

EXPLORING NATURE'S RECOVERY



# BIODIVERSITY RESILIENCE



## SABAL FOREST RESERVE

*Edited By*

Mohd Zacaery Khalik, Dayang Nuriza Abang Abdillah, Azahari Omar,  
Runi Anak Sylvester Pungga, Meekiong Kalu, Faisal Ali Anwarali Khan



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By

Mohd Zacaery Khalik, Dayang Nuriza  
Abang Abdillah, Azahari Omar, Runi Anak  
Sylvester Pungga, Meekiong Kalu, Faisal  
Ali Anwarali Khan

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# Endemic *Iguanura* Species (Arecaceae)

Nur Sabrina Moh Subri & Meekiong Kalu

Sarawak is a global biodiversity hotspot, specifically within its structurally complex Mixed Dipterocarp Forests (MDF). Palms of the family Arecaceae are vital ecological components of these forest understories, contributing to regional stability through specialized adaptations. The genus *Iguanura* consists of undergrowth palms found in lowland habitats and is highly valued in the ornamental plant industry.

The genus *Iguanura* Blume is a diverse group of understory palms primarily found in lowland forest habitats. Within palm taxonomy, it is categorized under the subfamily Arecoideae and the tribe Areceae, though researchers continue to debate its specific subtribal placement. These palms are notable for their extreme morphological range, with some species reaching four meters in height while others, like *Iguanura palmuncula*, remain diminutive with small, hand-sized leaves and delicate foliage.

A survey was conducted in the Sabal National Park (NP) and Sabal Forest Reserve (FR) to verify the presence of three specific taxa believed to be endemic to the area:

- (1) *Iguanura palmuncula* Becc. var. *palmuncula*,
- (2) *Iguanura palmuncula* Becc. var. *magna* Kiew, and
- (3) *Iguanura myochodoides* Kiew



▲ *Iguanura palmacula* var. *magna*

Taxa (Species/ variety)	Physical Description	Key Distinguishing Features
<i>Iguanura palmacula</i> var. <i>magna</i>	A dwarf clumped palm (1 – 1.6 m tall) with large, dissected leaves up to 94 cm long.	Distinguished by its larger size and unique fruit with a long projecting apical beak and a ridged dorsal surface.
<i>Iguanura palmacula</i> var. <i>palmacula</i>	A solitary palm (1.3–1.5 m tall) with pinkish-brown, fibrous leaf sheaths.	Shorter than var. <i>magna</i> with smaller leaves, but possesses more pairs of leaf dissections.
<i>Iguanura myochodoides</i>	Stands approx. 1.2 m tall with leaves that abscise (fall off) naturally.	Identified by its erect inflorescence with narrow rachillae and distinctive ellipsoidal fruit. Young leaves are notably dark purple.

The survey successfully re-recorded all three taxa, finding robust populations with densities exceeding 50 individuals per hectare. Because these populations are located within formally protected areas, they currently possess a high capacity for sustained viability.

While current populations in Sabal are stable, the long-term security of the genus in Western Sarawak requires proactive measures, particularly for species listed as Endangered or Critically Endangered. The paper outlines four primary strategies: (1) Habitat Protection: Safeguarding and rehabilitating natural habitats to maintain ecological integrity; (2) Regulatory Enforcement: Strengthening laws to prevent habitat loss from agriculture and development; (3) Collaborative Management: Partnering with local government and communities for sustainable site management, and (4) Sustainable Harvest: Regulating the collection of wild plants to prevent resource depletion. These integrated actions are essential for maintaining the biological heritage of the Sarawak ecosystem.



▼ *Iguanura myochodoides*



▲ *Iguanura palmacula* var. *palmacula*