

BIOTERRA & AGROFIELD SOLUTION:
ENZYMATIC BIOTECHNOLOGY FOR GLOBAL SOIL REGENERATION

#001



Left: Charlie Langdon, CEO Bioterra LLC, Texas
Right: Malick Guindo, CEO Agrofield Solution, Senegal

Bioterra and Agrofield Solution are pioneering the global introduction of enzymatic biotechnology to revolutionize soil regeneration and carbon sequestration. Their flagship products, Reclaim and Renew, harness enzymatic processes to enhance soil health, boost crop yields, and mitigate environmental impacts.

The Science Behind Enzymatic Biotechnology

Enzymatic biotechnology utilizes natural catalysts—enzymes— to accelerate biochemical reactions in the soil. One notable enzyme, carbonic anhydrase, enhances carbon sequestration by facilitating the conversion of CO₂ into stable soil carbon forms ([PubMed](#)). This approach aligns with sustainable agricultural practices, improving soil fertility while mitigating climate change.

Enhancing Microbial Activity & Carbon Sequestration

Bioterra and Agrofield’s products stimulate the growth and activity of beneficial soil microbes, which form symbiotic relationships with plant roots. These processes play a crucial role in carbon sequestration, transferring carbon from plants into the soil for long-term storage. Soils store more carbon than other terrestrial ecosystems and new studies found that the role microbes play in storing carbon in the soil is at least four times more important than any other process, including decomposition of biomatter. (<https://news.cornell.edu/stories/2023/05/microbes-key-sequestering-carbon-soil>)



Soil Sampling a treated cotton field (Lubbock, Texas)

Product Benefits: Reclaim & Renew

Reclaim: A soil stimulant and herbicide residue remediator, Reclaim enhances soil structure, promotes water infiltration, and accelerates the breakdown of toxic residues. It also boosts microbial activity, improving nutrient release and fertilizer efficiency

Renew: A highly cultured enzymatic biostimulant that invigorates soil and plant processes, Renew promotes root growth, drought tolerance, and nutrient absorption, leading to increased crop yields and healthier plants. Combined with Reclaim, they help combat salinity and remediate degraded soils.

A New Era in Sustainable Agriculture:
2 Products, 1 Application for incredible results

The enzymatic biotechnology introduced by Bioterra and Agrofield Solution represents a groundbreaking advancement in sustainable agriculture. By enhancing microbial activity and improving soil health, Reclaim and Renew offer practical, science-backed solutions for increasing crop yields, reducing environmental impact, and promoting global food security.



Strawberry farm production visit (Niayes, Senegal)



String beans test (Kirene, Senegal)

Organic, Deployable & Accessible
Solutions

Bioterra and Agrofield Solution prioritize organic and user-friendly formulations. Their enzymatic products are easily integrated into existing agricultural systems, offering a scalable, accessible and sustainable solution to soil regeneration and carbon sequestration.

As innovation continues to shape our interaction our ecosystem, Bioterra and Agrofield Solution are engaged to further their research and deployment of new innovations to combat climate challenges.

For more information on how Bioterra and Agrofield Solution can support your agricultural and soil regeneration efforts, **please visit our websites or contact us directly:**

- Agrofield Solution: www.agrofieldsolution.com / contact@agrofieldsolution.com
- Bioterra Global: www.bioterraglobal.com / info@bioterraglobal.com

Versatility Across Soil, Climate & Crop Types:
Enzymes vs Inoculants

Reclaim and Renew are enzymes based (No-living organisms, unlike Inoculants) designed for universal application, ensuring adaptivity and effectiveness across different soil types, climates, and crops. This makes them invaluable to farmers worldwide, improving soil fertility and productivity without altering existing agricultural practices.

Environmental & Human Health Impact

Reclaim and Renew enhance fertilizer efficiency and reduce the need for chemical inputs, thus contribute to lower greenhouse gas emissions on agricultural productions. Improved soil health leads to better water retention, reduced erosion, and more nutritious crops—ultimately creating a safer environment for both farmers and consumers.



Corn measurements (Lubbock, Texas)



Lettuce root size observation (Senegal)