
SSF Quantum Technology

"Digital fertilizers" and remote control of plant growth

Emergency response to the global fertilizer crisis

A strategic proposal for government and agribusiness

April 2026



The principal provisions

The global agricultural sector is facing an unprecedented crisis. Escalating tensions in the Middle East have led to severe shortages of fertilizers, soaring prices, and disruptions in shipments through the Strait of Hormuz. Traditional NPK fertilizers are becoming increasingly scarce and constantly increasing in price, which threatens food security worldwide.

SSF Technology is an immediate, proven solution

SSF (Signal of Special Form) is a technology for remote quantum effects on seeds, plants, soil or fertilizers. It does not require the introduction of additional chemicals, mechanical processing of fields or the presence of machinery. Instead, a special signal (SSF signal) triggers internal processes in biological and chemical systems that make plants more efficient at absorbing nutrients, and fertilizers more active.

Simply put, it's like "tuning" a plant and soil to maximize productivity without additional tons of fertilizers.

How to use it on the farm? Two options:

Option A. Strengthening of existing fertilizers

Using our technological solution, we remotely process the existing stock of NPK fertilizers (for example, in a warehouse) with an SSF signal.

The result: The effectiveness of fertilizers increases by at least 30%, which allows you to get the same yield with a smaller amount of application or compensate for the shortage.

Option B. Direct field cultivation (without fertilizers)

You transmit the coordinates and the area of the fields (from 100,000 hectares to several million). With our technological solution, we remotely send an SSF signal to the field and activate our own soil and plant resources.

The result: A 25-50% increase in yields, even in the complete absence of traditional fertilizers.

Both options do not require field trips, mechanization, logistics, or fuel consumption. Everything happens **remotely for 72 hours**.

SSF technology allows you to:

- **Do not depend on supplies** — you can work without fertilizers at all.
- **Save budget** — the cost of processing is ~\$50/ha, which is significantly lower than the current market prices for NPK, including shipping.
- **Handle millions of hectares instantly** — no need for spreaders, warehouses, transportation.
- **Save the harvest** — even if the season has already begun, processing is possible at any phase of the growing season.

Critical situation:

Due to the crisis in the Gulf of Hormuz and the general logistical collapse:

The current geopolitical climate has created "ideal" conditions for a global agricultural crisis:

1. **Fertilizer shortage:** Due to supply chain disruptions, traditional NPK fertilizers are becoming increasingly unavailable.
2. **Sharp rise in prices:** The cost of fertilizers has increased dramatically, making traditional agriculture economically unviable.
3. **Logistical collapse:** The situation in the Strait of Hormuz has seriously affected the transportation of raw materials.
4. **The sowing season** is in danger of disruption: immediate action is needed to prevent catastrophic crop failures.
5. **The possibilities for taking action are closing.** Without intervention, food security will be compromised at the national and regional levels.

The SSF solution. How SSF technology works:

- Any system (seed, plant cell, soil-microorganisms complex) has its own **resonant frequencies and internal energy flows**.
- The SSF signal is individually tailored to the task (for example, activation of nitrogen metabolism or improvement of germination). It contains a strictly defined time and phase structure.
- This weak signal does not contribute energy to the system, but **synchronizes its internal processes**, reducing "chaos" and directing resources to the growth, development and assimilation of nutrients.
- As a result, the system transitions to a **low-entropy (more orderly) state**, which is manifested in accelerated germination, increased biomass, and improved absorption of NPK from the soil or fertilizers.

Comparison with a phenomenon understandable to agronomists:

This is similar to the lunar-solar cycles or biorhythms that affect plants, but only the signal is created artificially and purposefully, with precise "tuning" to a specific crop and climatic conditions.

What do SSF signals do for a real agricultural site and plants?

The technology has been tested for **9 years in 25 countries**. The main practical effects confirmed by universities and SGS:

Effect	Examples from the trials
Increased germination	+14% (sunflower, Israel), +30% (South Africa), up to +500% at low baseline (eggplant, Turkey)
Increased Germination Energy (SVI)	+20% ... +58% (Nigeria, Libya)
Increased field yields	+27% (wheat, Spain), +33% (corn, Uganda), +37% (sunflower, Ukraine)
Saving fertilizers	The same yield with a 50% decrease in NPK (corn, Italy), or +13% yield with a 25% decrease in NPK (rice, Colombia)
Quality improvement	+4% protein in wheat (Canada), record polyphenol content in olives (Italy)
Stress tolerance	+10% of rice harvest in severe drought (Thailand)
Increasing phosphorus availability	+60% phosphorus absorption from the soil (SGS, USA)

Key performance indicators (crop examples):

Agricultural culture	Country	Increasing harvest
Corn	Uganda	by 33%
Rice	Thailand, Colombia	by 13-27%
Wheat	Kazakhstan, Spain	by 27-34%
Sunflower	Ukraine	by 37%
Legumes	Zimbabwe	by 88.9%
Germination	Several countries	by 500%
Coffee beans	Vietnam	We got 80.25 points compared to 77.83 points for the control sample.
Fodder grasses (alfalfa, clover, etc.)	Pastures for grazing Cattle, sheep	by 38%-54% of the biomass volume +accelerated growth

Independent verification:

- SGS in North America confirmed an increase in phosphorus uptake by ~60%
- Discovery Seed Labs (Canada) has confirmed the effectiveness of fertilizers without fertilizers
- Leading agricultural universities on 4 continents
- Government research institutes in the field of agriculture

Implementation and Pricing:

Rapid deployment:

1. **Contractual agreement:** The terms are agreed upon within 48 hours
2. **Coordinate determination:** The coordinates of the target area are specified
3. **Signal activation:** The SSF signal will be transmitted within 72 hours
4. **Immediate availability:** No dependence on the supply chain
5. **Guaranteed results:** confirmed by 9 years of data
6. **Cost savings of 50-80%** compared to traditional fertilizers
7. **Scale capability:** from 100,000 hectares to national scale operations
8. **Monitoring and Support:** Continuous performance monitoring

Competitive prices:

Service	Basic price	The first contract (70% discount)
Tillage (per hectare), at least 10,000 hectares	\$50	\$15
Application of fertilizers (per ton), not less than 1000 tons	\$50	\$15

Special offer:

Customers who sign contracts for the first time receive a discount of up to 70% on their initial contracts. This is an unprecedented opportunity to ensure your harvest at minimal cost.

Summary for decision-making

SSF technology is a ready-made tool for rapid response to the fertilizer crisis. It allows you to remotely increase yields by 25-50% in 72 hours, reduce the need for NPK fertilizers by 30-50%, and at the same time it is cheaper than traditional chemicals. The results have been proven in fields from Uganda to Canada, from Thailand to Italy.

Contact us today to discuss your specific requirements and secure the future of your agriculture. Our team is ready to activate SSF signals for your lands within 72 hours after the conclusion of the contract.

To carry out work on processing the SSF signal, it is enough to coordinate the area and coordinates. Field trips are not required.

Appendix: Scientific description of the technology and publications on the topic

Scientific description of SSF (Signal of Special Form) technology:

SSF technology is an engineering and technical solution to the selective resonance control of internal degrees of freedom of material systems. It is based on the generation of special-form signals (SSF) with a unique temporal, spectral, and phase structure, which makes it possible to initiate transitions between dynamic modes of complex media — condensed, biological, and crystalline structures.

The physical basis:

The effect of SSF is based on the principles of coherent control, nonlinear spectroscopy, and dynamics of open quantum systems. The key factors are the phase conditions of the excitation, the spectral structure of the signals and the resonant synchronization of the collective modes of the system. This approach makes it possible to enhance desired processes, suppress chaotic fluctuations, and change the efficiency of internal interactions without violating the fundamental laws of thermodynamics and energy conservation.

Concept and know-how:

The SSF signal is a weak control effect that is not associated with the transmission of significant energy flows. Its effectiveness is determined by the environmental parameters, the presence of resonant modes, the noise level and the exposure time. The technology uses the hypothesis of the sensitivity of collective processes in complex systems to phase influences at the microlevel, which may include quantum correlations, but specific mechanisms require further clarifying research.

Engineering implementation and experience:

Over the past 30 years, the authors and developers of SSF technology have focused their resources exclusively on the engineering implementation of the technology, which has allowed for repeatable and scalable practical results in various countries and commercial applications. The MediaSSF software platform uses adaptive algorithms to calculate the topological code of a signal based on mathematical models of quantum electrodynamics, and also implements quantum synchronization and high-frequency modulated fields to minimize entropy losses and increase exposure selectivity.

Practical effects:

In applied tests, an increase in the efficiency of biological processes, an improvement in plant growth characteristics and an optimization of the use of agricultural resources have been recorded. These effects are interpreted as the result of transferring the system to a low-entropy state due to the resonant control of internal energy flows.

Application solution:

SSF technology, including the MediaSSF software platform, is an applied engineering implementation of the concepts of resonance control of complex systems. The approach of the authors and developers of SSF technology to the implementation of the physical impact model corresponds to modern trends in physics of coherent processes, nonlinear dynamics and quantum thermodynamics, but with elements of "Know-how".

Below we provide links to open sources of information on this topic and the application of SSF agricultural signals in Africa.

Optima Quanta: Empowering African Farmers with Innovation and Assurance

NOVEMBER 4, 2024

<https://farmersreviewafrica.com/optima-quanta-empowering-african-farmers-with-innovation-and-assurance/>

Researchers discover a new type of quantum entanglement - Israel Institute of Technology

APRIL 11, 2025

<https://phys.org/news/2025-04-quantum-entanglement.html>

Quantum entanglement experiment aboard ISS tests it over longest distance yet

APRIL 9, 2013

<https://www.zmescience.com/science/physics/quantum-entanglement-experiment-international-space-station-0613564/>

Quantum Goes the Distance

U.S. research team expands quantum network with successful long-distance entanglement experiment

APRIL 8, 2019

<https://www.bnl.gov/newsroom/news.php?a=214491>

How to use entanglement for long-distance or free-space quantum communication

DECEMBER 16, 2019

<https://phys.org/news/2019-12-entanglement-long-distance-free-space-quantum.html>

Researchers Achieve Long-Distance Teleportation and Quantum Entanglement With Twisted Photons

Two quantum leaps in quantum communication

09 NOV 2015

<https://spectrum.ieee.org/researchers-achieve-teleportation-over-134-km-and-entanglement-at-multiple-quantum-levels-with-twisted-photons>

Quantum Entanglement and Information

FIRST PUBLISHED MON AUG 13, 2001; SUBSTANTIVE REVISION TUE MAY 2, 2023

<https://plato.stanford.edu/entries/qt-entangle/>

Quantum SSF Technology

Digital Fertilizer for the Modern Age

9 Years | 25 Countries | Proven Results

To invite further cooperation, please contact our local representative.:
