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ORCHIDS**Meekiong Kalu**

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ABSTRACT

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Keywords: Borneo, limestone, Orchidaceae, orchids

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INTRODUCTION

The orchids were collected along the trails to the summits in 10-15 m strips on both sides and randomly in the hill areas during preliminary surveys. All the herbarium specimens and spirit collections are kept at the Sarawak Biodiversity Centre (SBC), and living specimens are grown at the SBC Nursery. Identifications were made at the Forest Research Centre, Kuching and by matching with photos in the reference books. The books were: *Orchids of Borneo Vol. 1, 2 & 3*; *A to Z of South East Asian Orchid Species*; *The Orchids of Peninsular Malaysia and Singapore*; *Orchids of Sarawak*; and *The Plants of Mount Kinabalu: Orchids*.

RESULTS AND DISCUSSION

This project recorded 54 genera and 132 species of orchids in the Bau Limestone Area. This is 15% of the total number of orchids in Sarawak and 12% of the orchids found in Borneo. *Bulbophyllum* and *Dendrobium* are the two genera with the most species: 17 and 15 species respectively. Twenty-nine genera were represented by single species, eight genera by two species, seven genera by three species; four genera by four species and five genera by more than five species. Details are shown as Table 1.

Thirty-four species were recorded from Gunung Ropih. This is followed by Gunung Lanyang and Gunung Tabai with 25 and 20 species each.

Of the 132 species, about 54% were epiphytes, 26% terrestrial, 19% lithophytes and 0.7% climbers. Most of the epiphytes were in the genera *Bulbophyllum* and *Dendrobium*. The terrestrials were well represented by *Liparis* and *Paphiopedilum*. *Vanilla havilandii* was the only climbing species.

The book, "Orchids of Sarawak" records 60 genera and 144 species of orchids from the Bau area. Our project added eight genera as new records for the Bau area: *Acriopsis*, *Calanthe*, *Chelonistele*, *Chroniochilus*, *Epipogium*, *Kingidium*, *Nervilia* and *Taeniophyllum*. However, out of 60 genera previously recorded, 15 were not found during the survey: *Aphyllorchis*, *Arachnis*, *Ascidieria*, *Claderia*, *Dipodium*, *Epigeneium*, *Galeola*, *Geesinkorchis*, *Hippephyllum*, *Licanorchis*, *Peristylus*, *Phreatia*, *Poaephyllum*, *Sarcoglyphis* and *Tania*.

Table 1: Orchids collected from Bau Limestone Area.

Taxon	Locality												
	Meraja Kawa	Aup	Podam	Poing	Stulang Batu Payong	Apin	Tai Ton	Krian	Pambor	Tongga	Ropih Batu	Doya	Jebong Tabai Lanyang Juita Umbat
<i>Acriopsis lilifolia</i> var. <i>lilifolia</i>					1								
<i>Aerides odorata</i>					1								
<i>Agrostophyllum glaucum</i>													1
<i>Agrostophyllum sumatranum</i>					1								
<i>Apostasia wallichii</i>		1											
<i>Appendicula anceps</i>										1		1	1
<i>Appendicula lucida</i>													1
<i>Appendicula torta</i>			1										
<i>Appendicula undulata</i> var. <i>undulata</i>	1												1
<i>Appendicula undulata</i> var. <i>longicalcarata</i>						1							1
<i>Arundina graminifolia</i> var. <i>graminifolia</i>													1
<i>Brachypeza indusiata</i>													1
<i>Bulbophyllum acuminatum</i>						1					1		
<i>Bulbophyllum brevipes</i>													1
<i>Bulbophyllum carinilabium</i>	1												
<i>Bulbophyllum dentiferum</i>										1			
<i>Bulbophyllum devogelii</i>						1							
<i>Bulbophyllum inunctum</i>	1									1			
<i>Bulbophyllum medusae</i>													1
<i>Bulbophyllum mirum</i>										1			
<i>Bulbophyllum membranifolium</i>										1			
<i>Bulbophyllum mutabile</i>					1								
<i>Bulbophyllum nematocaulon</i>										1	1		
<i>Bulbophyllum pulchellum</i>			1										
<i>Bulbophyllum purpurascens</i>											1		
<i>Bulbophyllum reticulatum</i>						1			1	1		1	1
<i>Bulbophyllum ruficaudatum</i>											1		
<i>Bulbophyllum</i> sp. 1										1			

Taxon	Locality																			
	Meraja	Kawa	Aup	Podam	Poing	Stulang	Batu Payong	Apin	Tai Ton	Krian	Pambor	Tongga	Ropih	Batu	Doya	Jebong	Tabai	Lanyang	Juita	Umbut
<i>Bulbophyllum</i> sp. 2							1													
<i>Bromheadia finlaysoniana</i>					1								1							
<i>Calanthe vestita</i>			1	1																
<i>Chelonistele sulphurea</i>													1							
<i>Chroniochilus virescens</i>																				1
<i>Cleisostoma discolor</i>								1									1			
<i>Ceologyne asperata</i>								1												
<i>Ceologyne monilirachis</i>													1				1			
<i>Ceologyne septemcostata</i>	1																1	1		
<i>Ceologyne swaniana</i>	1														1					
<i>Cordiglotis filiformis</i>	1					1														1
<i>Cordiglotis pulverulenta</i>														1						
<i>Coribas pictus</i>									1			1		1	1					
<i>Corymborkis veratrifolia</i>				1											1					
<i>Cymbidium dayanum</i>	1																	1		
<i>Cymbidium finlaysonianum</i>																			1	
<i>Dendrobium acerosum</i>									1											
<i>Dendrobium aciculare</i>							1	1												
<i>Dendrobium anosmum</i>																1				
<i>Dendrobium crumenatum</i>																	1			
<i>Dendrobium flexile</i>				1																
<i>Dendrobium</i> cf. <i>indragiriense</i>											1									
<i>Dendrobium kentrophyllum</i>																	1			
<i>Dendrobium lamellatum</i>								1							1			1		
<i>Dendrobium rhodostele</i>							1						1				1	1		1
<i>Dendrobium rosellum</i>				1																
<i>Dendrobium secundum</i>							1													
<i>Dendrobium singaporense</i>	1		1										1							
<i>Dendrobium sinuatum</i>													1							
<i>Dendrobium spurium</i>					1			1							1			1		
<i>Dendrobium truncatum</i>																	1			
<i>Dendrochilum muluense</i>												1	1							
<i>Dendrochilum ochrolabium</i>							1													
<i>Dendrochilum</i> sp. 1 [indet.]													1							
<i>Dimorphorchis</i>																				
<i>Dimorphorchis lowii</i>				1																
<i>Dossinia marmorata</i>	1		1	1					1				1				1	1		1
<i>Epipogium roseum</i>													1							
<i>Eria densa</i>													1							
<i>Eria</i> cf. <i>iridifolia</i>				1																
<i>Eria javanica</i>	1																			
<i>Eria jenseniana</i>																		1		
<i>Eria leiophylla</i>																	1	1	1	1
<i>Eria ornata</i>	1																	1		
<i>Eria pseudoleiophylla</i>							1						1		1			1		1
<i>Eria pulchella</i>											1									1
<i>Eria tricallosa</i>																				1
<i>Flickingeria fimbriata</i>	1							1					1					1		
<i>Flickingeria luxurians</i>																		1		