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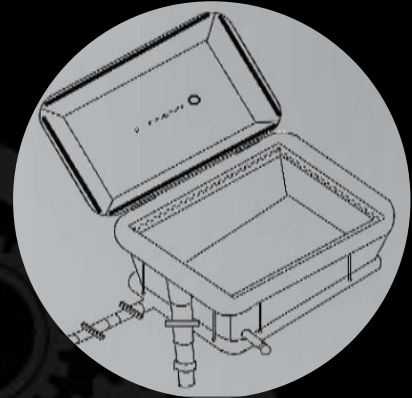
TECH BRIEF

All in One Micro Worm Culture Unit

Technical Problem: Unavailability of a micro worm culture unit which facilitates growth and development, harvesting and refining of the harvest processes within a single unit. The solution is “All In One” (growth and development, self-harvesting and harvest refining) unit for micro worm culture.

Inventiveness: This invention accounts for a micro worm culture unit with “All in One” concept to grow and harvest micro worms. This invention is made in order to support each and every biological activity including growth and development, reproduction and self-migrations of micro worms. Due to unavailability of an effective model for micro worm culture, this invention is a timely important one for households and commercial organizations engaged in fish seed culture. Crafting of the combined unit is accomplished with the use of PVC plumbing items and plastic containers. Growing chamber, harvester tube system, water supply system, refining section and lid with exhaust vents together serve as the All-in-one micro worm culture unit.

Market Applications: Micro worms (*Panagrellus redivivus*) are a kind of nematode species that used as a live feed in early fish larval rearing due to its high nutritive value and appropriate size. This can be used as a tool for Micro worm culture in household and institutes engaged in fish breeding and larval rearing.



Value Propositions: The conventional micro worm culture process uses a growing medium i.e. bread and milk power mixture kept on a closed container to support growth phase and development phase for growing and reproduction. Also, the harvesting is simply done for the adult nematodes who migrate away from the growth medium by scooping with a spoon or similar equipment. Among the disadvantages of aforesaid process; heavy accumulation of growth medium with harvested nematodes, higher acidification of growth medium due to improper air exchange, inability to determine the harvest and contamination of medium with maggot larvae are critical.

To address these issues, we have developed automatically self harvesting mechanism with minimum labor involvement. Moreover, the way we develop to harvest adult nematodes is everlasting. Because we are not using a water tray method as in the existing technologies, trapped nematodes are kept alive until harvest. Moreover, our system facilitates a 100 % decontamination of nematodes through a refining process.

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