

1. Record Nr.	UNINA9910373917103321
Autore	Singh Reetika
Titolo	Biotechnological Advances, Phytochemical Analysis and Ethnomedical Implications of <i>Sapindus</i> species // by Reetika Singh, Bechan Sharma
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2019
ISBN	981-329-189-3
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (XX, 133 p. 35 illus., 30 illus. in color.)
Disciplina	631.52 660.6
Soggetti	Plant breeding Botanical chemistry Biology—Technique Plant anatomy Plants - Development Trees Plant Breeding/Biotechnology Plant Biochemistry Biological Techniques Plant Anatomy/Development Tree Biology Biotecnologia vegetal Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Morphological Characteristics of <i>Sapindus</i> species -- Traditional uses and Ethnomedicinal values -- Biotechnological advances in <i>Sapindus</i> spp -- Phytochemical analysis and Pharmaceutical development -- Biological activities and medicinal implications -- Nanoparticles synthesis and Nanotechnological applications of <i>Sapindus</i> species.
Sommario/riassunto	Plants have always occupied a prominent position in the life of every living being. Plants are the primary source of food, shelter and medicines. The global inclination toward herbal medicine has advanced

the expansion of plant-based pharmaceutical industries to a vast extent. The production of traditional medicine at global market has been estimated to touch US \$5 trillion by 2050. Some of the useful plant-based drugs include vinblastine, vincristine, taxol, podophyllotoxin, camptothecin, digoxigenin, morphine, codeine, aspirin, atropine, capsicin, allixin, curcumin, artemesinin and ephedrine. Genus *Sapindus* is an important economical and medicinal trees, distributed over the world. Soap nuts contain higher amount of saponin, a natural detergent which can be used to clean clothes and hairs. *Sapindus* species possesses various pharmacological properties including antimicrobial, antioxidant, anti-inflammatory, anticancer, hepatoprotective, anti-trichomonas activity. Extracts of this plant are rich in various phytochemicals and polyphenolic compounds. All the pharmacological properties are due to presence of saponins. Biotechnological techniques can improve the saponin content; thus this chemical content can be produced at large scale and can be used as phytomedicine. We hope that this book would be of great use to under graduates, postgraduates, scientists, researchers and faculty members who are studying, teaching or working in the field of Biotechnology, Phytochemistry and Ethnopharmacology. The techniques explained in this book could be of immense use for the researchers working in this area. We shall deeply appreciate receiving any critical comments and suggestions from the readers from the different parts of globe which would help us improve the first edition of this publication.
