भाकृअनुप
ICAR

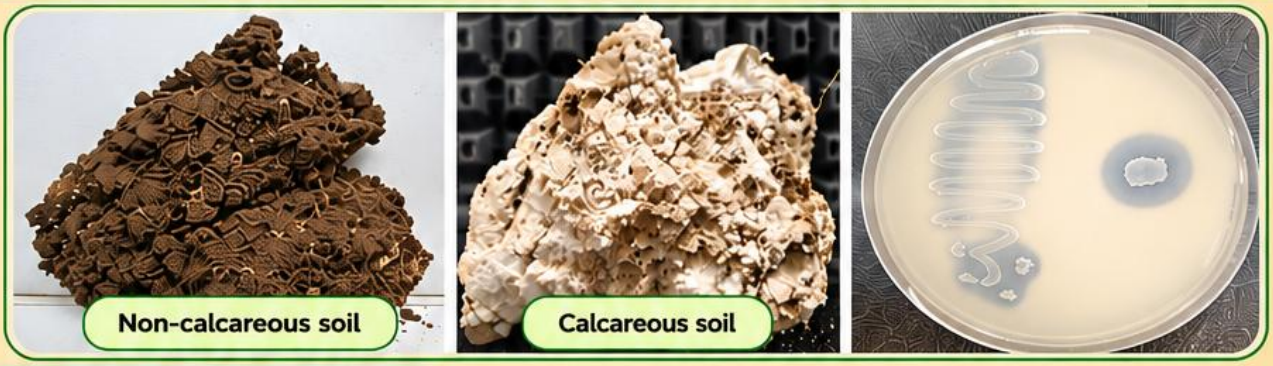
भा.कु.अ.प. - केंद्रीय कपास अनुसंधान संस्थान, नागपुर
ICAR- Central Institute for Cotton Research (CICR)

ICAR-CICR INVITES expression of interest (EOI) for
TECHNOLOGY TRANSFER /COMMERCIALIZATION

(EOI No.: ICAR-CICR/ITMU/Bacterial consortia for alleviation of soil calcareousness/Commercialization/2026-27)

Applications for Expression of Interest (EOI) are invited by ICAR – Central Institute for Cotton Research (CICR), Nagpur for the purpose of Technology Transfer/ commercialization **(Non-exclusive basis)** of the below-mentioned patented technology from the organizations/Industries/Companies/Individuals with relevant experience.

"Bacterial consortia for alleviating soil calcareousness to enhance soil/cotton productivity"



Technology background

- Calcareousness of soils is caused by the presence of both pedogenic and non-pedogenic $CaCO_3$, but the pedogenic formation of $CaCO_3$ affects soil health and crop productivity, apart from inducing soil sodicity and soil degradation.
- Pedogenic $CaCO_3$ causes, poor drainage, low infiltration rate, waterlogging, nutrient deficiency. Alkaline sodic soils cover approximately 60% of India's cropping regions.
- Though, amelioration of sodic soils with gypsum will provide calcium to displace sodium, repeated application of Gypsum salt may affect soil functions and environment.
- ICAR-CICR have developed an ecofriendly bacterial consortia, which solubilizes pedogenic $CaCO_3$, and alleviates soil calcareousness, and enhances soil health crop productivity.

Potential benefits of ICAR-CICR Bacterial Formulations:

- Enhanced water-soluble (40%), exchangeable calcium (12%), and reduced carbonate-bound calcium (14%) in calcareous soils.
- Enhanced SOC (24%), N (20%), P (55%), K (15%), S (27%) and Ca (11%) in calcareous soil, while, it decreased soil pH, sodium and $CaCO_3$ content.
- Enhanced plant growth, root attributes, soil biological quality and yield (25%) based on 2-year Multi-locationally validated in 5 ICAR-AICRP Cotton centres.

Contact details:

The Director
ICAR- Central Institute for Cotton Research (CICR)
Panjari Farm (Near Le Meridien Hotel), Wardha Road, Nagpur – 441108, Maharashtra

https://cicr.org.in/ | cicrnagpur@gmail.com, itmucicrngp@gmail.com | velicar@gmail.com | Telephone no. : 07103-275536, 07103-275529 Mobile: 9767821345