

*Review article*

## **Salt Tolerance Research in Sago Palm (*Metroxylon sagu* Rottb.): Past, Present and Future Perspectives**

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### **ABSTRACT**

The sago palm (*Metroxylon sagu* Rottb.) is one of the underdogs in the food crop planting industries for its potential which is extremely vast but the community appreciating it is scarce. Its capabilities to thrive well in undesirable environmental conditions, salt tolerance and high starch yield are one of the many advantages it possesses over other food crops like wheat, corn and rice. One important factor to look into for crop plantation is none other than its salt tolerance. The salt tolerance researches on this unique palm have commenced since 1977 and the pace of research was unbelievably slow in progression. Nevertheless, it was not until recently that this palm was being placed in the limelight once more. In this review, we are focusing on salt tolerance research and further detailed on the past, present and future of this research line. It is anticipated that consolidation of talents and resources can come in time and in tandem for the utilization of this cash palm to end world hunger.

*Keywords:* Food crop, food security, sago palm, salt tolerance, starch yield

### **INTRODUCTION**

The sago palm (*Metroxylon sagu* Rottb.) is a true palm Calamidae subfamily member categorized under the order Arecales and

family Areaceae. This palm is native to Southeast Asia countries like Malaysia, Philippines, Papua New Guinea and Indonesia, thriving well in tropical rain forests as well as low-land freshwater swamps (Johnson, 1977). The sago palm is a hapaxanthic (only flowers once per stem) multiple-stemmed type of palm and its flowers emerge from the upright terminal of its 10 to 15 metres stem (Kiew, 1977; Kueh, 1977).

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