Review of: "Antimicrobial Ayurveda Crops as Superfoods for Export, Conservation & Farmers' Benefit"

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The article delves into the global shift towards prioritizing health and well-being, particularly emphasized by the impact of the COVID-19 pandemic. It highlights the escalating concerns related to noncontagious diseases (NCDs), which now account for a substantial 71% of global deaths. Additionally, the emergence of resistant bacteria has revived the threat of contagious diseases, posing a challenge to the effectiveness of antibiotics and subsequently raising the specter of antimicrobial resistance (AMR).

A beacon of hope in this landscape is Ayurveda, the traditional Indian medicine system, which is gaining traction globally for its potential in managing NCDs. Ayurvedic remedies, notably the incorporation of superfoods like boiled turmeric milk, are making their mark as global health solutions. These superfoods, rich in antioxidants and polyphenols, are hailed for their preventive, curative, and rejuvenating properties.

The article introduces several Ayurvedic herbs with potent antioxidant potential, such as clove and turmeric, emphasizing the need for branding these attributes globally, similar to Traditional Chinese Medicine (TCM). This strategic move could not only elevate Ayurveda's global status but also boost Indian exports, contributing to economic growth and improving the livelihoods of farmers.

An intriguing aspect highlighted is the environmental, farmer, and social benefits that superfoods bring, surpassing the popularity and demand of conventional medicinal plants. The cultivation of marginal crops like kangkong, water chestnut, lotus, and spinegourd, once considered wild, now holds promise as emerging superfoods. The increasing demand for these crops, especially in eastern India, has created a niche market and has the potential to alleviate poverty among local farmers.

The methodology section reveals a meticulous compilation of data on the antioxidant potential, health benefits, and farm economics of the selected herbs. The results, presented in tables, provide a comprehensive overview of the phytochemical composition and income potential of these Ayurvedic superfoods.

The discussion underscores the antimicrobial properties of the proposed superfoods, suggesting their role in addressing the growing concern of antibiotic overuse. A comparison with TCM brings attention to the need for transitioning from wild harvesting to sustainable farming in Ayurveda, considering the threat of extinction faced by many wild species.

The review concludes by emphasizing the potential of Ayurveda to offer novel solutions, not only in health but also in areas like agriculture and biodiversity conservation. The article advocates for the identification and branding of

superfoods, drawing parallels with the success of TCM, and highlights the role of initiatives like the People's Biodiversity Register in scouting and preserving these valuable resources.

In summary, the article not only explores the health implications of global trends but also presents a compelling case for the integration of traditional systems like Ayurveda into modern practices, showcasing their potential to address pressing global challenges.

Nevertheless, the formulation of Ayurvedic herbs, ensuring they have undergone thorough quality control tests, possess minimal metal content, and are safe for human consumption, remains a subject of controversy. Hence, a comprehensive examination of these Ayurvedic herbs is required.