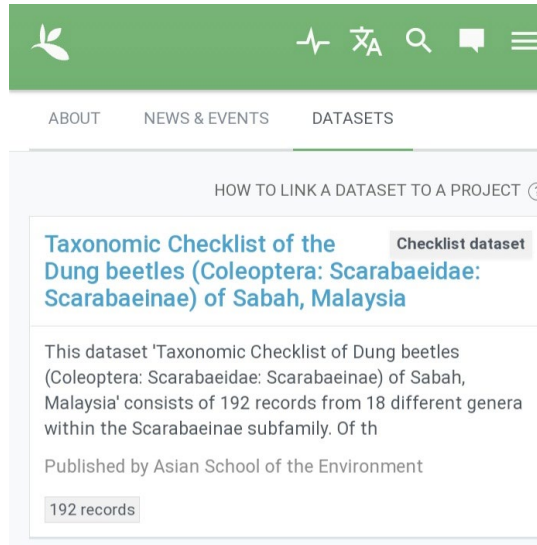


## Twitter Engagement

### [POST] Notification of Taxonomic Checklist Publication (13 April 2022) by @eleslade

"We have published an #openaccess checklist to #dungbeetles of Sabah, Malaysia through our #BIFA @GBIF project to mobilise data on #insects in the region. A huge amount of work led by @MarxYim & @XinRuiOng #TEELab @NTU\_ASE @ScienceNTU watch this space!"

<https://twitter.com/ElSlade/status/1514160062067245058>



### [POST] GBIF Introduction and Project Presentation to Forest Ecology Lab, ASE (30 March 2022) by @eleslade

"Great talk last week by #TEELab @MarxYim @NTU\_ASE about his work with #BIFA @GBIF compiling data and making photographic guides on Malaysian & Singapore #dungbeetles so that this knowledge is #openaccess and #accessible. Filling a key gap for #insect ecology and #entomology"

<https://twitter.com/ElSlade/status/1509124737523363846>



## BIFA6\_032 Mobilising Data on Ecologically Important Insects in Malaysia and Singapore Communications Output

### [POST] GBIF Introduction and Project Presentation to LKCNHM (29 Nov 2021) by @eleslade

“Had our first discussions about our #BIFA @GBIF project to mobilise data for Singapore #dungbeetles today with our partner @lkcnhm. Excellent talk on GBIF & our project by project co-ordinator @MarxYim here showcasing the amazing work of @zwitteriann & Young Xu @NTU\_ASE TEELab”

<https://twitter.com/ElSlade/status/1465344742376423429>



### [POST] Commencement of project after completion of Asia Biodiversity Mobilisation Workshop (12 Nov 2022) by @marxyim

“Our #GBIFBIFA project on Mobilising Data on Dung Beetles in Bornean Malaysia and Singapore is underway with @EleSlade presenting at the @GBIF Asia Virtual Summit 2021 along with many other Asian stakeholders that desire for improved access to biodiversity data for all!”

<https://twitter.com/MarxYim/status/1459108927874813960>

**MOBILIZING DATA ON ECOLOGICALLY IMPORTANT INSECTS IN MALAYSIA AND SINGAPORE**

**Goal**  
Increase knowledge on the Dung beetles (Scarabaeidae) and encourage their wider use as bioindicators

**Project lead**  
Tropical Ecology and Entomology (TEELab), Asian School of the Environment

**Partners**  
Lee Kong Chian Natural History Museum, National University of Singapore  
Forest Research Centre, Sabah, Malaysia  
Borneensis, Universiti Malaysia Sabah  
Finnish Museum of Natural History, Luomus

[https://www.gbif.org/project/BIFA\\_032/](https://www.gbif.org/project/BIFA_032/)

01:56

GBIF

Eleanor Slade

BIFA6\_032 Mobilising Data on Ecologically Important Insects in Malaysia and Singapore  
Communications Output

**[POST] Announcement of grant being awarded and introduction to project (1 Nov 2022) by @eleslade**

“We have a new grant from @GBIF #BIFA to work on databasing & documenting the #dungbeetles of Singapore & Bornean Malaysia. The project will be managed by @MarxYim with @XinRuiOng & local collaborators from Sabah, Helsinki & @lkcnhm Exciting times! @NTU\_ASE”

<https://twitter.com/ElSlade/status/1455157138314039297>

attached TEE Lab Blog Post ‘Mobilising data on ecologically important insects in Malaysia and Singapore’  
<https://teelabntu.wixsite.com/home/post/mobilising-data-on-ecologically-important-insects-in-malaysia-singapore-gbif-proj-funded-by-bifa>



## **TEE Lab Blog**

**[BLOG] Mobilising Data on Ecologically Important Insects in Malaysia & Singapore GBIF Project By BIFA/MOEJ (1 Nov 2021)**

This post was published at the beginning of the project. It was shared on twitter to reach a wider audience and other internal work channels such as slack as a way to reach colleagues and students within our institute.

<https://teelabntu.wixsite.com/home/post/mobilising-data-on-ecologically-important-insects-in-malaysia-singapore-gbif-proj-funded-by-bifa>

**[BLOG] (GBIF-BIFA) Taxonomic Checklist of the Dung Beetles in Sabah, Malaysia (13 Apr 2022)**

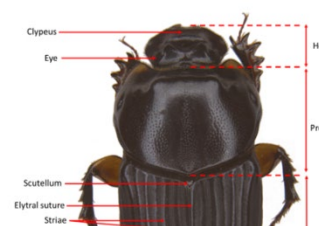
This post was uploaded following the publication of the taxonomic checklist. It will be shared via twitter and internal channels such as Slack.

<https://teelabntu.wixsite.com/home/post/gbif-bifa-taxonomic-checklist-of-the-dung-beetles-in-sabah-malaysia>


## Keys and photographic guides

### Dung Beetle Guidebook of Sabah

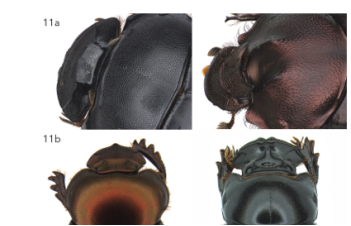
**Dung Beetle Anatomy**



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11. a. Pronotum granulate ..... 12  
 b. Pronotum either punctured or smooth ..... 13




Copyright Tropical Ecology & Entomology Lab

12. a. Single head horn, large elytra, large pronotal horns, females with reticulate ridge across head ..... **Catharsius (pg xx)**  
 b. Purple brown colouration, granulation elongated (roughly oval), males and females with two head horns, long and curved in large males, pronotal horn in largest males ..... **Proagoderus watanabei (pg xx)**

**Oniticellus tessellatus** Harold 1879



Left panel (top to bottom): Male dorsal view, Male lateral view, Male ventral view. Right panel (top to bottom): Female dorsal view, Close-up of scutellum.

**Size** 10 mm    **Colouration** Yellow & black    **Habitats** 

Copyright Tropical Ecology & Entomology Lab

**Ecology** Medium diurnal dweller  
**See** Boucomont 1914, Davis 1999 (10mm, n=nd)

Images above are examples of pages from a guidebook that is in development. It contains a key and photographic guides of dung beetle from Sabah. This guidebook is meant to be published online and in hard copies and made freely available to anyone.

### Dung Beetle Guidebook of Singapore

The Singapore dung beetle guidebook is in progress. Imaging is currently underway, and specimens are derived from Lee Kong Chian Natural History Museum (LKCNHM), our own extensive sampling efforts conducted between Nov to Dec 2021 (project by Zann Teo and Leong Yong Xu) and other reference collections from previous studies of dung beetles in Singapore.

## Publishing Data Papers

We have plans to publish data papers and database papers and we plan to write similar papers for Sabah dung beetle datasets and will aim to publish these in journals such as Biodiversity Data Journal, Scientific Data, or Zookeys.

## Interactive Videos

- Timelapse of databasing process (Complete but not yet uploaded or published)
- Timelapse of imaging and image processing (Complete but not yet uploaded or published)
- Video project on sampling dung beetles in Singapore (Editing in progress)
- Video project on DNA molecular sequencing (Editing in progress)