Therapeutic Potential of
Medicinal Plants
Immune Homeostasis Strengtheners

Immune system in human body is an essential tool to fight against the harmful pathogens and protect the body from many diseases. The strengthening of the immune system builds a strong shield having balanced immune responses. This book is an attempt to explore our knowledge on traditional herbal drugs involved in strengthening immune homeostasis. The book has an exclusive chapter on the traditionally recommended and scientifically validated medicinal plants as immune stimulants and a chapter on basics of immunology. The ethnomedical considerations, pharmacognostic features, traditional recommendations as immune stimulants, mechanism of action and clinical investigations of some prominent plants are incorporated in the book, including *Emblica officinalis, Tinospora cordifolia, Aloe vera, Allium sativum, Curcuma longa, Glycyrrhiza glabra, Boerhaavia diffusa*.

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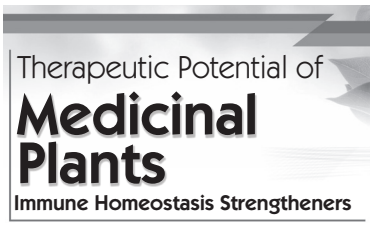

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Preface

The immune system commonly refers to a collection of cells and proteins that have an assigned function to protect the body from foreign antigens including microbes such as bacteria, fungi, viruses, toxins, etc. Over the past decade, numerous advances in the current understanding of the immune system have been made and also how the immune system functions in order to protect the body from infection. Generally, the immune system has two lines of defence as innate immunity and Adaptive immunity. Innate immunity is antigen-independent and involves various mechanisms for fighting against an intruding pathogen. Innate immunity is having a rapid immune response and does not have any immunologic memory. Whereas, adaptive immunity is considered antigen-dependent and antigen-specific. Adaptive immunity has the capacity for memory that helps the host to mount a fast and efficient immune response, even upon subsequent exposure to an antigen.

Plant-derived medicines have proven potential to work for the balancing immune homeostasis in our body. Since these medicines are effective and carry minimum side-effects, that lead to the over-popularization of herbal medicines throughout the world. The present book is focused on the role of selected traditionally recommended and scientifically validated medicinal plants as immunostimulants. The plants are carefully selected and arranged in each chapter, organized on the strong footing of scientific and methodical manner and essentially consist of highlights including recommended and scientifically validated medicinal plants as immunostimulant, ethnomedical consideration, pharmacognostic characteristics, phytochemistry, pharmacological properties, traditional recommendations as an immunostimulant, scientific investigation as an immunostimulant, reported mechanism of action as an immunostimulant and clinical investigation as an immunostimulant.

The appreciable momentum gathered by the global herbal market and encouraging number of new drug companies joining the herbal formulation market to meet the present demand, leads to enormous scope in phytochemical research that helps in the generation of safer and effective drugs from natural products adding to immune stimulation.

It is earnestly believed that the present book *Therapeutic Potential of Medicinal Plants: Immune Homeostasis Strengtheners* shall fulfill the necessary requirement of students of various programs and universities and also to the researchers who intend to continue their research on medicinal plants, especially in immunology and desire to establish a strong base in the herbal formulation development may also find this compilation equally informative and useful.

Neelesh Malviya

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