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Ethnobotanical Insights into Herbal Remedies for Respiratory Ailments in West Africa

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Abstract

Respiratory ailments—including asthma, bronchitis, pneumonia, and tuberculosis—are major public health concerns in West Africa, where access to conventional healthcare is often limited. In response, communities across the region have long relied on ethnobotanical knowledge to treat and manage these conditions. This traditional wisdom, passed down through generations, involves the use of medicinal plants with therapeutic properties tailored to respiratory health. Ethnobotanical studies not only preserve cultural heritage but also offer valuable leads for pharmacological research and integrative medicine.

***Keywords:** Ethnomedicinal surveys; Healer informants; Local healing practices; Respiratory ailments*

Introduction

According to the World Health Organization, up to 80% of the population in developing countries relies on traditional medicine for primary healthcare. In West Africa, herbal remedies are central to respiratory care, especially in rural and peri-urban areas. These remedies are administered as decoctions, infusions, inhalants, poultices, or dietary supplements, often prepared by traditional healers or elder women with deep botanical knowledge [1].

Ethnobotanical surveys across West Africa have identified numerous plant species used to treat respiratory ailments. These plants contain bioactive compounds such as flavonoids, alkaloids, saponins, and essential oils that contribute to their therapeutic efficacy [2].

In southwestern Nigeria, traditional healers use a combination of herbs including Crinum jagus, Anogeissus leiocarpa, and

Alstonia boonei to treat respiratory infections. Decoctions are commonly prepared from bark and leaves, often mixed with honey or palm wine to enhance efficacy. In Ghana, Momordica charantia (bitter melon) and Senna alata are used to treat asthma and chest pain. Herbal markets in Accra and Kumasi offer a wide range of respiratory remedies, reflecting both indigenous and pan-African botanical knowledge [3].

Senegalese healers use Combretum micranthum and Guiera senegalensis for treating coughs and tuberculosis. These plants are often harvested from savannah woodlands and prepared as teas or inhalants. Dosages are typically determined by experience and tradition, though standardization remains a challenge. Phytochemical screening of West African medicinal plants has revealed the presence of alkaloids, flavonoids, tannins, and glycosides—compounds known to support respiratory health [4].

Ethnobotanical studies must prioritize ethical engagement with communities, proper documentation, and conservation strategies. However, integration requires rigorous testing, standardization, and regulation to ensure safety and efficacy. Many medicinal plants used for respiratory ailments are harvested from the wild, raising concerns about sustainability. Collaborations between botanists, healers, and policymakers are essential to safeguard these resources [5].

Conclusion

Ethnobotanical knowledge in West Africa offers a rich repository of herbal remedies for respiratory ailments. These practices reflect deep ecological understanding and cultural heritage, providing valuable insights for modern medicine. As respiratory diseases continue to pose global health challenges, integrating traditional wisdom with scientific research can lead to more inclusive, effective, and sustainable healthcare solutions.

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