

Fertilizer Micro-Dosing to Enhance Yield and Use Efficiency

Small Doses, Big Yields



Fertilizer micro-dosing by hand

The Fertilizer Micro-Dosing for Enhanced Yield and Efficiency Technology is a practice that involves applying small amounts of fertilizer in shallow holes at the base of each plant. This precise method is low-risk, affordable, and efficient.



This technology is **TAAT1 validated**.



Scaling readiness: idea maturity
8/9; level of use 7/9

Gender assessment



Climate impact



Problem

- Nutrient deficiencies in millet and sorghum
- Inefficient and risky fertilizer application methods
- Insufficient nutrient replenishment and gradual soil fertility decline
- Crop failure risk due to drought discouraging fertilizer investment

Solution

- Addressing nutrient deficiencies in millet and sorghum
- Providing a low-risk and precise fertilizer application method
- Fostering rapid crop growth

Cost: \$\$\$

43 USD

Opportunity cost per Ha

ROI: \$\$\$

15–28 %

Increase in yield



Trademark



INTERNATIONAL CROPS RESEARCH
INSTITUTE FOR THE SEMI-ARID TROPICS

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Research Institute for the
Semi-Arid Tropics (ICRISAT)**
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Technology originally documented by

ProPAS

Commodities

Sorghum/Millet

Sustainable Development Goals



Categories

Production, Practices, Soil fertility,
Yield improvement

Best used with

- [Millet and Sorghum Varieties for Better Nutrition and Stress Resistance >](#)
- [Dual-purpose Varieties for Crop and Livestock Integration >](#)
- [Proactive Management of Striga Infestation >](#)

Tested/adopted in



Where it can be used

This technology can be used in the colored agro-ecological zones.



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<https://e-catalogs.taat-africa.org/org/technologies/fertilizer-micro-dosing-to-enhance-yield-and-use-efficiency>

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