FLORA DIVERSITY OF TASEK BERA RAMSAR SITE, PAHANG, MALAYSIA

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ABSTRACT

A botanical survey of the plant communities at Tasek Bera, Pahang, covering a mosaic of habitats, namely open water, rassau swamp, *Lepironia* reed-bed, seasonal freshwater swamp forest, and the surrounding lowland dipterocarp forest, resulted in an annotated checklist of 507 species of vascular plants in 176 genera and 83 families. The checklist includes previous collections. The largest family was Euphorbiaceae (7 genera, 7 species), followed by Dipterocarpaceae (6 genera, 10 species) and Rubiaceae (6 genera, 6 species). The largest genera were *Shorea* (20 species), *Syzygium* (14 species) and *Dipterocarpus* (11 species).

Keywords: Tasek Bera, Pahang, Flora diversity

INTRODUCTION

Tasek Bera is the largest natural freshwater lake in Peninsular Malaysia. It is situated in South West Pahang near the Negeri Sembilan border between 3° 00’-3° 10’ N and 102° 33’-102° 39’ E in the low lying, undulating plain between mountains of the Main Range in the west and hill ranges to the east. The much-branched lake and swamp systems is at an altitude of 30-35m while the surrounding low hills attain an altitude of about 80m. Access to Tasek bera is only via a few entry points: from the Ramsar site management office at Tanjung Keruin in the North, Pos Iskandar in the southern half of the lake, and Kampung Pathir (NW of Tanjung Keruin). Tasek Bera has been inhabited by the indigenous Semelai people for over 600 years. This area is surrounded by freshwater swamp forest. Recognizing its uniqueness, in November 1994, Tasek Bera was designated as the first Ramsar site in Malaysia (Shamsuddin et al., 1998). The 26000ha Ramsar site includes the former Bera Forest Reserve.

METHODOLOGY

The main aims of this study were to conduct a plant inventory and to carry out qualitative assessment of the flora diversity and composition through general field collections in August 2014 and to highlight the conservation value of this habitat and the plants it harbours. This will provide baseline data on the flora of Tasek Bera that can serve as a useful tool for the authorities-in-charge of protecting the site to monitor changes to the flora.

Collections were made of fertile vascular plants for herbarium specimens, but also of sterile specimens of major timber trees as vouchers. Plant identification and description were based on Corner (1952), Stone (1977), Turner (1995), Henderson (1930), Latiff et al. (1999), and Soepadmo et al. (1995). Some specimens were deposited in the Malaysian Agricultural Research and Development Institute Herbarium. Rapid assessment technique, i.e: plant listing based on trail survey was used to record
the species composition and diversity. Standard collecting materials and methods and note taking were used (Bridson & Forman, 1992). Herbarium specimens were collected for plants bearing fertile materials, while vouchers were collected for plants that were not flowering or fruiting. Floristic notes and habitat types were also recorded. All voucher and herbarium collections were lodged at the respective herbarium. The checklist contained vouchers, herbarium records, and sighted records (species which were sighted in the sites but were not collected). Sterile materials known only at the family level are not included in the checklist, while taxa known only to the genus level e.g. *Garcinia*, *Mangifera* and *Nephelium* are included.

**RESULTS**

Included in our findings in this inventory trip, a total of 507 vascular plants from 176 genera and 83 families are documented for Tasek Bera site. Trees, terrestrial herbs and climbers together with epiphytes each comprise about one third of the flora in this area (Table 1).

<table>
<thead>
<tr>
<th>FAMILIES</th>
<th>GENERA</th>
<th>SPECIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferns and lycophytes</td>
<td>17</td>
<td>23</td>
</tr>
<tr>
<td>Gymnosperms</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Monocotyledons</td>
<td>18</td>
<td>75</td>
</tr>
<tr>
<td>Dicotyledons</td>
<td>45</td>
<td>75</td>
</tr>
<tr>
<td>Total</td>
<td>83</td>
<td>176</td>
</tr>
</tbody>
</table>

**CONCLUSION**

The plant communities of Tasek Bera are unique and must be preserved for future generations, as well as the agrobiodiversity value it contains. The protection of Tasek Bera as a Ramsar site is therefore very important for the plant communities as well. In addition, freshwater swamp forest is the more endangered habitat in the region, not just in Peninsular Malaysia in particular.
REFERENCES


