

**Bio-innovations and Bioproducts developed by the
Department of Biotechnology faculty members and scholars
for Industrial Scale Production
(2019-2024)**

S. No.	Product Name	Analysis done	Viability of the product
1.	Nanobiofertilizer Production and Commercialization	All parameters tested to check the quality of suitable biofertilizers. Nanocellulose was characterized and utilized for making formulation of biofertilizers to enhance the shelf life and maintain the cell viability and quality of biofertilizers	It is very demanding product and CAGR is high. Having great potential to earn higher revenue and profit margin.
2.	Microbial Decomposer for fast conversion of agrowaste biomass in Compost for mushroom production	Microbial decomposer is designed with 15 bacterial cultures isolated based on metagenomic studies. All culture were evaluated for their potential to decompose the agrowaste material by employing various mechanisms	Product could be very demanding for mushroom growers and reducing the load of spent mushroom substrate.
3.	Biodetergent: An alternate of Chemical based detergent	This product is prepared by enzymes, biodegradable chemicals. (Testing undergoing)	The market of biodetergent is huge. The quality biodetergent is in highly demand. Our biodeternt is prepared by adding enzymes we produced in our own facility and biodegradable chemicals.
4.	Mycoherbicide for controlling weed	It is developed by our own R&D. We are utilizing mycoherbicidal biochemicals	Efficient and safe. Avoids the introduction of toxic chemicals into the environment

		extracted from selected fungi	
5.	Virokil	Antiviral, Anti-cancerous, & Immunity Booster, (Cordyceps Mushroom Product)	It is very effective to boost our innate immunity and protect us from viral infections prominently.
6.	Mother Tincer (Alcohol Based)	Immune Booster (Cordyceps Mushroom Product)	It is very effective to boost our innate immunity and protect us from viral infections prominently.
7.	Cordy Tea	Immune Booster (Formulations of mushrooms and herbs)	It is very effective to boost our innate immunity and protect us from viral infections prominently.
8.	Mycoprotein	Immune and Strength Booster (Formulations of mushrooms and herbs)	It is very effective to boost our innate immunity, body strength and vital functions of the body.
9.	<i>Cordyceps militaris</i> based Herbal Formulation for Preventing the Lung Cancer and SARS-COV-2	<p>A herbal formulation for preventing the lung cancer and coronavirus, comprises:</p> <ul style="list-style-type: none"> • <i>Cordyceps militaris</i> powder; • <i>Ganoderma lucidum</i> powder; • Shiitake mushroom powder; • Spirulina (<i>Arthrospira platensis</i>) powder; and <p>Ginger powder.</p>	It is very effective to boost our innate immunity and protect us from viral infections prominently.
10.	Natural Microbial Culture Media	Green microbiology practices. Microbial Culture well grown on this range of plant based microbial culture media	Our approach is unique to start the Green Microbiology practices to reduce the use of chemicals to make the culture media.

