

TITLE
HIGH CONSERVATION VALUE AREA (HCVA)
HCV 1.2: RAFFLESIA MONITORING



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1.0 INTRODUCTION

In the previous monitoring and assessment, we had been able to identify the species of the *Rafflesia* that we had found, observed, and studied which is *Rafflesia pricei*. The host plant of *Rafflesia pricei* has been found to be *Tetrastigma leucostaphylum*, one of the genus *Tetrastigma* species from the family Vitaceae (Nais, 2001). For this latest monitoring, we had been given a task to establish a plot to identify the range of the *Rafflesia* host plant.

1.1 Site Descriptions

Location : Coupe 12A
Coordinates : N 04° 05' 08.3"
 E 115° 27' 16.8"
Elevation : 1193m a.s.l
Topography : Concave

1.2 Personnel Involved

1. Ophelia Eda Alexander Treang
2. Lorin Sanggit
3. Christly Bian Dawat
4. Clinton Tubu Dawat



2.0 OBJECTIVES

1. To establish a plot to identify the range of Rafflesia host plant.
2. To monitor the progress of Rafflesia buds.

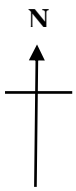
3.0 MATERIALS & METHODOLOGY

3.1 Materials

1. GPS Tracker
2. Compass
3. Clinometer
4. Linear Tape
5. Ruler
6. Warning Tape
7. Permanent Marker Pen
8. Pencil
9. Notebook
10. Digital Camera

3.2 Methodology

1. A main plot measuring 15m x 21m was established to the North direction by using a compass and a clinometer. **(Figure 1)**
2. The horizontal lines and the vertical lines of the main plot were marked with poles with 3m distance between each poles, therefore, the small squares inside the main plot are measuring 3m x 3m each. **(Figure 1)**
3. The position of existing Rafflesia host plants and Rafflesia buds inside the plot were recorded. **(Figure 2)**
4. The circumference of each buds were taken and recorded. **(Table 1)**
5. A few samples of the host plant's leaf were measured and recorded. **(Table 2)**



15m

3m

3m

21m

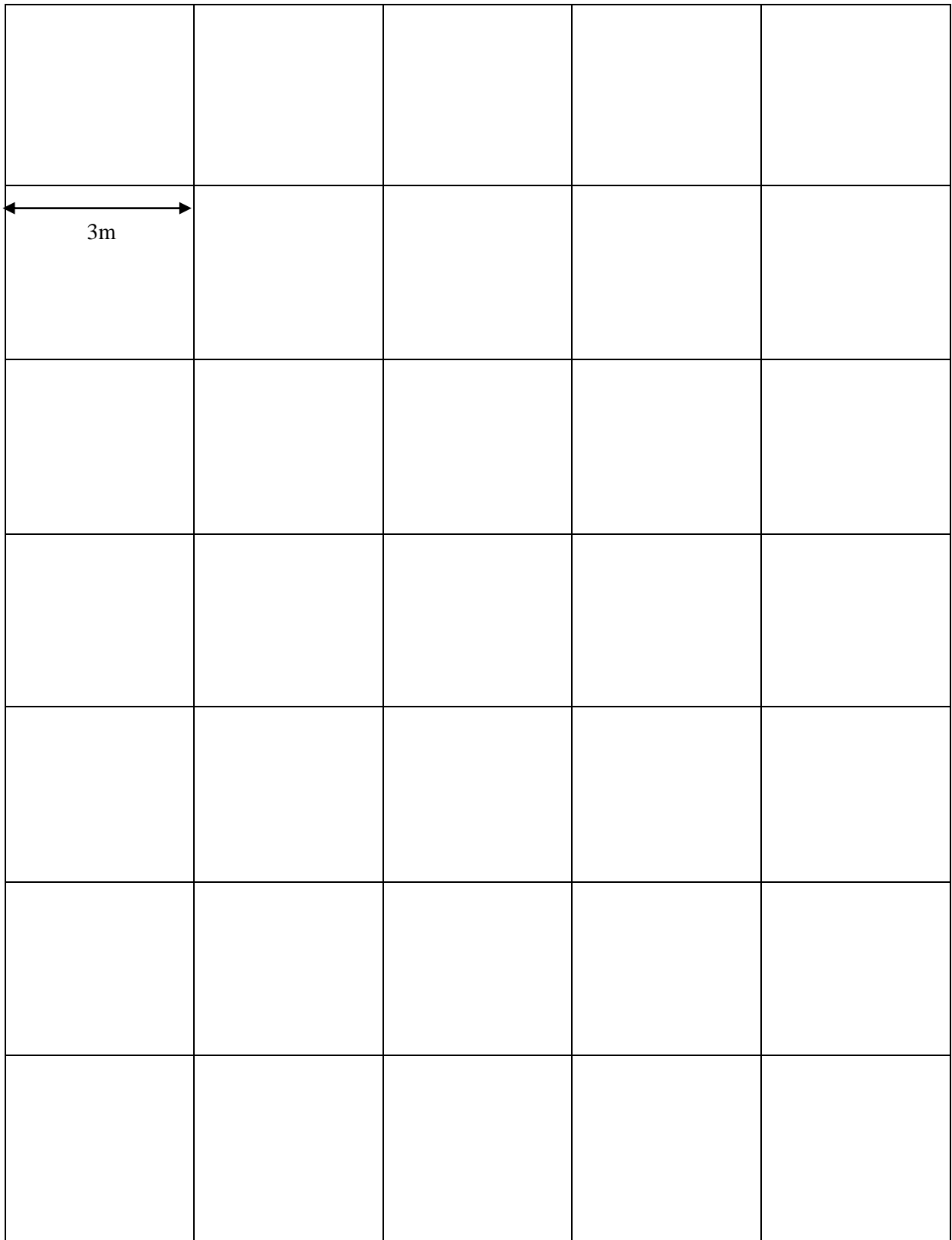


Figure 1: Main plot measuring 15m x 21m with 3m distance between each poles.



4.0 RESULTS

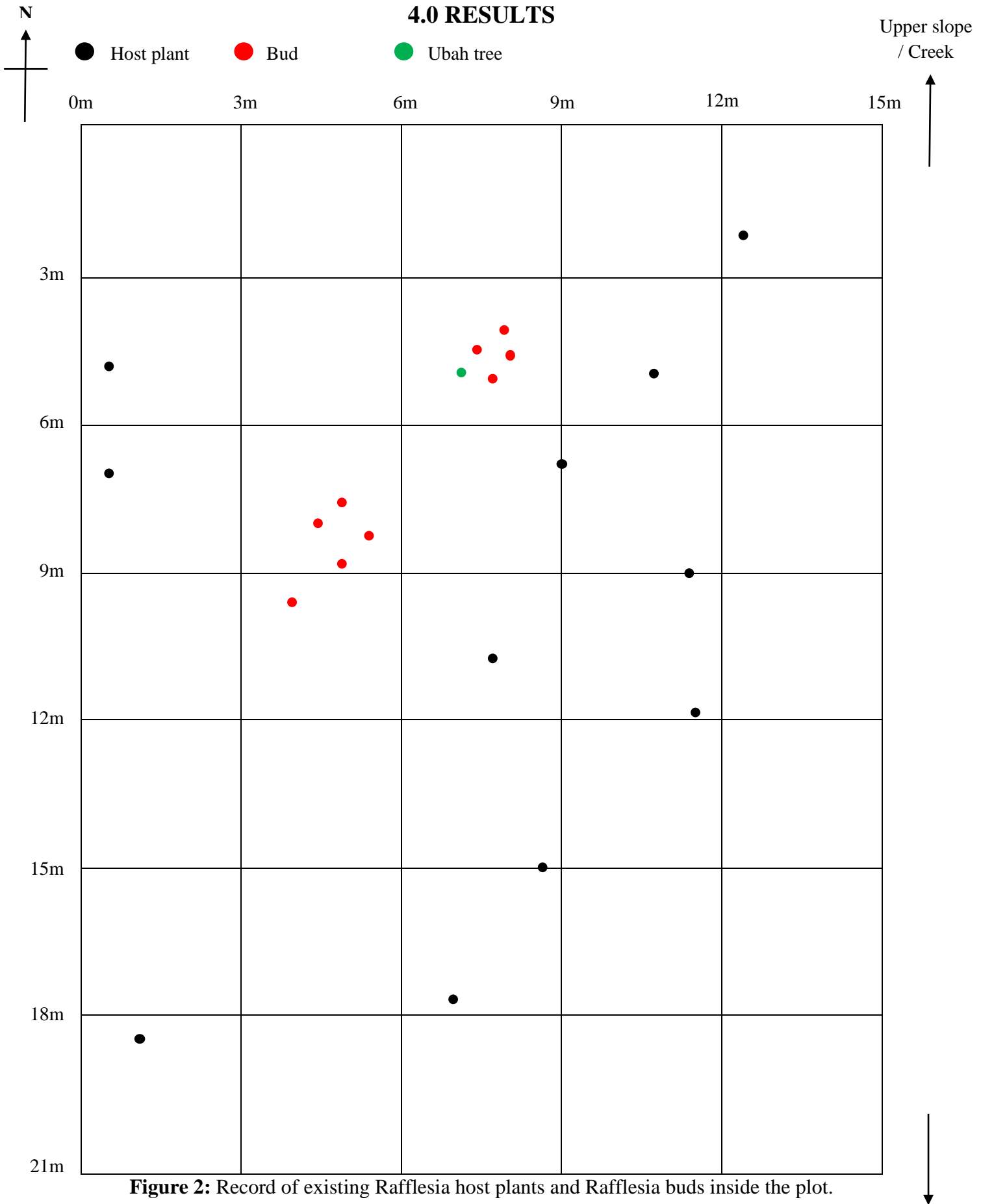


Figure 2: Record of existing Rafflesia host plants and Rafflesia buds inside the plot.

NO.	BUD	CIRCUMFERENCE (CM)	REMARKS
1.	Bud 1	25.0	
2.	Bud 2	29.8	
3.	Bud 3	33.1	
4.	Bud 4	37.3	
5.	Bud 5	24.2	New bud
6.	Bud 6	21.4	New bud
7.	Bud 7	26.3	New bud
8.	Bud 8	27.4	New bud
9.	Bud 9	–	Under Ubah tree root

Table 1: Measurements of Rafflesia buds' circumference.

NO.	LEAF	LENGTH (CM)	WIDTH (CM)
1.	Leaf 1	16.8	9.2
2.	Leaf 2	15.6	7.0
3.	Leaf 3	15.2	7.3
4.	Leaf 4	13.4	6.3
5.	Leaf 5	10.2	4.6
6.	Leaf 6	11.0	4.8
7.	Leaf 7	9.0	5.2
8.	Leaf 8	6.5	3.8
9.	Leaf 9	9.2	4.9
10.	Leaf 10	6.5	3.5

Table 2: Measurements of Rafflesia host plant's leaves.

5.0 DISCUSSIONS

The Rafflesia host plant (*Tetrastigma leucostaphylum*) was found in the range of the established plot– 15m x 21m. We have recorded eleven (11) spots of the host plant inside the plot. The host plants were found scattered throughout the plot (**Figure 2**). Besides that, we have taken a few samples of the host plant's leaf and found that the average leaf size was in the range of 3.5–9.2cm length and 6.5–16.8cm width (**Table 2**).

Meanwhile, we have recorded nine (9) existing Rafflesia buds inside the plot. The buds are in cluster and there are two (2) clusters that we have found (**Figure 2**). Other than that, we have taken the measurement of the buds' circumference and found four (4) new buds during the monitoring (**Table 1**).

There are no other host plant and bud found outside of the plot so far.



6.0 CONCLUSION

The range of the Rafflesia host plant was identified by establishing the plot, and the measurement of the Rafflesia buds were taken to monitor the progress of their growth.



7.0 REFERENCES

Nais, J. (2001). *Rafflesia of the World*. Sabah: Natural History Publications (Borneo) Sdn. Bhd.

Salleh, K.M. (2007). *Rafflesia Magnificent Flower of Sabah*. Kota Kinabalu: Natural History Publications (Borneo) Sdn. Bhd.

8.0 APPENDICES



Figure 3: Bian was checking the direction of the compass and holding the linear tape to establish the plot.



Figure 4: Lorin was holding the linear tape to establish the plot.



Figure 5: Tubu was pruning small trees to make poles for the plot.



Figure 6: Measuring the leaf of *Rafflesia pricei* host plant– *Tetrastigma leucostaphylum*.



Figure 7: Upper part of *Tetrastigma leucostaphylum* leaf.



Figure 8: Lower part of *Tetrastigma leucostaphylum* leaf.



Figure 9: Full view of *Tetrastigma leucostaphylum*.



Figure 10: Bud No. 1



Figure 11: Bud No.2



Figure 12: Bud No.3



Figure 13: Bud No. 4



Figure 14: Bud No. 5



Figure 15: Bud No. 6



Figure 16: Bud No.7



Figure 17: Bud No. 8



Figure 18: Buffer zone paint is still visible.



Figure 19: Signage paint has faded and need re-painting.