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(57) Abstract :
The present invention relates to an aqua algae-based air purification device designed to purify indoor air and water using filamentous algae sourced from pond water. The device employs a unique combination of natural elements, including Aloe vera-agar gel for algae immobilization and Luffa acutangular (natural loofah) as a protective casing, all enclosed within a mesh package. The device harnesses the photosynthetic capabilities of algae, requiring sunlight and moisture for survival, while Aloe vera gel enhances air quality through antibacterial properties. In addition to efficiently purifying air and water, this eco-friendly and cost-effective device contributes to environmental sustainability by utilizing filamentous algae known for addressing algal blooms. The versatile and holistic approach of this invention offers a promising solution to indoor air pollution and water purification challenges. Accompanied Drawing [FIG. 1]

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