Soybean Compact Technologies Toolkit

1 TECHNOLOGIES | CREATED ON AUG 22, 2025 BY TAAT PROFILING TEAM | LAST UPDATED AUG 22, 2025

TECHNOLOGIES IN THIS TOOLKIT

- **NoduMax**: Inoculant for Soybeans

https://taat.africa/muy

NoduMax: Inoculant for Soybeans

Advanced Soybean Inoculation Solution for Sustainable Agriculture

This technology is a solid inoculant, which contains the industry-standard strain USDA 110 and includes a gum Arabic adhesive and user instructions. It is packed in 100 g packets sufficient for 10 to 15 kg soybean seed.

International Institute of Tropical Agriculture (IITA)
David Ojo

This technology is TAAT1 validated.

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

Gender assessment 4

Climate impact 7

Problem

- Poor Root Nodulation and Low Biological Nitrogen Fixation (BNF) in Soybeans
- Lack of Quality Inoculant in the Market
- Limited Access to Affordable Inoculants in African Countries
- Complex Application Procedures
- Lack of Protein Sufficiency and Soil Fertility in Soybean Production
- Clumping in Alternative Inoculation Methods

Solution

- Promotes biological nitrogen fixation, reducing the need for expensive nitrogen fertilizers.
- Ensures the presence of symbiotic rhizobium bacteria, optimizing root nodulation for improved nutrient absorption.
- Enhances BNF, thereby boosting soil fertility and reducing reliance on synthetic fertilizers.
- Promotes natural nutrient cycling in the soil, contributing to sustainable agricultural practices.

Key points to design your project

- Implementation steps for the technology include assessing product quantities, considering delivery costs, and engaging trainers for installation support.
- Communication support, such as flyers, videos, and radio broadcasts, should be developed to promote the technology.
- For improved maize variety optimization, companion planting with resistant soybean varieties and proper nutrient fertilization is recommended.
- Collaboration with agricultural development institutes and agro-dealers facilitates successful technology implementation.

Cost: $$$ **3.20 USD**
For the purchase of 100g

ROI: $$$ **1 USD**
Profit per unit for retailers

150,000 USD
To build the NoduMax factory

120,000 USD
To equip the NoduMax factory

IP
Unknown

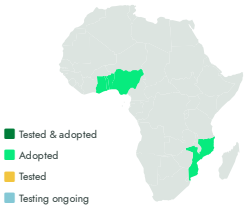
Technology from
ProPAS

Commodities
Soybean

Sustainable Development Goals

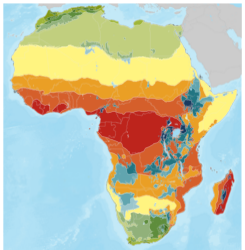
Categories
Inputs, Inoculant

Tested/adopted in



Where it can be used

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



Target groups
Farmers

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ABOUT US

TAAT

TAAT, Technologies for African Agricultural Transformation, is an African Development Bank initiative to boost agricultural productivity by rapidly rolling out proven technologies to more than 40 million smallholder farmers.

TAAT aims to double crop, livestock, and fish productivity by 2025 by engaging both public and private sectors to expand access to productivity-increasing technologies across the continent.TAAT advises African government who receive funding from international financial institutions such as the African Development Bank to help them integrate the best agricultural technologies in their development projects. TAAT also offers technical assistance for the integration of these technologies, when needed.

TAAT Technologies

TAAT definition of agricultural technologies is very broad: they include improved varieties, inputs, equipment, agricultural infrastructure, practices and agricultural policies. In short, any solution to an agricultural constraint. TAAT technologies have been developed by a wide variety of organizations: the CGIAR, other international research institutions, national research organizations, or the private sector.

TAAT Clearinghouse

Within TAAT, the Clearinghouse has the remit to select, profile and validate agricultural technologies, and showcase them in online catalogs to support the advisory role that the Clearinghouse offers to governments and the private sector. The Clearinghouse strives to be an 'honest broker' of technologies through its selection, profiling, validation and advice.

TAAT e-catalogs

The e-catalogs are designed to be used by decision-makers within governments, private sector companies or development organizations. They facilitate the search for appropriate solutions that are adapted to local conditions and requirements, and provide all necessary information, presented in jargon-free and easy to analyze technology profiles. Once a decision-maker has selected a technology of interest, the e-catalogs facilitate their direct contact with those who can help them implement the technology, whether they are a research group or a private company.

TAAT Technology Toolkits

Technology toolkits are hand-picked selections of technologies from the TAAT e-catalogs. We offer some curated toolkits for specific cases, and registered users can create their own toolkits, showcasing their selection of technologies. Toolkits can be used online and shared as links, as mini e-catalogs, they can also be downloaded, saved, shared or printed as collections of technology pitches in PDF format (pitches are one-page summaries of technology profiles, available for all technologies on the e-catalogs).

CONTACT

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TAAT is funded by the African Development Bank, the TAAT Clearinghouse is co-funded by the Bill and Melinda Gates Foundation and the African Development Bank.