Shatpada: Insect repellent formulation and methods thereof

• Brand Name: Shatpada housefly repellent

• Material: Nanoemulsion based repellent

• **Production method:** Ultrasonic homogenization technique

• Target pest:

Housefly, Musca domestica

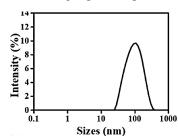
• Method:

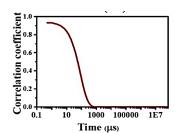
The nanoemulsion composition comprising a plant-derived part and its constituent, or both; and a surfactant by an ultrasonication technique. Such a method provides an approach whereby the potency of the active constituent is enhanced by an assembly of the active compound in a matrix for effective pest management.

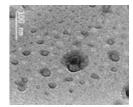
- **Dose:** Application of 0.03% nanoemulsion.
- Target states: Poultry units and dairy sheds
- Validation: The effect of nanoemulsion as repellents were evaluated in Malur (Karnataka)

• Benefits:

The metastable nanoemulsion composition has a homogeneous distribution of droplet size hence, capable of exhibiting superior repellence effect on various biostages of *Musca domestica*.







Size distribution by intensity and Correlogram of T. ammi EO NE

Droplets of nanoemulsion

• Commercialization of technology: The technology ready for commercialization.

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