

Project Update: February 2017

We completed the second phase of the Project during which we focused on the identification of material and the analysis of the data collected during the previous phase of the Project. The list of the collected material and localities is given in the Table 1.

Table 1. The list of the collected material and localities.

	Cave	Locality	Coordinates	Fauna	Sequenced
1.	Gua Ular	Batu Batangan, Lower Kinabatangan, Borneo, Sabah	5° 27.566' N 118° 06.126' E	≈ 50 Gastropoda 14 Opiliones 5 Diplopoda 2 Isopoda	4 Gastropoda
2.	Gua Kolam	Batu Batangan, Lower Kinabatangan	5° 27.557' N 118° 06.118' E	1 Acarina 1 Opiliones 3 Hemiptera 5 Staphylinidae ≈ 30 Diptera	
3.	Gua Babi	Batu Batangan, Lower Kinabatangan, Borneo, Sabah	5° 27.570' N 118° 06.088' E	≈ 50 Gastropoda 3 Opiliones 4 Diplopoda 4 Isopoda 11 Leiodidae	4 Gastropoda 4 Leiodidae
4.	Gua Merayar	Batu Batangan, Lower Kinabatangan, Borneo, Sabah	5° 27.573' N 118° 06.075' E	17 Gastropoda 2 Diplopoda 20 Isopoda	4 Gastropoda
5.	Gua Lumpur	Batu Batangan, Lower Kinabatangan, Borneo, Sabah	5° 27.556' N 118° 05.958' E	No fauna collected	
6.	Gua Ikan	Batu Batangan, Lower Kinabatangan, Borneo, Sabah	5° 27.558' N 118° 05.891' E	2 Diplopoda 2 Isopoda 1 Staphylinidae 19 Leiodidae 2 Diptera	4 Leiodidae
7.	Gua Cendawan Bi	Batu Batangan, Lower Kinabatangan, Borneo, Sabah	5° 27.574' N 118° 05.848' E	No fauna collected	
8.	Gua Fico	New hill 2, Lower Kinabatangan, Borneo, Sabah	5° 27.135' N 118° 08.769' E	2 Gastropoda 4 Acari 1 Isopoda ≈ 30 Staphylinidae ≈ 50 Leiodidae	2 Gastropoda 4 Leiodidae

Several snail specimens and specimens of the genus *Ptomaphaminus* from each cave were stored in 96% ethanol and have been sequenced. It turned out that most *Ptomaphaminus* specimens, except the new species from Gua Fico, belong to a single species- *P. latescens*, widely distributed in Sunda. This was not a surprising discovery since seven out of eight caves we explored are located on a single limestone outcrop. DNA sequences will remain available for future studies and molecular analyses via the Barcoding of Life Database (BOLD). After study, all material will be deposited in the collection of Universiti Malaysia Sabah.

We are preparing for the last phase of our project during which we will organise several workshops with elders from local communities and local primary schools in the Kinabatangan area (Sukau and Batu Puteh). We made the promotional video that will be used during the educational activities and leaflets (in English and Malay) that will be distributed at local communities, Sabah Wildlife Department, Sabah Forestry Department, and Universiti Malaysia Sabah. We prepared a number of small, sturdy demonstration boxes, in which reference specimens from our collections will be compiled. These boxes will be donated to the respective schools and communities in Sukau and Batu Puteh.

We are also planning to explore several caves in Sukau and do a IUCN Red List assessment for the Sanaron cave snail, *Georissa filiasaulae*.