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TREES OF THE LIMESTONE SUMMITS

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ABSTRACT

139 tree-species, in 82 genera and 39 families,were recorded. The Myrtaceae (15 species), Rubiaceae and Euphorbiaceae (each with 11 species), Ebenaceae and Melastomataceae (each with eight species) were the most species-rich families. *Podocarpus polystachyus* and *Gymnostoma sumatrana* were the most common species, and they were found in almost all the limestone hills in Bau.

Keywords: limestone, summit, trees





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Abstract. 139 tree-species, in 82 genera and 39 families, were recorded. The Myrtaceae (15 species), Rubiaceae and Euphorbiaceae (each with 11 species), Ebenaceae and Melastomataceae (each with eight species) were the most species-rich families. *Podocarpus polystachyus* and *Gymnostoma sumatrana* were the most common species, and they were found in almost all the limestone hills in Bau.

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INTRODUCTION

In this paper, we describe the floristic composition of trees of the summit limestone forests at Bau. During the Bau Limestone Inventory Project, the collections were concentrated on the limestone summits and shoulders extending approximately 10 m from the summit. This method was adopted on the assumption that species that occurred on the limestone summits can be considered to be true limestone species (Francis Ng, *pers. comm.*). Many of the specimens were sterile. The specimens were identified at the Forest Research Centre, Kuching. All the herbarium specimens are kept in the Sarawak Biodiversity Centre.

RESULTS AND DISCUSSION

Nineteen hills were surveyed. Of these, four hills (Gunung Doya, Gunung Tabai, Gunung Meraja and Gunung Kawa) are more than 400 m high. Six hills (Gunung Apin, Gunung Batu Payung, Gunung Tai Ton, Gunung

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Podam, Gunung Stulang and Gunung Ropih) range from 110 to 150 m and the rest range from 160 to 380 m.

Thirty-nine families were recorded during the survey. Thirty-eigh families were Angiosperms, comprising of 138 species. Gymnosperms were represented by one species, *Podocarpus polystachyus*. This *Podocarpu* together with *Gymnostoma sumatrana* were found on most limestone hills and were the two most common summit trees.

Myrtaceae, represented by 15 species, in three genera, is the most species family on the Bau limestone summits. Four other families, Euphorbiacea, Rubiaceae, Ebenaceae and Melastomataceae had more than seven species recorded. Other families were represented by smaller numbers of species.

Euphorbiaceae and Rubiaceae are the only two families that are represented by more than five genera; eight and seven genera respectively. A summary of trees recorded on the summits of Bau Limestone Area is provided in Table 1.

Almost all of the summits were covered with a layer of peat and humus to a depth of between 0.3 to 3 m except Gunung Batu and Gunung Krian which were covered with very thin sandy soil and loose rocks, and



Figure 1: Vegetation on the summit of Gunung Poing (170 m altitude). 1 – Mezzettia laptopoda, 2-Santiria apiculata, 3 – Gymnostoma sumatrana, 4 – Euonymus Javanicus, 5 – Garcinu memceyloides, 6 – Vatica coriacea, 7 – Diospyros beccarii, 8 – Diospyros elliptifolia, 9 – Diospyros hermaphroditica, 10 – Antidesma leucarpum, 11 – Cleistanthus baramicus, 12 – Drypetes sp., 13 Endiandra clavigera, 14 – Endiandra coriacea, 15 – Endiandra macrophylla, 16 – Aglaia korthabii. 17 – Dysoxylum alliaceum, 18 – Horsfieldia carnosa, 19 – Ardisia cardifera, 20 – Syzygium corymbifera, 21 – Syzygium griffithii, 22 – Syzygium lineata, 23 – Syzygium punciilimba, 24 Syzygium sp., 25 – Polygala venenosa, 26 – Nauclea sp., 27 – Euodia lunur-ankenda, 28 – Dimocarpus longan, 29 – Ganua sp., 30 – Turpinia sphaerocarpa var. sphaerocarpa, 31 – Rinora bengalensis, 32 – Pandamus sp.