

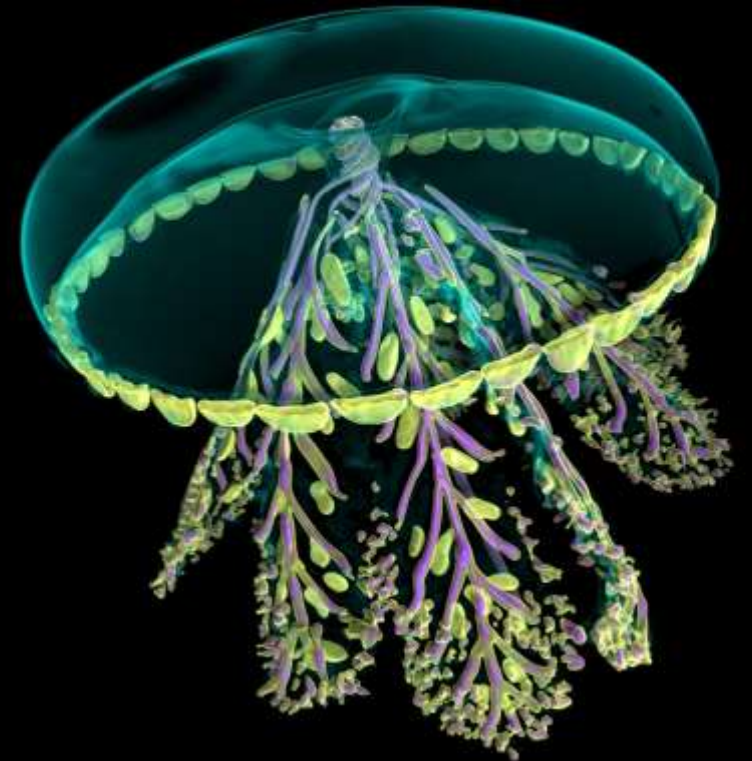
SYNTHESYS+

Transnational Access

Katherine Dixey, TA Deputy

SYNTHESYS+ Kick-Off Meeting

London, 18th Feb. 2019



Taxonomic Access Facilities for TA

- 13 national TAFs providing researcher access to collections at 21 natural history institutions & botanic gardens
- State-of-the-art chemical analysis, molecular and imaging facilities
- SYNTHESYS funds research, travel + subsistence costs
- 4 new TA institutions: 2 new TAFs (FI-TAF, + IL-TAF) + additions to DE-TAF (ZFMK) + BE-TAF (BGM)



13 years, 50,000+ User Days

SYNTHESYS (FP6): 2004 - 2009

- 11 TAFs, 19 institutions
- 2,056 projects & 29,636 User Days funded over 9 calls

SYNTHESYS2 (FP7): 2009 - 2013

- 10 TAFs, 16 institutions
- 1,002 projects & 10,463 User Days funded over 4 calls

SYNTHESYS3 (FP7): 2013 - 2017

- 11 TAFs, 18 institutions
- 1,110 projects & 11,030 User Days funded over 4 calls

SYNTHESYS+ (H2020): 2019 – 2023

- 13 TAFs, 21 institutions
- Target of 7,017 User Days to be funded over 4 calls



Application Process

- 4 annual competitive funding calls in Feb 2019-2022
- Online application system (transferring to ELViS)
- Eligibility check + Host verification
- Scoring + discussion by User Selection Panel
- Feedback to all applicants

New for SYNTHEsys⁺:

Up-weighting to applications:

- from new user areas
 - Focusing on EC Societal Challenges
- 20% of User Days available to non-EU researchers

The screenshot shows the SYNTHEsys+ web application interface. The page title is "List Of Applications for GB-TAF". The user is logged in as "User syntheys@nhm.ac.uk logged in as [SuperAdmin]". The page displays a table of 169 applications. A dropdown menu is open for "GB-TAF", showing a list of TAFs: AT-TAF, BE-TAF, CZ-TAF, DE-TAF, DK-TAF, ES-TAF, FR-TAF, HU-TAF, NL-TAF, and SE-TAF. The table has columns: Applicant Name, Project Title, Application State, Administration State, and Support. The first row shows an application for "specimens from the north-eastern tributaries of the Congo River (Ilimbi, Aruwimi)".

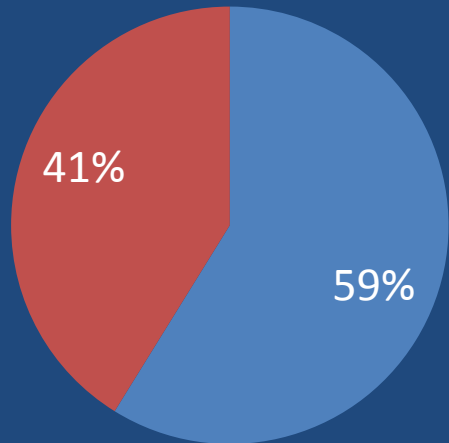
Applicant Name	Project Title	Application State	Administration State	Support
2-TAF-61	specimens from the north-eastern tributaries of the Congo River (Ilimbi, Aruwimi)	in processing	Scored	received
2-TAF-62	The Foccal Cortical neuroanatomy as a tool to unveil paleoneurology	in processing	Scored	received
2-TAF-63	Mineral chemical zonation of the stratiform Zinkgruvan Zn-Pb-Ag-(Cu) deposit, Bergslagen, Sweden	in processing	Scored	received
2-TAF-64	Revision of the Tristan da Cunha freshwater diatom flora based on the collections of John R. Carter	in processing	Scored	received
2-TAF-65	Systematics of Neotropical Heliotropium and Tournefortia (Heliotropaceae, Boraginaceae)	in processing	Scored	received
2-TAF-66	Skeletal mineralogy of Antarctic bryozoans as an emerging tool for predicting effects of the ocean acidification	Complete	Complete	received

Applicant Helpdesk

- New for SYNTHESYS+, separate function to general enquiries
- High-level application writing guidance
 - Highlight general areas for improvement
 - Offer general bid-writing advice
- Will not:
 - Proofread
 - Comment on potential success of a project
- Centralised service (synthesys@nhm.ac.uk)

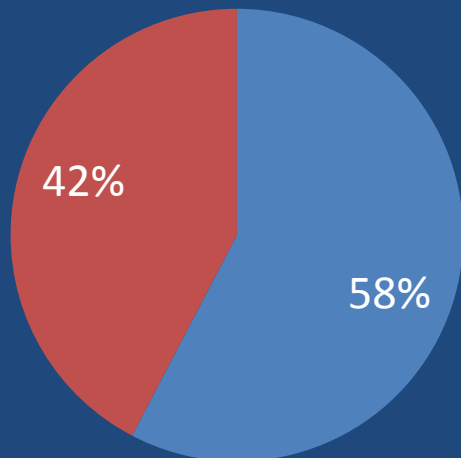
SYNTHESYS3: Gender balance & researcher status

Calls 1-4 all applicants



Gender balance of accepted applications consistently exceeds industry average*

Calls 1-4 accepted applicants

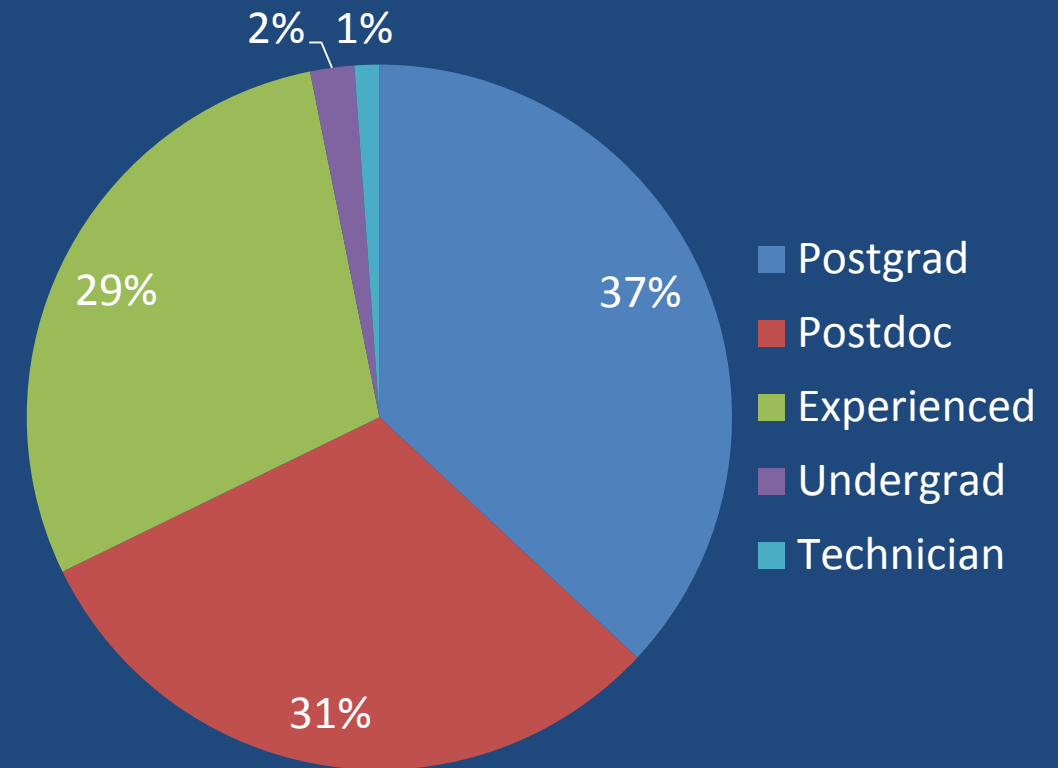


Improvement from 37% female in Call 3 to 43% female in Call 4

*'She Figures 2012 Gender in Research and Innovation' indicating that females account for 33% of scientific researchers in the EU.

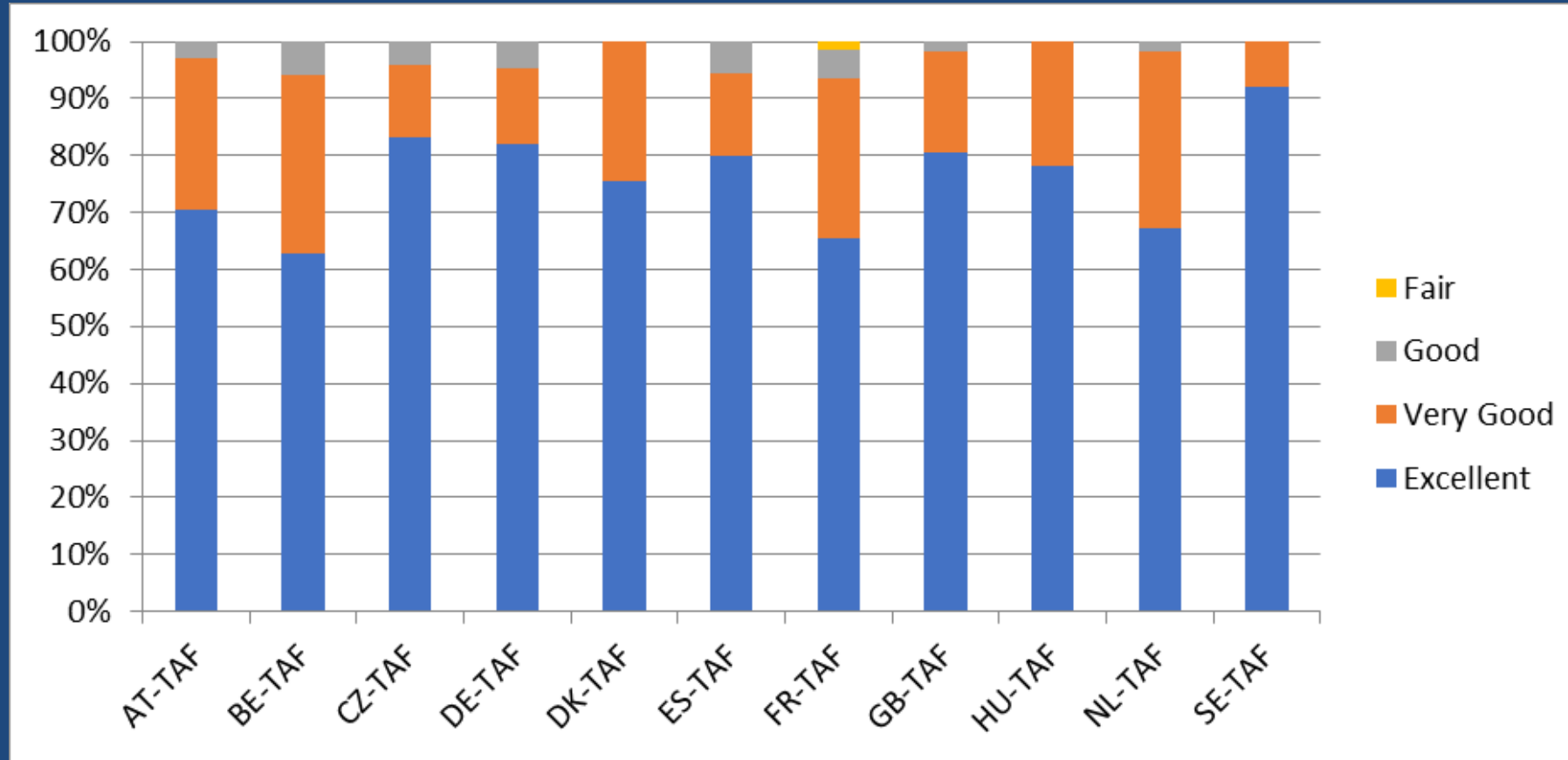
■ Male
■ Female

Researcher Status of Successful Applicants (All Calls)



SYNTHESYS3: User feedback

Exit survey for all users: used to help improve user experience with each Call.



- 935 responses
- 97% of Users regarded their overall visit quality as “excellent” or “very good”
- Only 2 “Fairs” and 0 “Poors”

Outputs

- SYNTHESYS 1, 2 + 3: **>4,700** research outputs.
- **497** outputs already accepted, in press or published from SYNTHESYS3 visits alone.

SYNTHESYS3:	Accepted	In press	Published	Total
Book/Monograph		3	12	15
Database, CD or DVD			4	4
Non Peer Reviewed	9	2	65	76
Peer Reviewed	27	48	317	392
Thesis	1	2	6	9
Training	1			1
Grand Total	38	55	404	497

PLOS ONE
TENTH ANNIVERSARY

Publish About Browse

OPEN ACCESS PEER-REVIEWED

RESEARCH ARTICLE

Megalictis, the Bone-Crushing Giant Mustelid (Carnivora, Mustelidae, Oligobuninae) from the Early Miocene of North America

Alberto Valenciano, Jon A. Baskin, Juan Abella, Alejandro Pérez-Ramos, M. Ángeles Álvarez-Sierra, Jorge Morales, Adam Hartstone-Rose

nature COMMUNICATIONS

Altmetric: 5 Views: 1,477 Citations: 25 More detail >>

Article

Larger mammals have longer faces because of size-related constraints on skull form

Andrea Cardini & P. David Polly

How to get involved in the TA

- Spreading the word (Call 1 launched Feb19)
- Responding to applicant queries
- Acting as Host
- Collaborating on research outputs from visits
- Acting as Supporter
- Acting as Scorer & User Selection Panel member
- Applying to visit another TAF



Benefits of TA

User

- Increased collaborations with Hosts + multiple TAFs
- Users learn new skills - transferred to home institution

Host institution

- Increased quality of collections: identifying specimens, updating nomenclature
- Users create new metadata
- Enhanced electronic data capture + processing
- Increased use of collections leads to enhanced value in the collections

Wider community

- High-quantity, high-quality research outputs
- Increased collaborations between international experts
- Fast-tracked progress in global research issues including environmental + climate change + climate modelling, soil biodiversity, marine, freshwater + terrestrial ecosystem functioning, mineral deposit distribution + food security.

Contacts

synthesys@nhm.ac.uk: 1st point of contact for Access queries

NHM Access Team:

TA Leader: Kristina Gorman (k.gorman@nhm.ac.uk, +44 207 942 5816)
(on maternity leave from 15th March 2019)



TA Deputy: Katherine Dixey (k.dixey@nhm.ac.uk, +44 207 942 6099)
(TA Leader maternity cover from 15th March 2019)



TA Support: Scott Wilson (scott.wilson@nhm.ac.uk, +44 207 942 5849)



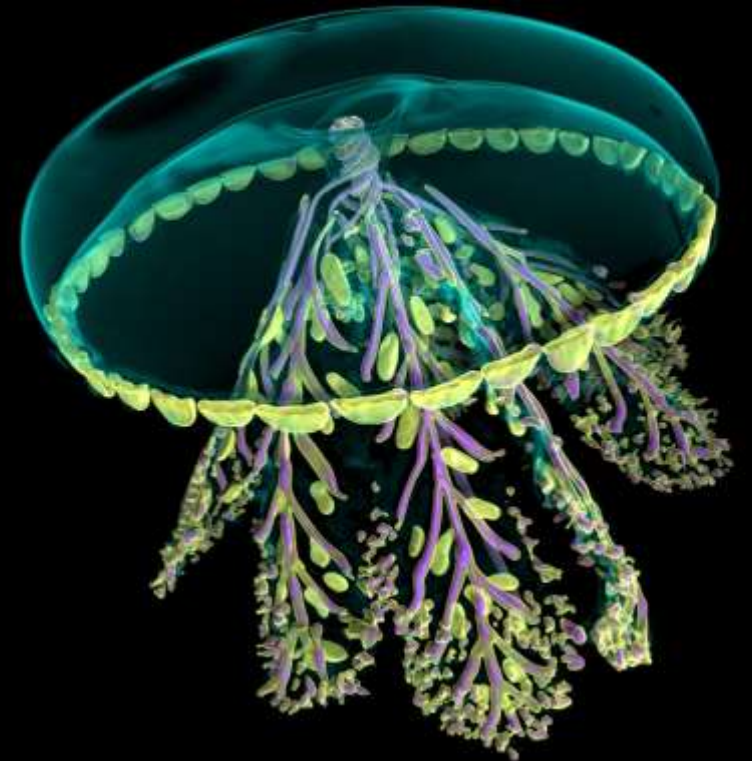
SYNTHESYS+

Synthesis of Systematic Resources

a DiSSCo project

www.synthesys.info

synthesys@nhm.ac.uk



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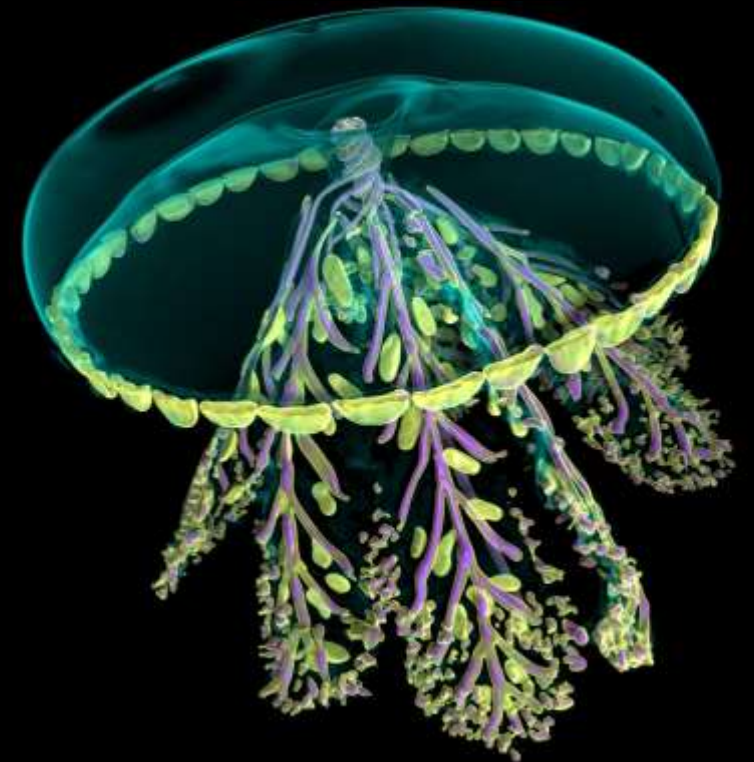
SYNTHESYS+

Virtual Access

Sandy Knapp, Access stream coordinator

SYNTHESYS+ Kick-Off Meeting

London, 18th Feb. 2019



Virtual Access: overview

- Drive from the EC to provide virtual as well as physical access:

H2020 work programme Call - Integrating and opening research infrastructures of European interest (INFRAIA-01-2018-2019): *“For grants awarded under this topic beneficiaries being ‘access providers’ must provide virtual access to research infrastructures or installations.”*

- SYNTHESYS+ will offer an integrated **Digitisation on Demand (DoD)** service: providing collections in digital form
- Help institutions increase their proportion of digital collections
- Provides virtual collections **freely available to a global user community**
- 2 open calls (years 2 + 3) for collections at 19 institutions
- Specific task within JRA2 will work on Digitisation as a Service, supporting VA, providing a mechanism for prioritising VA requests, establishing procedures (year 1) before 1st VA Call launched (year 2)
- Feedback from VA requests will refine the ELViS platform in JRA1

Virtual Access: overview

- scientific case submitted to **independent panel** to prioritise
- **VA institutional co-ordinator** at each TAF
- make use of existing network of public portals (principally GBIF and institutional data portals)
- **No embargo** or constraint on who uses the data - openly published (FAIR)
- VA requests publicly tracked and monitored through a data dashboard
- **External board assessment of VA services** (Deliverables 10.1 Jan21, 10.2 Jun22)
- €1m budget across 19 institutions. Budget per partner will be **demand-driven (more demand = larger budget)**. Includes staff costs for digitisers, technicians, curators, coordination (some partners could claim equipment maintenance costs). **Capital equipment costs not eligible**



VA institutional coordinator / helpdesk

- Promotion of calls for digitisation requests and promote newly digitised content
- Liaison with local staff to assess feasibility (ensure requested material is accessible and ready to be digitised)
- Ensure relevant staff resource (digitiser time) and facilities available
- Validate cost models by tracking actual costs of digitisation activities
- Coordinate digitisation activities and open access data delivery
- Ensure institutional standards met as minimum
- Assist in collating statistics and metrics for VA assessment (specimens digitised, demand, rate of download, outputs)



Application for VA

- 2 funding calls (Feb 2020 and Feb 2021)
- Requester can only select material listed (material that is sensitive, inaccessible, not ready for digitisation cannot be requested) – **host institution remains in control** of what can be digitised
- Online application system incl. project description, scientific case, outputs, evidence of prior discussion with collection managers
- Needs to be credible + value for money
- Part of how we get a collection ready is being paid for under the VA programme

For example: a request to digitise wheat collections across Europe would not specify that all specimens would need barcodes - the project would pay for curator and digitiser time to do this part of the process.

- Individual researcher or a partnership can apply

New for SYNTHESYS+:

Up-weighting to applications:

- from new user areas
- Focusing on EC Societal Challenges

Expectation that proposals may include requests for:

Cross-institutional digitisation:

For example, collections from a specific geographical location held in multiple TAFs.

Large-scale digitisation:

For example, DK-TAF recently received a request to provide images and data of Brazilian collections in herbarium C. However, with an estimated 80,000 specimens from Brazil, such a request had to be declined at that time.

Iconic specimens

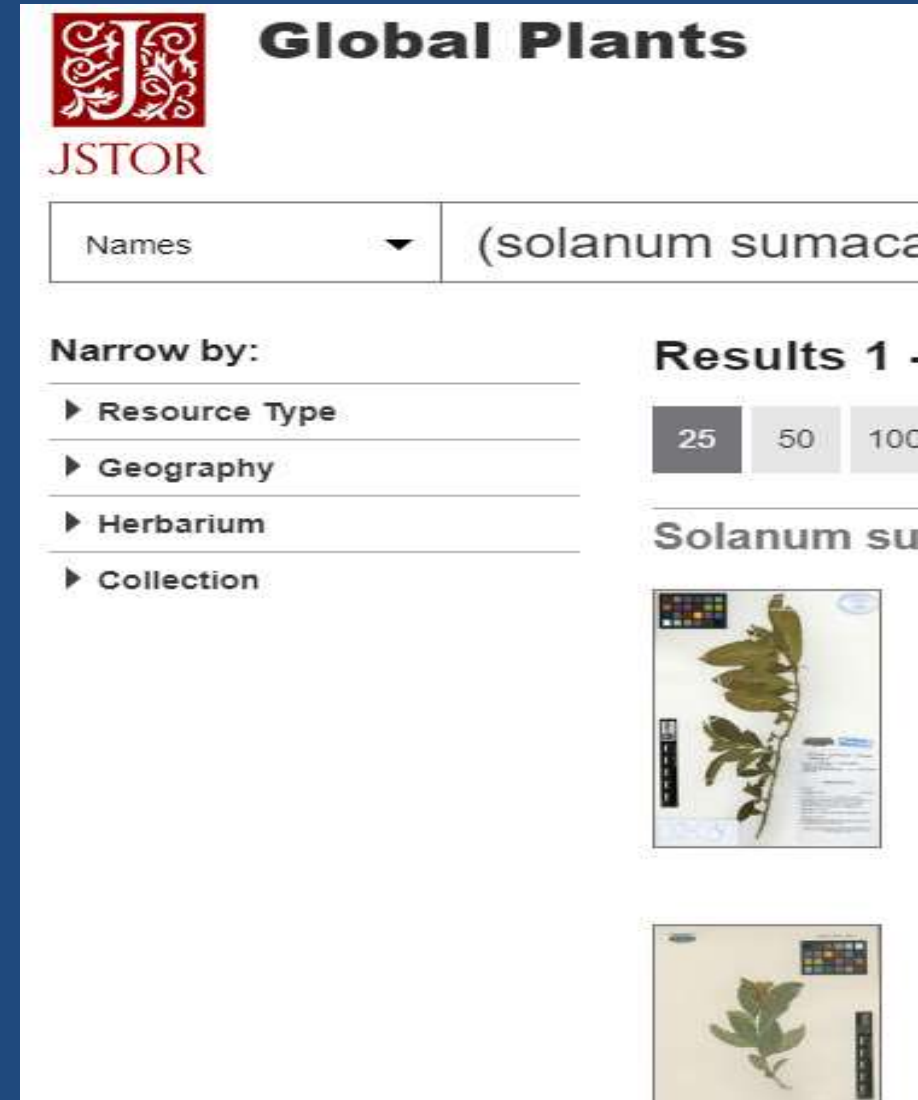
For example, unique fossil skulls



Application prioritisation

- Discussion and prioritisation by independent panel
- Prioritisation based on:
 - i. feasibility of creating the digital assets
 - ii. quality of the proposed research
 - iii. anticipated added value of the digitised data to others, beyond those making the original request
 - iv. EU focus areas for research e.g. climate change, anthropogenic impact, health, agriculture and the circular (regenerative) economy.
 - v. other?

(Projects where the requester has not communicated with the institution & community will not be prioritised)



How to get involved in VA

- Exposing collections that are digitisation-ready
- Spreading the word during 2019 (Call 1 launching Feb 2020)
- Ensuring SYNTH+ priorities are reflected
- Responding to applicant queries and assisting VA coordinator / helpdesk function
- Collaborating on research outputs
- Acting as Supporter to applications (from other TAFs)
- Submitting DoD requests to other TAFs



Benefits of VA

User

- Digital data provided free of charge with minimum effort to User
- High-quality digital data provided by trained experts on FAIR principles

Host institution

- Creation of new digital data and metadata
- User-driven prioritisation: most impactful collections identified for digitisation
- Enhanced electronic data capture and processing
- Increased use leads to enhanced value of NH collections

Wider community

- High-quality, high-quantity research outputs
- Increased collaboration between international experts
- Novel virtual access services and support structures
- Fast-tracked progress in societal issues: environmental, climate change, climate modelling; soil biodiversity; marine, freshwater, terrestrial ecosystem functioning; mineral deposit distribution; food security

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