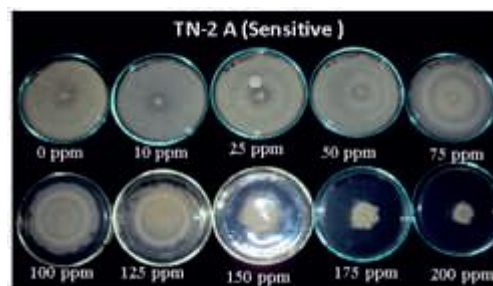


Shatpada Carbenderma - Bioformulation of carbendazim tolerant *Trichoderma harzianum* for biological management of plant diseases

- **Brand Name:** Shatpada Carbenderma
- **Microbial Constituent:** *Trichoderma harzianum* (ICAR-NBAIRGJ16B)
- **Microbial Culture and accession number:** *Trichoderma harzianum* ICAR-NBAIRGJ16B.
- **Formulation type:** Powder formulation 1×10^9 cfu/ml IU/mg
- **Target pest and crop:** Soil borne diseases of groundnut and sorghum.
- **Method of application:** 10g per Kg of seed. Treat before sowing. Foliar spray @ 1 Kg per acre. Coat the seeds with 1% carboxy methyl cellulose/gum arabic solution before adding powder formulation.
- **Dosage of application:** 10g per Kg of seed. Foliar spray @ 1 Kg per acre mixed in required quantity of water. Can be applied with fungicides.
- **Target states:** Karnataka, Tamil Nadu, Gujarat
- **Benefits:** Carbendazim tolerance is upto 500 ppm and has good biocontrol potential against soil borne pathogens that has been verified by pot and field experiments with groundnut and sorghum. There is no carbendazim tolerant formulation of *Trichoderma* available in the market. Besides carbendazim tolerance, it is tolerant to Carboxin, Oxycarboxin and Imidacloprid which are commonly used seed treatment chemicals.



- **Commercialization of technology:** Toxicological data required for CIB&RC registration is available
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