



TUNDRR

Build Better Soil Build Real Value

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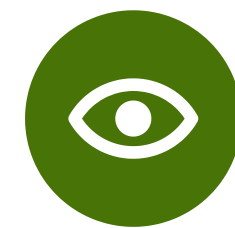
03.
UNLOCK VALUE



Our Vision & Mission



Movement Goal



Vision

Become an internationally renowned
circulareconomy service provider

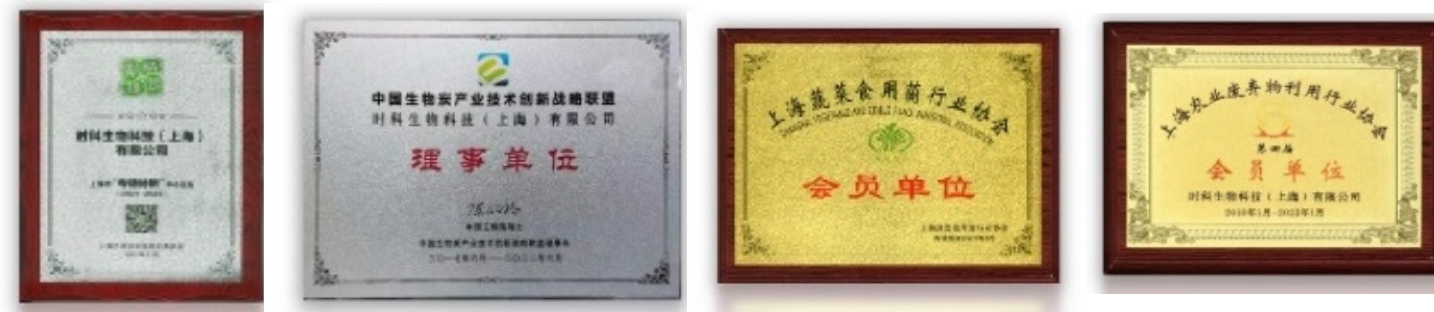


Mission

More resource efficient, More environmentally
friendly, Healthier soil, Safer food



Qualification



01

Member unit of International Biochar Initiative (IBI)

02

Industry standard NY/T 3618-2020 formulation unit

03

Local standard DB/31T 1199-2019 formulation unit

04

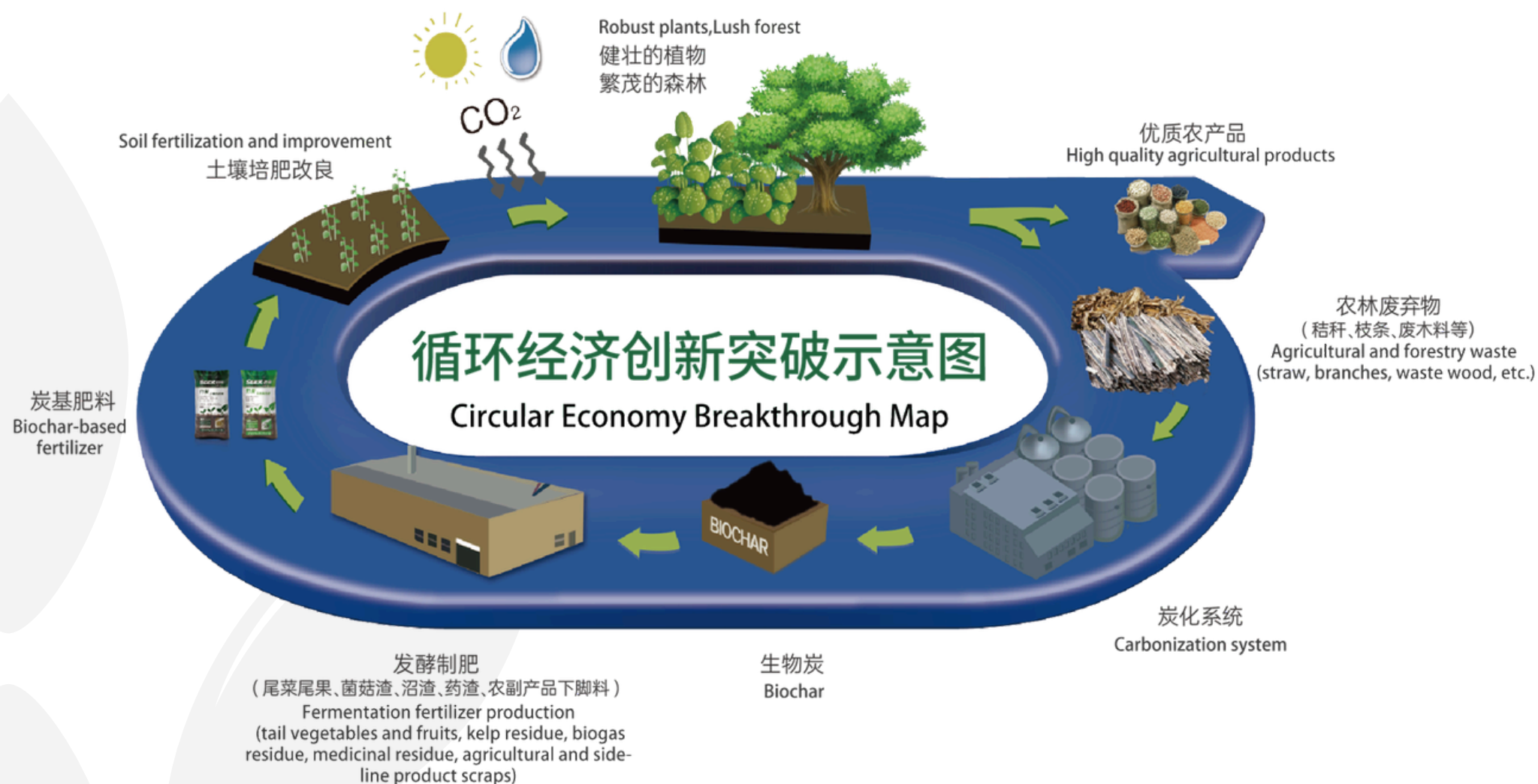
Member unit of Shanghai Soil and Fertilizer Society

05

Top Ten Leading Technology Demonstration Units of the Ministry of Agriculture and Rural Affairs

Main Business

Low carbon circular economy project includes design, construction, operation and technical services



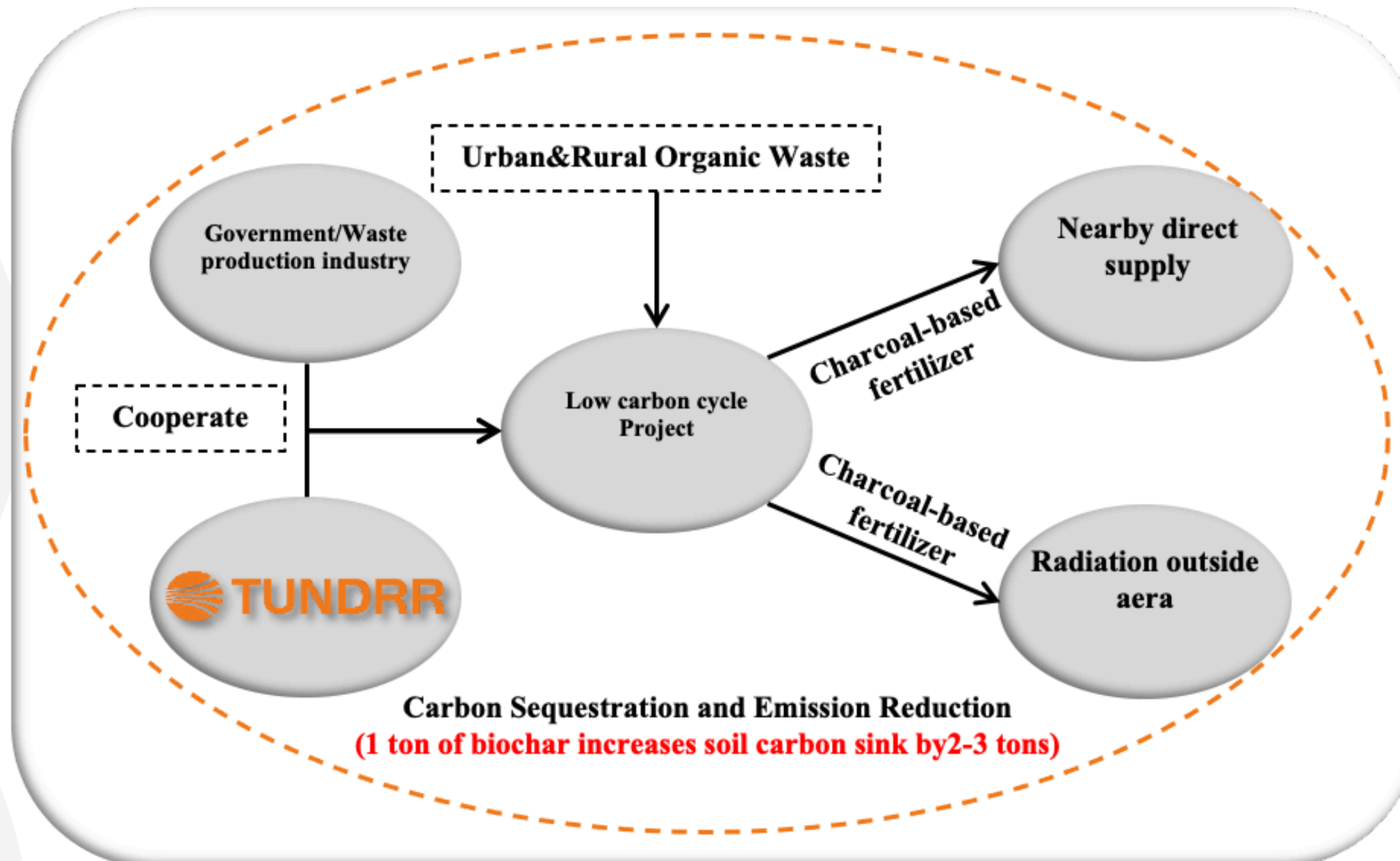
Serving the green and low carbon recycling industry

- Wastes such as straws, branches, waste wood, tail vegetables, mushroom residues, aquatic plants, biogas residues, manure, agricultural and sideline products leftovers, etc., are made into a new type of TUNDRR biochar based microbial fertilizer using the core technology of carbonization and charcoal bacteria compound fermentation. products and field applications.
- Realize efficient resource utilization of waste, soil fertilization, soil improvement, pollution remediation, carbon sequestration and emission reduction, and help green and low-carbon circular industries.



Innovative Model

Innovative Model: Front-end service (environmental protection) + back-end output (agriculture) + carbon sequestration and emission reduction (carbon trading)



Mode Features:

- Novel mode
- Wide range of disposa
- Energy-saving and high-efficiency
- Outstanding benefits
- Broad prospects

Core Products



TUNDRR Carbon-Based Soil Conditioner

Contains a minimum of 25% biochar, a significant proportion of silicon, calcium, and magnesium; pH of 7.0–9.0, adjusting and neutralizing acidic soils



TUNDRR Organic Fertilizer BBP 1

Crop Nutrition ; Soil Improvement ; Carbon Sequestration and Emission Reduction; Green and environmental protection

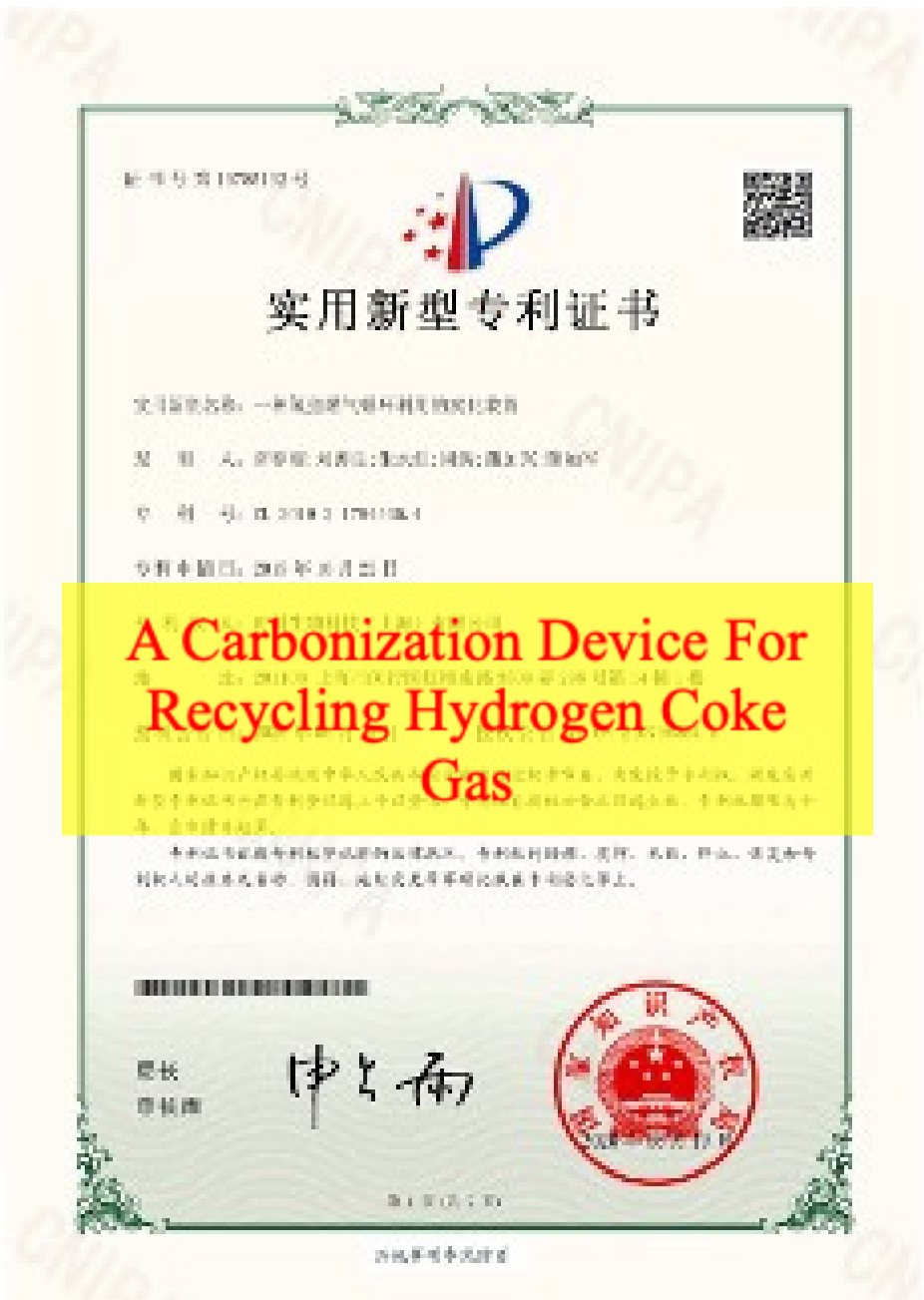
Core Products



NPK Water Soluble Fertilizer

Applicable crops: rice, wheat, corn, peanuts, rapeseed, cotton, sunflowers, melons and vegetables, eggplants and fruits, roots, cabbage, beans, green leafy vegetables, cabbage, onions and garlic, melons and fruits, citrus fruits, nuts, stone fruits, flowers, traditional Chinese medicine, tea, landscaping, tobacco, and other favorite crops.

Patents



- 01 40+ Authorized Patents
- 02 3 Provincial/Ministerial Science And Technology Awards
- 03 4 Municipal/Departmental Science And Technology Awards
- 04 2 Industry Science And Technology Awards
- 05 3 Industry/Local/Group Standards

Technology Awards



NO.	Year	Project Name	Award Level	Award-giving Unit
(1)	2018	Development and industrial application of biochar-based fertilizer	Third Prize of Science and Technology of Shanghai Municipality	Shanghai Municipal People's Government
(2)	2020	The key technology and application of agricultural and forestry wastes carbonization and its resource utilization	Second Prize of Science and Technology of Shanghai Municipality	Shanghai Municipal People's Government
(3)	2021	Construction and application of biochar and straw carbonization technology system	First Prize of China Agricultural Science and technology contribution	Ministry of Agriculture of the People's Republic of China
(4)	2021	Research and application of soil continuous cropping obstacle control technology for facility vegetables	Third Prize of Agricultural Science and technology contribution of Liaoning province	Agricultural Science and Technology Contribution Award committee of Liaoning province
(5)	2022	Study and application of eco-cycle model of high efficient carbonization fertilizer production from agricultural wastes	Excellent Project Award of Shanghai industry-university-research Cooperation	Science and Technology Association of Shanghai
(6)	2022	Technology system and industrial application of carbonization fertilizer return from Agricultural and Forestry Wastes	Third Prize of Carbon Neutral Track in University Alumni Science and technology innovation competition	Shanghai Pudong New Area Committee of the Communist Youth League
(7)	2023	Construction and application of cultivated land quality improvement technology model in middle-south of Liaoning River Plain	Second Prize of Agricultural Science and technology contribution of Liaoning province	Agricultural Science and Technology Contribution Award committee of Liaoning province

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TUNDRR Biochar Product Application Case



Location: Shanghai Jinshan·ShanghaiYinlong Vegetable Professional Cooperative

Crop: Cabbage

Experimental group	Biochar based fertilizer 120kg/acre+plant enzyme third-generation 3kg/acre
Control group	Conventional fertilization (compound fertilizer 45kg/acre)

Effect: The fields using TUNDRR products generally had an average fresh weight, root length, and dry matter weight 20.46%, 26.19%, and 19.05% higher than the control group, indicating that TUNDRR products can improve soil, promote root development, improve quality, and increase yield and income.



Location: Shanghai Road Leisure Agriculture Professional Cooperative

Crop: Cucumber

Experimental group	120kg/acre of TUNDRR biochar based microbial fertilizer;
Control group	120kg/acre of biochar based microbial fertilizer from a certain tower brand.

Effect: When used, TUNDRR biochar based microbial fertilizer in cucumber plants increased plant height, stem thickness, and leaf number by 3.50%, 5.90%, and 1.88% compared to the control group. It can effectively enhance cucumber plant growth, increase stem thickness, and enhance nutrient absorption and transport.



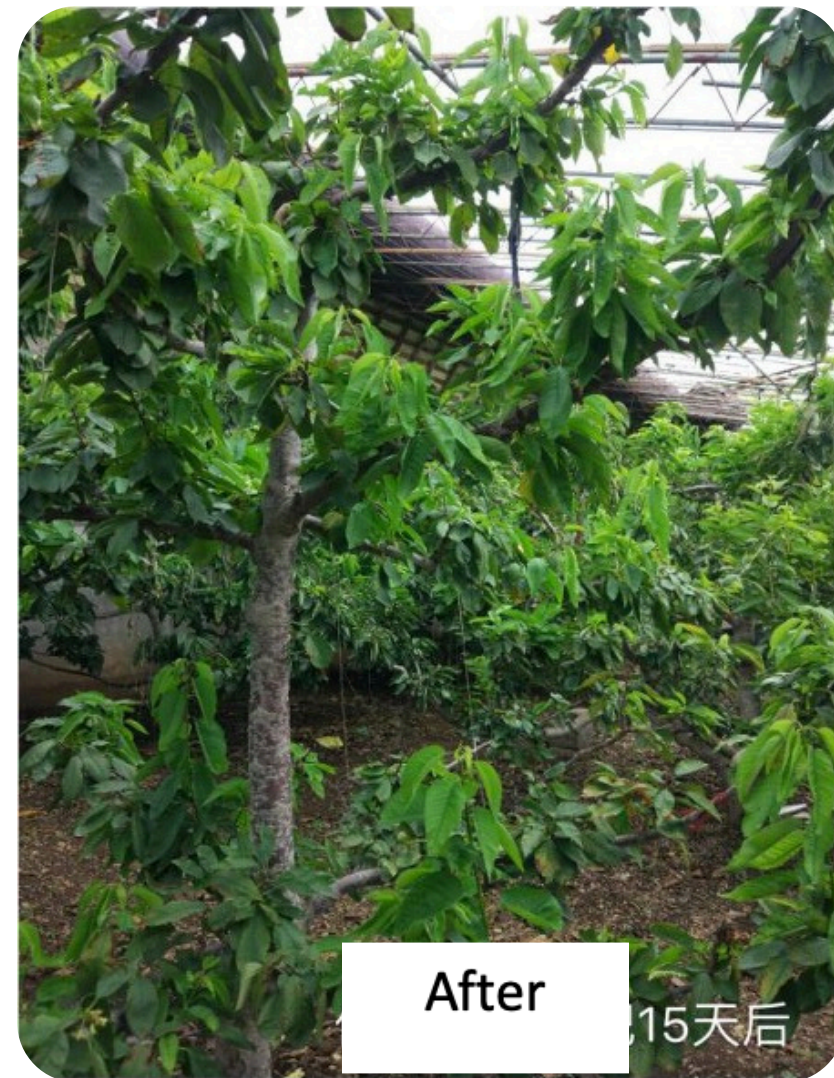
Location: Shanghai Jiading-Shanghai Jialv Garden Fruit and Vegetable Professional Cooperative

Crop: Hami melon



Experimental group	TUNDRR bamboo biochar composite microbial fertilizer 50kg/acre+carbon energy microbial agent 40kg/acre+topdressing;
Control group	500kg/acre of commercial biochar based microbial fertilizer+40kg/acre of compound fertilizer

Effect: The average plant height of the experimental group was 24.31% higher than that of the control group, and the soil pH value of the experimental group increased, the soil physical and chemical properties improved, and the problem of soil acidification was alleviated.



Location: Dalian, Liaoning Province Crop: Cherry

Fertilizer application: The tree body is affected by low temperature, and the yellow leaves and new branches have weak growth. Apply 5kg/plant of charcoal based microbial agent and 5kg/acre of plant enzyme per hole, followed by topdressing with a large amount of water-soluble elemental fertilizer.

Effect: The frozen trees resumed growth, with thick green leaves and significantly better fruit yield than conventional fertilization. In addition, the cherry fruits in the experimental group had good color, uniform size, and high quality, resulting in a significant increase in yield and income.





Location: Weifang, Shandong Province Crop: Ginger

Fertilizer Application: After crop rotation, 50kg/acre of bamboo charcoal soil remedial microbial agent was applied, along with conventional topdressing.

Effect: The ginger plants grew robust with lush, dark green leaves. The soil pH improved significantly, the incidence of diseases was greatly reduced, and the yield reached 32,000 jin/mu, a 10% increase compared to conventional methods.





Location: Shouguang, Shandong Province

Crop: Tomato

Fertilizer Application: Carbon-energy compound microbial fertilizer was applied as a base fertilizer at 80kg/acre before spring plowing, followed by thorough mixing and ridging.

Effect: After transplanting, the tomato seedlings showed a high survival rate, uniform growth, strong stress resistance, and rapid development of fibrous roots from the root system.

Experimental
group



Control
group



Experimental
group

Control
group



Location: Songjiang, Shanghai

Crop: Hang Bok Choy (Organically Grown)

Fertilizer Application: Experimental Group: 120 kg/acre of biochar-based fertilizer (inoculant).

Control Group: 500 kg/acre of commercial biochar based microbial fertilizer.

Effect: The use of biochar-based fertilizer in organic cultivation requires a lower application rate, saving labor. The experimental plot had significantly fewer weeds than the control plot, reducing weeding costs. Furthermore, the Hang Bok Choy exhibited uniform growth with no occurrence of seedling death or plant rot.

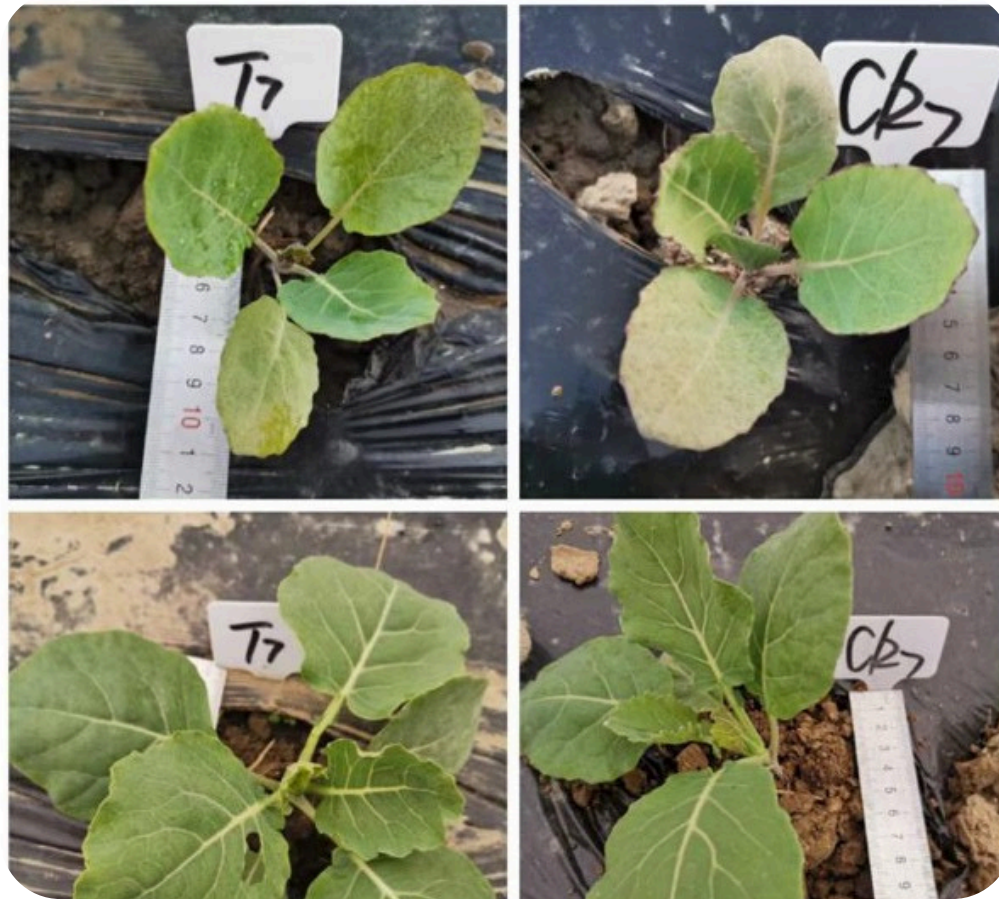


Location: Zhangjiagang City, Jiangsu Province

Crop: Lettuce

Fertilization: Before transplanting and tillage, 120 kg/mu of Bio-biochar based microbial fertilizer was applied per mu as base fertilizer, compared with conventional fertilization.

Effect: After 15 days of transplanting, the lettuce roots in the test area showed significantly more feeder roots than those in the conventional fertilization area. The overall growth was more uniform compared to the control group, with almost no seedling mortality or rot, demonstrating significant effects.

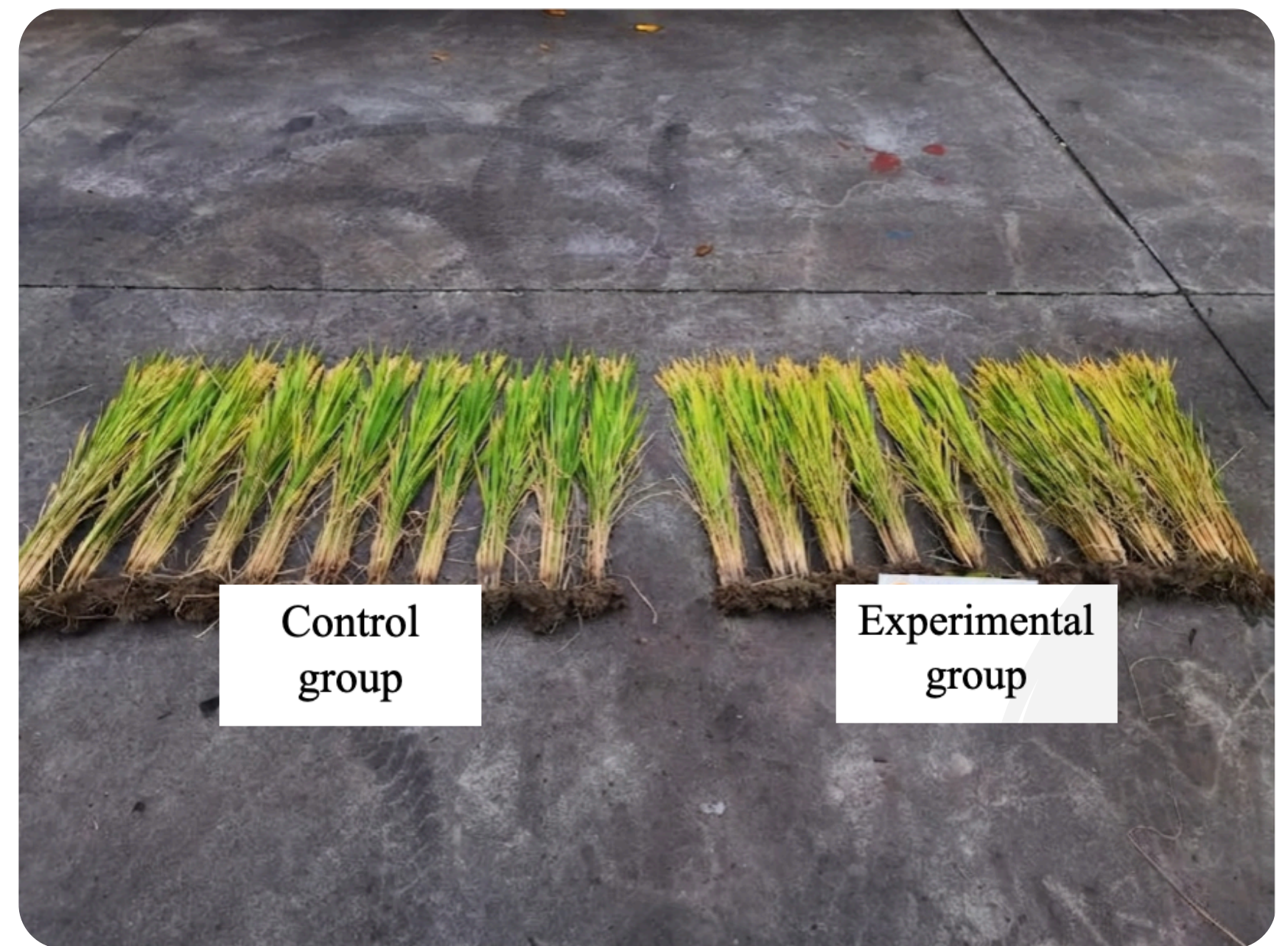


Location: Bengbu, Anhui Province

Crop: Cabbage

Fertilizer Application: Under open-field cultivation, 120 kg/acre of biochar-based fertilizer was applied, supplemented with plant enzyme flushes and 5 kg/acre per application of a balanced water-soluble fertilizer.

Effect: The cabbage in the plot treated with TUNDRR biochar based microbial fertilizer showed significantly better growth than in the conventionally fertilized plot. The leaves were dark green with an even, waxy bloom (white frost), and the root systems exhibited vigorous development with numerous fibrous roots.

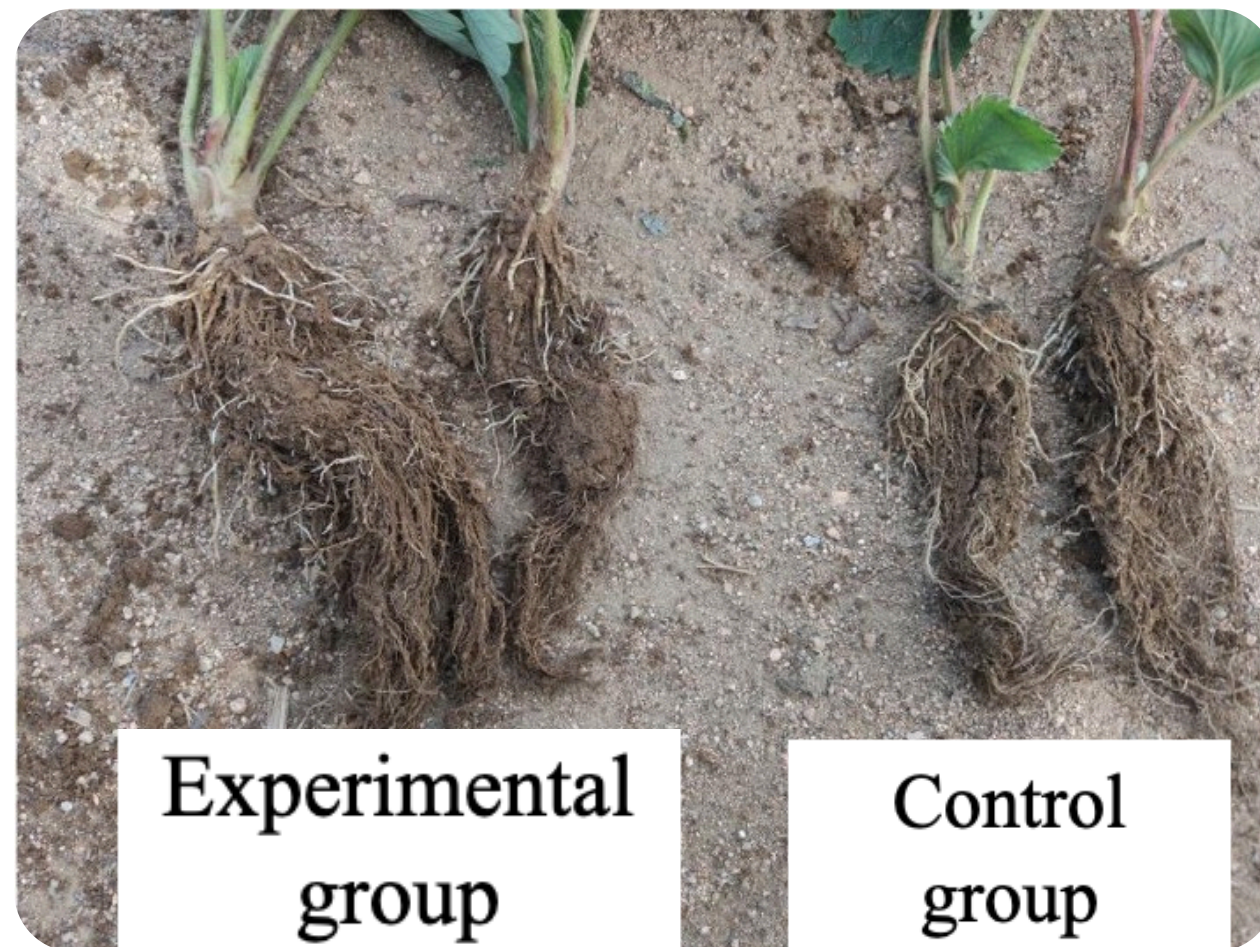
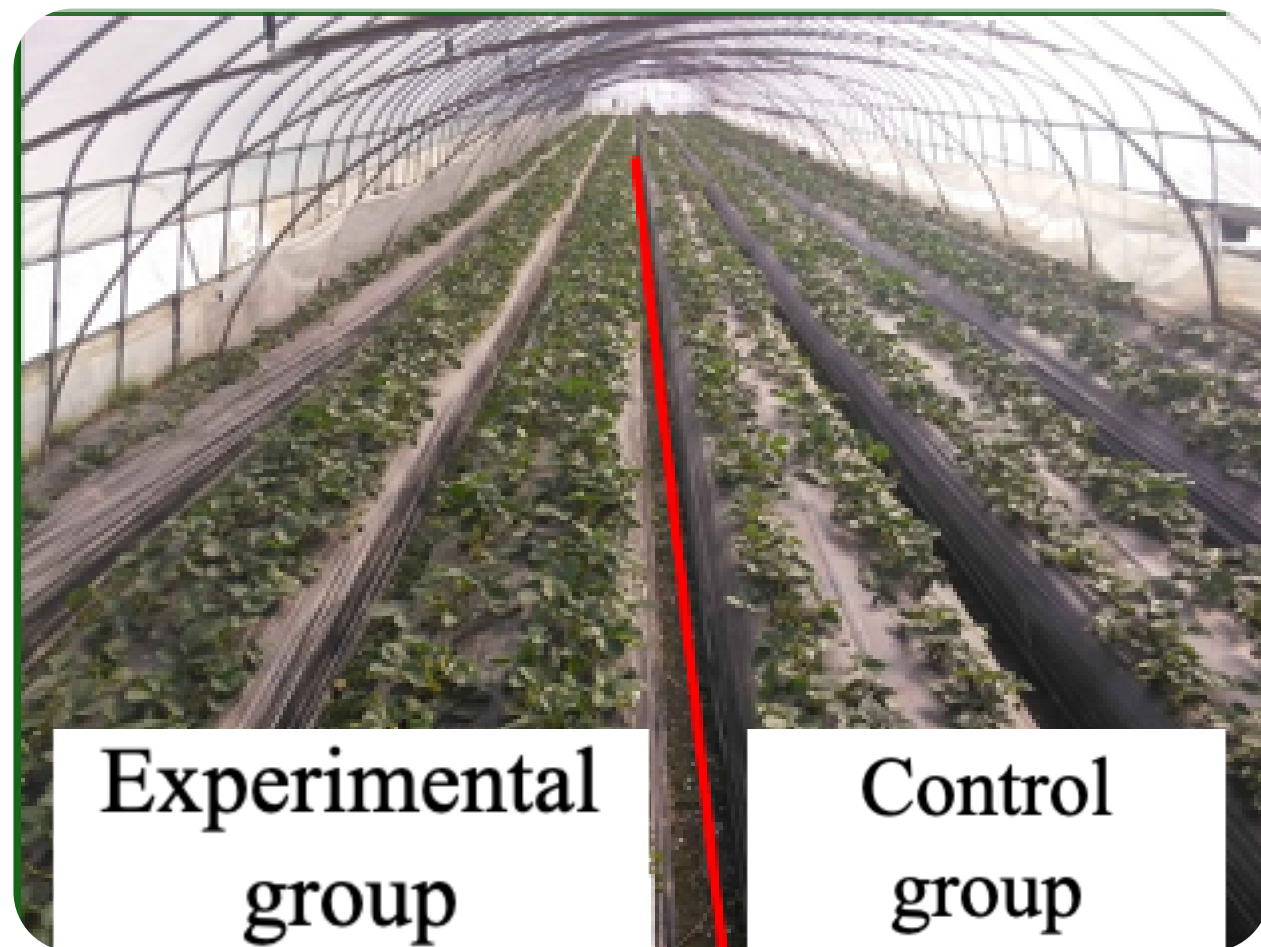


Location: Minhang District, Shanghai

Crop: Rice

Fertilization: 100 kg/acre of TUNDRR Biochar-based Fertilizer + 45 kg/acre of TUNDRR Compound Microbial Fertilizer + 10 kg of Urea.

Results: The application of TUNDRR biochar based microbial fertilizer effectively promoted the growth and development of rice, with some biological traits outperforming conventional fertilization. Although fertilizer input was reduced by 10.7% compared to conventional methods, the yield per mu showed no decrease.



Location: Jurong City, Jiangsu Province

Crop: Strawberry

Fertilization: 80 kg/acre of Biochar-based Microbial Inoculant as base fertilizer + TUNDRR Top-dressing Fertilizer Package

Effect: Strawberry plants exhibited faster growth and reduced seedling mortality; robust root system development; abundant flowering and fruit set, uniform berry size, rapid coloration, and high sugar content. The yield per mu increased by 15.6% compared to conventional fertilization, demonstrating significant yield improvement.



Location: Jiashan, Zhejiang province

Crop: Grape

Fertilizer Application: A basal fertilizer was applied in the autumn, consisting of 80 kg/acre of TUNDRR microbial inoculant, compound fertilizer, and the TUNDRR top-dressing fertilizer package.



Effect: Grape budbreak was uniform, and the new leaves were thick and glossy. During the fruit enlargement stage, the berries were uniform in size, colored quickly, and developed high sugar content with a good bloom (natural waxy coating). The grapes also demonstrated good storage quality.

Case Study on the Soil Improvement Effects of the Product



Reclaimed Land in Songjiang District, Shanghai

Soil Condition: Former hardened land reclaimed for farming, with poor physicochemical properties and low organic matter content.

Remediation Plan: Application of 200 kg/acre per crop of TUNDRR Biochar-based Soil Remediation Microbial Agent for two consecutive cropping seasons, supplemented with 5 kg/acre of plant-based enzyme fertilizer as top dressing.

Remediation Results: Soil physicochemical properties were gradually restored and stabilized; tomatoes grew vigorously with excellent quality, winning the "Best Sweetness Award" in Songjiang District.



Location: Songjiang District, Shanghai

Subject: Shanghai Dao Xiaoyan Fruits and Vegetables Professional Cooperative

Soil Condition:

After years of cultivation, the greenhouse soil has developed severe secondary salinization, leading to seedling death, plant rot, and low vegetable yields.

Remediation Plan: Application of TUNDRR bamboo charcoal soil conditioner at a rate of 240 kg/acre.

Remediation Effects:

The issue of seedling death in cherry tomatoes was alleviated. The plots treated with the soil conditioner showed vigorous tomato growth, increased yield, and improved quality.



Location: Chongming, Shanghai

Soil Condition: Saline-alkali soil in greenhouse-protected land within a coastal area.

Remediation Plan: Application of TUNDRR soil remedial microbial inoculant at 120 kg/acre combined with biochar at 40 kg/acre.



Remediation Effects: Through three consecutive years of trials (involving bok choy, watermelon, and chili pepper), the total soil salt content decreased from 1.48 g/kg to 0.74 g/kg, marking a 50% reduction. The soil alkalinity dropped from 17.09% to 12.75%, a decrease of 4.34 percentage points.



Location: Huishan, Wuxi, Jiangsu Province

Project: Pilot Project for Safe Utilization and Remediation of Agricultural Land

Soil Condition: Cadmium contamination in paddy fields caused by the back-irrigation of river dredging sediments.

Remediation Plan:

Application of TUNDRR Bamboo Charcoal Soil Conditioner + Biochar + Conventional Fertilization.

Remediation effect: The available cadmium content in paddy fields decreased by 21.4%.

Remediation Plan:

Application of Carbon-based Microbial Inoculant + Biochar + Conventional Fertilization.

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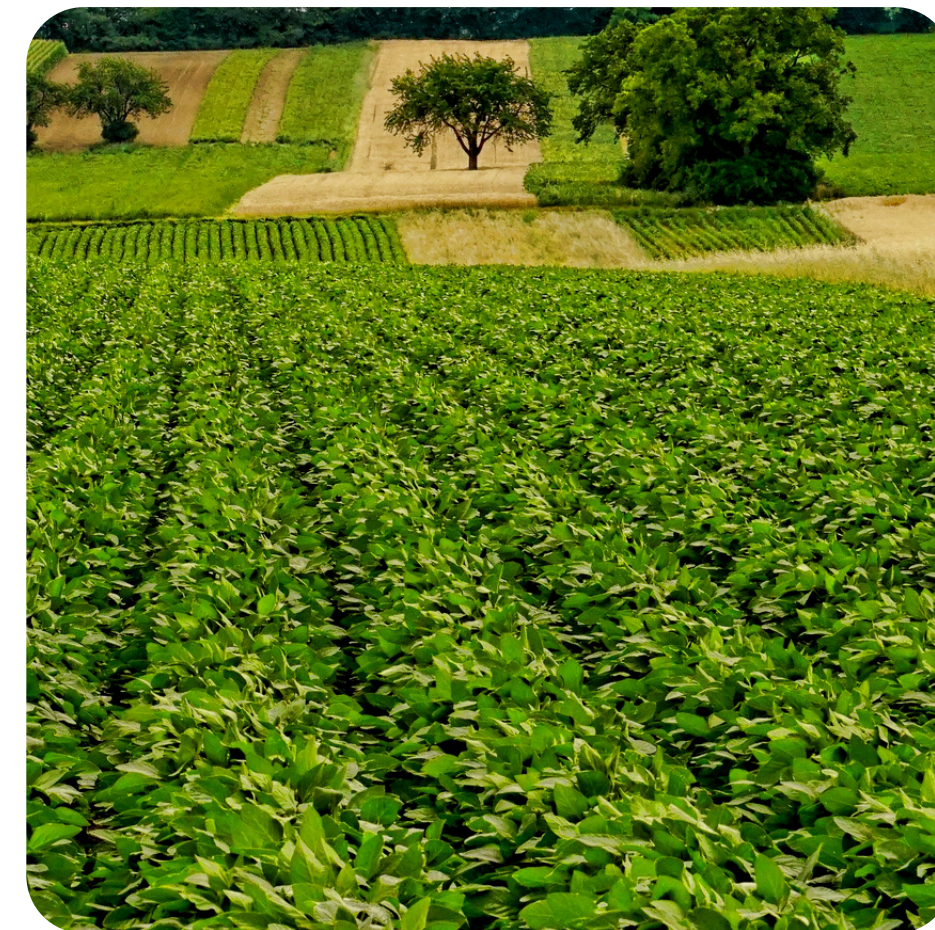


What If The Agricultural Products You Grow Could Become Financial Assets?

Our soil amendments and carbon-based fertilizers help farmers build:

Better Soil → Better Crops → Better Quality → Higher Yield

But the opportunity can go further.





From Agricultural Products to Financial Assets

By combining agricultural improvement with RWA solutions, we help explore new ways to transform high-quality agricultural output into real-world asset value — creating new possibilities for financing, capital access, and monetization.



What Could RWA Mean for Farmers?

01 | Unlock Asset Value Earlier

Explore ways to unlock part of the value of future agricultural output before traditional harvest sales.



02 | Create New Financing Opportunities

Turn productive agricultural assets into a potential new source of capital.

03 | Connect with Global Capital

Create opportunities for qualified agricultural assets to connect with international investors and capital markets.



What Could RWA Mean for Farmers?



04 | Diversify Revenue & Monetization

Move beyond simply growing and selling — and explore additional ways to capture value from agricultural assets.



05 | Make Better Agriculture More Valuable

Higher quality, stronger yields, and healthier soil can create a stronger foundation for long-term asset value.

TUNDRR | FROM SOIL TO ASSET VALUE

We don't just improve the soil.

We help unlock the value behind what you grow.

Better Agriculture. Better Assets. More Ways to Create Value.



THANKS