

Benefits

For the soil:

- Maintains soil nitrogen levels
- Promotes growth of other useful microorganisms
- Provides increased soil organic matter
- Can help control striga

For the yield:

- Can improve yield by 50%
- Improves protein quality of crops

For economic value

- It is 20 times cheaper than ordinary nitrogen fertilizer
- The small sachet are very easy to transport

Target crops



Information for suppliers and retailers

Quality of inoculant

- Strain should be efficient for target crops.
- Ensure good quality carrier material, free from microbial contamination
- Adequate number of efficient and viable bacteria cells

Handling and storage

- Transport and store at correct temperatures ie. 10°C-28°C
- Do not expose to direct sunlight
- Do not transport or store together with chemicals
- Do not stock longer than the expiry date.

Rhizobia-based fertilizer is currently produced at Makerere University

For more information, contact your nearest Community Based Facilitator or Africa 2000 Network (A2N) regional office.
A2N-Uganda,
P.O. Box 21990 Kampala
Tel. 031263218/9 or 0414541571
www.a2n-uganda.org



Africa 2000 Network-Uganda

Rhizobia-based bio-fertilizer

Guidelines for extension staff



AFRICA
soil health
consortium

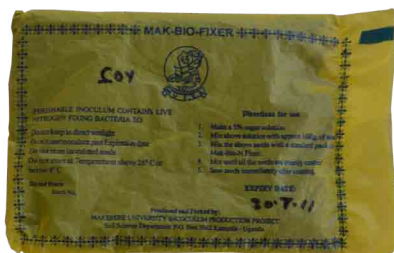


What is bio-fertilizer?

An organic fertilizer containing living cells that help plants uptake of nutrients when applied to seed or soil.

Rhizobia-based bio-fertilizer contains symbiotic bacteria capable of invading and eliciting root or stem nodules on leguminous crops to convert atmospheric nitrogen, into ammonia in plant roots.

For rhizobia-based fertilizer to be effective in legumes, phosphate fertilizers are needed.

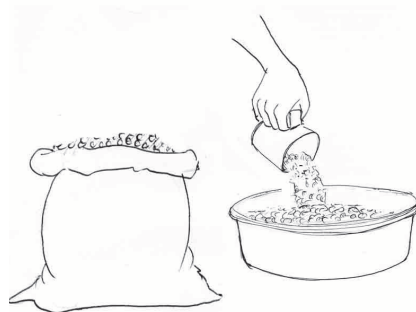


Example of inoculant available in Uganda, from Makerere University, Kampala

How to apply

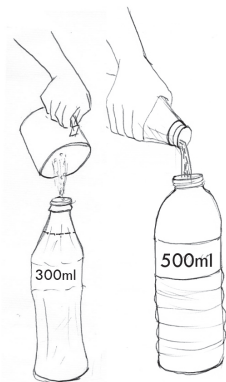
Step 1:

Prepare 16kg of clean seed, enough for 1 acre.



Step 2:

Pour 300ml of clean lukewarm water into a 500ml bottle.



Step 3:

Add 2 tablespoons of sugar to the water and mix thoroughly.



Step 4:

Add the sugar solution to the prepared seed and mix evenly.



Step 5:

Shake the sachet of inoculum to break clods. Open sachet under shade and pour into the prepared seed in a basin.



Step 6:

Mix the seed and inoculant and slowly shake until seeds are uniformly coated. Be careful not to split or peel the outer coat of seeds.

Step 7:

Plant all the coated seed immediately after inoculation.

Repeat the same process until the field is planted.