

NEW RECORD OF THE HIGHLAND BLOSSOM BAT,  
*SYCONYCTERIS HOBBIT* ZIEGLER, 1982  
(MAMMALIA: CHIROPTERA: PTEROPODIDAE)  
FROM IRIAN JAYA, INDONESIA

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**ABSTRACT.** - The first record of the Highland Blossom Bat, *Syconycteris hobbit* Ziegler, 1982 (Pteropodidae), from Habema and Tembagapura-Timika, Irian Jaya, Indonesia, is reported in this paper. The species was previously known from Papua New Guinea.

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INTRODUCTION

Anderson (1911) considered that the Macroglossine genus *Syconycteris* contained three species: *S. australis*, *S. crassa*, and *S. papuana*. Since then, several new species of *Syconycteris* have been named. Rozendaal (1984) described *S. carolinae* from a single adult male specimen from the southern base of Mt. Gumkonora, West Halmahera, Maluku Province, Indonesia. A second record of *S. carolinae* was reported by Boeadi & Flannery (1992).

Ziegler (1982) described *S. hobbit* on the basis of from an adult and subadult specimens from Marobe Province, Papua New Guinea (approximately 7°31'S 146°40'E), 2400 m above sea level. Another specimen of *S. hobbit* was collected by Flannery (1990) from the high altitude of Forfes near the Summit of mount Kaindi, Marobe Province, Papua New Guinea.

Koopman & Gordon (1992) reported on bats from southern and northern Mollucas, western New Guinea, as well as the surrounding islands, but do not record *Syconycteris hobbit*. In this paper we report on new records of *S. hobbit* from Irian Jaya, eastern Indonesia.

## METHODS

Eleven adult females and eight males as dry skins and skulls were available for study. Twenty seven measurements of skull (cranial and dental) and 18 external measurements were recorded from each specimen using dial calipers to the nearest 0.01 mm (Table 1). Measurements recorded follow Ziegler (1982) as well as additional measurements described in Kitchener & Maharadatunkamsi (1991). The results are compared with measurements of the species reported in Ziegler (1982). The specimens measured were three adult females from Tembagapura-Timika (approximately 2500 m above sea level) and eight males and eight adult females from Habema (approximately 3000 m above sea level). Cranial, dental and external measurements listed below are arranged in the sequence as they appear in Table 1.

## TAXONOMY

### ORDER CHIROPTERA, SUBORDER MEGACHIROPTERA

### FAMILY PTEROPODIDAE

### *Syconycteris hobbit* Ziegler, 1982

**Material examined.** - Adult females: MZB 15159, 15153, 15158, 15165, 15167, 15168, 15157; Habema tract-Wamena, altitudes  $\pm 2500$  m above sea level, Irian Jaya, Indonesia, coll. M. H. Sinaga, 1990. — MZB 14439 14437, 14438; Tembagapura-Timika, altitudes  $\pm 2000$  m above sea level, Irian Jaya, Indonesia, coll. S. N. Priyono & Sudarmanu, 1984.

Adult males: MZB 1554, 15156, 15160, 15161, 15162, 15163, 15164, 15166; Habema tract-Wamena, altitudes  $\pm 2500$  m above sea level, Irian Jaya, Indonesia, coll. M. H. Sinaga, 1990.

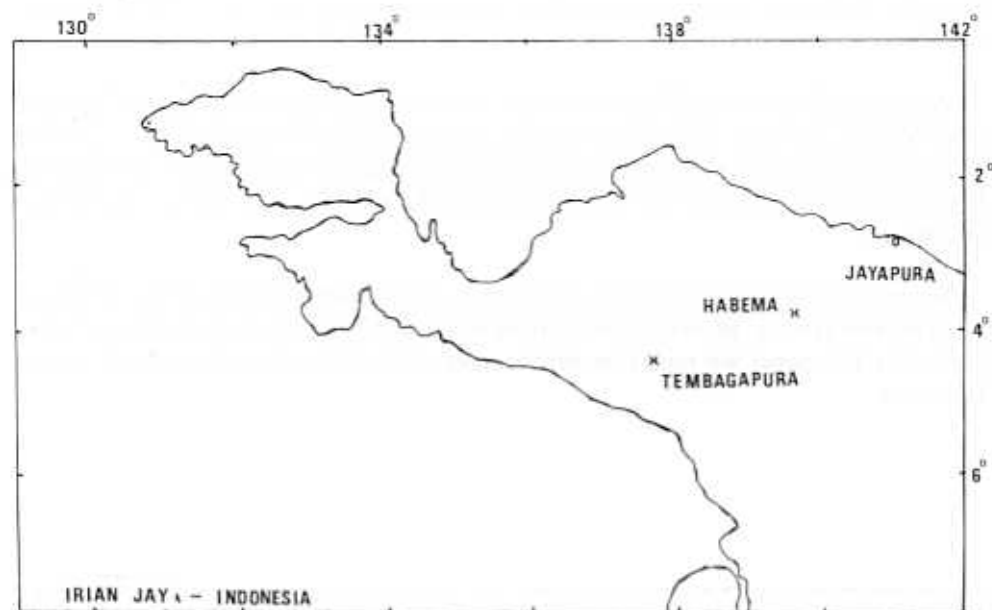


Fig. 1. Location of collecting sites (marked x) at the western end of Irian Jaya.

Table 1. Skull and body measurements of *Syconictoris hobbit* from Timika and Habema-Wamena, Irian Jaya

	Ziegler (1982)	TEMBAGAPURA-TIMIKA		HABEMA-WAMENA		HABEMA-WAMENA	
		Aver	Std Range	Aver	Std Range	Aver	Std Range
Sex		Female		Female		Male	
GSL	24.90	25.43+0.18	(25.21-25.65)	25.37+0.29	(24.94-25.92)	25.66+0.32	(25.19-26.05)
CB	23.15	24.17+0.29	(23.95-24.58)	24.25+0.30	(23.94-24.74)	24.40+0.34	(23.90-24.73)
PL	11.48	11.56+0.08	(11.52-11.63)	11.67+0.19	(11.40-12.02)	11.74+0.23	(11.31-11.9)
ZB	13.06	14.21+0.39	(13.67-14.58)	14.27+0.09	(14.13-14.40)	14.97+0.40	(14.42-15.69)
BW	10.34	10.34+0.12	(10.24-10.51)	10.45+0.09	(10.30-10.61)	10.58+0.21	(10.18-10.92)
POW		5.12+0.09	( 5.03- 5.25)	5.11+0.16	( 4.84- 5.37)	5.08+0.16	( 4.92- 5.42)
LJW		4.86+0.12	( 4.69- 4.98)	4.99+0.19	( 4.71- 5.35)	5.07+0.17	( 4.80- 5.44)
MFW		3.04+0.04	( 3.00- 3.10)	3.13+0.08	( 3.01- 3.27)	3.11+0.09	( 2.97- 3.30)
ONL		7.41+0.04	( 7.37- 7.47)	6.99+0.09	( 6.79- 7.08)	7.05+0.20	( 6.60- 7.27)
RAP		7.67+0.04	( 7.63- 7.71)	7.75+0.29	( 7.24- 8.14)	7.90+0.15	( 7.65- 8.07)
DL		18.16+0.34	(17.85-18.64)	17.99+0.27	(17.58-18.43)	18.09+0.25	(17.81-18.56)
BRH		8.41+0.24	( 8.11- 8.70)	8.69+0.11	( 8.59- 8.89)	8.82+0.19	( 8.50- 9.05)
C-C	4.76	5.09+0.04	( 5.06- 5.14)	4.99+0.18	( 4.71- 5.26)	5.21+0.08	( 5.10- 5.38)
P2P2		5.01+0.13	( 4.87- 5.18)	4.95+0.09	( 4.80- 5.14)	5.09+0.14	( 4.84- 5.29)
P3-P3		5.65+0.12	( 5.50- 5.79)	5.59+0.16	( 5.39- 5.85)	5.66+0.15	( 5.50- 5.91)
P4-P4	5.94	5.99+0.22	( 5.71- 6.25)	5.90+0.12	( 5.76- 6.14)	6.09+0.08	( 5.96- 6.18)
M1-M1		6.18+0.21	( 5.89- 6.34)	6.27+0.18	( 5.91- 6.49)	6.41+0.11	( 6.27- 6.65)
M2-M2		5.96+0.22	( 5.74- 6.17)	6.22+0.12	( 6.03- 6.41)	6.22+0.08	( 6.05- 6.35)
C-M2		7.51+0.01	( 7.50- 7.52)	7.33+0.21	( 7.06- 7.79)	7.55+0.22	( 7.16- 7.80)
C1L		1.39+0.12	( 1.31- 1.54)	1.27+0.09	( 1.11- 1.39)	1.37+0.07	( 1.29- 1.49)
P2L		0.99+0.04	( 0.95- 1.04)	0.97+0.10	( 0.79- 1.07)	0.96+0.10	( 0.80- 1.08)
P3L		1.21+0.07	( 1.13- 1.29)	1.20+0.08	( 1.04- 1.30)	1.21+0.06	( 1.10- 1.29)
P4L		1.18+0.03	( 1.14- 1.22)	1.21+0.09	( 1.08- 1.33)	1.21+0.05	( 1.14- 1.28)
M1L	1.04	1.14+0.04	( 1.09- 1.18)	1.08+0.09	( 0.95- 1.23)	1.12+0.10	( 0.91- 1.23)
M2L		0.73+0.03	( 0.70- 0.75)	0.64+0.06	( 0.54- 0.74)	0.65+0.09	( 0.53- 0.75)
M3l		9.80+0.17	( 9.60-10.02)	9.57+0.20	( 9.30- 9.88)	9.67+0.21	( 9.31- 9.88)
C-M3	8.16	8.60+0.04	( 8.55- 8.66)	8.45+0.17	( 8.27- 8.78)	8.65+0.17	( 8.40- 8.88)
D1	16.7(cu)*	13.00+1.08	(12.12-14.76)	14.12+0.65	(13.18-15.2)	13.70+0.60	(12.99-14.7)
D2	30.0(cu)*						
D2M		21.74+0.71	(20.78-22.46)	22.40+0.69	(21.41-23.63)	21.93+0.83	(20.76-23.26)
D2P1		3.69+0.11	( 3.54- 3.80)	3.86+0.26	( 3.60- 4.28)	3.94+0.50	( 3.24- 4.80)
D2P2		3.18+0.28	( 2.78- 3.41)	3.65+0.33	( 3.23- 4.24)	3.40+0.41	( 2.72- 3.99)
D3M	30.2	30.40+0.40	(30.60-30.97)	32.17+1.29	(30.49-34.17)	31.70+0.95	(30.80-33.55)
D3P1	21.5	22.73+0.33	(22.26-22.99)	23.99+0.44	(23.41-24.76)	23.10+0.74	(22.30-24.76)
D3P2	34.5(ch)#	34.31+0.78	(33.68-35.41)	37.08+0.90	(35.86-39.07)	36.72+1.19	(35.21-38.24)
D4M	29.3	30.48+0.54	(30.08-31.24)	32.47+1.26	(30.37-34.17)	31.99+0.84	(30.50-33.38)
D4P1	18.5	19.01+0.45	(18.40-19.46)	20.22+0.58	(19.07-21.13)	19.33+0.57	(18.49-20.61)
D4P2	20.5(ch)#	20.13+1.27	(19.16-21.93)	22.10+0.76	(20.85-23.04)	21.34+0.85	(20.04-23.01)
D5M	31.8	33.53+0.69	(32.74-34.43)	34.34+1.61	(32.40-37.37)	34.52+0.55	(33.71-35.27)
D5P1	16.0	17.12+0.48	(16.51-17.67)	17.78+0.40	(17.04-18.22)	15.66+2.15	(10.30-17.09)
D5P2	13.2(ch)#	12.79+0.94	(11.88-14.08)	14.50+0.60	(13.26-15.07)	14.21+1.22	(12.30-16.26)
FA	47.2	48.76+0.65	(47.85-49.36)	49.89+1.41	(48.13-52.31)	49.67+1.35	(47.95-52.10)
ML		5.17+0.20	( 4.84- 5.26)	5.48+0.28	( 5.11- 5.90)	5.36+0.29	( 4.79- 5.85)
SVL	67.7	75.15+1.23	(73.67-76.67)	75.22+1.82	(72.89-78.17)	73.83+2.28	(70.74-77.40)
EL	12.0	9.94+0.16	( 9.71-10.06)	10.32+0.41	( 9.81-10.99)	10.13+0.41	( 9.50-10.66)
TL		16.07+0.17	(15.83-16.23)	15.84+0.56	(14.67-16.58)	16.26+0.54	(15.27-17.01)

\*cu = Cum unguis; measurements including claw as of hind foot and fore digits

#ch = Chord: straight-line, rather than along curvature.

**Description of Irian Jayan *S. hobbit*.** - The colouration of *Syconycteris hobbit* was described by Ziegler (1982) as having dark greyish-brown fur dorsally, darkest on head and nape, with the anterior back paler laterally and especially posteriorly.

The Irian Jayan specimens have dense velvet fur all over the dorsum, but less so on the venter. That covering the front and sides of the head is the shortest. The colouration of the Habema highland specimens vary from greyish-brown to dark brown dorso-ventrally, with a darker colour on the head and nape. Some rusty brown parts can be seen on the forearms and flanks down to the hind legs. The rump is faintly, light brown, and the whitish suffusion on the medio-ventral parts of the body are often seen. The colouration of the Tembagapura-Timika specimens are lighter in general compared to the Habema highlands.

**Weights.** - Most of the female specimens from Habema are pregnant. Pregnant females averaged 22.2 grams (n=5), whereas non-pregnant adults averaged 19.3 grams (n=3). The males averaged 20.3 grams (n=8). Specimens from Tembagapura-Timika averaged 18 grams (n=3). The average weights of the Irian Jayan specimens are considerably heavier than those reported by Ziegler (1982) from Papua New Guinea, in which the adults average 15.7 grams and sub adults, 15.1 grams in weight.

**External, skull, tooth row measurement.** - In comparison with the New Guinean specimens, those from Irian Jaya are slightly larger (Table 1). For example in males, the range for head and body length (SVL) for the Irian Jaya specimens = 70.74-77.40; FA = 47.95-52.10 and GSL = 25.19-26.05; whereas the corresponding measurements for the Papua New Guinean specimens are SVL = 59-75; FA = 45-50; and GSL = 24.2-25.4 (fide Ziegler, 1982). The measurements of the Irian Jayan population is thus slightly larger than that from Papua New Guinea. With regards to the BW and P<sup>1</sup>-P<sup>1</sup> (Table 1), the differences between the two populations are not significant.

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