Durasi: 90 menit, rehat, & partisipasi aktif

Materi: slide gambar & narasi oral

Plot: alur & kompleksitas meningkat
(Global, Indonesia, Spesimen, Riset)

Q & A

BIAS Botany

Sesi 2:

Prinsip Dasar Biosistematika dan Konservasi Biodiversitas

Alex Sumadijaya

Biodiversitas: Keragaman ekosistem, jenis, genetik

Biosistematika: identifikasi, deskripsi, klasifikasi, penamaan, kekerabatan

Konservasi:
Perlindungan, Pembelajaran, Pemanfaatan

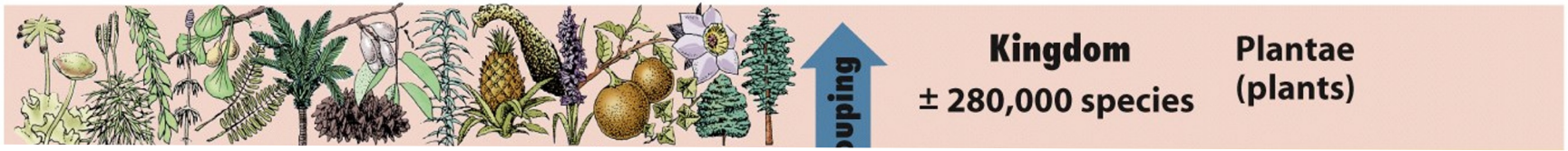
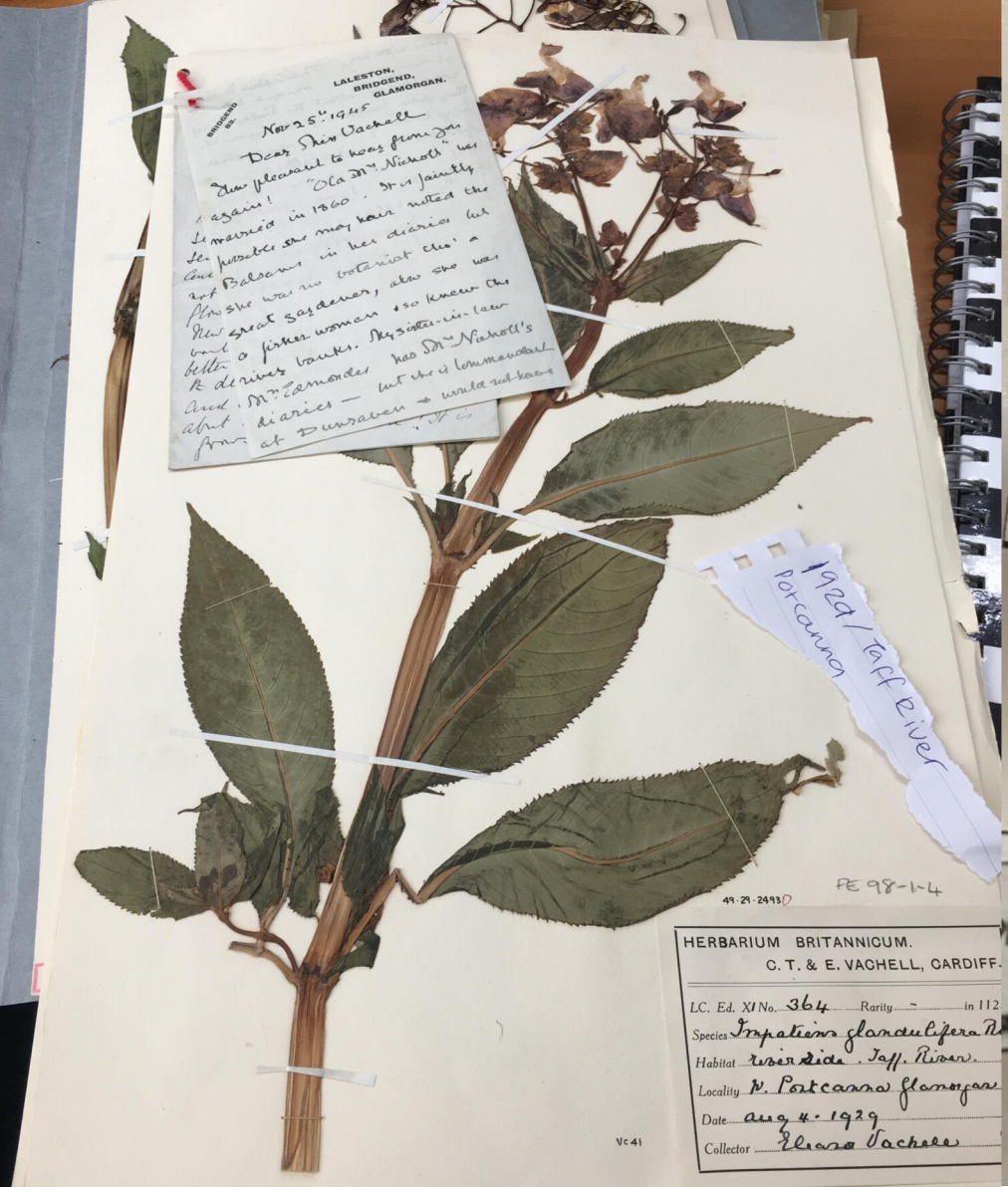
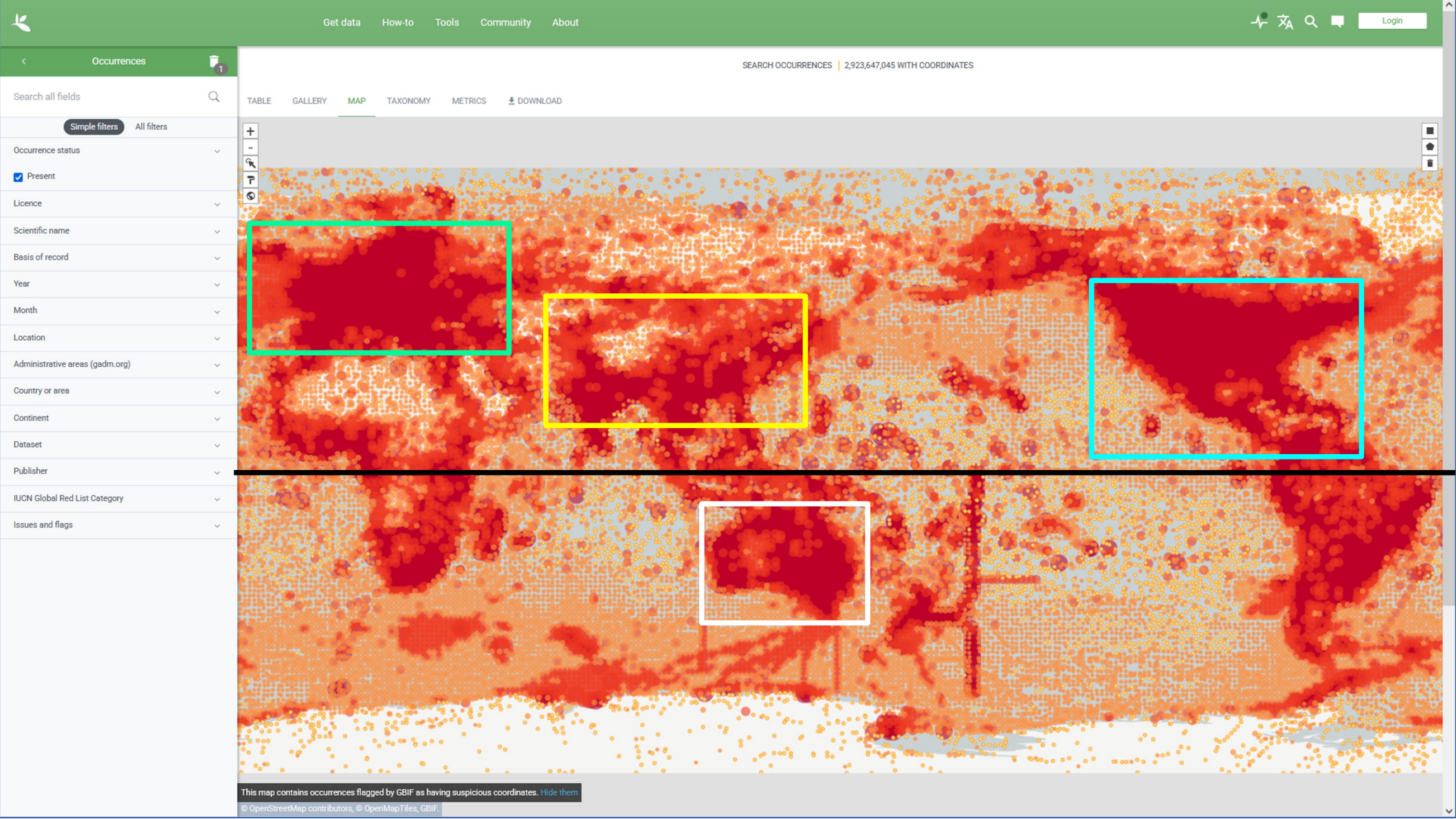


Figure 2-6 Discover Biology 3/e


LALESTON,
BRIDGEND,
GLAMORGAN.
Nov 25th 1945
Dear Miss Vachell
1924 / Taff River
Portcanna
PE 98-1-4
HERBARIUM BRITANNICUM.
C. T. & E. VACHELL, CARDIFF.
LC. Ed. XI No. 364
Species Impatiens glandulifera
Habitat riverside . Taff. River.
Locality N. Portcanna Glamorgan
Date aug 4. 1929
Collector Elvira Vachell


screen-trap
Paul Naftzger
5/2018
under dead snapping turtle
Paul Naftzger
9/2019
sweep-net
Paul Naftzger
8/2019
night light
Paul Naftzger
9/2019
Paul Naftzger

Johnson, K. R., Owens, I. F., & Global Collection Group. (2023). A global approach for natural history museum collections. Science, 379(6638), 1192-1194.


Get data
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Community
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Occurrences
Search all fields
Simple filters
All filters
Occurrence status
Present
Licence
Scientific name
Basis of record
Year
Month
Location
Administrative areas (gadm.org)
Country or area
Continent
Dataset
Publisher
IUCN Global Red List Category
Issues and flags
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METRICS
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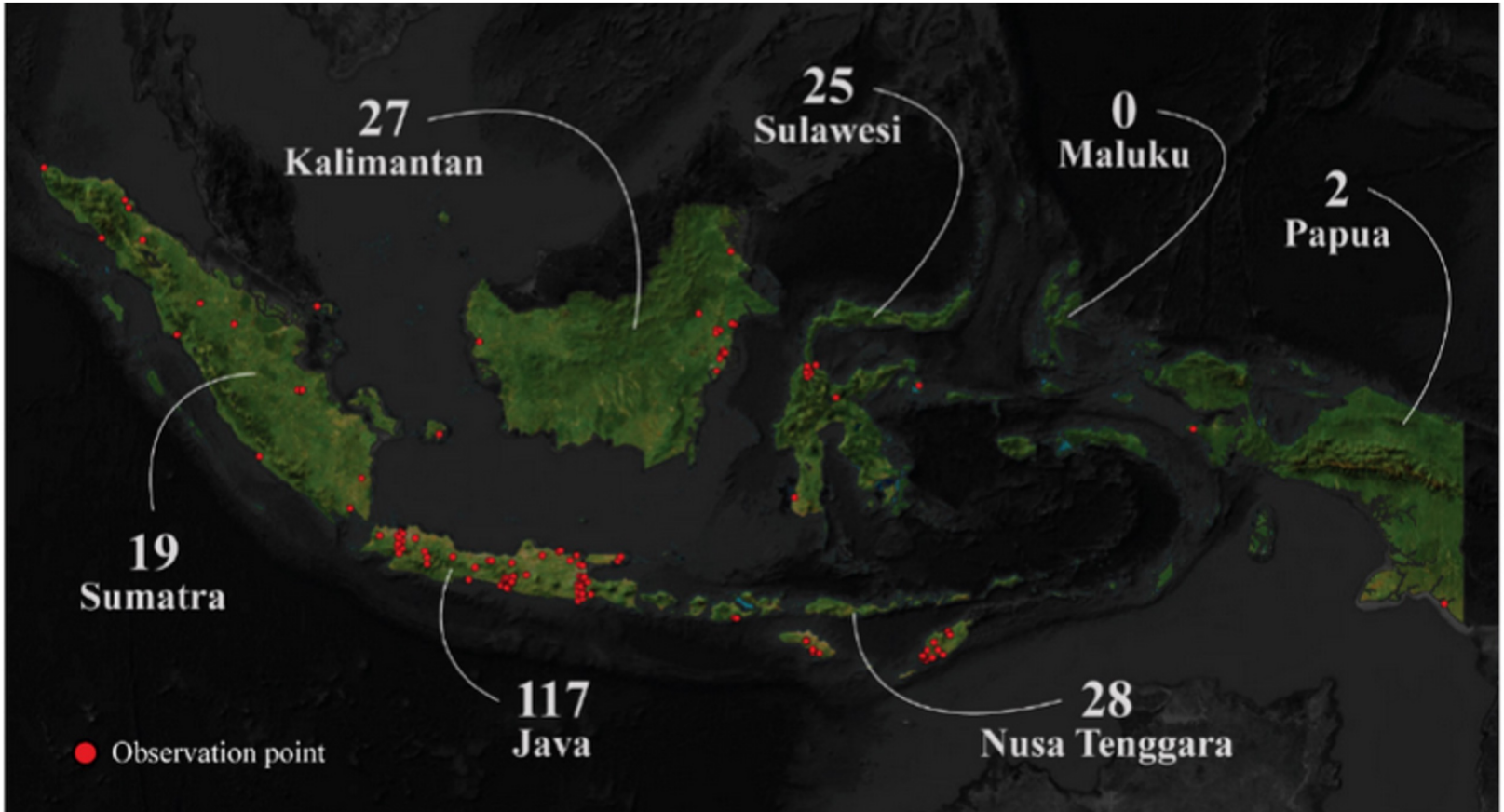
KUPUNESIA APP FOR CITIZEN SCIENCE: NEW WAY OF MAINSTREAMING INTEREST AND STUDY OF INDONESIAN BUTTERFLIES

Djunijanti Peggie*[#1,2], Swiss Winasis Bagus Prabowo[#1,3], Abdul Mutholib Shahroni[#1,4], Fariq Izzudien Ash Shidiq[#1], Lutfi Irwansyah[#1], Soenarko[#1], Nabila Rahma[#1,4], and Imti Yazil Wafa[#1]



Materi: slide gambar & narasi oral

Plot: alur & kompleksitas meningkat

Durasi: 90 menit, break & partisipasi aktif

Q & A

1

Sesi 2:

Prinsip Dasar Biosistematika dan Konservasi Biodiversitas

Alex Sumadijaya

Unity in Biodiversity

2

Biodiversitas: Keragaman ekosistem, jenis, genetik

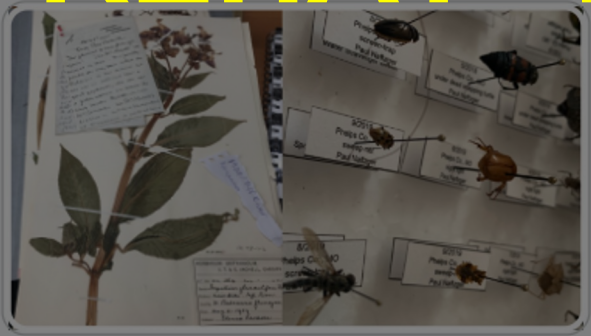
Biosistematika: identifikasi, deskripsi, klasifikasi, penamaan, kekerabatan

Konservasi:
Perlindungan, Pembelajaran, Pemanfaatan

3

REHAT 1

4



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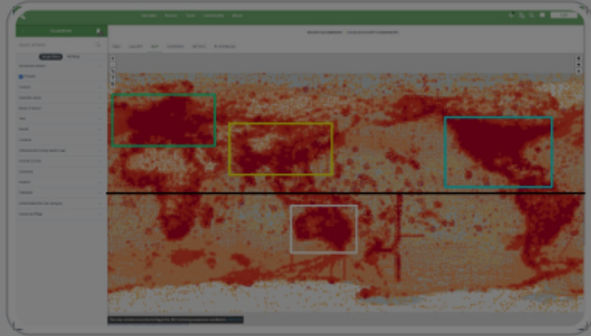

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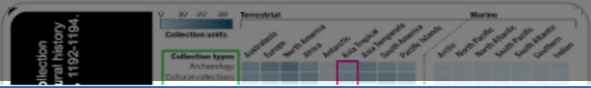
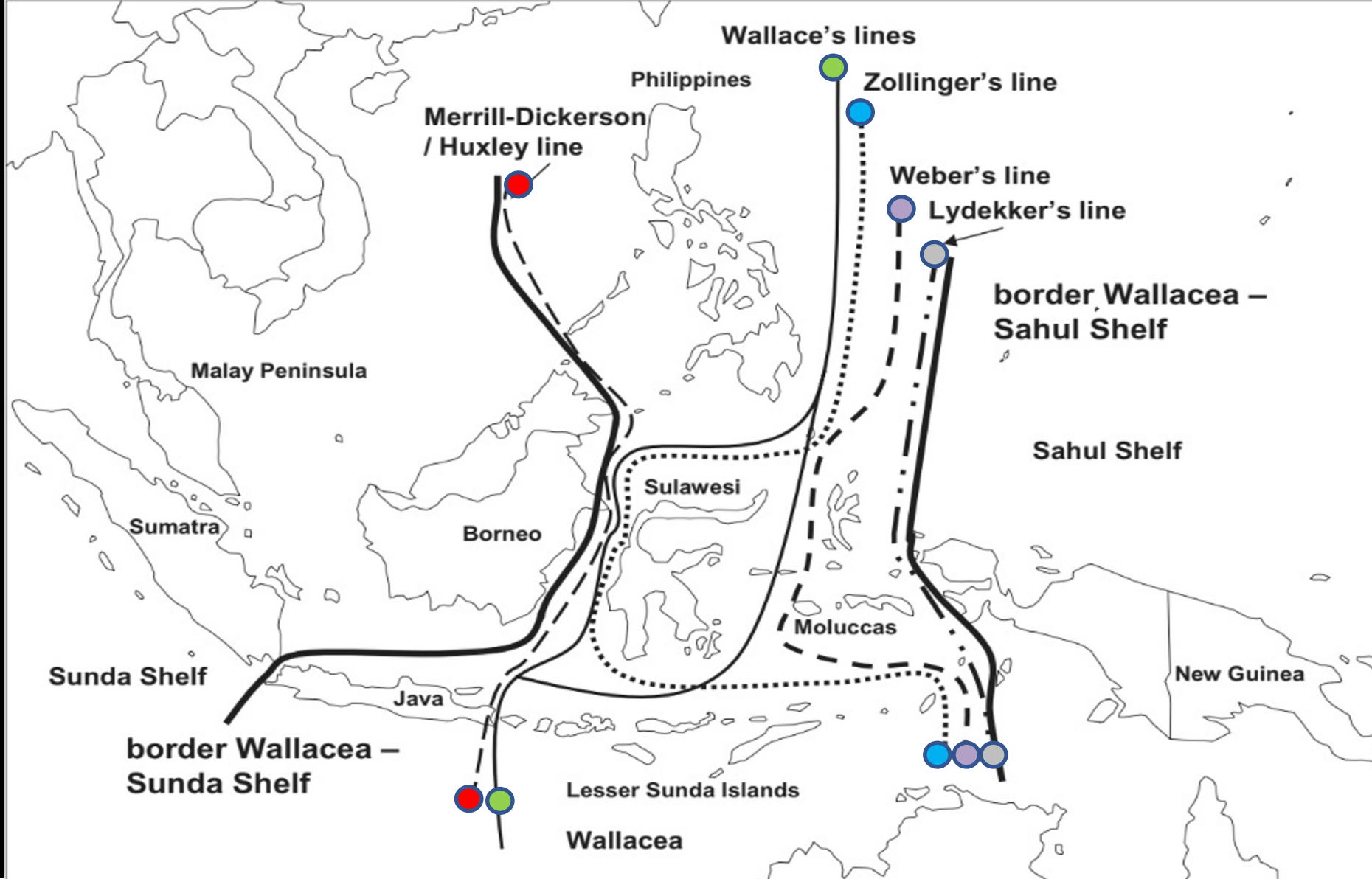
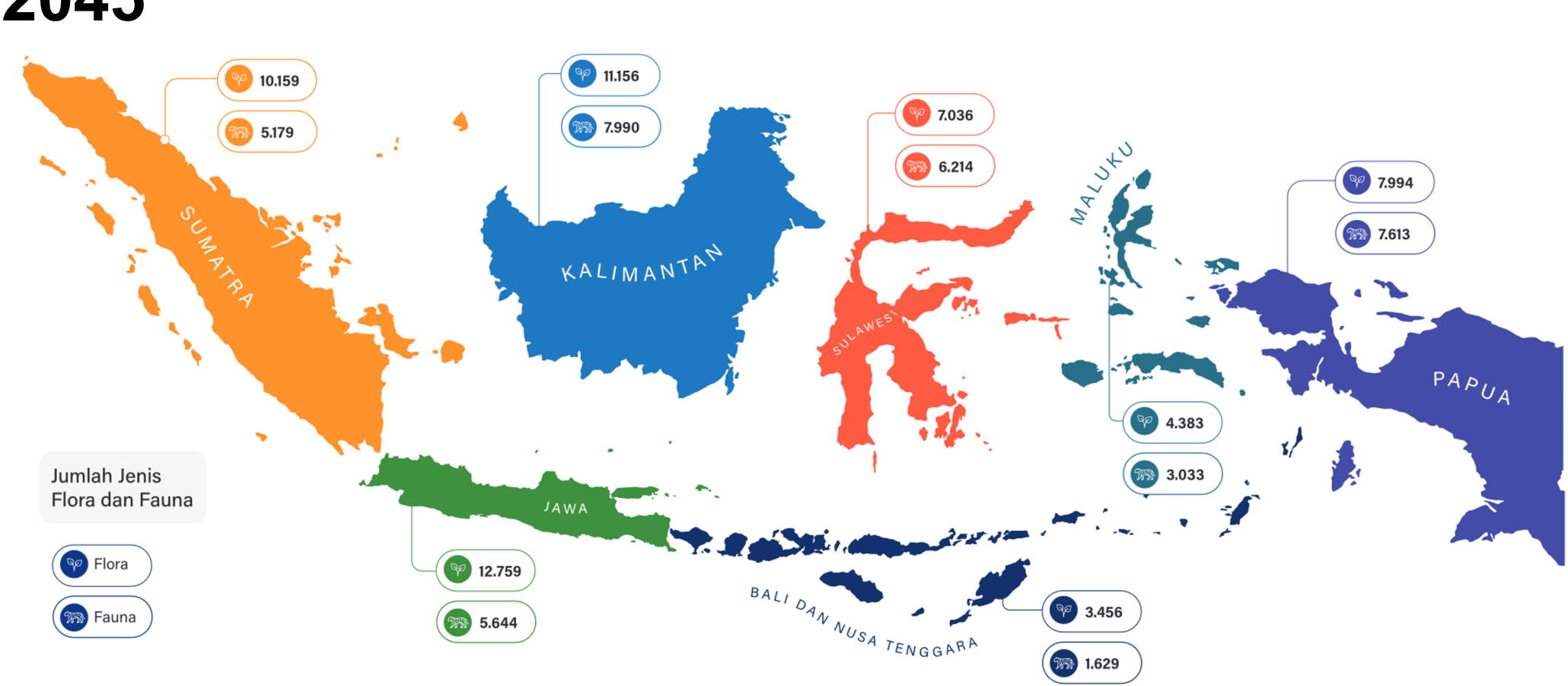


Van Welzen, P. C., Parnell, J. A., & Slik, J. F. (2011). Wallace's Line and plant distributions: two or three phytogeographical areas and where to group Java?. *Biological Journal of the Linnean Society*

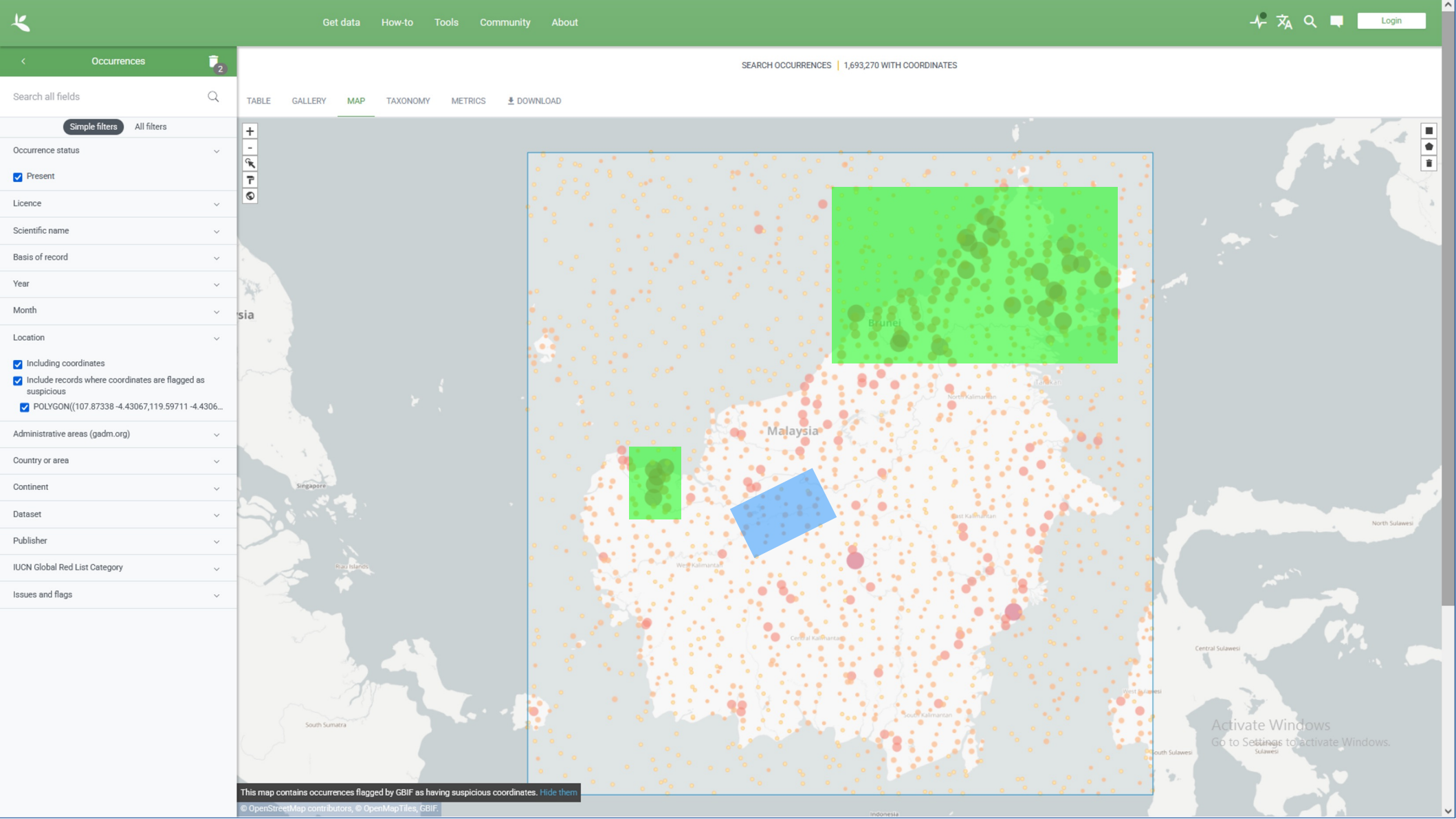



STRATEGI DAN RENCANA AKSI
KEANEKARAGAMAN HAYATI INDONESIA
INDONESIAN BIODIVERSITY
STRATEGY AND ACTION PLAN
IBSAP
2025–2045



Gambar 2.5

Sebaran Jumlah Spesies Flora dan Fauna Terestrial Indonesia yang Teridentifikasi hingga Tahun 2022[48]


Get data
How-to
Tools
Community
About
Login
Occurrences
Search all fields
Simple filters
All filters
Occurrence status
Present
Licence
Scientific name
Basis of record
Year
Month
Location
Including coordinates
Include records where coordinates are flagged as suspicious
POLYGON((107.87338 -4.43067,119.59711 -4.4306...
Administrative areas (gadm.org)
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Publisher
IUCN Global Red List Category
Issues and flags
SEARCH OCCURRENCES | 1,693,270 WITH COORDINATES
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Singapore
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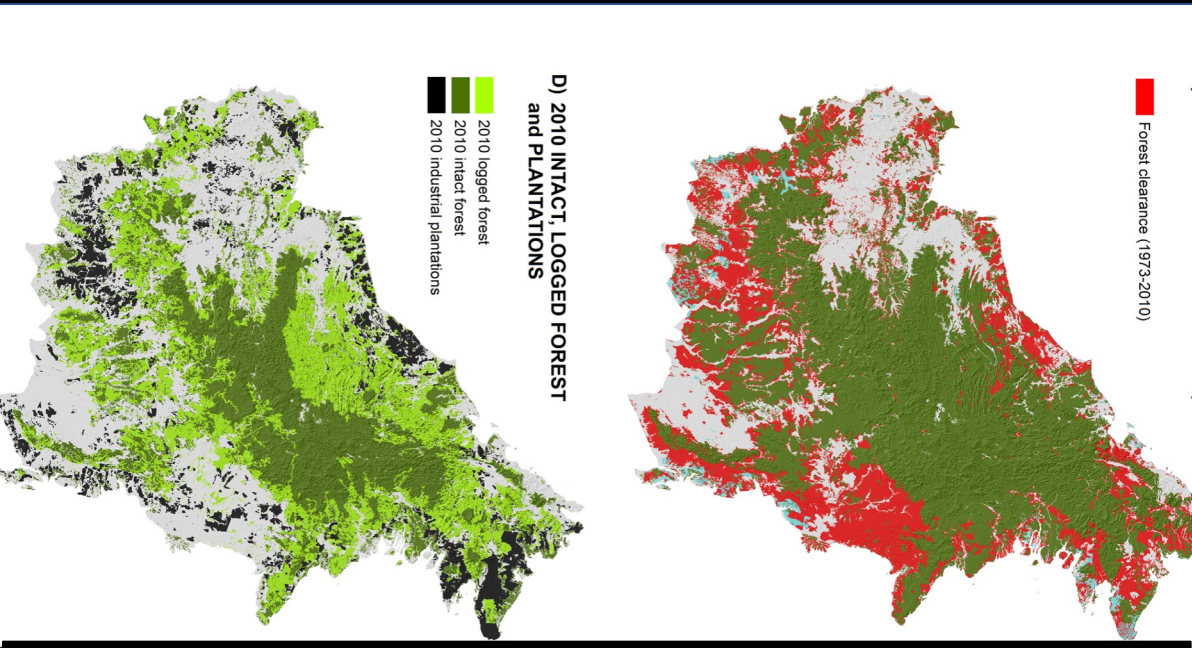
Ocampo-Peñuela, N., Garcia-Ulloa, J., Kornecki, I., Philipson, C. D., & Ghazoul, J. (2020). Impacts of four decades of forest loss on vertebrate functional habitat on Borneo. *Frontiers in Forests and Global Change*, *3*, 53.

Gaveau, D. L., Sloan, S., Molidena, E., Yaen, H., Sheil, D., Abram, N. K., ... & Meijaard, E. (2014). Four decades of forest persistence, clearance and logging on Borneo. *PloS one*, *9*(7), e101654.



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File Edit View Insert Format Slide Arrange Tools Help

Slideshow

Fit Background Layout Theme Transition

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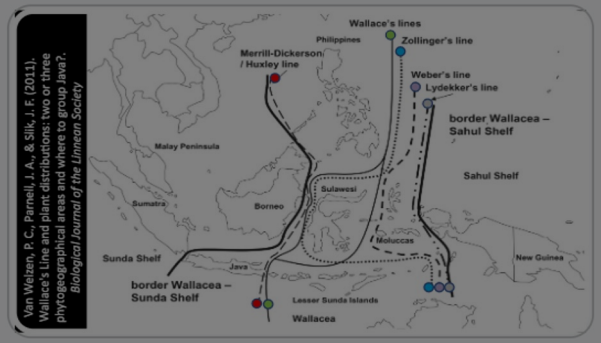
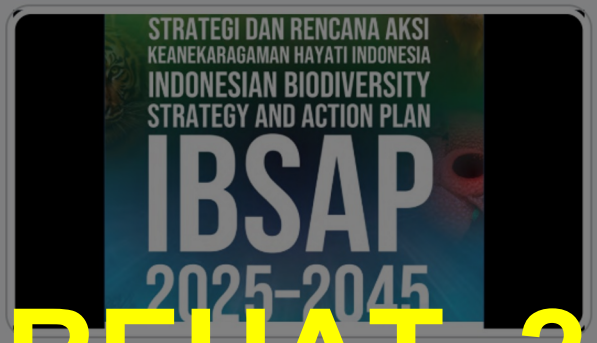
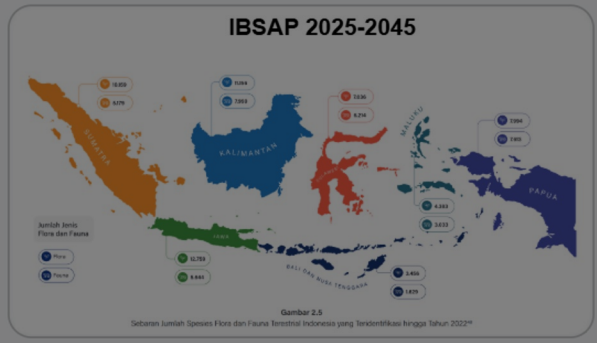


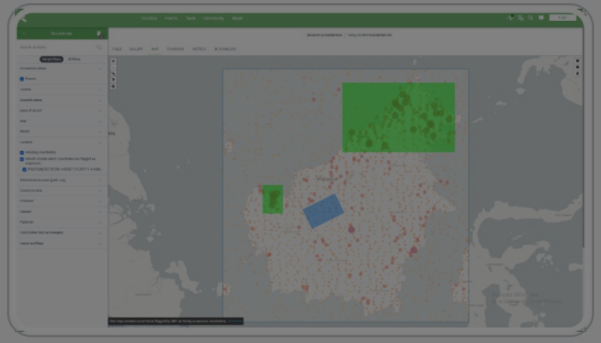


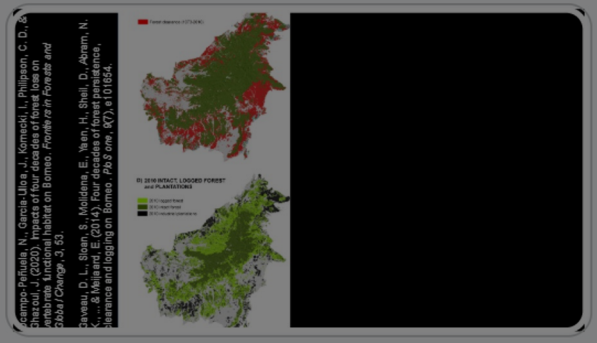


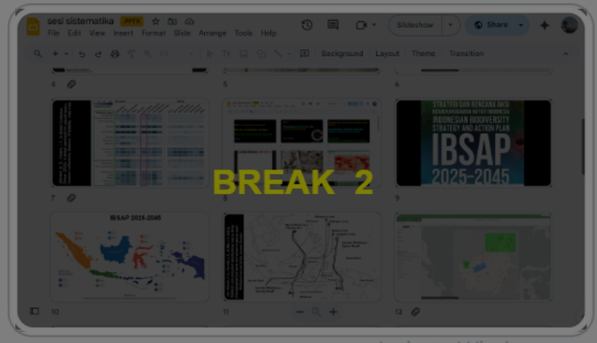
10

REHAT 2

12







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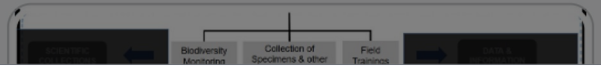
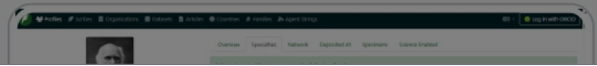
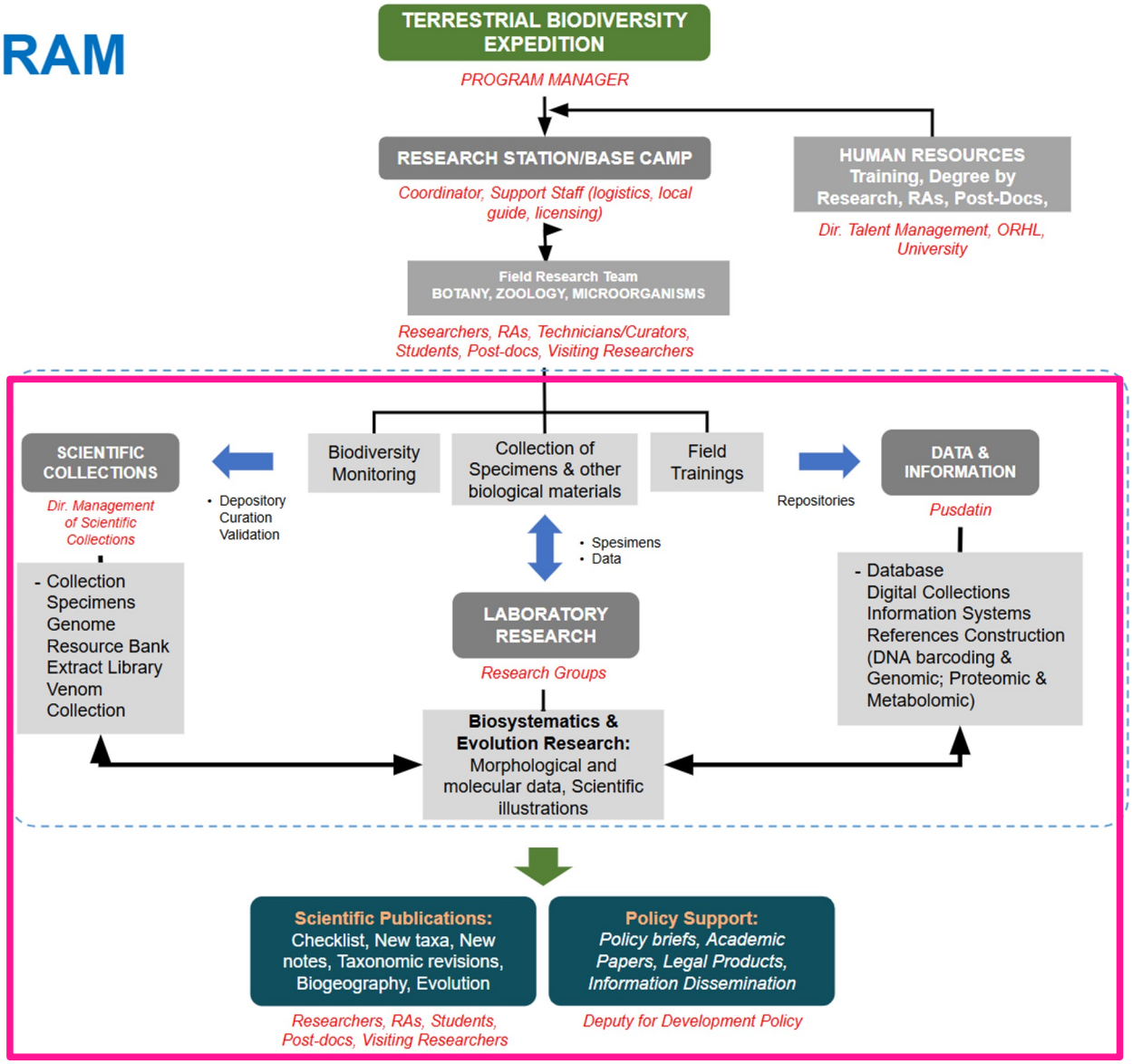
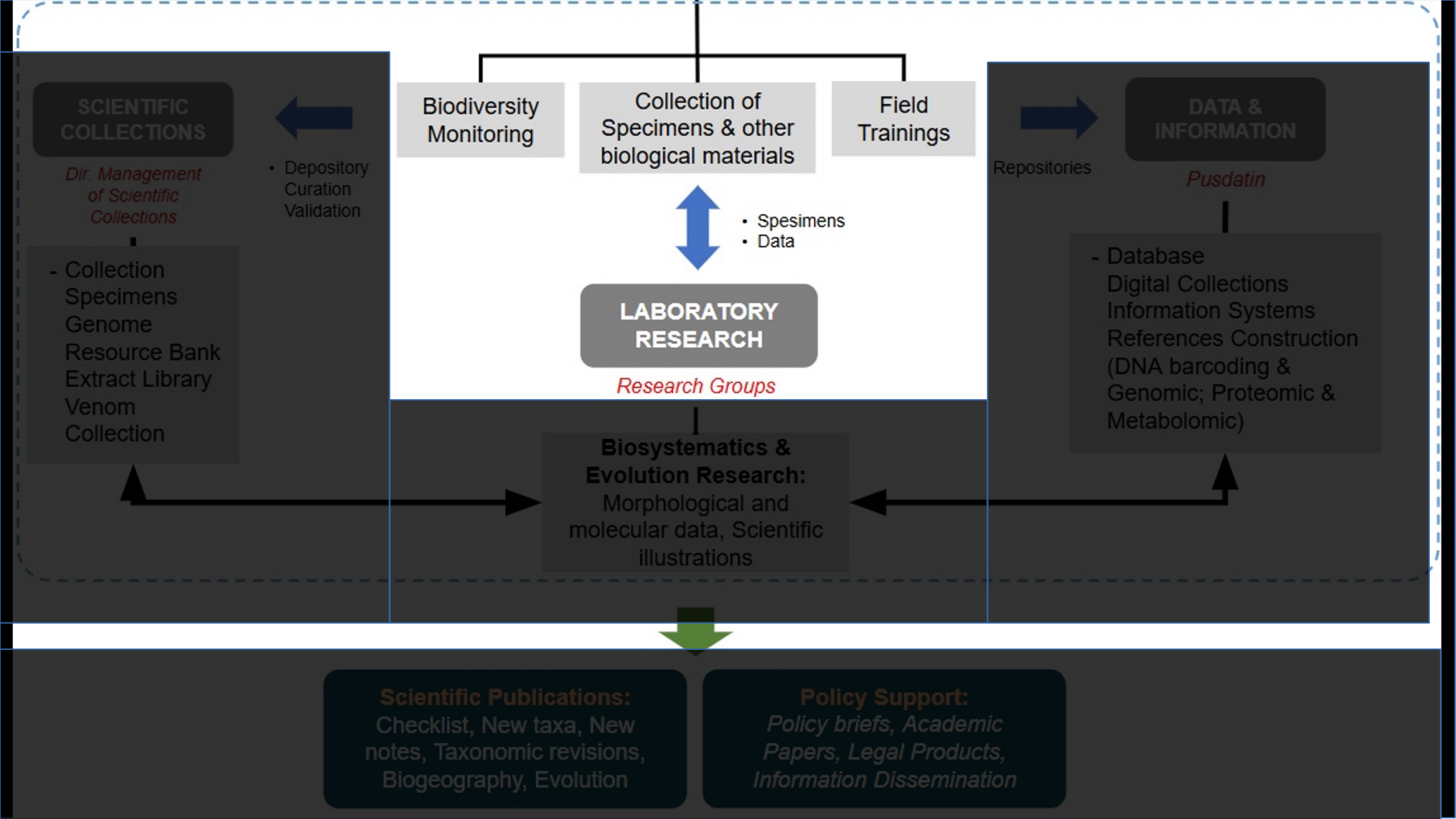




PLATFORM PROGRAM




SCIENTIFIC COLLECTIONS
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Specimens
Genome
Resource Bank
Extract Library
Venom
Collection
• Depository
Curation
Validation
Biodiversity Monitoring
Collection of Specimens & other biological materials
Field Trainings
• Spesimens
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Research Groups
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Morphological and molecular data, Scientific illustrations
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DATA & INFORMATION
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Checklist, New taxa, New notes, Taxonomic revisions, Biogeography, Evolution
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Policy briefs, Academic Papers, Legal Products, Information Dissemination

BIODIVERSITAS
Volume 23, Number 4, April 2022
Pages: 2101-2110

ISSN: 1412-033X
E-ISSN: 2085-4722
DOI: 10.13057/biodiv/d230445

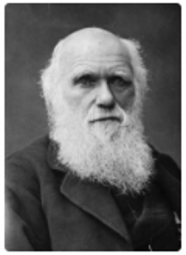
Role of siamang (*Symphalangus syndactylus*) as seed dispersal agent in a Sumatran lowland tropical forest

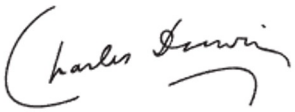
MUHAMMAD FARHAN ADYN[1,♥], MARSYA CHRISTYANTI SIBARANI[2], LAJI UTOYO[2], RIKHA ARYANIE SURYA[3], AGUNG SEDAYU[1]

[1]Department of Biology, Faculty of Mathematics and Natural Sciences, Universitas Negeri Jakarta. Jl. Rawamangun Muka Raya 11, East Jakarta 13220, Jakarta, Indonesia. Tel./fax. +62-21-4898486, ♥email: farhan.adyn15@gmail.com
[2]Wildlife Conservation Society-Indonesia Program. Jl. Malabar 1 No.11, Bogor 16128, West Java, Indonesia
[3]Bukit Barisan Selatan National Park. Jl. Ir. H. Juanda No. 19, Terbaya, Kotaagung, Bandar Lampung 35384, Lampung, Indonesia

Manuscript received: 8 March 2022. Revision accepted: 25 March 2022.

Abstract. *Adyn MF, Sibarani MC, Utoyo L, Surya RA, Sedayu A. 2022. Role of siamang (*Symphalangus syndactylus*) as seed dispersal agent in a Sumatran lowland tropical forest. Biodiversitas 23: 2101-2110.* Seed dispersal is mutualistic interaction between angiosperms and dispersal agents. One of the important dispersers for lowland tropical forests, including in Bukit Barisan Selatan National Park





Charles Darwin

Charles Robert Darwin; Charles R. Darwin; Darwin; C. R. Darwin; C.R. Darwin; CR Darwin

February 12, 1809 – April 19, 1882

geologist, explorer, travel writer, ethologist, naturalist, philosopher, writer, botanist

English naturalist and biologist (1809–1882)

http://www.wikidata.org/entity/Q1035

https://en.wikipedia.org/wiki/Charles_Darwin [View]

United Kingdom of Great Britain and Ireland

Darwin, Charles Robert. 2025. Natural history specimens collected and/or identified and deposited. [Data set]. Zenodo. https://doi.org/10.5281/zenodo.8030780

DOI 10.5281/zenodo.8030780

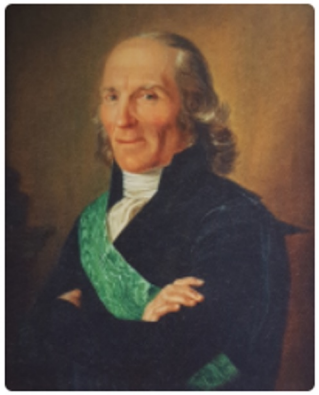
Collected or identified specimens in the following Families:

Families Collected 446

Asteraceae	284
Poaceae	153
Fabaceae	125
Pteromalidae	90
Rubiaceae	86
Rhynchonellidae	75
Eulophidae	72
Euphorbiaceae	57
Amaranthaceae	56
Solanaceae	46
Macraucheniidae	43
Brassicaceae	37

Families Identified 29

Balanidae	39
Scalpellidae	15
Archaeobalanidae	10
Lepadidae	6
Pyrgomatidae	6
Chthamalidae	5
Rubiaceae	4
Titanolepadidae	3
Tetraclitidae	3
Pollicipedidae	2
Catophragmidae	2
Terebratulidae	2
Milleporidae	2
Poritidae	2



Carl Peter Thunberg

Carl Peter Thunberg; Thunb.; Thunberg

November 11, 1743 – August 08, 1828

botanist, explorer, pteridologist, bryologist, writer, zoologist, ornithologist, physician, university teacher, lepidopterist, mycologist, philosopher, naturalist

Swedish naturalist (1743-1828)

http://www.wikidata.org/entity/Q39658

W

https://en.wikipedia.org/wiki/Carl_Peter_Thunberg

3,340 specimens used in 231 works

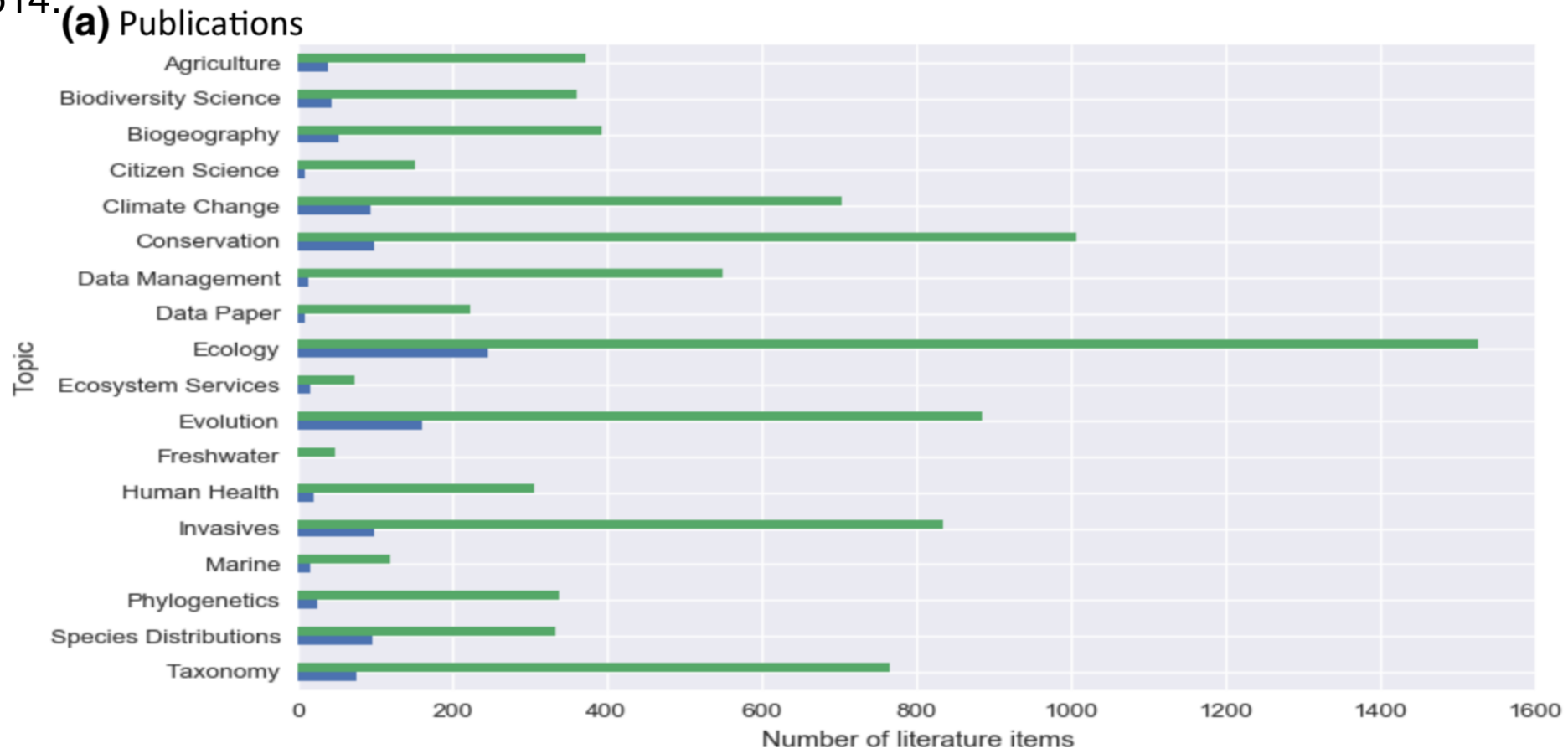
Science Enabled by Specimen Data

Zulkarnaen, R. N., S. Mohd. Ali, and D. Cicuzza. 2025. Integrating hotspot analysis and priority setting for enhanced endemic Bornean palms conservation. Journal for Nature Conservation 84: 126859. https://doi.org/10.1016/j.jnc.2025.126859

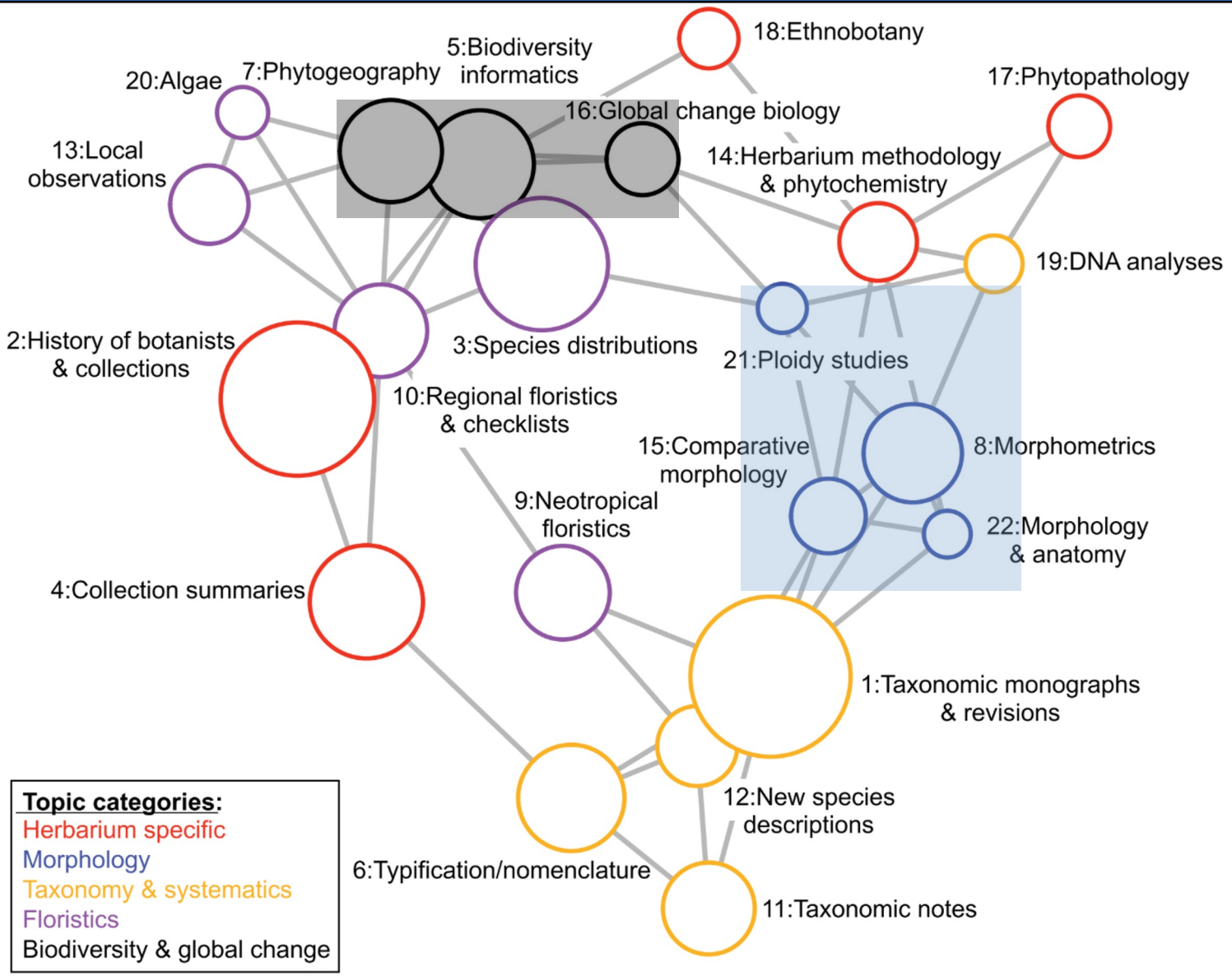
1

The Arecaceae family (palms) holds global significance for its economic and ecological roles. Borneo is known as a center of endemic plant species but faces threats from human activities, including those affecting palms. This study aims to update the distribution and conservation status of endemic Bornean palms, identify potential conservation priority areas, and conduct a gap analysis to inform conservation strategies. The methodology involved comprehensive data collection, along with spatial and statistical analysis for conservation assessment and prioritization. Despite challenges like limited data on palm distribution in Indonesia, the study provides critical insights for developing targeted conservation strategies, particularly for conservation priority areas outside protected areas. The study identified 210 endemic Bornean palms, including 16

Paton, A., Antonelli, A., Carine, M., Forzza, R. C., Davies, N., Demissew, S., ... & Dickie, J. (2020). Plant and fungal collections: current status, future perspectives. Plants People Planet 2: 499–514.



Heberling, J. M., Prather, L. A., & Tonsor, S. J. (2019). The changing uses of herbarium data in an era of global change: an overview using automated content analysis. BioScience, 69(10), 812-822.



BIODIVERSITAS
Volume 24, Number 11, November 2023
Pages: 6256-6263

ISSN: 1412-033
E-ISSN: 2085-472
DOI: 10.13057/biodiv/d24114

DNA barcoding of Burgo chicken from Bengkulu, Indonesia, based on the cytochrome oxidase gene sub unit I mitochondria DNA

AHMAT FAKHRI UTAMA[2], JARULIS[1,2,♥], SIPRIYADI[1,2], IZUL MIFTAKHUL JANNAH[2]

[1]Department of Biology, Faculty of Mathematics and Natural Sciences, Universitas Bengkulu. Jl. W.R. Supratman, Kandang Limun, Kota Bengkulu 38371, Bengkulu, Indonesia

[2]Graduate Program of Biology, Department of Biology, Faculty of Mathematics and Natural Sciences, Universitas Bengkulu. Jl. W.R. Supratman, Kandang Limun, Kota Bengkulu 38371, Bengkulu, Indonesia. Tel.: +62-736-20919, ♥email: jarulis@unib.ac.id

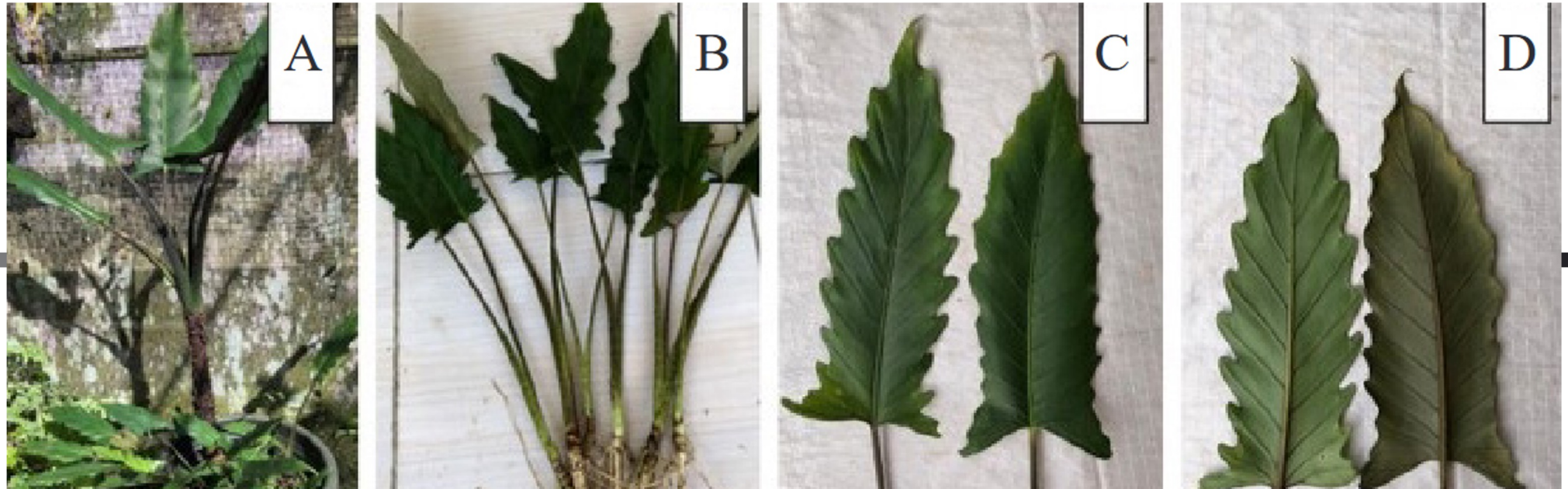
Manuscript received: 26 October 2023. Revision accepted: 27 November 2023.

Abstract. *Utama AF, Jarulis, Sipriyadi, Jannah IM. 2023. DNA barcoding of Burgo chicken from Bengkulu, Indonesia, based on the cytochrome oxidase gene sub unit I mitochondria DNA. Biodiversitas 24: 6268-6275.* The Burgo chicken provides a genetic source o one crossbreed chicken in Bengkulu Province. However, genetic information on Burgo chickens is not yet available, while th population of this chicken continues to decline. Research on DNA barcoding using the cytochrome oxidase subunit I mtDNA gene wa

Research Article

Study of Morphology and Growth of *Alocasia* spp. from Papua, Indonesia

Daawia[1], Juang Gema Kartika[2*], krisantini[2], Megayani Sri Rahayu[2], Ni Putu Sri Asih[3], Deden D. Matra[2], Bambang Suhartawan[4]



Journal of Aquaculture and Fish Health Vol. 12(1) - February 2023
DOI : 10.20473/jafh.v12i1.36634

Morphometric and Meristic Diversity in Eel (*Anguilla bicolor*) in South Coast of Java

Endah Rochmatika[1*], Win Darmanto[2], Mufasirin[3] and Ramadhana[4]

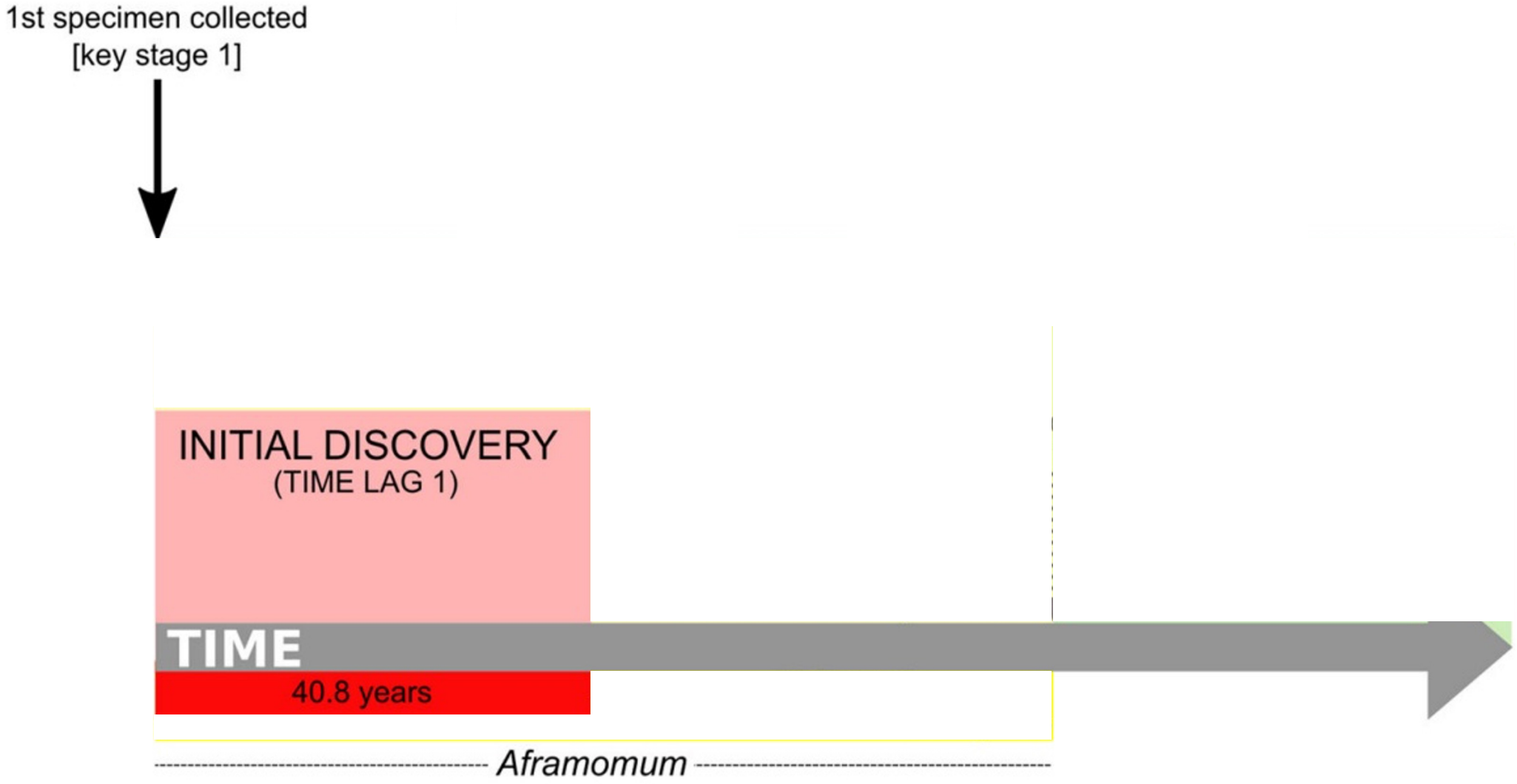
[1]Master Program of Biotechnology Fisheries Science, Faculty of Fisheries and Marine, Universitas Airlangga, Jl. Mulyorejo, Surabaya, East Java 60115, Indonesia

[2]Department of Biology, Faculty of Science and Technology, Universitas Airlangga, Jl. Mulyorejo, Surabaya, East Java 60115, Indonesia

[3]Department of Parasitology, Faculty of Veterinary Medicine, Universitas Airlangga, Jl. Mulyorejo, Surabaya, East Java 60115, Indonesia

[4]Master Program Department of Aquaculture, National Taiwan Ocean University, 2 Pei-ning road Keelung 202301, Taiwan, Republic of China

How long does it take to discover a species? Goodwin et al.

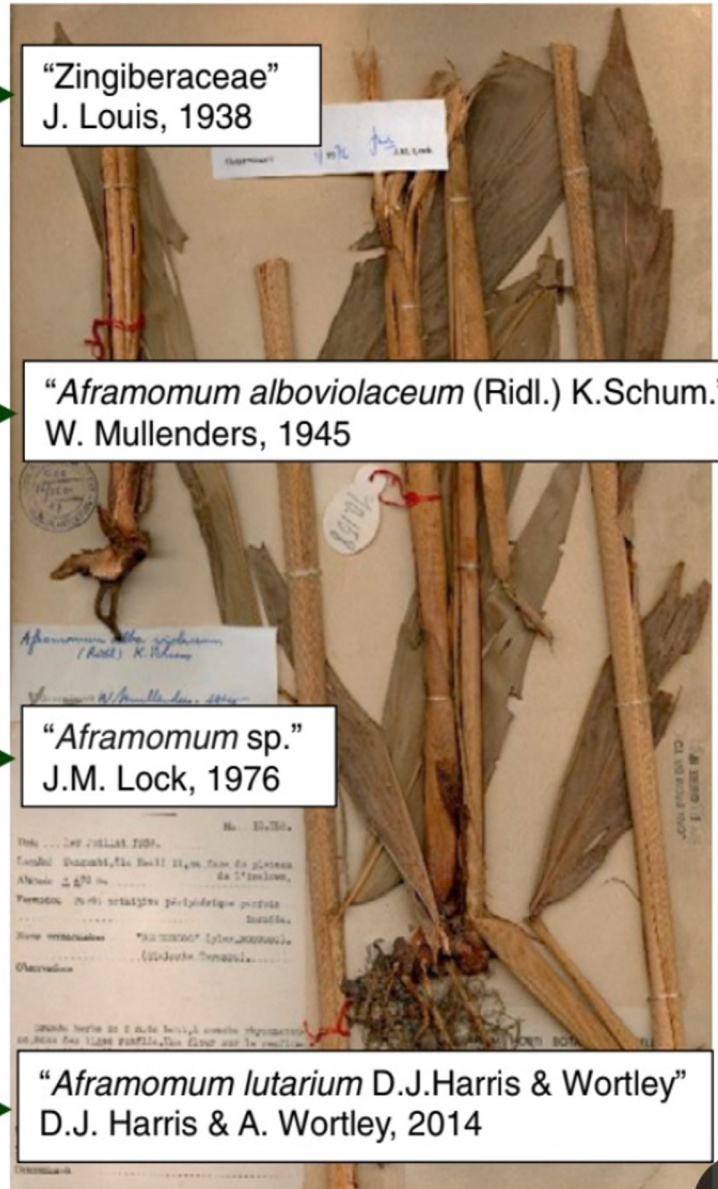


Family → "Zingiberaceae" J. Louis, 1938

Name A → "*Aframomum alboviolaceum* (Ridl.) K.Schum." W. Mullenders, 1945

Genus → "*Aframomum* sp." J.M. Lock, 1976

Name B → "*Aframomum lutarium* D.J.Harris & Wortley" D.J. Harris & A. Wortley, 2014



ISSUE: VOL. 5575 NO. 3: 24 JAN. 2025 TYPE: ARTICLE PUBLISHED: 2025-01-24 DOI: 10.11646/ZOOTAXA.5575.3.3 PAGE RANGE: 387-408 ABSTRACT VIEWS: 566
PDF DOWNLOADED: 28

Two new species of fanged frog from Southeastern Borneo, Indonesia (Amphibia: Anura: Dicroglossidae)

ADE DAMARA GONGGOLI[+], TOMOHIKO SHIMADA[+], MASAFUMI MATSUI[+], KANTO NISHIKAWA[+], IRVAN SIDIK[+], AHMAD MUAMMAR KADAFI[+], ACHMAD FARAJALLAH[+], AMIR HAMIDY[+]

AMPHIBIA • LIMNONECTES • MERATUS MOUNTAIN RANGE • MORPHOLOGY • PARTIAL 16S RRNA GENE • TAXONOMY

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Research Center for Biology
Indonesian Institute of Sciences
LIPI

Taxonomists

Parataxonomists

Lecturers

DIRECTORY OF INDONESIAN TAXONOMISTS

2nd Edition

Research Center for Biology
Indonesian Institute of Sciences
LIPI

16

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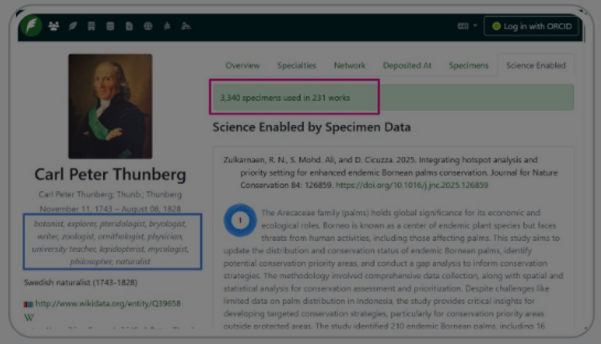

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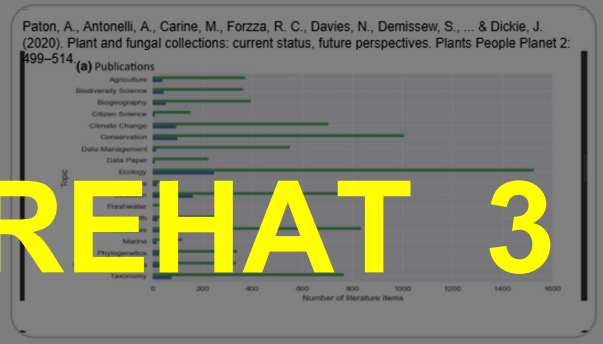

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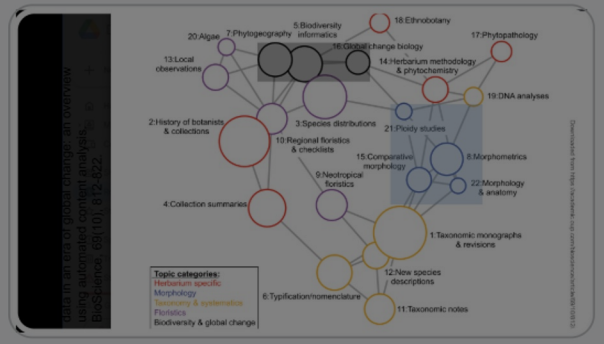

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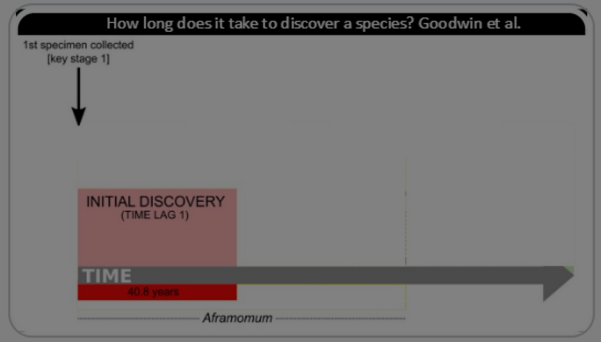
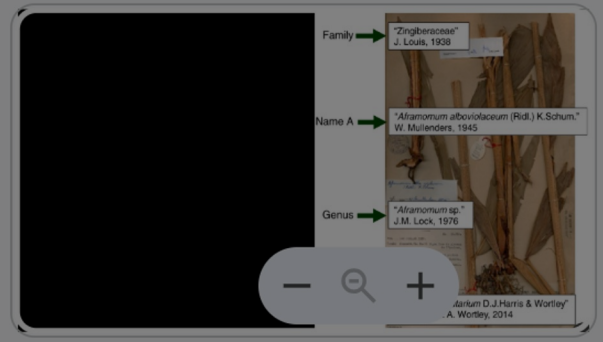
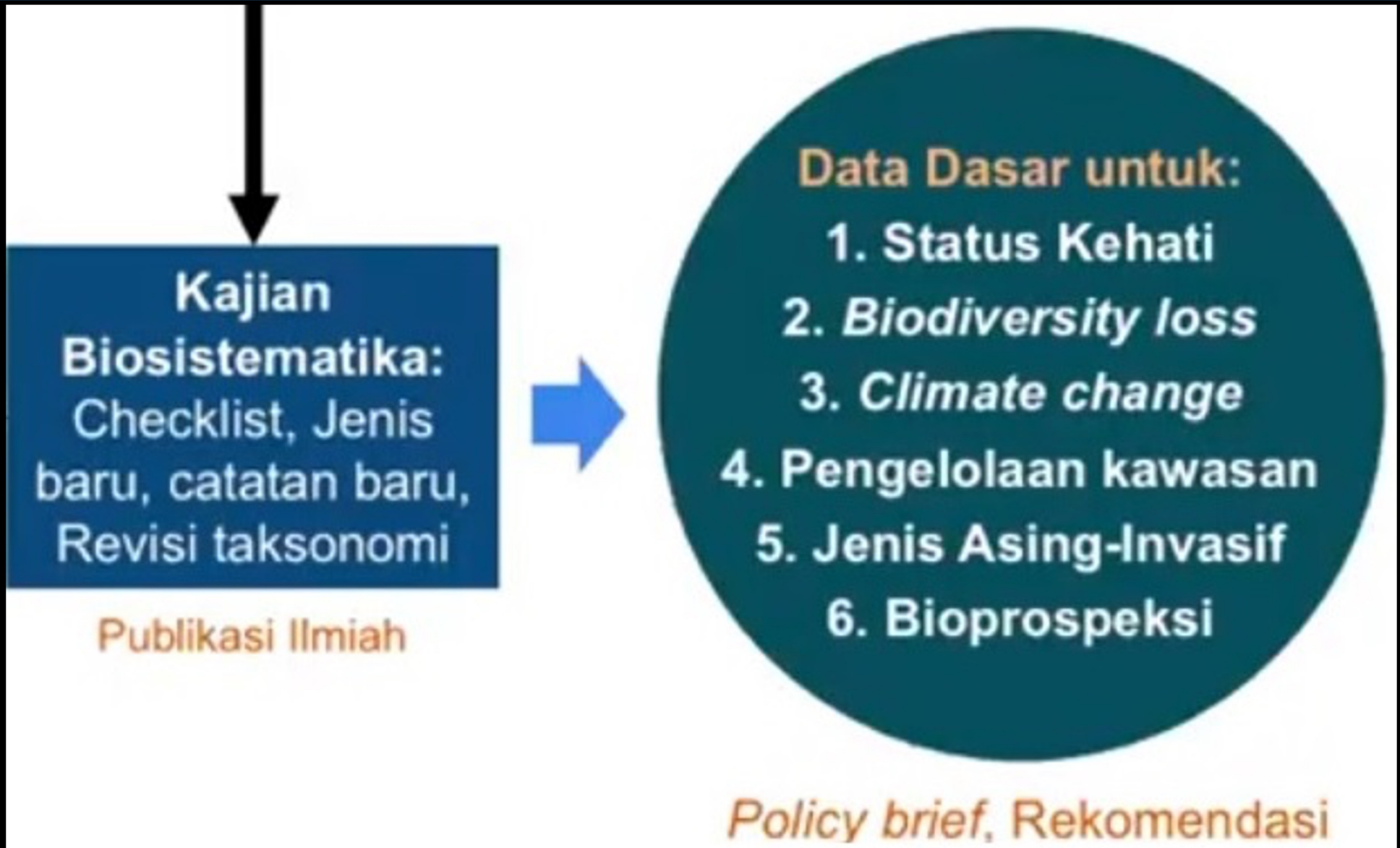




REHAT 3


Kajian Biosistematika:
Checklist, Jenis baru, catatan baru, Revisi taksonomi
Publikasi Ilmiah
Data Dasar untuk:
1. Status Kehati
2. Biodiversity loss
3. Climate change
4. Pengelolaan kawasan
5. Jenis Asing-Invasif
6. Bioprospeksi
Policy brief, Rekomendasi

Short Communication

Biodiversity and Status Fish Species in Mangrove Water in Lombok, West Nusa Tenggara-Indonesia

Gema Wahyudewantoro*, Haryono Haryono, Rudhy Gustiano, Rusdianto Rusdianto, Daniel F. Mokodongan, Kunto Wibowo, Firman M. Nur**

Primack, R. B., & Miller-Rushing, A. J. (2009). The role of botanical gardens in climate change research. *New Phytologist*, *182*(2), 303-313.

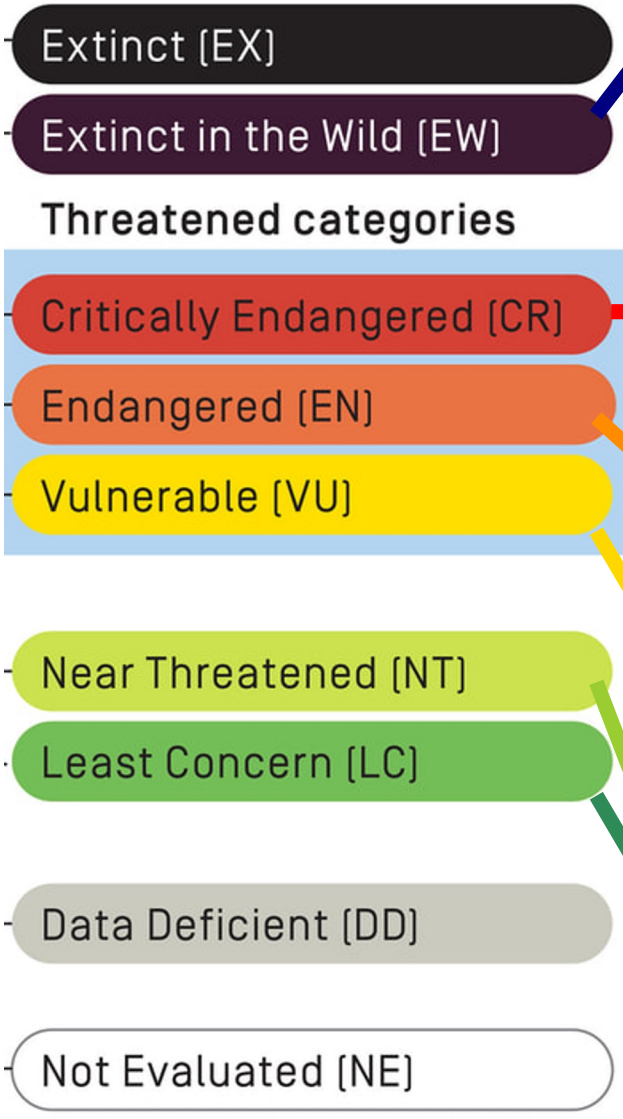
1868

2005

Next

More than 45,300 species are threatened with extinction

That is still 28% of all assessed species.



EW Extinct in the Wild		There are no Irish vascular plant species or subspecies in this category. Taxa which are extinct in the wild in Ireland, but for which there is wild-collected Irish material in *ex situ* cultivation or storage are assessed as **RE**
RE Regionally Extinct		Exinct in the wild in Ireland – either not recorded between 1970 and 2014 or, if recorded then, subsequently confirmed by targeted surveys to be no longer present at these recorded sites
CR Critically Endangered	A	≥80% decline in Area of Occupancy
	B	1 location and continuing decline
	C	< 250 individuals and continuing decline
	D	< 50 individuals
EN Endangered	A	50–79% decline in Area of Occupancy
	B	2–5 locations and continuing decline
	C	250–2,499 individuals and continuing decline
	D	50–249 individuals
VU Vulnerable	A	30–49% decline in Area of Occupancy
	B	6–10 locations and continuing decline
	C	2,500–10,000 individuals and continuing decline
	D1	250–1,000 individuals
	D2	≤ 5 locations and plausible future threat
NT Near Threatened	A	20–29% decline in Area of Occupancy or habitat quality
LC Least Concern		No thresholds met
WL Waiting List		Insufficient distribution or population data, taxonomic uncertainties and/or uncertainties regarding native or alien status (of taxa or individuals) mean that no assessment could be made

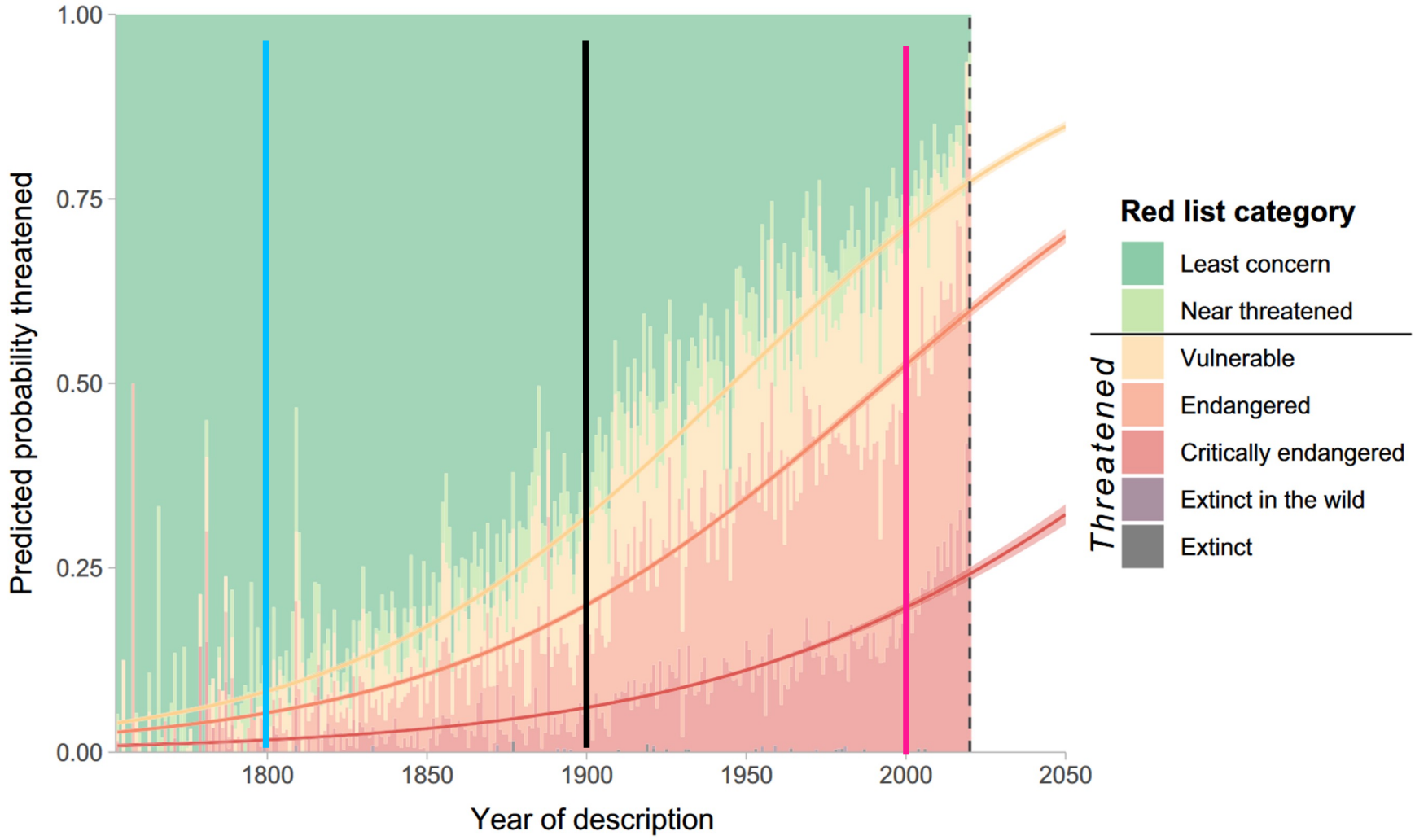
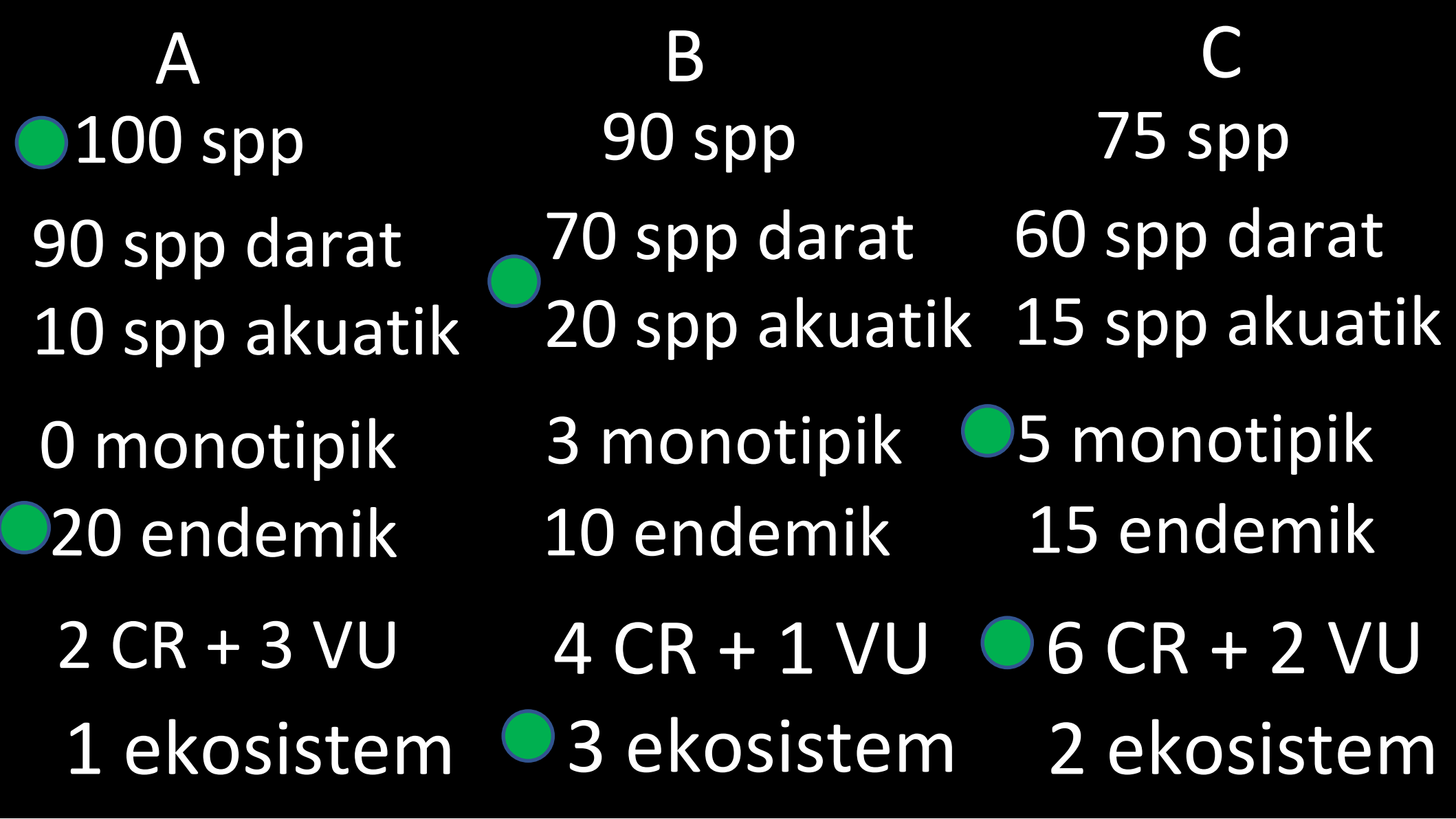


Fig. 1 Observed proportions (background bars) and predicted probabilities (lines) of threatened species by year of description. Shaded ribbons give the 95% credibility interval for the model coefficients at each level of threatened: Vulnerable (VU) or higher (yellow, top line), Endangered (EN) or higher (orange, middle line) and CR or higher (red, bottom line). The vertical dashed line at the year 2020 denotes our reference year for predictions, and the last year of data that we used to fit our models.


A
100 spp
90 spp darat
10 spp akuatik
0 monotipik
20 endemik
2 CR + 3 VU
1 ekosistem
B
90 spp
70 spp darat
20 spp akuatik
3 monotipik
10 endemik
4 CR + 1 VU
3 ekosistem
C
75 spp
60 spp darat
15 spp akuatik
5 monotipik
15 endemik
6 CR + 2 VU
2 ekosistem

Inventory of Land Snail in Darungan Lake, Bromo Tengger Semeru National Park 2019

Putri Afin Nurhayati[1*], Boni Herdiawan[2], Galuh Ayu Chantika Dwitara[1]

[1]Biology Department, Science and Technology Faculty, Airlangga U
[2] Generasi Biologi Indonesia Zoology Division, Gresik 61171, East

**email: putri.afin.nurhayati-2017@fst.unair.ac.id*

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Key word:
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Land snail
Darungan Lake
Bromo

ABSTRACT

This study aims to determine t
have never been revealed befor
is in the forest in the Ranu D
Tengger Semeru National Park
is the 1.5 km transect line meth

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Journal homepage: www.jurnal.usk.ac.id/depik

Diversity and distribution of fish in the Lokop river, Leuser Ecosystem Area, Indonesia

Furqan Maghfiriadi[1], Firdus Firdus[1,2,*], M. Ali Sarong[3], Ilham Zulfahmi[4], Agung Setia Batubara[5]

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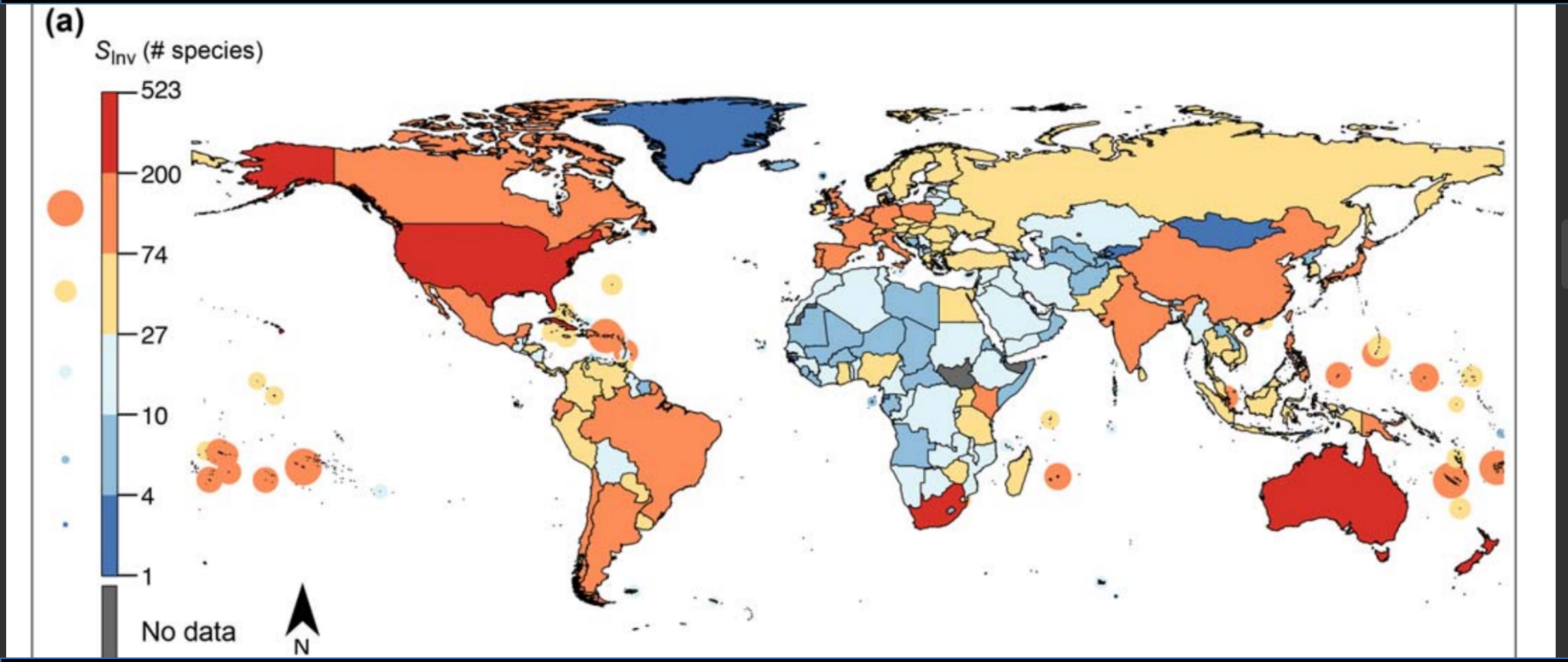
Keywords:

ABSTRACT

Lokop is one of the villages in Serbajadi District, East Aceh Regency, Aceh Province. The village has a watershed named the river Lokop. This



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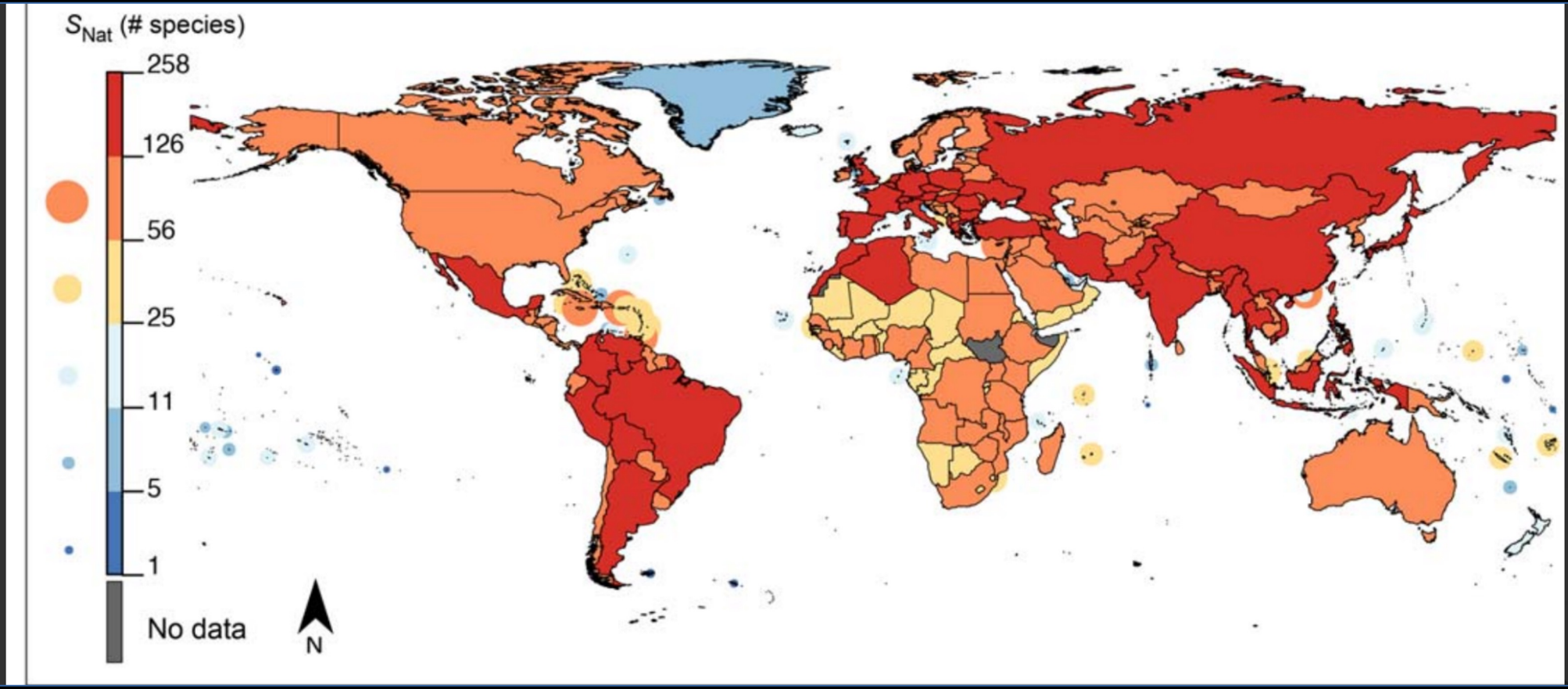

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MACROFUNGI DIVERSITY IN MOUNT PANDAN ECTOURISM AREA, ACEH TAMIANG

Juli Trianda Sri Rezeki[1], Nurjannah[1], Gadis Arsinta Wijaya[1], Septi Masnuria Siregar[1], Via Savira[1], Nanda Lia Putri[1], Jasmidar[1], Nurjanah[1], Fitria Handayani[1], Zulfan Arico[1]*

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Kolaborasi Lintas Profesi dan Generasi
Mengenai Etnomikologi Jamur-Jamur Indonesia

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INVENTORY, ASSOCIATION, AND HABITAT CHARACTERISTICS OF HUPERZINE A NATURAL RESOURCES IN THE CIBODAS BOTANICAL GARDENS, WEST JAVA, INDONESIA

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