The impact of using the plant "Aerva javanica" to reduce the spread of unpleasant odors during sports activities.

Abstract

This paper presents a pioneering investigation into the utilization of "Aerva javanica," a plant recognized for its air-purifying capabilities, as a sustainable strategy to mitigate unpleasant odors in sports facilities. The emergence of odor issues, primarily due to intense physical activity in enclosed spaces, poses a significant challenge for maintaining a conducive environment for both athletes and spectators. "Aerva javanica," known for its ability to absorb and neutralize volatile organic compounds (VOCs), offers a promising, eco-friendly solution to this pervasive problem.

The study conducts a comprehensive analysis of the plant's effectiveness in various sports environments, assessing its capacity for odor reduction compared to traditional air freshening methods. Through quantitative and qualitative methodologies, including air quality measurements and participant feedback, the research evaluates the impact of "Aerva javanica" on improving ambient air quality and user satisfaction within indoor sports settings.

Findings suggest that the integration of "Aerva javanica" significantly enhances the air quality, contributing to a more pleasant and health-conscious environment. This research underscores the plant's potential as a cost-effective, natural alternative to conventional air purification methods, advocating for its adoption in the sports and wellness industry.

Moreover, the study highlights the broader implications of this innovation, including potential applications in other public and private spaces plagued by poor air quality. By advancing a green solution to air quality management, this work contributes to the ongoing discourse on sustainable practices within facility management, offering insights into the intersection of environmental science and public health.