



Global Biodiversity
Information Facility

Biodiversity Information Fund
for Asia (BIFA)



Motacilla alba Linnaeus, 1758



Tringa ochropus Linnaeus, 1758



Neurobasis chinensis Linnaeus, 1758



Saxicola maurus stejnegeri (Parrot, 1908)



Saxicola maurus stejnegeri (Parrot, 1908)



Pantala flavescens Fabricius, 1798



Cinnyris jugularis (Linnaeus, 1766)



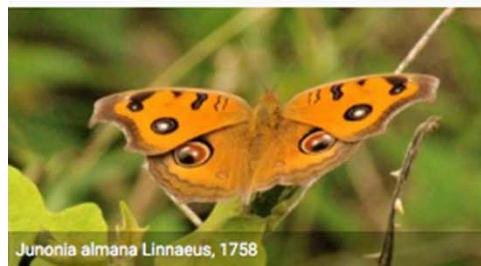
Lanius schach Linnaeus, 1758



Emberiza yessoensis (Swinhoe, 1874)



Junonia lemonias Linnaeus, 1758



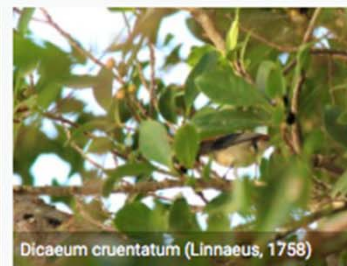
Junonia almana Linnaeus, 1758



Tirumala limniace



Apis dorsata Fabricius, 1793



Dicaeum cruentatum (Linnaeus, 1758)



Tamias maritimus (Bonhote, 1900)

Digitizing and data basing specimens of the Sumatran Flora deposited at Herbarium Universitas Andalas (ANDA)-Part 2

Ahmad Taufiq – Herbarium of Universitas Andalas

GBIF ENGAGEMENT MEETING 8 JULY 2019, BIODIVERSITY CONSERVATION AGENCY, HANOI

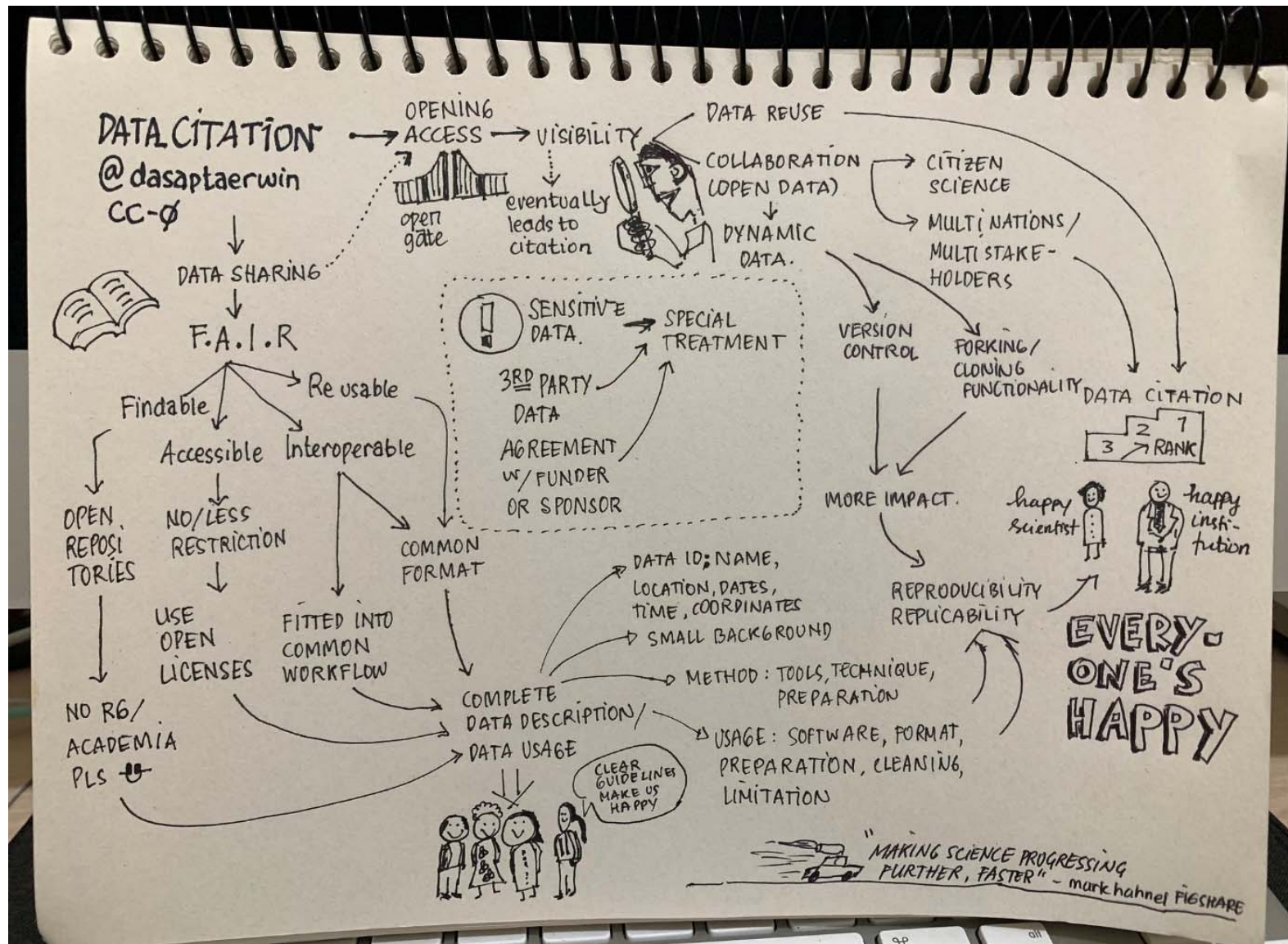
GREETINGS FROM PADANG



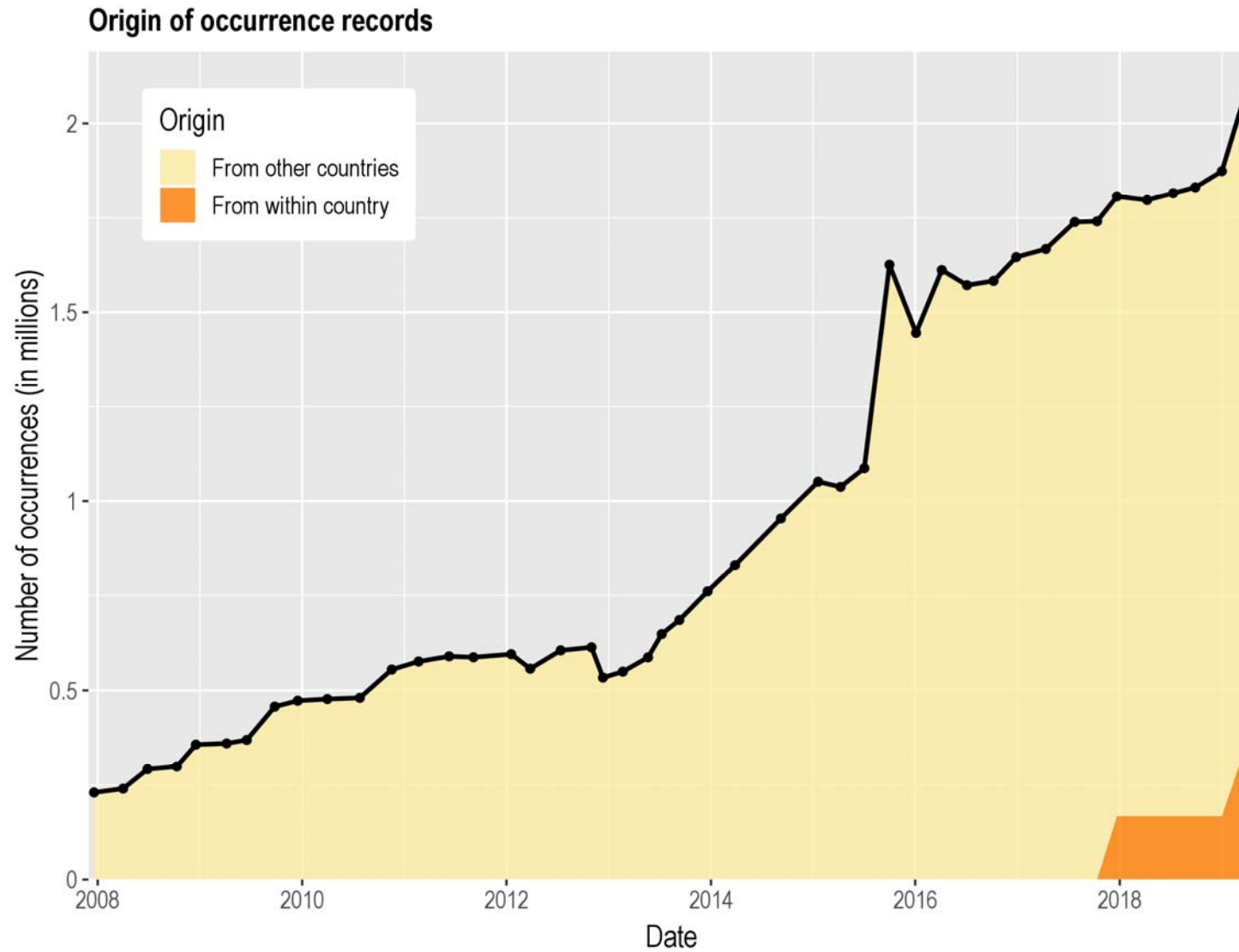
PROJECT OBJECTIVES



PROJECT OBJECTIVES



PROJECT OBJECTIVES



PROJECT OBJECTIVES

we will focus on:

- 1) to digitize and manage 20,000 sheets of herbarium specimens hosted at Herbarium ANDA that will be connected to the GBIF online database, and
- 2) to build an offline digital database incorporating more detailed information for sensitive specimens.

DATA SOURCES

Preserved specimen of
Sumatran plant
 ± 65.000 sheets



A BRIEF REPORT

BIFA 3 (2018)

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PROJECT | IN PROGRESS

Digitizing and databasing Sumatran flora

 1 Apr 2018 - 31 Mar 2019 € 15,000

ABOUTDATASETS



13,568 done

DATA MOBILIZATION WORKSHOP



STAKEHOLDERS MEETING



WORKSHOP FOR VOLUNTEER



DATA CAPTURING AND CLEANING



DATA PUBLISHING

 **GBIF** INTEGRATED PUBLISHING TOOLKIT (IPT)
free and open access to biodiversity data

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[Geographic Coverage](#)
[Taxonomic Coverage](#)
[Temporal Coverage](#)
[Project Data](#)

Flora of Sumatra: Vascular plant collection of selected families deposited at Herbarium of Andalas University (ANDA)

Latest version published by Herbarium of Andalas University on Apr 30, 2019

Herbarium of Andalas University (ANDA) is one of the active herbaria on Sumatra, Indonesia. Currently, the herbarium hosts about 65,000 sheets of herbarium collections, consisting of vascular plants and moss. The main collections are from Sumatra and adjacent islands. The herbarium serves both for research and education. Since 2018, we worked with the Global Biodiversity Information Facility (GBIF) to catalog and digitize our collections to improve the accessibility of the specimens. Since then, we have cataloged up to 13,568 of geo-referenced data from 374 species in 85 genera within 15 families of vascular plants. Among all of the families we have cataloged are Balsaminaceae, Begoniaceae, Dipterocarpaceae, Euphorbiaceae, Fagaceae, Gesneriaceae, Nepenthaceae, Polygalaceae, Rosaceae, Sapotaceae, Symplocaceae, Pandaceae, Phyllanthaceae, Putranjivaceae and Chrysobalanaceae. Among them are 40 species that are endemic to Sumatra. The program is our first step to improve research and education for species on Sumatra.



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DATA PUBLISHING

PUBLISHER | SINCE NOVEMBER 9, 2018

Herbarium of Andalas University

ABOUT METRICS

13,568 OCCURRENCES

1 DATASET

Description: Herbarium of Andalas University is a national herbarium in Indonesia, administered under the management of Andalas University, Padang, West Sumatra, Indonesia and registered in Index Herbariorum with the abbreviation ANDA. Herbarium ANDA has become the center of plant information for Sumatran species that used by local and national government agencies and researchers from several countries. It comprises about 65,000 sheets of dry collection of plant specimens that collected mostly from Sumatran floristic area. More than 12,000 sheets herbarium specimen were digitized by the collaboration with GBIF on Biodiversity Information Fund for Asia (BIFA3-17 2018). The data arranged using the Darwin Core format.

Endorsed by: [Indonesian Biodiversity Information Facility](#)

Technical contact: [Ahmad Taufiq](#)

Country or area: [Indonesia](#)



DATA PUBLISHING

OCCURRENCE DATASET | REGISTERED MARCH 4, 2019

Flora of Sumatra: Vascular plant collection of selected families deposited at Herbarium of Andalas University (ANDA)

Published by [Herbarium of Andalas University](#)

✉ Nurainas Nurainas • Ahmad Taufiq • Heru Handika • Syamsuardi Syamsuardi

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13,568 OCCURRENCES

Herbarium of Andalas University (ANDA) is one of the active herbaria on Sumatra, Indonesia. Currently, the herbarium hosts about 65,000 sheets of herbarium collections, consisting of vascular plants and moss. The main collections are from Sumatra and adjacent islands. The herbarium serves both for research and education. Since 2018, we worked with the Global Biodiversity Information Facility (GBIF) to catalog and digitize our collections to improve the accessibility of the specimens. Since then,... [More](#)



Project ID: BIFA3_17

Metadata last modified: April 30, 2019

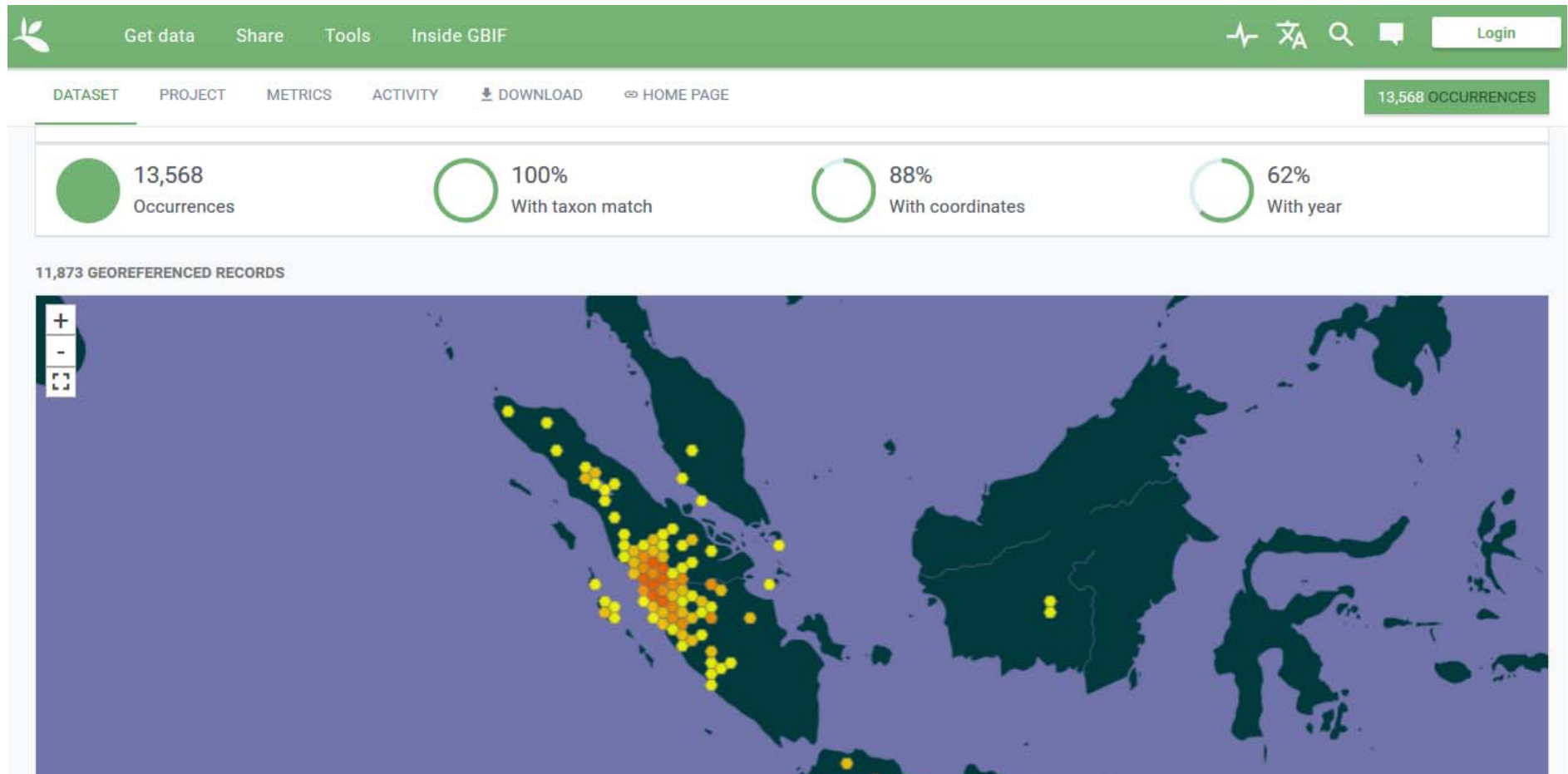
Data last changed: April 8, 2019

Hosted by: [Research Center For Biology - Indonesian Institute of Sciences \(LIPI\)](#)

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 [How to cite](#)  [DOI](#) 10.15468/sncpxn

DATA PUBLISHING



DATA PUBLISHING

The screenshot displays the GBIF Occurrences interface. The top navigation bar includes links for 'Get data', 'Share', 'Tools', and 'Inside GBIF', along with a 'Login' button. The main section is titled 'Occurrences' and features a search bar with the text 'Search all fields'. Below the search bar are two tabs: 'Simple' (selected) and 'Advanced'. A sidebar on the left contains several filter categories, each with a dropdown arrow: 'License', 'Scientific name', 'Basis of record', 'Location', 'Year', 'Month', 'Dataset', and 'Country or area'. The 'Dataset' filter is expanded, showing a checked box for 'Flora of Sumatra: Vascular plant collection of selected families deposited at Herbarium of Andalas University (ANDA)'. At the bottom of the sidebar, a URL is displayed: 'https://www.gbif.org/occurrence/2006002965'. The main content area is a grid of 15 plant specimen images, each with a label below it. The labels are: 'Didymocarpus Wall.', 'Begonia aberrans Irmsch.', 'Begonia harauensis Girm.', 'Begonia droopiae Ard.', 'Begonia vuijckii Koord.', 'Begonia padangensis Irmsch.', 'Monophylea horsfieldii', 'Begonia section', 'Begonia beludruvanea M.Hughes', 'Begonia aberrans Irmsch.', 'Begonia vuijckii Koord.', 'Cyrtandra populifolia Miq.', 'Begonia gracilicyma Irmsch. ex M.Hughes', 'Begonia droopiae Ard.', and 'Mallotus peltatus Müll.Arg.'.

DATA PUBLISHING

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13,568 OCCURRENCES

Description

Purpose

Temporal scope

Geographic scope

Taxonomic scope

Methodology

Additional info

Bibliography

Contacts

Data description

GBIF registration

Citation

Family

[Balsaminaceae](#) Jewelweed

[Begoniaceae](#) Begonia

[Chrysobalanaceae](#) Maranthes

[Dipterocarpaceae](#) Keruing

[Euphorbiaceae](#) Cooper leaf

[Fagaceae](#) Oak

[Gesneriaceae](#) Mapele

[Nepenthaceae](#) Pitcher plant

[Pandaceae](#) Kayu busih

[Phyllanthaceae](#) Andarupis

[Polygalaceae](#) Sasapuan

[Putranjivaceae](#) Bintang mabas

[Rosaceae](#) Rose

[Sapotaceae](#) Manatu

[Symplocaceae](#) Asiatic sweetleaf

Genus

[Acalypha](#) Cooper leaf

[Agrostistachys](#) Gelintum

[Alchornea](#) Khang poi

[Aleurites](#) Bunsangil

[Anisoptera](#) Keruing

[Antidesma](#) Buah jerawai

[Aporosa](#) Kumpang

[Baccaurea](#) Belembik

[Baliospermum](#) Neruvam

[Begonia](#) Begonia

[Bischofia](#) Java cedar

[Breynia](#) Fart bush

[Bridelia](#) Kanidei

[Epithema](#) Fleshy ephthema

[Eriobotrya](#) Berry

[Euphorbia](#) Fire plant

[Flueggea](#) Patala

[Galearia](#)

[Ganua](#) Ganua

[Glochidion](#) Sakah-sakah

[Hancea](#) Enserai

[Henckelia](#) Bracted stone flower

[Hevea](#) Rubber

[Homalanthus](#) Bangki

[Homonoia](#) Willow leaved water croton

[Hopea](#) Merawan

[Hura](#) Sandbox tree

[Nepenthes](#) Pitcher

[Palaquium](#) Nato nasi

[Paraboea](#)

[Parashorea](#) White meranti

[Payena](#) Bee taul

[Phyllanthus](#) Meniran

[Planchonella](#) Nyatoh nangka merah

[Pleionuma](#)

[Polygala](#) Sasapuan

[Prunus](#) Janteli

[Quercus](#) Oak

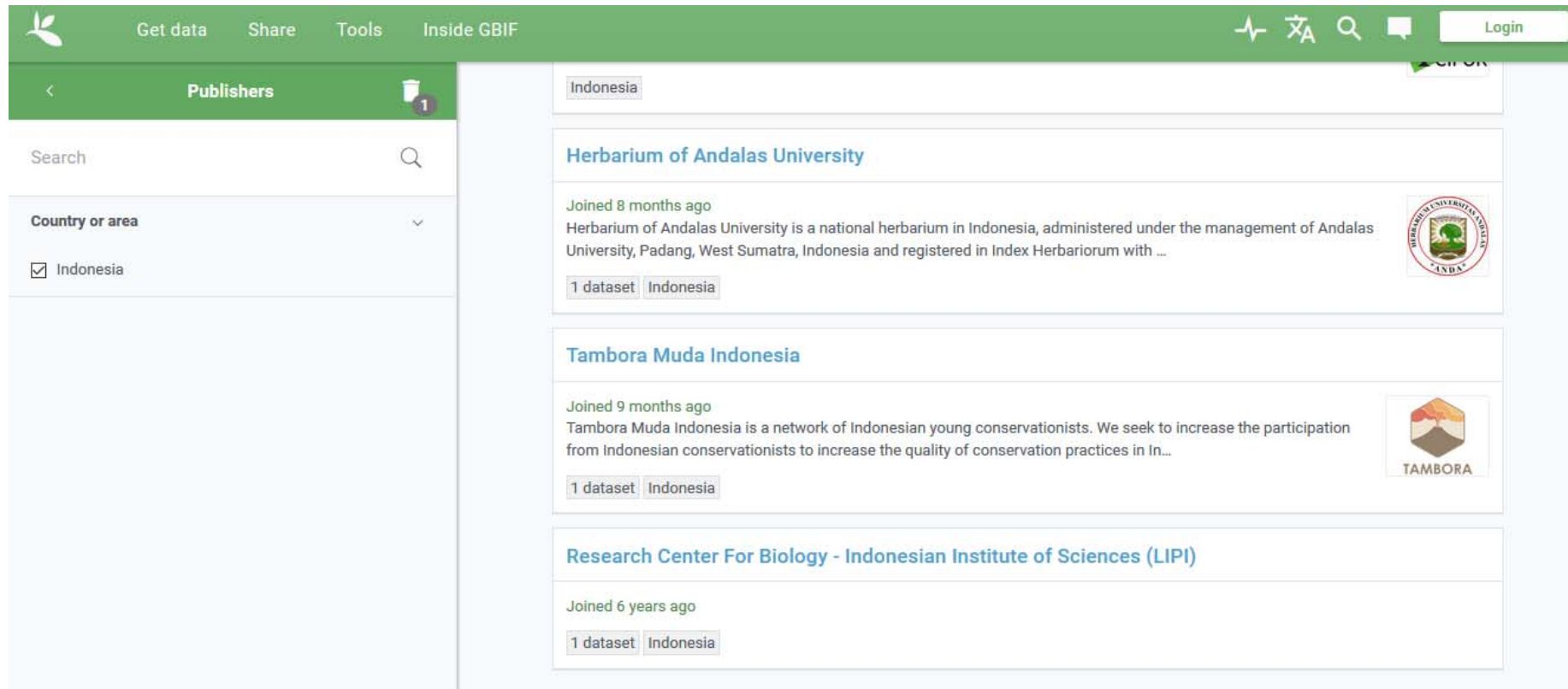
[Raphiolepis](#) Snow maiden

[Rhynchoglossum](#) Malayalam

[Rhynchotechum](#) Assamese

https://www.gbif.org/occurrence/search?q=Acalypha&dataset_key=3e0987c4-375f-4d68-b2ac-5e4e3a6d3d6d&advanced=1

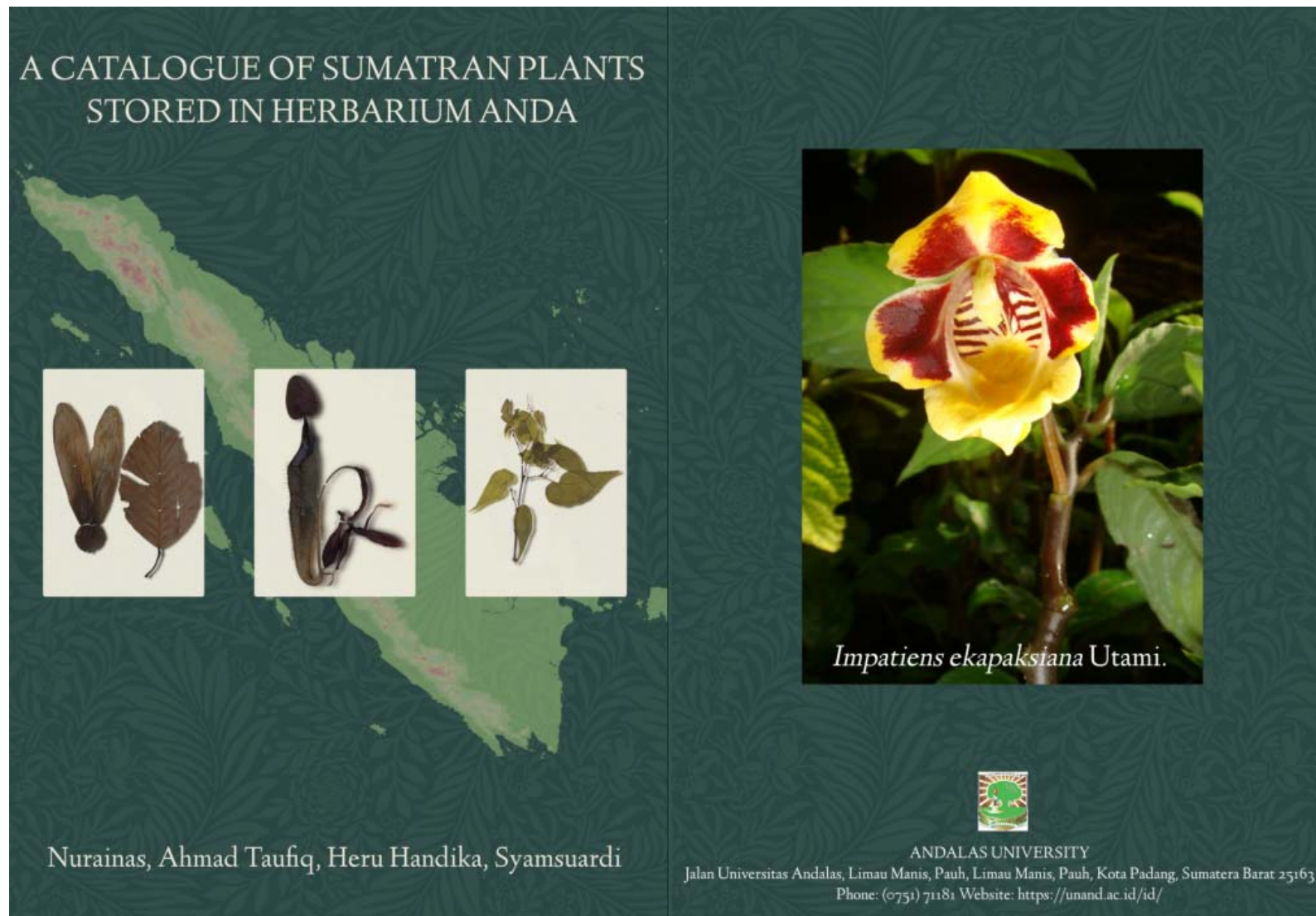
DATA PUBLISHING



The screenshot shows the GBIF website's 'Publishers' page for Indonesia. The top navigation bar includes 'Get data', 'Share', 'Tools', 'Inside GBIF', and a 'Login' button. The left sidebar has a 'Publishers' header with a trash icon and a search bar. Below the search bar, the 'Country or area' filter is set to 'Indonesia'. The main content area displays a list of publishers for Indonesia, each with a title, join date, description, and a '1 dataset' tag.

Publisher	Joined	Description	Datasets
Herbarium of Andalas University	8 months ago	Herbarium of Andalas University is a national herbarium in Indonesia, administered under the management of Andalas University, Padang, West Sumatra, Indonesia and registered in Index Herbariorum with ...	1 dataset
Tambora Muda Indonesia	9 months ago	Tambora Muda Indonesia is a network of Indonesian young conservationists. We seek to increase the participation from Indonesian conservationists to increase the quality of conservation practices in In...	1 dataset
Research Center For Biology - Indonesian Institute of Sciences (LIPI)	6 years ago		1 dataset

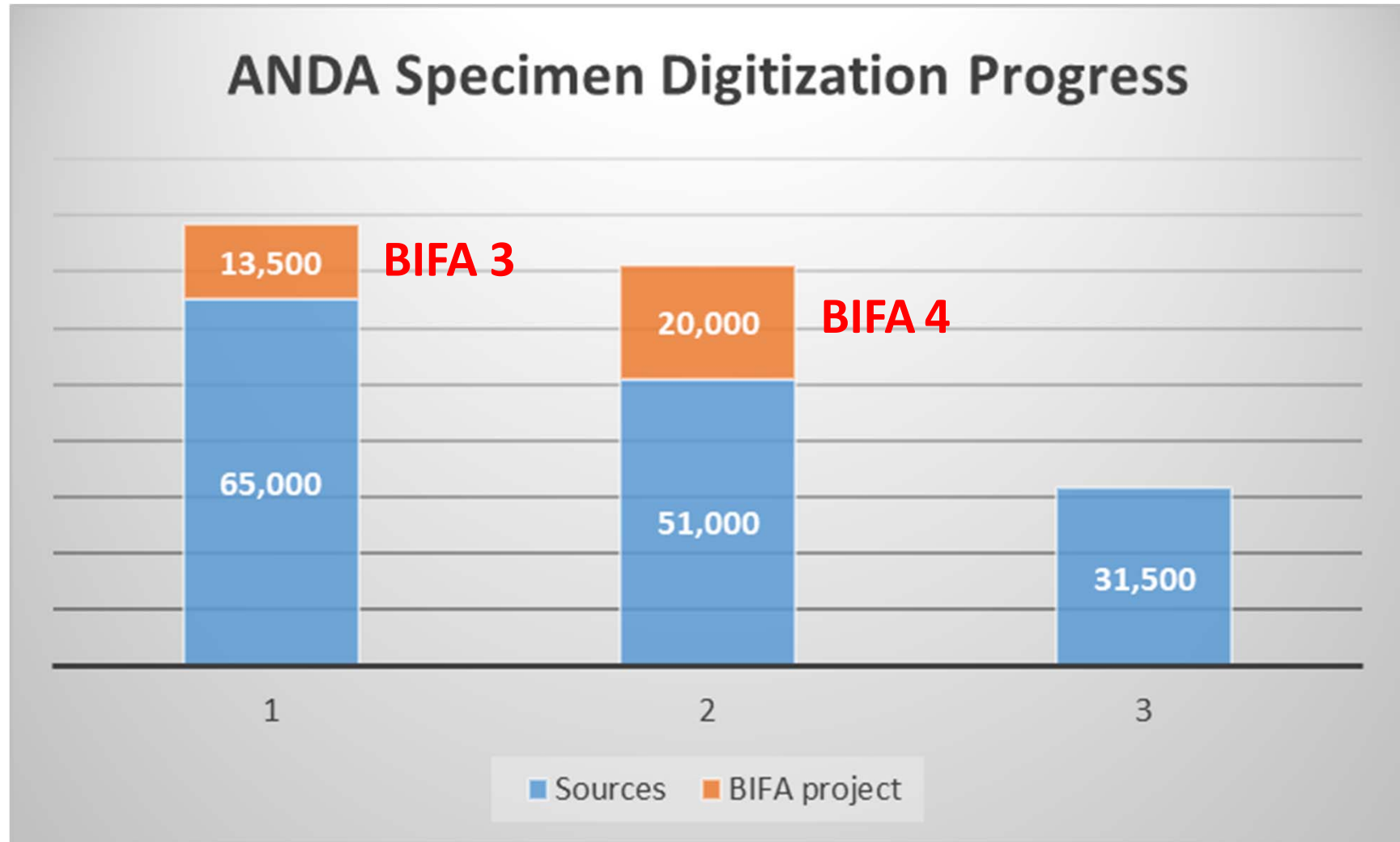
DATA PUBLISHING



DATA PUBLISHING



DATA SOURCES



PROJECT TIMELINE

Activity	2019								2020			
	M	J	J	A	S	O	N	D	J	F	M	A
Preparation and national stakeholders meeting	X											
Open recruitment for volunteers		X										
Mandatory attendance of a project team member to the BIFA Capacity Enhancement Workshop (expenses for attending the workshop are covered by the BIFA program)			X									
Workshop for volunteers			X									
Capturing specimen images		X	X	X	X							
Capturing specimen data			X	X	X							
Data cleaning					X	X						
Data publishing						X	X					
Deadline for mid-term report – 31 October 2019						X						
Mandatory milestones attached to the mid-term report:												
- Gain certification at BIFA Capacity Enhancement Workshop												
- At least one dataset has been published to GBIF.org												
Creating an offline database							X	X	X			
Writing data papers										X	X	
Deadline for final reporting – 30 April 2020												X
Mandatory milestones attached to the final report:												
- All deliverables have been produced												
- Sustainability and next steps have been documented												

PROJECT SUSTAINABILITY

We will continue the activities after the project end, with the specific plans:

1. to continue the data digitization for the remaining specimens using our independent funds,
2. to adapt the specimen data management and digitization as a part of materials for a class on “the Plant Specimens and Collection Management” that has been a part of the department curriculum,
3. to strengthen a collaboration with InaBIF as the main partner on Sumatra,
4. to work together with InaBIF to promote Indonesian species database,
5. to increase communication and collaborations with experts on designated taxa to verify species identification

TERIMAKASIH..
THANK YOU..

