FACTSHEET

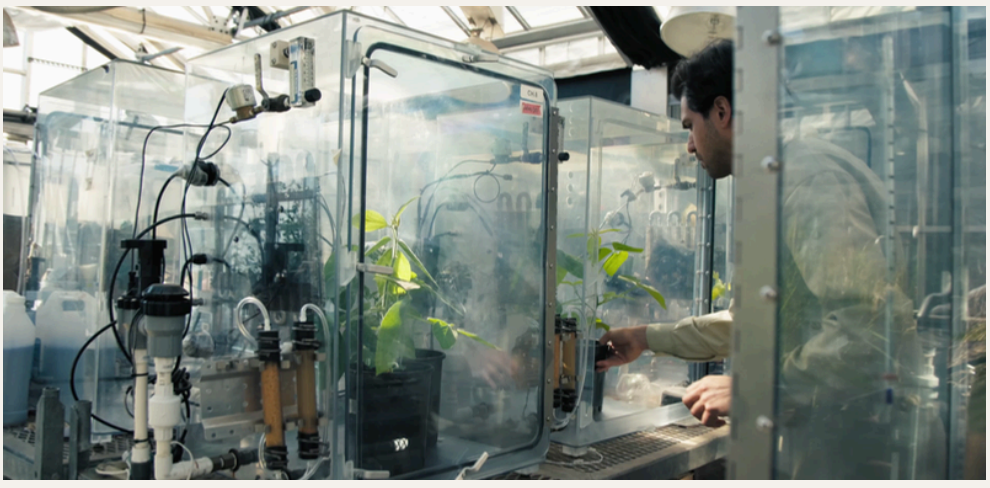
loam

Did you know we collaborate with leading scientists?

Learn more

Independent research using the same isolates found in **CarbonBuilder™** has confirmed what we're seeing in the field: more stable soil carbon and reduced nitrogen losses compared to untreated soils. Here's a look at the science behind the results.

This work doesn't just measure what happens in the soil, it reveals why, tracing plant-fixed carbon into its most durable forms.



Lawrence Livermore National Laboratory

WATCH VIDEO

In partnership with LLNL and UC Berkeley, we're tracing exactly how our fungal isolates draw carbon from the atmosphere and lock it into soil, down to the DNA level.

Using a rare isotope (^{13}C) and cutting-edge imaging tech (originally developed to study stardust in meteorites), researchers can now watch carbon move from plant to soil.

"The goal of this collaboration is to really understand the mechanisms by which Loam's fungal isolates are drawing down carbon through the plant and storing it in soil."

- Dr. Noah Sokol, Lawrence Livermore National Laboratory

Western Sydney University

WATCH VIDEO

In a wheat growth chamber trial, our *Thozatella* sp. isolate (the active ingredient in **CarbonBuilder™** Wheat, Canola and Pulses) delivered results that stack up:

- +9.4% higher total soil carbon
- +20.8% more carbon locked in protected soil aggregates
- +20.9% greater resistance to carbon loss during a fallow simulation

More carbon in the soil, and more of it staying there.

"We also were very interested in.. the characteristics and we measured a lot of them that these fungi had that could be explaining the our observations for the soil carbon pools and its dynamics."

- Dr. Yolima Carillo, Western Sydney University

The University of Queensland

WATCH VIDEO

A soybean trial found **CarbonBuilder™** doesn't just build carbon, it helps soils hold onto nitrogen too:

- +20.2% higher total soil nitrogen
- +56.2% more nitrogen stored in stable soil aggregates

Better nitrogen retention means less loss over time, and more available for the next crop.

"We could see how the fungal inoculant not only increased grain but it increased carbon in the soil."

- Dr. Vijaya Singh, The University of Queensland

It's not just a product claim, it's independent research.

Independent researchers keep coming to the same conclusion: **CarbonBuilder™** builds more soil carbon, stores it in stable, long-lasting forms, and helps soils hold onto more nitrogen too.
These aren't isolated results, they're consistent findings across different crops, trial conditions, and research institutions. That consistency is what gives us (and growers) confidence in what's happening below the surface. The proof is in the data, and we're continuing to invest in the research that keeps it coming.