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(57) Abstract :

[039] The invention relates to a low-cost, eco-friendly insect monitoring and management device that combines phototactic light attraction, adhesive sticky trapping, and vapor-based incapacitation to effectively control agricultural pest populations. The device features a quadrangular frame with three sides fitted with yellow sticky panels, a centrally mounted LED light powered by a rechargeable or solar battery, and a kerosene-water vapor chamber at the base. Designed for easy deployment in both open-field and protected environments, the system attracts and traps photophilic insects while incapacitating evasive pests using non-toxic vapors. This integrated approach supports sustainable agriculture by reducing dependency on chemical insecticides and enhancing decision-making in integrated pest management (IPM) programs. Accompanied Drawing [FIGS. 1-2]

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