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| Nota di contenuto | Part 1. Introduction of Sago Resources- Chapter 1: Status and Outlook of Global Food Security and the Role of Under-Utilized Food Resource: Sago Palm (Hiroyuki Konuma) -- Chapter 2: Growing Area of Sago Palm and Its Environment (M. H. Bintoro) -- Chapter 3: Life and Livelihood in Sago Growing Area (Yukio Toyoda) -- Part 2. Diversity of Sago Resource in Asia and Pacific -- Chapter 4: Genetic Variation, Agronomic Features of Sago Palm in Asia and Pacific (Hiroshi Ehara) -- Chapter 5: Genetic Diversity of Sago Palm Resources in Indonesia (Barahima Abbas) -- Part 3. Sago Industry Contributes for Food Security and Rural Development in Core Producing Countries -- Chapter 6: An Overview of Sago Industry Development from 20th c. to 21st c. (Jong Foh Shoon) -- Chapter 7: Suitability of Peat Swamp Areas for Commercial Production of Sago Crop - Sarawak Experience (Roland Yong Chiew Ming) -- Chapter 8: Feasibility of Small Scale Sago Industries on Small Island in East Indonesia (Wardis Girsang) -- Chapter 9: Addressing Food Insecurity through Food Safety and Cropping of Sago in Papua New |

Guinea (Aisak G Pue) -- Chapter 10: Conservation and Sustainable Utilization of the Fiji Sago Palm (Dick Watling) -- Part 4. Agricultural Botany of Sago Palm -- Chapter 11: Matter Production as A Basis of Starch Production in Sago Palm (Yoshinori Yamamoto) -- Chapter 12: Morphogenesis of Sago Palm (Satoshi Nakamura) -- Chapter 13: Morphological and Anatomical Characteristics of Sago Palm Starch (Yoji Nitta) -- Part 5. Growth Environment -- Chapter 14: Soil Environment in Sago Palm Forest (Masanori Okazaki) -- Chapter 15: Interaction between Microbes Activities and Sago Palm Growth (Koki Toyoda) -- Part 6. Starch Production and Utilization -- Chapter 16: Study on the Transformation in Extraction and Consumption Processes of Sago Starch in a Traditional Society of Indonesia (Yoshihiko Nishimura) -- Chapter 17: Improvement of Sago Processing Machine (Darma) -- Chapter 18: The Structure and Characteristics of Sago Starch (Masanori Okazaki) -- Chapter 19: Recovery of Starch from Sago Pith Waste and Waste Water Treatment (Budi Santoso) -- Chapter 20: Acid modification of sago starch and its fiber for industrial application (Titi Candra Sunarti) -- Part 6. New Carbohydrate Resources -- Chapter 21: Starch Properties and Uses as food for Human Health and Welfare (Kazuko Hirao) -- Chapter 21: Production, Purification and Health Benefits of Sago Sugar (Kazuko Hirao) -- Chapter 22: Production, Purification and Health Benefits of Sago Sugar (Kopli Bujang) -- Chapter 23: New Sago Starch Resources and Its Properties from Starch Pith Waste and Pacific Sago Palms (Takashi Mishima) -- Part 8. Conclusion -- Chapter 24: Outcomes and Recommendations from the 12th International Sago Symposium (Yoshinori Yamamoto).

Sommario/riassunto

This book is open access under a CC BY 4.0 license. This book addresses a wide variety of events and technologies concerning the sago palm, ranging from its botanical characteristics, culture and use to social conditions in the places where it is grown, in order to provide a record of research findings and to benefit society. It discusses various subjects, including the sago palm and related species; differentiation of species of starch-producing palm; habitat, morphological, physiological and growth characteristics; culture and management; productivity of carbon dioxide; starch extraction and manufacture; characteristics and utilization of starch; and cultural anthropological and folkloristic aspects. Problems such as food shortages due to increasing populations, global warming and climate change, and decreasing reserves of oil and other underground resources, have become more pressing in recent years. In the context of these problems, the book examines the role of the sago palm in sustainable food production, in the manufacture of other foodstuffs, as a raw material for ethanol and in the manufacture of biodegradable plastics. In addition to academics, this book will be useful to researchers and government officials working for international agencies, national governments, municipalities, and other research organizations; technicians, researchers, managers, entrepreneurs, and others working in industries such as agriculture, plant production, food production, manufacturing, chemical engineering, energy production, and distribution.
