

Medicinal Plant in Sijangkang Mangrove Forest: Species Richness and Diversity

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Structured Abstract

Background: In our ecosystem, every species has their own function and importance for each other. As human beings, we are always ourselves to plant. Plants frequently provide the source of food, raw materials for clothes & building apparatuses and as medicine. This research covered the finding of multiple medicinal plants located in Sijangkang Mangrove Forest and analyzation of the therapeutical content in each plant. Another aim of this plant is to identify, and the diversity and distribution of each medicinal plant existed in Sijangkang Mangrove Forest. Based on another study, the area covered by mangrove forest specifically in Malaysia is decreasing annually. This research is to show the visual and the importance of each medicinal plant in Sijangkang Mangrove Forest.

Methods: To achieve the aims of the research, four transects were set up to identify the medicinal plants in the Sijangkang Mangrove Forest. Each transect have 2 sub-transect consist of 10 metre X 10 metre quadrats. The plants were identified using taxonomy key with guidance from experienced person. The diversity indices were determined by using PAST software. The pharmaceutical contents of each plant were identified by reviewing multiple journals and other sources to verify the characteristics and traditional uses of the plants.

Results: A total of 277 medicinal plants from 15 different species were identified across the four transects. The most abundant species was *Scyphiphora Hydrophyllacea*, which appeared 63 times across all transects. The result show that Sub-Transect B of Transect is the most stable and has the highest diversity among all 4 transects. By using systematic literature review, the medicinal plant species found were proven to have variety of therapeutic content such as flavonoids, terpenoid, tannins and more.

Conclusion: This research highlights the importance of the Sijangkang Mangrove Forest as a habitat for medicinal plants and provides valuable data on the diversity and distribution of these plants. The identification of the therapeutic content of each plant reinforces the ecological and medicinal value of the forest. Given that mangrove forests are decreasing annually, continued conservation efforts are necessary to protect these plants and ensure they remain available for future generations.

Keywords: Medicinal plants, Sijangkang Mangrove Forest

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