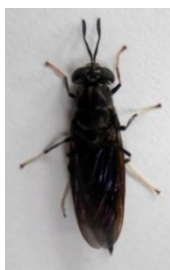


Waste to wealth: Technology on Black Soldier Fly mediated bioconversion of farm and kitchen wastes



BSF adult fly



Mating of BSF



BSF larvae



BSF pupae



BSF compos

- **Brand Name:** Shatpada-Organic waste bio-converter
- **Insect germplasm registration:** Black soldier fly (*Hermetia illucens* L.) is registered under Arthropod Germplasm Information System (AGIS), ICAR-NBAIR, with scientific name, Institute Accession No. IS-STR-01 and National Accession No. NBAIR-IS-STR-01. NCBI GenBank accession number MG682545
- **Target industries/customers:** Poultry sector/ Fish Farming Sectors/ Farmers/ Contract farming companies/ Farmer's federations/Groups/ Municipalities / Panchayats
- **Production method:** The black soldier fly (BSF), *Hermetia illucens* (L.) (Stratiomyidae: Diptera) is mainly a tropical detritivorous insect and the larval stages of the insect are useful in converting solid organic waste into compost, thereby reducing the quantity of the organic waste. The BSF pre-pupae are also used as a valuable nutrient additive in poultry feed and fish meal. In this technology rearing method and structure for rearing BSF larvae were standardized and developed. The present technology employing the larvae of Black Soldier Fly (BSF) is a simple bioconversion process that affects a 70-85% reduction in the weight and volume of organic wastes within a matter of few days. This process does not require energy and electricity, is self-contained, and does not produce methane or any other greenhouse gases. The process does not require the introduction of any foreign or exotic material. The BSF larvae feed voraciously on the organic solid waste and convert it into manure in 13-18 days. The larvae are the primary output of the solid waste conversion and the weight of the prepupae for a meal could be around 20kg / 100 kg solid waste conversion.
- **Validation:** Mass rearing of BSF is validated at institute level.
- **Benefits:**
 - **Biomass conversion:** Biomass reduction of organic wastes of 50-95% is reported with this technology
- **Commercialization of technology:** Technology has been approved for commercialization.
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