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Nota di contenuto	Chapter 1. Research Progress on the Ethnobotanical, Biological, and Phytochemical Studies of Medicinal Plants of Ethiopian Flora—Part 1: A Six-Decade (1960-2020) Review -- Chapter 2. Rose-scented geranium, an important African plant for the perfume and cosmetic industries -- Chapter 3. Fruits and Vegetables Used in Treating Respiratory and Other Troubles in Africa: Ethnopharmacology and Phytochemistry -- Chapter 4. Secondary Metabolites Used in Pests' Control -- Chapter 5. African endangered plants: their phytochemistry, ethnomedicine, and conservation strategies -- Chapter 6. In vitro and in silico studies of bioactive compounds from selected Ethiopian plants -- Chapter 7. African natural products with anti-malarial activity -- Chapter 8. African Natural Products with Antileishmanial Activity -- Chapter 9. A Review on Antimicrobial Compounds from Selected African Medicinal Plants -- Chapter 10. Anti-viral Natural Products from Africa -- Chapter 11. Medicinal Plants Used For Managing Erectile Dysfunction in Africa -- Chapter 12. Overview of Medicinal Plants-Mediated Bio-

Nanoparticles: Synthesis, Their Characterization, and Applications as Therapeutic Agents -- Chapter 13. Protocol for The Extraction of Alkaloids from Medicinal Plant Extracts -- Chapter 14. Some African Medicinal Plants for Syphilis and Gonorrhea: Ethnobotanical Knowledge and Ethno-Diagnosis -- Chapter 15. Diversity and uses of Medicinal Flora in the Vegetation of the Ankaratra Massif, Madagascar -- Chapter 16. Contributions of African Medicinal Plants to Modern Drug Discovery.

Sommario/riassunto

This book provides a comprehensive overview of bioactive compounds derived from African traditional medicinal plants, shedding light on their potential applications in modern medicine. It compiles crucial information on compounds with proven in vitro and in vivo activity against various diseases, providing a foundation for further research in drug discovery. The book also introduces the use of these bioactive secondary metabolites in cosmetics, nutrition, and pest control, with detailed description of medicinal plant species, including their botanical names, ethnomedicinal uses, and pharmacological activities, making it an invaluable resource for researchers and pharmaceutical companies. Key concepts include the exploration of secondary metabolites from plants in Ethiopia, Egypt, Kenya, Uganda, Zimbabwe, Cameroon, Tanzania, Madagascar, and Nigeria, and Ghana, and their industrial applications. The chapters cover ethnobotanical knowledge, bioactivities, and chemical profiling of these plants, including the ethnobotanical and phytochemical studies of Ethiopian flora, the role of rose-scented geranium in the perfume industry, and the use of fruits and vegetables in treating respiratory ailments. Readers will also discover insights into the use of secondary metabolites for pest control, the conservation strategies for endangered African plants, and the synthesis of bio-nanoparticles for therapeutic applications. The book presents a detailed analysis of medicinal plants with anti-malarial, antileishmanial, improve sexual desire and antimicrobial properties, highlighting their significance in traditional and modern medicine. This volume is an essential resource for researchers, graduate students, and professionals in the fields of natural products, phytochemistry, and pharmaceuticals. It provides a unique perspective on the integration of traditional African medicine with contemporary scientific research, offering valuable insights into the potential of these bioactive compounds in drug development.