



Pterocarpus santalinus L. - A plant with Radioprotective Efficacy

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Preface

In the modern advanced era of living, *humans are being exposed to different kinds of radiations knowingly or unknowingly*. This book presents a comprehensive description about radioprotective efficacy of *Pterocarpus santalinus*, commonly known as Red Sandalwood. It is an endemic plant species found in Seshachalam hill ranges of Eastern Ghats. A detailed review of existing radio protectants, both synthetic and natural agents. The book presents a detailed description of major phytochemicals present in the plant extracts, provides experimental research data using in vitro cell culture studies, mice models and advanced molecular docking techniques with clear tables and diagrams. This book also provides mechanistic insights into how Pterocarpus phytoconstituents may ameliorate the adverse effects of ionizing radiation. The data provided in the book fosters natural product based radio protective drug development, strengthens integrative therapeutic approaches and may serve as a valuable reference for researchers, scientists and clinicians engaged in radiation safety and herbal medicine development.

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Pterocarpus santalinus L. - A plant with Radioprotective Efficacy

In the modern advanced era of living, humans are being exposed to different kinds of radiations knowingly or unknowingly. This book presents a comprehensive description about radioprotective efficacy of *Pterocarpus santalinus*, commonly known as Red Sandalwood. It is an endemic plant species found in Seshachalam hill ranges of Eastern Ghats. A detailed review of existing radio protectants, both synthetic and natural agents. The book presents a detailed description of major phytochemicals present in the plant extracts, provides experimental research data using in vitro cell culture studies, mice models and advanced molecular docking techniques with clear tables and diagrams. This book also provides mechanistic insights into how *Pterocarpus* phytoconstituents may ameliorate the adverse effects of ionizing radiation. The data provided in the book fosters natural product based radio protective drug development, strengthens integrative therapeutic approaches and may serve as a valuable reference for researchers, scientists and clinicians engaged in radiation safety and herbal medicine development.

