



Zuraida Ahmad

# SAGO

*(Metroxylon Rottb)*

*And Its Applications*

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# **Sago** **(*Metroxylan Rottb*)** **and Its Applications**

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Editor  
Zuraida Ahmad



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# Chapter 2

## Comparative Study between Standard and Commercial Sago Starch

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**Keywords:** standard sago, commercial sago, characterization, properties

**Preview.** The properties of native sago starch are very much depend upon its botanical source. The same source of starch however, after underwent different pretreatment process, will also contribute to significant difference in their properties. Therefore, this study is concentrated on the characterization of standard and commercial sago starch. Special attention is given to their composition, morphology, and hydrogen bond of this starch, crystallinity as well as their thermal properties.

### Introduction

Starch is one of the most important biopolymers and is widely used in numerous industrial applications such as in the food, pharmaceutical, paper and cosmetics industries. Starch is a polymeric mixture of essentially linear (amylose) and branched (amylopectin) alphasuglucans. Starch functionality depends to a great extent on the molecular structure, size and weight of these components as demonstrated in gels, extrusion products and starch pastes [1].

Modified and unmodified starch products are extensively used for a variety of applications such as sizing agents for textiles and paper, as adhesives for corrugated and laminated paper boards and wall papers, flocculants, binders, fabric printing aids, thickeners, and many other