



GBIF

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)



Tamiops maritimus (Bonhote, 1900)

Georeferencing and Mobilization of Plant Occurrence Data from Pakistan

Lubna

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PROJECT OBJECTIVES

- Mobilize and georeference complete data from 36,000 records from participating herbaria plus 1,000 from other herbaria
- To convince Pakistani taxonomists working with all kinds of organisms that data mobilization will greatly enhance the value of their work while helping them, and their students, acquire the knowledge and skills required to become full participants in today's data driven world.
- To enable GBIF to provide more taxonomically and geographically comprehensive data from Pakistan and to develop sustained commitment to data mobilization.
- Symbiota's ability to promote collaboration in mobilizing and visualizing data can increase the impact of taxonomic research and biodiversity collections on many different user groups.
- Project focusses on plants but we shall actively encourage engagement by individuals working with other organismal groups.

DATA SOURCES

Title of dataset	Taxonomic/geographic scope	Approximate number of records (specimens)	Current format (e.g. undigitized, digitized)
ISL	Vascular plants, bryophytes and fungi/Pakistan	29,000	180000 undigitized, none digitized
SWAT	Vascular plants and fungi/Swat District, Pakistan	6,000	5950 undigitized; 50 digitized
QUETTA	Vascular plants, fungi and algae/Balochistan, Pakistan	1000	1000 undigitized
BGH, PMAS, other herbaria	Vascular plants and fungi	1000	None digitized

PROJECT TIMELINE

Proposed dates	Activity	Lead partner
June 2018	Attendance of project team member at BIFA Capacity Enhancement Workshop	
April 1	Initiation of data mobilization Barkworth (NAU) had devoted part of April to this workshop.	ISL Workshop held.
April 1	Initiate steps for becoming GBIF data providers	NAU
Each month	Monitor mobilization progress, modify procedures to achieve faster rate	ISL
April 1	Start contacting herbaria concerning their holdings. Summarize results in June. Identify reasons for failing to register with or update Index herbarium.	SWAT In progress
May	Data entry	In progress First instalment received (May 15)

PROJECT TIMELINE- CONT..

July	Presentation on data mobilization in Pakistan at Botanical Society of America (not included in budget; Barkworth (NAU) will be attending regardless of funding)	NAU
August	Presentation on modifying software for use in countries with poor internet access to TDWG (not included in budget; Barkworth (NAU) will be attending regardless of funding)	NAU
November	Blended workshop promoting data mobilization (subject to receipt of funding from funding agency in Pakistan)	ISL
	Submit Flora of District Swat as data paper with online, illustrated checklist	SWAT
December	Submit Flora of Pakistan data paper	NAU
	Submit abstracts on their data mobilization activities to annual meeting of Pakistan Botanical Society.	ISL, SWAT
December	Identify potential sources for further work on digitization, work with others to ensure at least one more funding proposal is submitted in 2019.	
March	Prepare report on progress and impact.	NAU

PROJECT SUSTAINABILITY

- We shall use the functionality of Symbiota, the software used to run OpenHerbarium, to convince Pakistani taxonomists
- This will increase pressure on reluctant curators to mobilize their specimen data
- Tools in Symbiota make it very easy to send feedback to collection managers and enable printing of annotation labels.
- These resources will increase the probably that the data will be actively curated after completion of the project.
- Openherbarium is hosted on a server at the University of Florida server along with other Symbiota portals and has secure funding through 2022 with a sustainability plan to address long-term support.