

# iDigBio: HUB and data aggregator

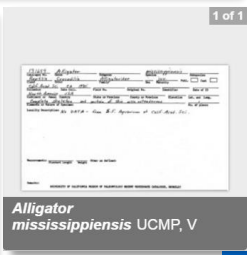
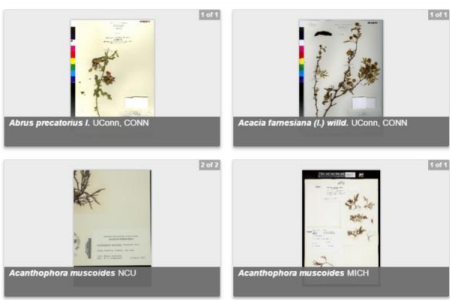
Our scope:

- Specimen data Darwin Core
- Media Audubon Core
- Global; all taxa

Biodiversity  
Information  
Standards  
TDWG



Sylviidae	Abrosopus albugular...	MVZ	Bird specimens	1959-05-12	Collector(s) Chester ...	Taiwan	Fenchihu, A-li Shan (...	<a href="http://arctos.database...">http://arctos.database...</a>
Sylviidae	Abrosopus albugular...	CM	Birds	1986-10-08	Collector Unknown	Taiwan	no data	<a href="um.catalog:CM.Birds...">um.catalog:CM.Birds...</a>
Sylviidae	Abrosopus albugular...	CM	Birds	1986-10-08	Collector Unknown	Taiwan	no data	<a href="um.catalog:CM.Birds...">um.catalog:CM.Birds...</a>
Nymphalidae	Abrota ganga	YPM	ENT	1955-06-03	Hwei Chin	Taiwan	Formosa, Pulli	<a href="um.uuid:7329fb64-1f11...">um.uuid:7329fb64-1f11...</a>
Pomacentridae	Abudefduf bengalensis	CAS	ICH	2014-05-18	Iria Fernandez-Silva; ...	Taiwan	Tashi Fish Market, Yilan	<a href="um.catalog:CAS:ICH...">um.catalog:CAS:ICH...</a>
Pomacentridae	Abudefduf septemfasc...	CAS	ICH	1973-07-08	L. Chen, K. Chang, F. ...	Taiwan	Hengchun, Maopitou.	<a href="um.catalog:CAS:ICH...">um.catalog:CAS:ICH...</a>
Pomacentridae	Abudefduf sexfasciatus	ROM	Fishes	1978-03	no data	Taiwan	NE Taiwan, Pacific Oc...	<a href="URI:catalog:ROM:Icht...">URI:catalog:ROM:Icht...</a>
Pomacentridae	Abudefduf vaiensis	CAS	ICH	2014-05-17	Iria Fernandez-Silva; ...	Taiwan	Tashi Fish Market, Yilan	<a href="um.catalog:CAS:ICH...">um.catalog:CAS:ICH...</a>
Pomacentridae	Abudefduf vaiensis	LSUMZ	Fishes	2008-11-15	Chakrabarty, Prosanta...	Taiwan	Heng-Chen, Ding-tong...	<a href="03e3c8b6-2c79-11e4...">03e3c8b6-2c79-11e4...</a>
Pomacentridae	Abudefduf vaiensis	FMNH	Fishes	2009-09-10	H. C. Ho, W. L. Smith...	Taiwan	Heng Chun, Heng Ch...	<a href="c63f19b8-4ea3-4742...">c63f19b8-4ea3-4742...</a>
Melithaeidae	acabaria	FLMNH	Invertebrate Zoology	2011-05-29	Mandy Bemis, Machel...	Taiwan	no data	<a href="FBF9489E-D0A6-4D8...">FBF9489E-D0A6-4D8...</a>
Fabaceae	Acacia confusa Merr.	MO	MO	1961-04-13	Y.R. Cheunjet et al.	Taiwan	Mimosaceae, Tsu San...	<a href="um.catalog:MO:Tropic...">um.catalog:MO:Tropic...</a>
Fabaceae	Acacia confusa Merr.	MO	MO	1961-04-16	L.L. Liujet et al.	Taiwan	Mimosaceae, Universl...	<a href="um.catalog:MO:Tropic...">um.catalog:MO:Tropic...</a>
Fabaceae	Acacia confusa Merr.	MO	MO	1989-07-29	Alwyn H. Gentryjet et al.	Taiwan	Pintung County, Nanje...	<a href="um.catalog:MO:Tropic...">um.catalog:MO:Tropic...</a>
Euphorbiaceae	Acalypha australis L.	MO	MO	1960-05-11	Lee, W. C.	Taiwan	Taiwan University Ca...	<a href="um.catalog:MO:Tropic...">um.catalog:MO:Tropic...</a>
Elapidae	Acalyptophis peronii	UCM	Amphibian and reptile...	1972-01-01/1972-12-31	Collector(s): A. Tu	Taiwan	Anping, Tainan City, S...	<a href="http://arctos.database...">http://arctos.database...</a>
Elapidae	Acalyptophis peronii	UCM	Amphibian and reptile...	1972-07-07	Collector(s): A. Tu	Taiwan	Anping, Tainan City, S...	<a href="http://arctos.database...">http://arctos.database...</a>
Elapidae	Acalyptophis peronii	UCM	Amphibian and reptile...	1972-01-01/1972-12-31	Collector(s): A. Tu	Taiwan	Anping, Tainan City, S...	<a href="http://arctos.database...">http://arctos.database...</a>
Elapidae	Acalyptophis peronii	UCM	Amphibian and reptile...	1972-01-01/1972-12-31	Collector(s): A. Tu	Taiwan	Anping, Tainan City, S...	<a href="http://arctos.database...">http://arctos.database...</a>
Undesignated	Acanthaceae Juss.	MO	MO	1996-04-24	James C. Solomon L...	Taiwan	Taipei Hsien, Ulai Hsia...	<a href="um.catalog:MO:Tropic...">um.catalog:MO:Tropic...</a>



# What are the *minimum* data fields needed?

## Darwin Core

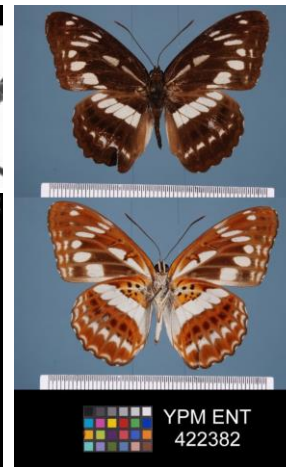
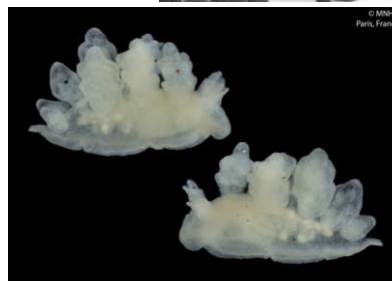
- recordID (*iDigBio*)
- **occurrenceID** (unique!)
- scientificName
- eventDate
- recordedBy
- Locality information
- catalogNumber
- **institutionID**
- **collectionID**
- Geological Context
- bibliographicCitation
- (Other DwC data fields & extensions)

## Audubon Core

















- identifier
- occurrenceID of specimen
- URL
- Camera EXIF
- photographer

## Metadata

- Institution
- Collection
- Contact & info
- Description
- URL



# Indexed locality fields

- continent
- country
- county
- geopoint (lat, long)
- locality
- verbatimLocality
- stateProvince
- waterbody
-  bed
-  group (Geological context group)
-  member
-  formation
-  earliestEonOrLowestEonothem (Earliest Eon)
-  latestEonOrHighestEonothem (Latest Eon)
-  earliestEraOrLowestErathem (Earliest Era)
-  latestEraOrHighestErathem (Latest Era)
-  earliestPeriodOrLowestSystem (Earliest Period)
-  latestPeriodOrHighestSystem (Latest Period)
-  earliestEpochOrLowestSeries (Earliest Epoch)
-  latestEpochOrHighestSeries (Latest Epoch)
-  earliestAgeOrLowestStage (Earliest Age)
-  latestAgeOrHighestStage (Latest Age)
-  lowestBiostratigraphicZone
-  lithostratigraphicTerms

# Why collections publish/share data with iDigBio

- Discovery and use
- Data quality (20 flags), improvement

## Specimen Record

Data <u>Flags</u> Raw	
Type	Description
scientificname_added	
geopoint_low_precision	Geographic Coordinate has Low Precision.
dwc_phylum_added	Darwin Core Phylum Added.
dwc_country_replaced	Darwin Core Country Corrected.
idigbio_isocountrycode_added	iDigBio ISO 3166-1 alpha-3 Country Code Added.
dwc_kingdom_added	Darwin Core Kingdom Added.

- Attribution, credit, collection value metrics

## Recordset

Data Corrected <u>Data Use</u> Raw						
<p>The table below represents monthly iDigBio portal use statistics for this recordset. <b>Search</b> indicates in how many instances a record from this recordset matched a search query. <b>Download</b> indicates in how many instances a record from this recordset was downloaded. <b>Seen</b> indicates in how many instances a record from this recordset appeared (visually) in the search results in a browser window. <b>Records Viewed</b> and <b>Media Viewed</b> indicate how many specimen and media records were opened and viewed in full detail. Note: Monthly statistics aggregation began on Jan 15th 2015; therefore, the month of (01 / 2015) represents approximately half a month of statistics reporting.</p>						
Month of	Search	Download	Seen	Records Viewed	Media Viewed	
01 / 2015	4,644,439	39,693	249	185	36	
02 / 2015	14,478,408	18,174	872	93	6	
03 / 2015	11,134,952	92,788	604	136	8	

# Geopoint relevant data quality flags

geopoint_0_coord	Geographic Coordinate had literal '0' values.
geopoint_bounds	Geographic Coordinate was out of bounds.
geopoint_datum_error	Geographic Coordinate has Invalid Geodetic Datum.
geopoint_datum_missing	Geographic Coordinate Missing Geodetic Datum (Assumed to be WGS84).
geopoint_low_precision	Geographic Coordinate has Low Precision.
geopoint_pre_flip	Prior to examining other factors, the magnitude of latitude was determined to be greater than 180, and the longitude was less than 90, so their values were swapped.
geopoint_similar_coord	Geographic Coordinate had similar latitude and longitude (+/- lat == +/- lon).
idigbio_isocountrycode_added	iDigBio <a href="#">ISO 3166-1 alpha-3</a> Country Code Added. <a href="#">iDigBio correction table</a>
rev_geocode_both_sign	Geographic Coordinate had its Latitude and Longitude negated to place it in correct country.
rev_geocode_corrected	The reverse geocoding process was able to find a coordinate operation that placed the point within the stated country.
rev_geocode_eez	The Reverse geocode does not fall within the land borders of a country, but does fall inside a countries' exclusive economic zone water boundary (approx. 200 miles from shore).
rev_geocode_eez_corrected	The reverse geocoding process was able to find a coordinate operation that placed the point within the stated country's exclusive economic zone.
rev_geocode_failure	The point was not able to be reverse geocoded to any country.
rev_geocode_flip	Geographic Coordinate had its Latitude and Longitude swapped to place it in correct country.
rev_geocode_flip_both_sign	Geographic Coordinate had its Latitude and Longitude both swapped and negated to place it in correct country.
rev_geocode_flip_lat_sign	Geographic Coordinate had its Latitude and Longitude swapped, and its Latitude negated to place it in correct country.
rev_geocode_flip_lon_sign	Geographic Coordinate had its Latitude and Longitude swapped, and its Longitude negated to place it in correct country.
rev_geocode_lat_sign	Geographic Coordinate had its Latitude negated to place it in correct country.
rev_geocode_lon_sign	Geographic Coordinate had its Longitude negated to place it in correct country.
rev_geocode_mismatch	Geographic Coordinate did not reverse geocode to correct country.