

Technology Transfer Success Story (ICAR)

Eco-Friendly “Shatpada” Pest Management Technologies for Sustainable Agriculture

The Indian Council of Agricultural Research (ICAR), through the ICAR–National Bureau of Agricultural Insect Resources (ICAR-NBAIR), Bengaluru, has successfully transferred two indigenous, eco-friendly pest management technologies under its flagship “Shatpada” series to industry, marking a significant milestone in translating public-funded research into field-level impact.

The technologies—Shatpada Fruit Fly Trap for the management of *Bactrocera* spp. and Shatpada White Grub Lure for the control of *Holotrichia consanguinea*—were developed through rigorous laboratory and multi-location field validation by the ICAR-NBAIR research team. These innovations address two of the most destructive pest complexes affecting horticultural and field crops in India, particularly in states such as Rajasthan and Maharashtra and other states.

Recognising the urgent need to reduce farmers’ dependence on chemical pesticides and mitigate associated health and environmental risks, Shashank Ramesh, Director of HSRP Agro Tech Pvt. Ltd., entered into a technology licensing agreement with ICAR-NBAIR. An industrial engineer by training, Mr. Ramesh is driven by a strong societal vision, technological advancement must align with human and environmental well-being.

The technology transfer was facilitated under the leadership of Dr. S. N. Sushil, Director, ICAR-NBAIR, with Dr. Deepa Bhagat and her team playing a key role in technology development, scale-up readiness, and industry interfacing. The licensed technologies offer cost-effective, residue-free, and farmer-friendly solutions, significantly reducing input costs while improving pest control efficiency.

Aligned with the global “One Health, One World” approach, this technology transfer exemplifies ICAR’s commitment to science-led innovation, public–private partnerships, and farmer-centric development. The successful commercialization of the Shatpada technologies demonstrates how ICAR research can effectively bridge the laboratory-to-land gap, delivering tangible socio-economic and environmental benefits.

