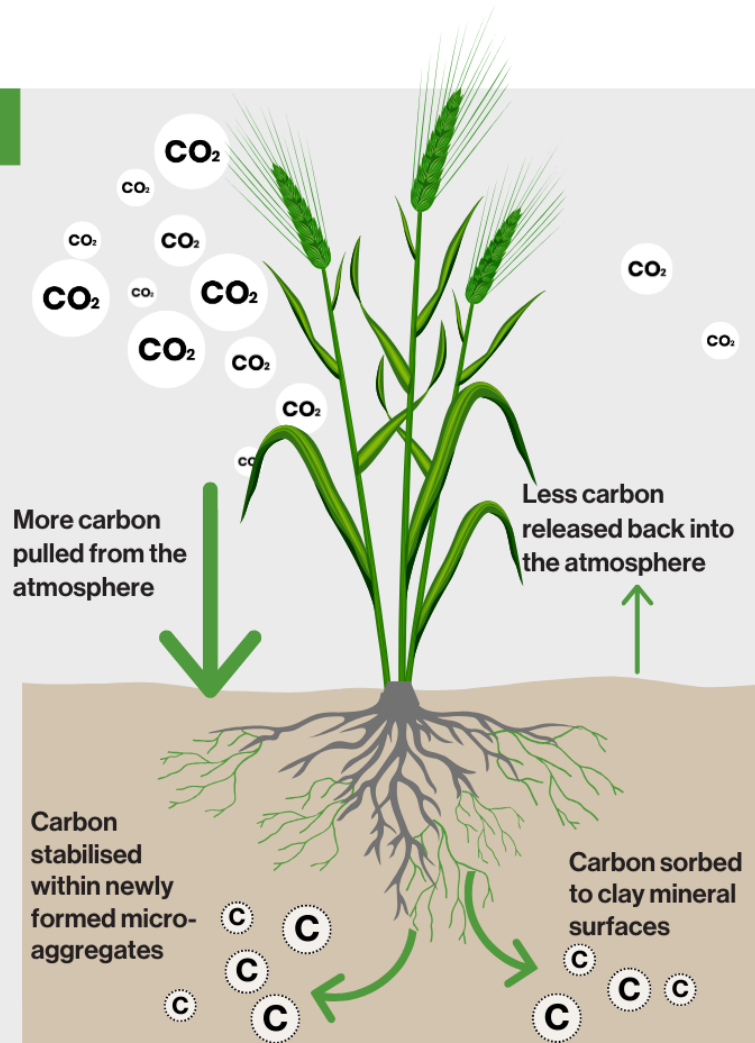
Building stable carbon not only improves soil health but also the performance of your soil carbon project. Total organic carbon (TOC) can be defined by three major pools of carbon in your soil:

1. Particulate Organic Matter (POM)
2. Aggregate Carbon (Agg-C)
3. Mineral Associated Organic Matter (MAOM)

POM will cycle in and out of the soil within a very short period of time: days to months, whereas Agg-C and MAOM are the most stable pools of carbon in your soil, lasting from decades to centuries.

CarbonBuilder fungi increases the formation of carbon bonds with soil minerals as MAOM, protecting this carbon from decomposition. The fungi's mycelium also facilitates the generation of soil aggregates, protecting the Agg-C from oxidation.

Read the peer-reviewed publication by Western Sydney University.



## Field Application



The FurrowMate direct air injection unit is your practical solution to large scale biological additive application.

FurrowMate delivers your CarbonBuilder Barley into your planting furrow easily, safely and accurately, saving you hours and increasing your product efficacy.

## Chemical Compatibilities

During our product development process, we tested CarbonBuilder Barley against commonly used seed treatments through controlled environment tests in our laboratories.

Pontiac <sup>®</sup>	Raxil <sup>®</sup>	EverGol <sup>®</sup> Energy	Vitavax <sup>®</sup> 200	ZincFlo <sup>®</sup> Plus
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Systiva <sup>®</sup>	Cruiser <sup>®</sup> Opti	Rancona <sup>®</sup> Dimension
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Compatible

Vibrance<sup>®</sup>

Incompatible

Scan the QR to learn more about CarbonBuilder Barley.

