

BIOTROPIKA

Journal of Tropical Biology



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Biotropika: Journal of Tropical Biology

Biotropika: Journal of Tropical Biology is a scientific journal published by Biology Department, Faculty of Mathematics and Natural Sciences, University of Brawijaya established since 2013. Biotropika: Journal of Tropical Biology is a peer-reviewed journal that strives to provide scientific information on the research results which focused on biological science in tropical regions including biotechnology, biodiversity, microbiology and environmental sciences. Biotropika: Journal of Tropical Biology publishes three issues each year.

(*Biotropika: Journal of Tropical Biology* adalah jurnal ilmiah yang diterbitkan oleh Jurusan Biologi, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Brawijaya sejak 2013. *Biotropika: Journal of Tropical Biology* adalah jurnal yang ditelaah oleh mitra bestari yang menyediakan informasi ilmiah tentang hasil-hasil penelitian yang fokus pada kajian biologi di wilayah tropis meliputi bioteknologi, biodiversitas, mikrobiologi dan ilmu lingkungan. *Biotropika: Journal of Tropical Biology* menerbitkan tiga isu/nomor setiap tahun).

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PREFACE

All of our gratitude goes to Almighty God because of His blessed, Biotropika: Journal of Tropical Biology publishes scientific writings which are the results of research from academics in Indonesia. In this edition, Biotropika: Journal of Tropical Biology presents writings relating to the potential of natural resources from Indonesia, namely breadfruit, Javan Slow Loris, local rice, and aquatic macrofauna.

The content of this edition begins with the importance of increasing the productivity of breadfruit plants (*Artocarpus altilis*) *in vitro* for the production of secondary metabolites that are useful as herbal-based treatments. The selection of the right disinfectant will influence the success of the breadfruit leaf tissue culture technique. The population of Javan slow lorises which are threatened by high human activity around them is highly dependent on the preservation of protected forest areas. The potential of local rice to be developed into varieties that are resistant to drought stress and flavourful rice varieties to support self-sufficiency in Indonesian-based food resources. And, the study of the importance of macroinvertebrates in a reservoir (Batuaji reservoir, Central Lombok) as a water quality bioindicator in supporting sustainable development.

The publication of this edition is also due to the hard work and attention of many parties, therefore the editor would like to thank the scientific reviewers who are pleased to provide input and criticism for improving the quality of writing. The editorial staffs have spent the time so that this edition can be published well. Hopefully the writings in this journal can be useful for the reader and become a reference for future studies.

Regards,

Editorial Team

KATA PENGANTAR

Segala puji syukur kita sampaikan kepada Tuhan YME karena atas karunia-Nya, Biotropika: Journal of Tropical Biology kembali menerbitkan tulisan-tulisan ilmiah yang merupakan hasil penelitian dari para akademisi di Indonesia. Pada edisi ini, Biotropika: Journal of Tropical Biology menyajikan tulisan-tulisan yang berkaitan dengan tentang potensi sumber daya alam asal Indonesia yaitu tanaman sukun, kukang Jawa, dan padi lokal serta makrofauna akuatik.

Isi tulisan pada edisi ini dimulai dari pentingnya peningkatan produktivitas tanaman sukun (*Artocarpus altilis*) secara *in vitro* untuk produksi metabolit sekunder yang bermanfaat sebagai pengobatan berbasis herbal. Pemilihan desinfekatan yang tepat akan memengaruhi keberhasilan teknik kultur jaringan daun sukun tersebut. Populasi kukang Jawa yang terancam dengan adanya aktivitas manusia yang tinggi di sekitarnya sangat tergantung pada kelestarian kawasan hutan lindung. Potensi padi lokal untuk dikembangkan menjadi varietas yang tahan cekaman kekeringan dan varietas padi beraroma untuk mendukung swasembada pangan berbasis sumber daya asli Indonesia. Serta, kajian tentang pentingnya makroinvertebrata dalam sebuah perairan (Waduk Batuaji, Lombok Tengah) sebagai bioindikator kualitas air untuk mendukung pembangunan yang berkelanjutan.

Penerbitan edisi ini juga atas kerja keras dan perhatian banyak pihak, oleh karena itu redaksi Biotropika: Journal of Tropical Biology mengucapkan terima kasih kepada para mitra bestari yang berkenan memberikan masukan dan kritik untuk peningkatan kualitas tulisan. Para anggota redaksi yang telah meluangkan waktunya agar edisi ini dapat terbit dengan baik. Semoga tulisan-tulisan dalam jurnal ini dapat bermanfaat bagi pembaca dan menjadi rujukan untuk penelitian-penelitian berikutnya.

Hormat kami,

Dewan redaksi

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