

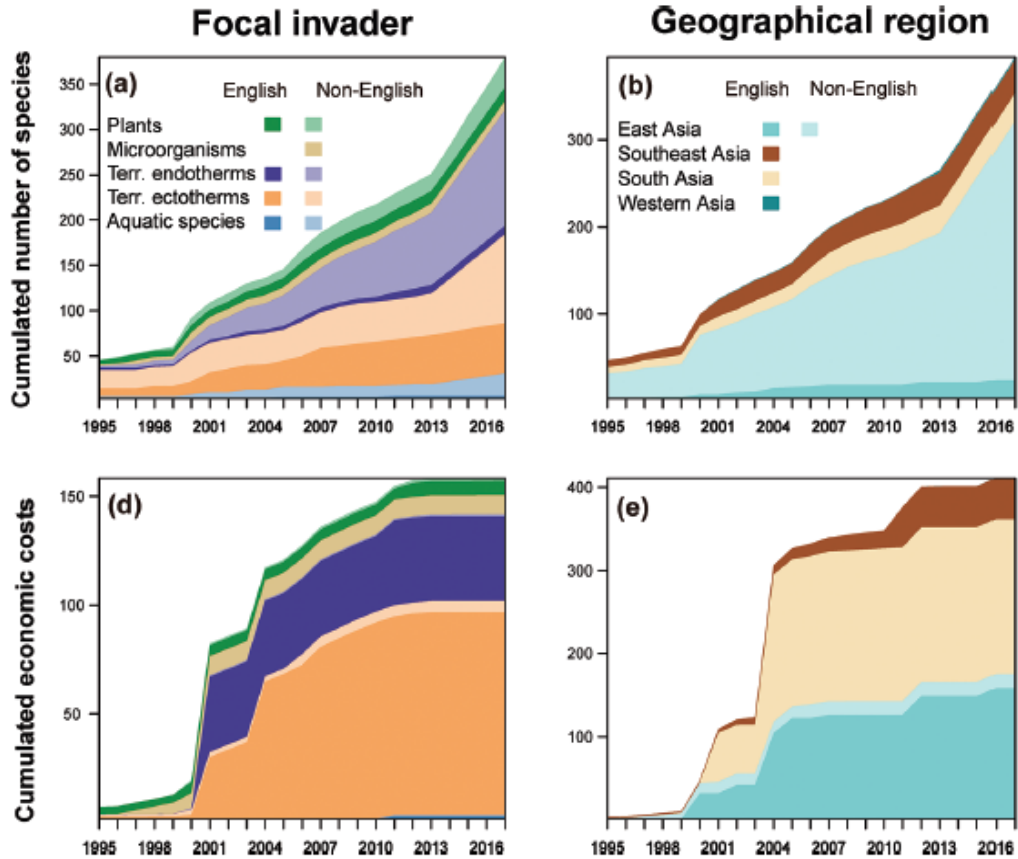
Open checklist data on invasive alien species for policy and management

Melodie A. McGeoch, La Trobe University, Australia

*Asia Regional Engagement Meeting and Symposium on Open Science and Data Use
20-23 November 2022*



Invasive alien species and data needs



River tamarind



Mosquitofish



Nile tilapia

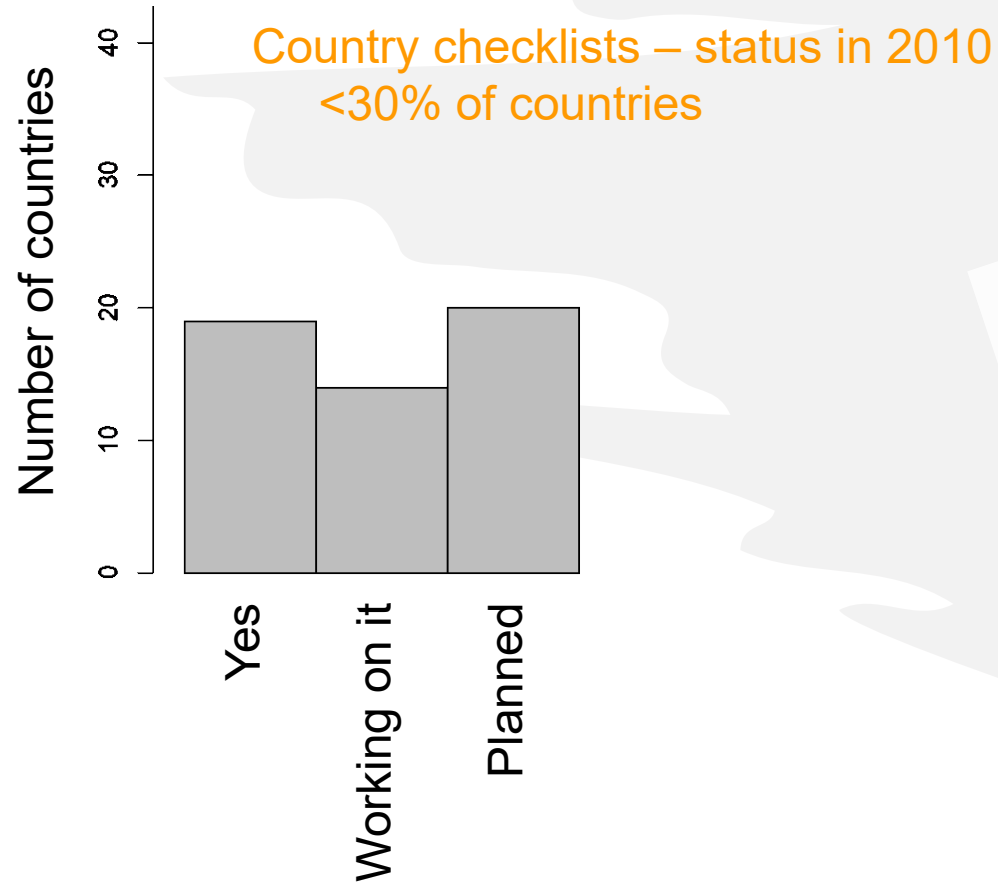


Water hyacinth



Image(s) used under license from Shutterstock.com

Data accessibility



**MANAGEMENT OF INVASIVE ALIEN SPECIES
IN THAILAND**

Napompeth Banpot
National Biological Control Research Center, Kasetsart University
P.O. Box 9-25, Chatuchak, Bangkok 10900, Thailand

Invasive Alien Species in South-Southeast Asia

*National Reports
&
Directory of Resources*

Edited by Nirmalie Pallewatta, Jamie K. Reaser, and Alexis T. Gutierrez

Latombe et al. 2017. <https://doi.org/10.1016/j.biocon.2016.06.013>

Data challenges

Signal grass / Green summer grass

11 countries in Asia – 5 invasive



<https://www.agric.wa.gov.au/pasture-management/signal-grass?nopaging=1>

Naming and taxonomic source differences

Brachiaria distachya

Brachiaria subquadripara

Urochloa subquadripara

Preferred Scientific Name

Urochloa distachya (L.) T.Q. Nguyen

Other Scientific Names

Brachiaria distachya (L.) Stapf

Brachiaria miliiformis (J. Presl) Chase

Brachiaria subquadripara (Trin.) Hitchc.

Digitaria distachya (L.) Pers.

Panicum distachyon L.

Panicum miliiforme J. Presl

Panicum subquadriparum Trin.

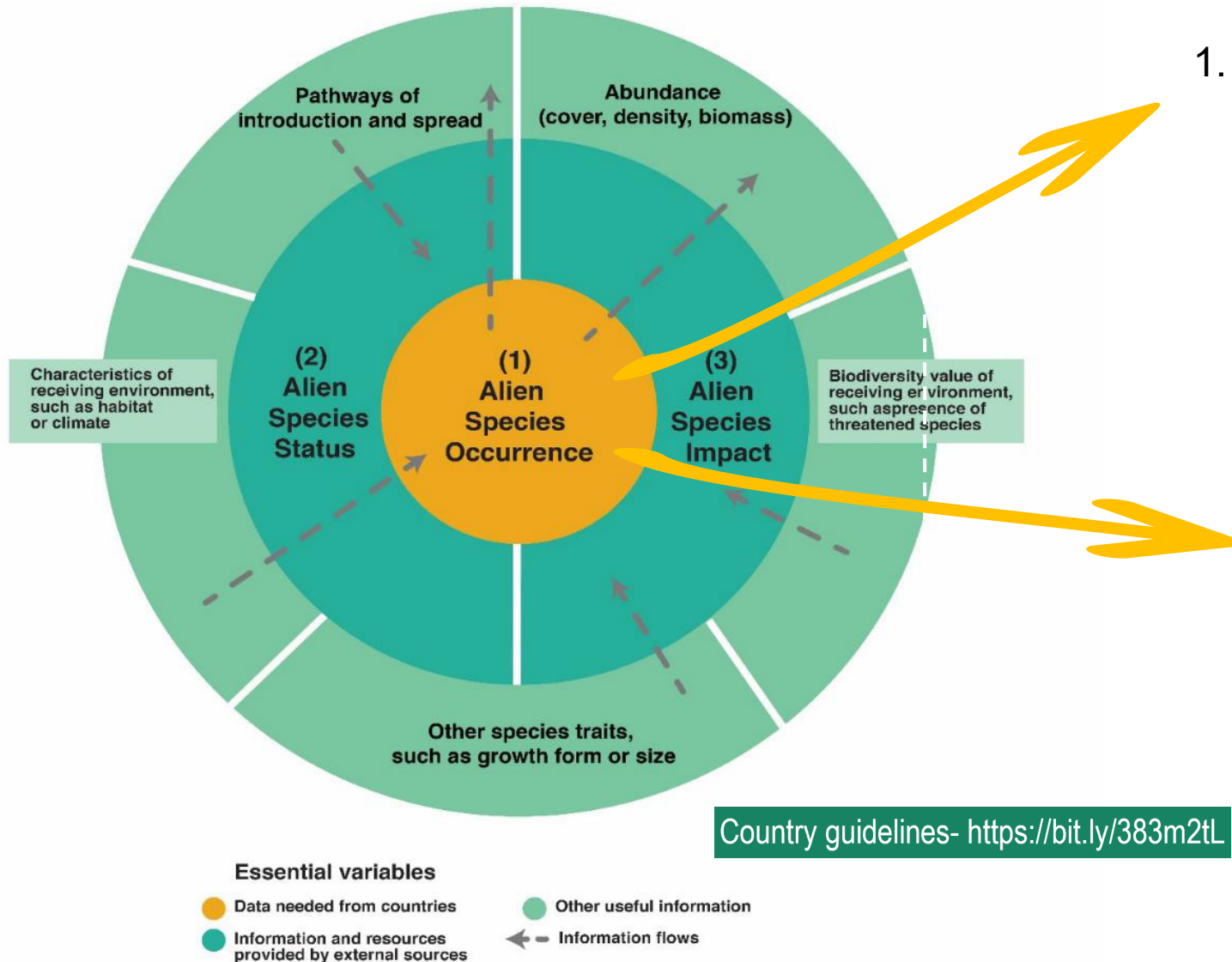
Urochloa subquadripara (Trin.) R.D. Webster



Catalogue of Life



Essential Variables for Invasion Monitoring



Country guidelines- <https://bit.ly/383m2tL>

1. National and sub-national checklists



2. Individual occurrence records



The Global Register of Introduced and Invasive Species (GRIIS)



European wasp



Long leaved wattle

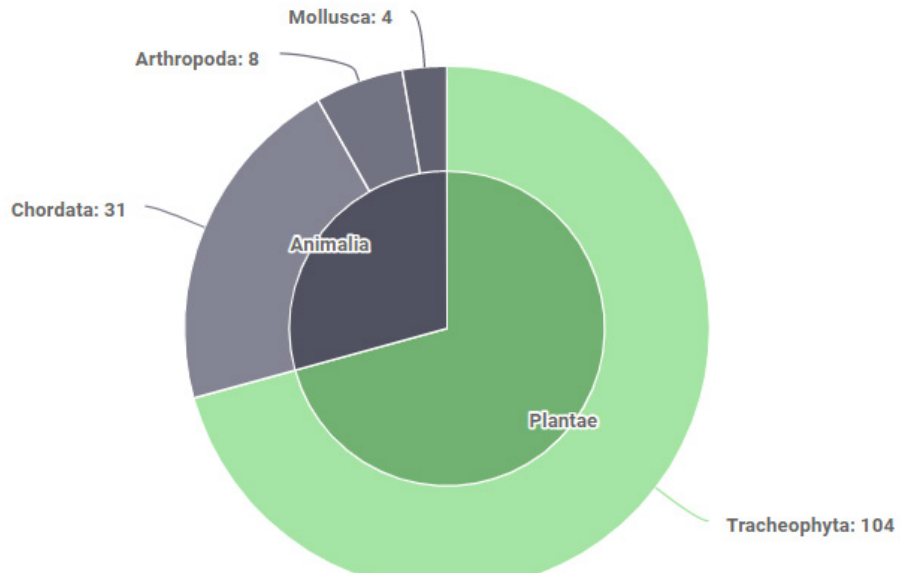


Wild boar

- Country checklists for 196 countries
- Taxonomic information that allows comparisons across countries
- Collaboration including national experts
- With information on local evidence of impact
- Country checklists published via GBIF's Integrated Publishing Toolkit (IPT)

GRIIS
GLOBAL REGISTER OF
INTRODUCED AND INVASIVE SPECIES





The Global Register of Introduced and Invasive Species

CHECKLIST DATASET | REGISTERED OCTOBER 17, 2018

Global Register of Introduced and Invasive Species - Thailand

Published by [Invasive Species Specialist Group \(ISSG\)](#)
 Zungontiporn S • Watcharasin P • Promma A • Wong L J • Pagad S

DATASET TAXONOMY PROJECT METRICS [DOWNLOAD](#) [HOME PAGE](#) **172 RECORDS**

The Global Register of Introduced and Invasive Species (GRIIS) presents validated and verified national checklists of introduced (alien) and invasive alien species at the country, territory, and associated island level. Checklists are living entities, especially for biological invasions given the growing nature of the problem. GRIIS checklists are based on a published methodology and supported by the Integrated Publishing Tool that jointly enable ongoing improvements and updates to expand their ... [More](#)

Project ID: GRIIS
Publication date: September 11, 2020
Metadata last modified: September 11, 2020
Hosted by: [GBIF Secretariat](#)
Licence: [CC BY 4.0](#)
[How to cite](#) [DOI](#) [10.15468/rbs6sw](#)

152 Accepted names 18 Synonyms 99% Overlap with GBIF Backbone 95% Overlap with Catalogue of Life



GRIIS Country Compendium

Examples of countries in GRIIS	# of IAS in GRIIS	% of species flagged as locally invasive	# of IAS listed unique to country
Bangladesh	148	25.0%	47
Cambodia	153	25.5%	17
Indonesia	396	77.5%	195
Malaysia	363	9.4%	80
Singapore	698	2.9%	407
Thailand	171	24.0%	28
Vietnam	350	15.5%	92

scientific **data**

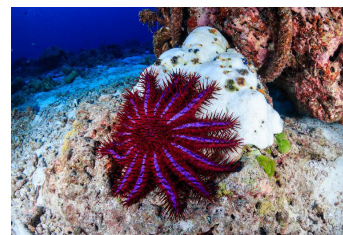
OPEN **Country Compendium of the Global Register of Introduced and Invasive Species**

DATA DESCRIPTOR

[Check for updates](#)

Pagad et al. 2022.
<https://www.nature.com/articles/s41597-022-01514-z>

and associated dataset:
Pagad, S., et al. 2022.
Zenodo <https://doi.org/10.5281/zenodo.6348164>



1. CBD Clearing House Mechanism

<https://www.cbd.int/countries/>




Easy and open access to GRIIS data



COUNTRY PROFILES

Thailand



Thailand

Further Information

- > InforMEA Profile
- > World Heritage Sites
- > GBIF Data
- > WTO Statistics
- > Law and Environment
- > Invasive Alien Species
- > Related Websites

2. GBIF Integrated Publishing Toolkit

gbif.org_publisher_issg - <https://bit.ly/31ZrQCM>

3. Open Data Repository

GRIIS Country Compendium - <https://go.nature.com/3OkZ86K>
- with link to Zenodo repository link in the paper

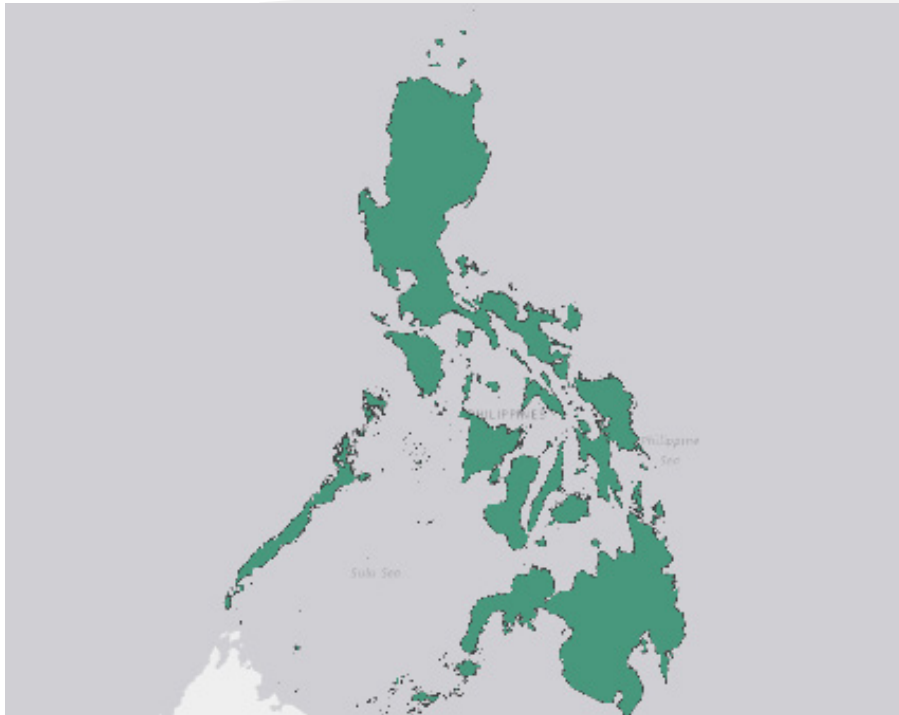
4. GRIIS.org



<https://griis.org/>

'Download' -> search by country name

Country Profiles



Philippines (PHL)

Philippines

- **Date joined:** August 8, 1967
- **Head of State :** President Rodrigo Roa Duterte
- **Capital :** Manila
- **Population:** 108.1 Million (2019)
- **Language(s) :** Filipino, English, Spanish
- **Currency :** Peso
- **Department of Foreign Affairs of the Philippines Website:** <http://www.dfa.gov.ph>

- **Institution/Agency to oversee the Biodiversity Natural Resources:**
Department of Environment and Natural Resources
<https://www.denr.gov.ph/>

- **Species:** [Dataset \(gbif.org\)](https://gbif.org)
- **Sources:** [Main Details \(cbd.int\)](https://cbd.int)

Global assessments

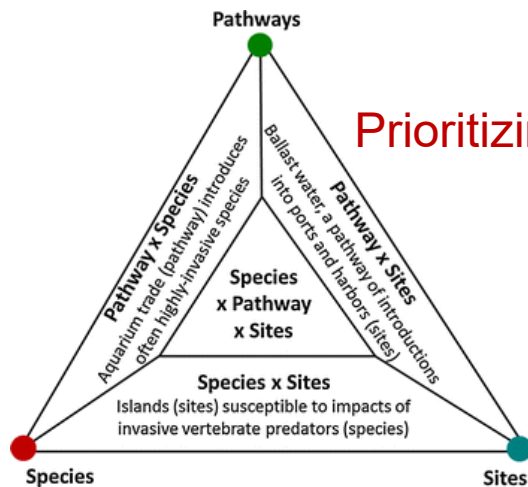


Open GRIIS Checklists *Widespread value for policy and management*



National strategy and action planning

Prioritizing actions



Reporting under international agreements

Post-2020 Biodiversity Framework



Acknowledgements



Shyama Pagad, Dmitry Schiegel, Tim Hirsh, Donald Hobern, Quentin Groom, Lou Peake

Walter Jetz, Ajay Ranipeta



Australian Government
Australian Research Council



Securing Antarctica's
Environmental Future
Australian Research Council Special Research Initiative



LA TROBE
UNIVERSITY

There are two peer-reviewed publications explaining GRIIS and its methods:

- Pagad *et al.* 2018, that introduces GRIIS and its concepts
Pagad, S. *et al.* Introducing the Global Register of Introduced and Invasive Species. *Sci Data* 5, 170202 (2018).
<https://rdcu.be/cZ4qI>

AND

Pagad *et al.* 2022, that has the details and associated dataset of the 'Country Compendium'.
<https://www.nature.com/articles/s41597-022-01514-z>

with the associated dataset:

Pagad, S. *et al.*

Zenodo <https://doi.org/10.5281/zenodo.6348164> (2022).

<https://bit.ly/3tfNZd0>

Resources and further information:

Country guidelines- <https://bit.ly/383m2tL>

Country checklists- <https://bit.ly/31ZrQCM>

Invasion indicators - <https://bit.ly/3hUTloJ>

GRIIS methods-: <https://go.nature.com/2yYfcFh>

Data workflow- <https://bit.ly/3k3HDLI>

The researchers- <https://bit.ly/36tehXU>