

Sago Palm (*Metroxylon Sagu* , *Arecaceae*) production in the Eastern Archipelago of Indonesia: Variation in morphological characteristics and pith dry-matter yield

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Abstract

Eleven local varieties of sago palm (*Metroxylon sagu* Rottb.) in southeast and north Sulawesi and in northern Maluku were studied: one variety with a weak black band on the back of the petiole: three varieties with a brown band on the back of the petiole: seven bandless varieties comprising two spineless, four short spine and one long spine types. Large variation in morphological characteristics and pith dry-matter yield were estimated at 13 to 34% and 55%, respectively. The difference in pith dry-matter yield is mainly attributed to trunk diameter and dry-matter percentage of pith. Trunk diameter was not affected by the length of growth period, which might reflect the palm's own characteristics, such as genetic background and growth environment. The dry-matter percentage of pith was not related to any characteristics measured. The pith dry-matter yield was highest in the short spine type, followed by the spineless and the long spine types.

Key Words Indonesia - local variety - morphology - pith - plant type - sago palm

Produksi Palma Sagu (*Metroxylon Sagu*, *Arecaceae*) Di Kepulauan Timur Indonesia: Keragaman Karakteristik Morfologi Dan Hasil Bahan Kering Empulur Batang

Résumé Dalam survey tersebut dipelajari sebelas varitas sagu lokal (*Metroxylon sagu* Rottb.) di Sulawesi Tenggara, Sulawesi Utara, dan Maluku Utara: satu varitas dengan pita sedikit hitam pada bagian belakang dari tulang daun: tiga varitas dengan pita coklat pada bagian belakang belakang dari tulang daun: tujuh varitas tanpa pita terdiri dari dua varitas tanpa duri, empat varitas duri pendek dan satu varitas duri panjang. Terdapat adanya keragaman pada karakteristik morfologi dan hasil bahan kering empulur batang yang diperkirakan berurutan-turut berkisar 13 sampai 34% dan 55%. Perbedaan pada hasil bahan kering empulur batang terutama

tergantung pada diameter batang dan proporsi kering empulur batang. Diameter batang tidak dipengaruhi oleh panjangnya periode tumbuh; namun nampaknya lebih terkait dengan gambaran karakteristik khusus, seperti latar belakang genetik dan lingkungan tumbuhnya. Persen bobot kering empulur batang tidak ada hubungannya dengan berbagai karakteristik yang diteliti. Hasil bahan kering empulur batang tertinggi adalah pada tipe duri pendek (511kg/batang), diikuti tipe tanpa duri (417kg/batang) dan tipe duri panjang (329kg/batang).