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Ethnobotanical Significance from Bungo Range National Park, Sarawak

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ABSTRACT

A study was conducted to document traditional knowledge on plants with economic and ethnobotanical significance used by the communities in the vicinity of the boundary of Bungo Range National Park (BRNP). Eight key villages were selected for this study, viz. Tringgus, Pedaun Bawah, Bijuray Mongag, Puruh Semadang, Bengoh Rais, Temurang, Abang Kiding and Rejoi. The surveys encompass interviews, field samplings with documentation and the preliminary results are presented. A total of 366 species from 261 genera and 102 families of plants with ethnobotanical uses were recorded. The family Zingiberaceae (9 genera, 22 species) is most utilised by the communities near the BRNP, followed by Euphorbiaceae (11 genera, 18 species) and Fabaceae with 16 species from 13 genera; whereas Asteraceae and Piperaceae were the two most popular plant families used by the Bidayuh communities for medicinal purposes whilst Zingiberaceae, Anacardiaceae, Cucurbitaceae and Poaceae were the four most popular plant families harvested for foods. More work still remains to be done as this documentation is still far from satisfactory.

Keywords: Bidayuh, documentation, ethno plants, Heart of Borneo Sarawak

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A study was conducted to document traditional knowledge on plants with economic and ethnobotanical significance used by the communities in the vicinity of the boundary of Bungo Range National Park (BRNP). Eight key villages were selected for this study, viz. Tringgus, Pedaun Bawah, Bijuray Mongag, Puruh Semadang, Bengoh Rais, Temurang, Abang Kiding and Rejoi. The surveys encompass interviews, field samplings with documentation and the preliminary results are presented. A total of 366 species from 261 genera and 102 families of plants with ethnobotanical uses were recorded. The family Zingiberaceae (9 genera, 22 species) is most utilised by the communities near the BRNP, followed by Euphorbiaceae (11 genera, 18 species) and Fabaceae with 16 species from 13 genera; whereas Asteraceae and Piperaceae were the two most popular plant families used by the Bidayuh communities for medicinal purposes whilst Zingiberaceae, Anacardiaceae, Cucurbitaceae and Poaceae were the four most popular plant families harvested for foods. More work still remains to be done as this documentation is still far from satisfactory.

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INTRODUCTION

The tropical forests which are endowed with rich and diverse flora is a great storehouse for daily resources for many ethnic groups in Sarawak, either as traditional medicines, foods, ornamental plants, construction materials, perfumery and so forth. Bungo Range National Park (BRNP) is one of such important storehouses which contain rich flora resources that are unique and therefore warrant the need to call for its conservation. Traditional knowledge on the use of forest plants by the local communities has to be documented.

This ethnobotanical study is conducted on the communities near the boundary of BRNP. It is not only significant for forest conservation, but also for conservation of ethnobotanical knowledge of the indigenous people which is showing signs of extinction (Sayok and Teucher, 2018). The local communities near BRNP are mainly Bidayuh. There were ethnobotanical studies reported for Bidayuh in Bau. The study areas were conducted around Singai (Ripen and Noweg, 2017), Jagoi (Ripen and

Noweg, 2016) and Kampung Grogo (Ipor *et al.*, 2009). These studies are relevant to the present ethnobotanical study of BRNP.

In Singai, 52 plant species comprising 35 families were previously documented to be useful for the Bidayuh community. In Jagoi, 117 plant species belonging to 59 families were documented to have economic and cultural values. The most common plant families used by Bidayuh community in Singai were (i) Arecaceae, (ii) Fabaceae, (iii) Poaceae, (iv) Asteraceae, (v) Moraceae, and (vi) Zingiberaceae, which were similar for the Bidayuh community in Jagoi. Most of the plant species were used as traditional medicine for both Bidayuh communities. In another ethnobotanical survey, the diversity of plants in traditional orchards was reported for the Bidayuh community in Kampung Grogo in Bau (Ipor *et al.*, 2009). The major fruit trees in the community were *Baccaurea bracteata*, followed by *Adicea* sp., *Koompassia excelsa, Lansium domesticum, Nauclea* sp. and *Durio zibethinus*.

The objectives of this ethnobotanical study were to document plants with economic and ethnobotanical significance used by the local communities within the boundary of BRNP. Interviews or discussions and observations were the main approaches to achieve the above objective to generate baseline information. This study was also meant to support the development of the Master Plan for BRNP to conserve the remaining forested lands in the area.

MATERIALS AND METHODOLOGY

Field visits to all targeted villages near the vicinity of BRNP were conducted from February 2018 until September 2019. Nine key villages were selected, *viz*. Tringgus, Pedaun Atas, Bijuray Mongag, Puruh Semadang, Bengoh Rais, Temurang, Abang, Kiding and Rejoi (Figure 1). The study included interviews with the relevant villagers, surveys as well as literature reviews from previous studies. For interviews, approximately 5 % of the total households in each village were interviewed.



Figure 1: The key villages visited during the ethnobotanical study near the vicinity of BRNP. (Source: Google Map, retrieved in October 2017)