

HERBAL PLANTS: MEDICINAL AND NUTRITIONAL ASPECTS



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PREFACE

Medicinal plants always played an important role in the maintenance of health, well-being, and everyday life of a population worldwide. Throughout the centuries, plant leaves, stems, flowers, seeds, berries, and roots were used for healing. This book, which is based on a scientific findings and original research done in College of Veterinary and Animal Science, Navania, Vallabhnagar, Udaipur (Rajasthan University of Veterinary and Animal Sciences, Bikaner) represent a comprehensive and up to date introduction of some important medicinal plants. This book focuses on presenting the current scientific evidence of biomolecular effects of selected herbs in relation to clinical outcomes and therapy for promotion of Animal Health. Although the terms “herb” and “herbal medicine” in traditional medicine are sometimes used in relation to animal or insect parts, our use of the term is limited to plants. The herbs selected cover a wide range and include flowering herbs, leaves, and leaf exudate Neem, Ajwai, Moringa, Dhatura, Calotropis, Parthenium, Aloevera and Khejri etc. As of now, many commercially available herbal products are uncharacterized and of questionable quality or content. The composition of natural products such as herbs can vary greatly with season, growing conditions, preparation, and storage. However, there is also adulteration, contamination, and misidentification of herbs and herbal products. Improved quality control techniques and processes for the identification of herbs and the establishment of characteristic chemical “fingerprints” for herbs and herbal medicines are badly needed. The herbal plants discussed in the book have proved highly beneficial to Animal Health and control of intermediate hosts of parasites. I wish it will be greatly helpful to readers.



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College of Veterinary and Animal Sciences, Navania, Udaipur (RAJUVAS) is one of the prestigious Colleges in Udaipur, Rajasthan concerned with animal welfare activities, animal health and production with areas of education, research and extension. It is dedicated to provide quality education to the aspirants of Veterinary profession. The primary motive of the college is to produce competent Veterinarians who are endowed with skills that would help them fulfill the state's commitment to increase livestock productivity in the state, in particular and in the country, in general and ensure increase farmers' income in years to come. The College has well organized departments with qualified faculty and latest laboratory infrastructure suitable for practical training of veterinary professionals.

Plants have been used as medicines throughout history. Medicinal plants are widely and successfully used on every continent. In India, the practice of herbal medicine is extremely well established and documented. As a result, most of the medicinal plants that have international recognition come from this region. Many people now take medicinal plant products on a daily basis, to maintain good health as much as to treat illness.

All plants produce chemical compounds which give them an evolutionary advantage, such as defending against herbivores or, in the example of salicylic acid, as a hormone in plant defenses. These phytochemicals have potential for use as drugs, and the content and known pharmacological activity of these substances in medicinal plants is the scientific basis for their use in modern medicine. The alkaloids are bitter-tasting and toxic, and concentrated in the parts of the plant such as the stem most likely to be eaten by herbivores which protect against parasites besides being used as growth promoters. In this regard the book 'Herbal plants: Medicinal and Nutritional Aspects' published by Dr. Hakim Manzer Alam, Assistant Professor, Department of Veterinary Parasitology focus on the research oriented results. It will definitely be useful for students and researchers in general and Veterinarians in particular.

I congratulate author of this book for their useful compilation

Prof. (Dr.) Rajeev Kumar Joshi

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About the Editor



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