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This spreadsheet contains examples of digitised specimens and the data associated with them, matching up the collected data with corresponding Darwin

Overview: Core terms and MIDS levels.

Links

**Darwin Core Terms** https://dwc.tdwg.org/terms/

MIDS https://tdwg.github.io/mids/information-elements/index.html

Tab Key

Botany Entomology

Cell Key

Rows with grey = Data is auto-populated by a script/system default

Rows with **BOLD** = Data is collected by the digitisers.

> \*Taxonomic names to be used in the project are preemptively collected before the project starts and then used as a dropdown list for the duration of the project. Our experience suggest that trying to verify/collect taxonomic names during a project causes significant delays.

Rows with Yellow =

Data can fit into the MIDS requirement as information required to locate the specimen in the collection, but is institution-specific. Data about location in institutions e.g., room and cabinet is not published but may be necessary for collections management and accreditation reasons.

Sheet Key **Function** 

Definitions Broader description of fields that are collected via NHM digitisation and either required or automatically filled by CMS settings.

MIDS terms together with their Darwin Core equivalent in reference to an Botany specimen. Botany

Example specimens and their associated data mapped into the MIDS levels. These are examples from a standard mass digitisation project of Botany

Botany Examples 0-1 and Media collections.

Entomology

Botany Example - ODA - MIDS 2 Example specimen and its associated data mapped into the MIDS levels. This example is from a project that included all of the MIDS2 level as well.

MIDS terms together with their Darwin Core equivalent in reference to an Entomology specimen.

**Entomology Example** Example specimen and its associated data mapped into the MIDS levels. The example is from a standard mass digitisation project of Entomology collections.

## **BOTANY**

Some information collected during digitisation projects are not included in MIDS, but are important for institutional/curatorial purposes such as conservation, or accreditation. These are below:

Darwin Core name	Data example	Darwin Core definition
		The name, acronym, code, or initials identifying the collection or data set from which
CollectionCode	(Botany Department =) BOT	the record was derived.
occurrencelD	(automatically generated)	An identifier for the dwc:Occurrence (as opposed to a particular digital record of the dwc:Occurrence). In the absence of a persistent global unique identifier, construct one from a combination of identifiers in the record that will most closely make the dwc:occurrenceID globally unique.
rightsHolder	"Trustees of the"	A person or organization owning or managing rights over the resource.
MaterialEntity		An entity that can be identified, exists for some period of time, and consists in whole or in part of physical matter while it exists.
preparations	e.g. sheet, slide	A list (concatenated and separated) of preparations and preservation methods for a dwc:MaterialEntity.
disposition	e.g. Currently held; on loan	The current state of a dwc:MaterialEntity with respect to a collection.
*Current Location - for in	ternal use only	n/a
*Permanent Location - fo	r internal use only	n/a
*Sub-Department	e.g. Algae, British and Irish Herbarium	n/a
*Bio-Geographic Region	This is used and captured for physically locating the specimen within the collection	

There are also fields that are automatically populated by the CMS upon record creation, or information that is pulled automatically from a different module upon record creation.

MIDS level	Label	Darwin Core name	Darwin Core definition
			The full scientific name of the kingdom in which the
	1 Name	kingdom	dwc:Taxon is classified.
			The full scientific name of the phylum or division in
	1 Name	phylum	which the dwc:Taxon is classified.
			The full scientific name of the class in which the
	1 Name	class	dwc:Taxon is classified.
			The full scientific name of the order in which the
	1 Name	order	dwc:Taxon is classified.

		The full scientific name of the family in which the
1 Name	family	dwc:Taxon is classified.
		The full scientific name of the genus in which the
1 Name	genus	dwc:Taxon is classified.
		The name of the first or species epithet of the
1 Name	specificEpithet	dwc:scientificName.
		The name of the lowest or terminal infraspecific
		epithet of the dwc:scientificName, excluding any
		rank designation.
1 Name	infraspecificEpithet	
		The authorship information for the
		dwc:scientificName formatted according to the
		conventions of the applicable
1 Name	scientificNameAuthorship	dwc:nomenclaturalCode.
		The taxonomic rank of the most specific name in
1 Name	taxonRank	the dwc:scientificName.
		The nomenclatural code (or codes in the case of an
		ambiregnal name) under which the
1 Name	nomenclaturalCode	dwc:scientificName is constructed.
		A list (concatenated and separated) of taxa names
		terminating at the rank immediately superior to the
1 Name	higherClassification	referenced dwc:Taxon.

## Additional information IF transcription/georeferencing is part of the project. - Darwin Core terms/fields we collect, but not included in MIDS

Darwin Core name	Notes	Darwin Core definition	
habitat Verbatim from the label A category or description of the habitat in which the dwc:Ever		A category or description of the habitat in which the dwc:Event occurred.	
		The four-digit year in which the dwc:Event occurred, according to the Common Era	
year		Calendar.	
month		The integer month in which the dwc:Event occurred.	
day		The integer day of the month on which the dwc:Event occurred.	
	The precise location from the		
	label, without the upper		
Location	hierarchy.	A spatial region or named place.	
continent		The name of the continent in which the dcterms:Location occurs.	
islandGroup		The name of the island group in which the dcterms:Location occurs.	
island		The name of the island on or near which the dcterms:Location occurs.	
		The name of the country or major administrative unit in which the dcterms:Location	
country		occurs.	

	The name of the next smaller administrative region than country (state, province,
	canton, department, region, etc.) in which the dcterms:Location occurs.
	The full, unabbreviated name of the next smaller administrative region than
	stateProvince (county, shire, department, etc.) in which the dcterms:Location occurs.
	The lower limit of the range of elevation (altitude, usually above sea level), in meters.
	The upper limit of the range of elevation (altitude, usually above sea level), in meters.
-generated by filling in the	A list (concatenated and separated) of geographic names less specific than the
in the CMS)	information captured in the dwc:locality term.
	A description or reference to the methods used to determine the spatial footprint,
	coordinates, and uncertainties.
	A list (concatenated and separated) of maps, gazetteers, or other resources used to
	georeference the dcterms:Location, described specifically enough to allow anyone in
	the future to use the same resources.
	A list (concatenated and separated) of names of people, groups, or organizations who
	determined the georeference (spatial representation) for the dcterms:Location.
	The date on which the dcterms:Location was georeferenced.
	The horizontal distance (in meters) from the given dwc:decimalLatitude and
	dwc:decimalLongitude describing the smallest circle containing the whole of the
	dcterms:Location. Leave the value empty if the uncertainty is unknown, cannot be
	estimated, or is not applicable (because there are no coordinates). Zero is not a valid
	value for this term.
	generated by filling in the in the CMS)

## **ENTOMOLOGY**

Some information collected during digitisation projects are not included in MIDS, but are important to collect for institutional/curatorial purposes such as conservation and accrediation These are below:

Darwin Core name Data example Darwin Core definition		Darwin Core definition
		The name, acronym, coden, or initialism identifying the collection or data set from
CollectionCode	(Botany Department =) BOT	which the record was derived.

		An identifier for the dwc:Occurrence (as opposed to a particular digital record of the
		dwc:Occurrence). In the absence of a persistent global unique identifier, construct one
		from a combination of identifiers in the record that will most closely make the
occurrenceID	(automatically generated)	dwc:occurrenceID globally unique.
rightsHolder	"Trustees of the"	A person or organization owning or managing rights over the resource.
		An entity that can be identified, exists for some period of time, and consists in whole or
MaterialEntity		in part of physical matter while it exists.
		A list (concatenated and separated) of preparations and preservation methods for a
preparations	Slide, Pinned, etc.	dwc:MaterialEntity.
disposition	e.g. Currently held; on loan	The current state of a dwc:MaterialEntity with respect to a collection.
*Current Location - for		
internal use only		n/a
*Permanent Location - for		
internal use only		n/a
*Sub-Department	e.g. Lepidoptera, Coleoptera	n/a

There are also fields that are automatically populated by the CMS upon record creation, or information that is pulled automatically from a different module upon record creation.

MIDS level Label Darwin Core name		Darwin Core name	Darwin Core definition
			The full scientific name of the kingdom in which the
1	Name	kingdom	dwc:Taxon is classified.
			The full scientific name of the phylum or division in
1	Name	phylum	which the dwc:Taxon is classified.
			The full scientific name of the class in which the
1	Name	class	dwc:Taxon is classified.
			The full scientific name of the order in which the
1	Name	order	dwc:Taxon is classified.
			The full scientific name of the superfamily in which
1	Name	superfamily	the dwc:Taxon is classified.
			The full scientific name of the family in which the
1	Name	family	dwc:Taxon is classified.
			The full scientific name of the subfamily in which
1	Name	subfamily	the dwc:Taxon is classified.
			The full scientific name of the tribe in which the
1	Name	tribe	dwc:Taxon is classified.
			The full scientific name of the genus in which the
1	Name	genus	dwc:Taxon is classified.

			The name of the first or species epithet of the
1	Name	specificEpithet	dwc:scientificName.
			The name of the lowest or terminal infraspecific
			epithet of the dwc:scientificName, excluding any
1	Name	infraspecificEpithet	rank designation.
			The authorship information for the
			dwc:scientificName formatted according to the
			conventions of the applicable
1	Name	scientificNameAuthorship	dwc:nomenclaturalCode.
			The taxonomic rank of the most specific name in
1	Name	taxonRank	the dwc:scientificName.
			The nomenclatural code (or codes in the case of an
			ambiregnal name) under which the
1	Name	nomenclaturalCode	dwc:scientificName is constructed.

level	Label	Darwin Core name	Darwin Core definition	Information type	Notes
			The name (or acronym) in use by the institution having custody of the object(s) or information		Auto-populated by the CMS system
	0 Organization	InstitutionCode	referred to in the record.	e.g. NHMUK	default.
				Unique	
	0 PhysicalSpecimenID	CatalogNumber	An identifier (preferably unique) for the record within the data set or collection.	identifier/Barcode	
	1 License	license	A legal document giving official permission to do something with the resource.	e.g. CC0-1.0	Bulk updating records when image ingest happens. Auto-populated by the CMS system
	1 Modified	modified	The most recent date-time on which the resource was changed.		default.
	1 Name	scientificName	The full scientific name, with authorship and date information if known. When forming part of a dwc:Identification, this should be the name in lowest level taxonomic rank that can be determined. This term should not contain identification qualifications, which should instead be supplied in the dwc:identificationQualifier term.	e.g. Arctium minus subsp. pubens (Bab.) Arènes	The list of taxonomic names to be used by a project is collected before the project begins and used as a dropdown list to select from.
	1 ObjectType	basisofRecord	The specific nature of the data record.	e.g. Specimen	Auto-populated by the CMS system default/script
				Die Coognaphie vertien	Collected by the digitisers for institutional use; not an
	1		A list (consistent and congrated) of identifiers (publication, global unique identifier, LIPI) of	Bio-Geographic region	internationally standardised field.
	2 Media	associatedMedia	A list (concatenated and separated) of identifiers (publication, global unique identifier, URI) of media associated with the dwc:Occurrence.	Media (photograph)	

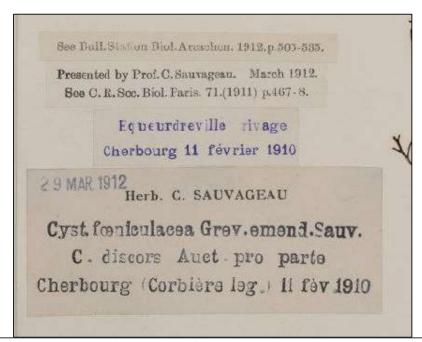
## Additional information IF transcription/georeferencing is part of the project.

2 CollectingAgent	recordedBy	A list (concatenated and separated) of names of people, groups, or organizations responsible for recording the original dwc:Occurrence. The primary collector or observer, especially one who applies a personal identifier (dwc:recordNumber), should be listed first.  An identifier given to the dwc:Event in the field. Often serves as a link between field notes
2 CollectingNumber	fieldNumber	and the dwc:Event.
2 DateCollected 2 QualitativeLocation	eventDate verbatimLocality	The date-time or interval during which a dwc:Event occurred. For occurrences, this is the date-time when the dwc:Event was recorded. Not suitable for a time in a geological context. The original textual description of the place.
2 QuantitativeLocation	decimalLatitude	The geographic latitude (in decimal degrees, using the spatial reference system given in dwc:geodeticDatum) of the geographic center of a dcterms:Location. Positive values are north of the Equator, negative values are south of it. Legal values lie between -90 and 90, inclusive.

The geographic longitude (in decimal degrees, using the spatial reference system given in dwc:geodeticDatum) of the geographic center of a dcterms:Location. Positive values are east of the Greenwich Meridian, negative values are west of it. Legal values lie between - 180 and 180 inclusive

2 QuantitativeLocation decimalLongitude 180 and 180, inclusive.



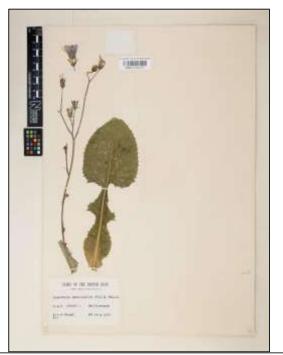


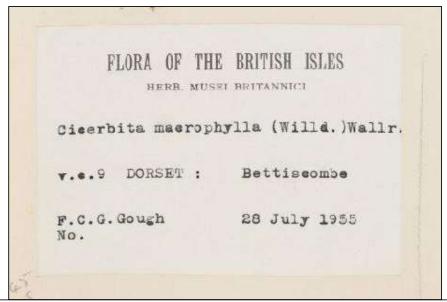
Figs. 1 & 2, BM015757291, Cystoseira foeniculacea (L.) Grev. specimen and associated labels, scale bar and colour chart

MIDS					
level	Label	Darwin Core terms	Description	Data	Notes
		Example A - Brown Algae P	roject		
			MIDS Level 0		
	0 Organization	InstitutionCode	The name (or acronym) in use by the institution having custody of the object(s) or information referred to in the record.	NHMUK	Auto-populated by the CMS system default.
	0 PhysicalSpecimenID	CatalogNumber	An identifier (preferably unique) for the record within the data set or collection.	BM015757291	Unique Identifier, encoded into a machine readable barcode including the "BM" prefix.
			MIDS Level 1		

1 License	license	A legal document giving official permission to do something with the resource.	Image = CC0, Data = CC BY	CCO waives all copyright and related rights, effectively placing the data in the public domain. CC BY allows anyone to use, share, adapt, and build upon copyrighted data, as long as they give credit to the original creator
1 Modified	modified	The most recent date-time on which the resource was changed.	2025-04-24T13:01:27+00:00	Auto-populated by the CMS system default.
1 Name	scientificName	The full scientific name, with authorship and date information if known. When forming part of a dwc:Identification, this should be the name in lowest level taxonomic rank that can be determined. This term should not contain identification qualifications, which should instead be supplied in the dwc:identificationQualifier term.	Cystoseira foeniculacea (L.) Grev.	Whilst this data is not always present on the specimen image, this is denoted by labels within the collection.
1 ObjectType	basisofRecord	The specific nature of the data record.	Specimen (PreservedSpecimen)	Auto-populated by the CMS system default/script
	CollectionCode		ВОТ	Auto-populated by the CMS system default/script
	occurrenceID		29fc480e-5068-48c5-aea4- d031f0087863	Auto-populated by the CMS system default.
	rightsHolder		©; The Trustees of the Natural History Museum, London	Bulk update of records when image ingests/record creation happens.
	kingdom			Auto-populated based on existing CMS data
	phylum		Ochrophyta	Auto-populated based on existing CMS data
	class		Phaeophyceae	Auto-populated based on existing CMS data
	order		Fucales	Auto-populated based on existing CMS data
	family		Sargassaceae	Auto-populated based on existing CMS data

2 Media	associatedMedia	A list (concatenated and separated) of identifiers (publication, global unique identifier, URI) of media associated with the dwc:Occurrence.	015757291	Photographs of specimen and labels
		MIDS Level 2		
	Bio-geographic region		World excluding British Isles	Collected by the digitisers for institutional use; not an internationally standardised field.
	Sub-department		Algae	Auto-populated by the CMS system default/script
	disposition		Currently held	Auto-populated by the CMS system default/script
	preparations		Sheet	Bulk update of records when image ingests/record creation happens.
	MaterialEntity		Sheet	Auto-populated by the CMS system default/script
	higherClassification		Ochrophyta; Phaeophyceae; Fucales; Sargassaceae	Auto-populated by the CMS system default based on existing data in the CMS
	nomenclaturalCode		ICBN	Auto-populated based on existing CMS data
	taxonRank		Species	Auto-populated based on existing CMS data
	scientificNameAuthorship		(L.) Grev.	Auto-populated based on existing CMS data
	infraspecificEpithet			Auto-populated based on existing CMS data
	specificEpithet		foeniculaea	Auto-populated based on existing CMS data
	genus		Cystoseira	Auto-populated based on existing CMS data



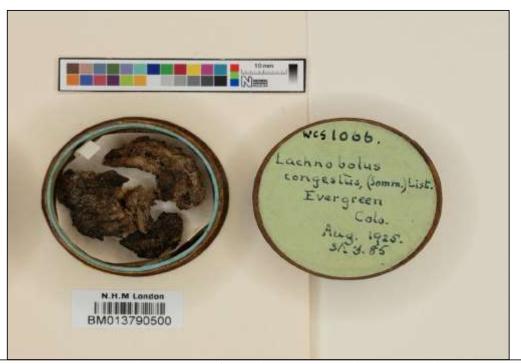


Figs. 3 & 4, BM014144101, Cicerbita macrophylla subsp. uralensis (Rouy) P.D.Sell specimen and associated labels, scale bar and colour chart

MIDS					
level	Label	Darwin Core terms	Description	Data	Notes
		Example B - British and I	Irish Asterales		
			MIDS Level 0		
	0 Organization	InstitutionCode	The name (or acronym) in use by the institution having custody of the object(s) or information referred to in the record.	NHMUK	Auto-populated by the CMS system default.
	0 PhysicalSpecimenID	CatalogNumber	An identifier (preferably unique) for the record within the data set or collection.	BM014144101	Unique Identifier, encoded into a machine readable barcode including the "BM" prefix.
			MIDS Level 1		

	license	A legal document giving official permission to do something with the resource.	Image = CC0, Data = CC BY	CCO waives all copyright and related rights, effectively placing the data in the public domain. CC BY allows anyone to use, share, adapt, and build upon copyrighted data, as long as they give credit to the original creator
	modified	The most recent date-time on which the resource was changed.	2024-10-14T15:39:58+00:00	Auto-populated by the CMS system default.
1 Name	scientificName	The full scientific name, with authorship and date information if known. When forming part of a dwc:Identification, this should be the name in lowest level taxonomic rank that can be determined. This term should not contain identification qualifications, which should instead be supplied in the dwc:identificationQualifier term.	Cicerbita macrophylla subsp. uralensis (Rouy) P.D.Sell	Whilst this data is not always present on the specimen image, this is denoted by labels within the collection.
1 ObjectType	basisofRecord	The specific nature of the data record.	Specimen (PreservedSpecimen)	Auto-populated by the CMS system default/script
1 ObjectType	basisofRecord  CollectionCode	The specific nature of the data record.	·	Auto-populated by the CMS system default/script  Auto-populated by the CMS system default/script
1 ObjectType		The specific nature of the data record.	(PreservedSpecimen)	
1 ObjectType	CollectionCode	The specific nature of the data record.	(PreservedSpecimen)  BOT  e707c7e6-75b2-4e7c-89f7-	Auto-populated by the CMS system default/script  Auto-populated by the CMS system default.  Bulk update of records when image ingests/record
1 ObjectType	CollectionCode occurrenceID	The specific nature of the data record.	(PreservedSpecimen)  BOT  e707c7e6-75b2-4e7c-89f7- c251d713dc71  ©; Ine Irustees of the Natural	Auto-populated by the CMS system default/script  Auto-populated by the CMS system default.
1 ObjectType	CollectionCode  occurrenceID  rightsHolder	The specific nature of the data record.	(PreservedSpecimen)  BOT  e707c7e6-75b2-4e7c-89f7- c251d713dc71  ©; The Trustees of the Natural History Museum London	Auto-populated by the CMS system default/script  Auto-populated by the CMS system default.  Bulk update of records when image ingests/record creation happens
1 ObjectType	CollectionCode  occurrenceID  rightsHolder kingdom	The specific nature of the data record.	(PreservedSpecimen)  BOT  e707c7e6-75b2-4e7c-89f7- c251d713dc71  ©; The Trustees of the Natural History Museum London Plantae	Auto-populated by the CMS system default/script  Auto-populated by the CMS system default.  Bulk update of records when image ingests/record creation happens Auto-populated based on existing CMS data
1 ObjectType	CollectionCode  occurrenceID  rightsHolder kingdom phylum	The specific nature of the data record.	(PreservedSpecimen)  BOT  e707c7e6-75b2-4e7c-89f7- c251d713dc71  ©; The Trustees of the Natural History Museum London Plantae	Auto-populated by the CMS system default/script  Auto-populated by the CMS system default.  Bulk update of records when image ingests/record creation hanners  Auto-populated based on existing CMS data  Auto-populated based on existing CMS data
1 ObjectType	CollectionCode  occurrenceID  rightsHolder kingdom phylum class	The specific nature of the data record.	(PreservedSpecimen)  BOT  e707c7e6-75b2-4e7c-89f7- c251d713dc71  ©; Ine Irustees of the Natural History Museum London Plantae  Magnoliophyta	Auto-populated by the CMS system default/script  Auto-populated by the CMS system default.  Bulk update of records when image ingests/record creation hanners  Auto-populated based on existing CMS data  Auto-populated based on existing CMS data  Auto-populated based on existing CMS data
1 ObjectType	CollectionCode  occurrenceID  rightsHolder kingdom phylum class order	The specific nature of the data record.	(PreservedSpecimen)  BOT  e707c7e6-75b2-4e7c-89f7- c251d713dc71  ©; The Trustees of the Natural History Museum London Plantae  Magnoliophyta  Asterales	Auto-populated by the CMS system default/script  Auto-populated by the CMS system default.  Bulk update of records when image ingests/record creation hannens  Auto-populated based on existing CMS data  Auto-populated based on existing CMS data  Auto-populated based on existing CMS data  Auto-populated based on existing CMS data

2 Media	associatedMedia	A list (concatenated and separated) of identifiers (publication, global unique identifier, URI) of media associated with the dwc:Occurrence.	014144101	Photographs of specimen and labels
		MIDS Level 2		
	Bio-geographic region		9 Dorset	Collected by the digitisers for institutional use; not an internationally standardised field.
	Sub-department		British and Irish Herbarium	Auto-populated by the CMS system default/script
	disposition		Currently held	Auto-populated by the CMS system default/script
	preparations		Sheet	Bulk update of records when image ingests/record creation happens.
	MaterialEntity		Sheet	Auto-populated by the CMS system default/script
	higherClassification		Magnoliophyta; Asterales; Asteraceae	Auto-populated by the CMS system default based on existing data in the CMS
	nomenclaturalCode		ICBN	Auto-populated based on existing CMS data
	taxonRank		Subspecies	Auto-populated based on existing CMS data
	scientificNameAuthorship		(Rouy) P.D.Sell	Auto-populated based on existing CMS data
	infraspecificEpithet		uralensis	Auto-populated based on existing CMS data



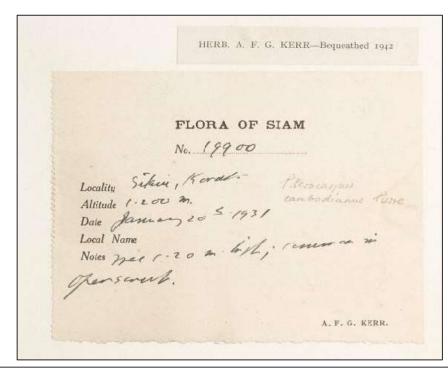
Figs. 5, BM013790500, Arcyodes incarnata (Alb. & Schwein.) O.F.Cook specimen and associated labels, scale bar and colour chart

MIDS level	Label	Darwin Core terms	Description	Data	Notes
		Example C - Slime Mould			
			MIDS Level 0		
	0 Organization	InstitutionCode	The name (or acronym) in use by the institution having custody of the object(s) or information referred to in the record.	NHMUK	Auto-populated by the CMS system default.
	0 PhysicalSpecimenID	CatalogNumber	An identifier (preferably unique) for the record within the data set or collection.	BM013790500	Unique Identifier, encoded into a machine readable barcode including the "BM" prefix.
			MIDS Level 1		

1 License	license	A legal document giving official permission to do something with the resource.	Image = CC0, Data = CC BY	CCO waives all copyright and related rights, effectively placing the data in the public domain. CC BY allows anyone to use, share, adapt, and build upon copyrighted data, as long as they give credit to the original creator
1 Modified	modified	The most recent date-time on which the resource was changed.	2024-08-07T14:49:39+00:00	Auto-populated by the CMS system default.
1 Name	scientificName	The full scientific name, with authorship and date information if known. When forming part of a dwc:Identification, this should be the name in lowest level taxonomic rank that can be determined. This term should not contain identification qualifications, which should instead be supplied in the dwc:identificationQualifier term.	Arcyodes incarnata (Alb. & Schwein.) O.F.Cook	Whilst this data is not always present on the specimen image, this is denoted by labels within the collection.
1 ObjectType	basisofRecord	The specific nature of the data record.	Specimen (PreservedSpecimen)	Auto-populated by the CMS system default/script
1 ObjectType	basisofRecord  CollectionCode	The specific nature of the data record.	•	Auto-populated by the CMS system default/script  Auto-populated by the CMS system default/script
1 ObjectType		The specific nature of the data record.	(PreservedSpecimen)	
1 ObjectType	CollectionCode  occurrenceID  rightsHolder	The specific nature of the data record.	(PreservedSpecimen)  BOT  24a0t015-c0t4-45d9-atcd- 783de91d7168 ©; The Trustees of the Natural	Auto-populated by the CMS system default/script  Auto-populated by the CMS system default.  Bulk update of records when image ingests/record creation happens
1 ObjectType	CollectionCode  occurrenceID  rightsHolder  kingdom	The specific nature of the data record.	(PreservedSpecimen)  BOT  24a0f015-c0f4-45d9-afcd- 783de91d7168 ©; The Trustees of the Natural History Museum London	Auto-populated by the CMS system default/script  Auto-populated by the CMS system default.  Bulk update of records when image ingests/record creation hanners  Auto-populated based on existing CMS data
1 ObjectType	CollectionCode  occurrenceID  rightsHolder  kingdom  phylum	The specific nature of the data record.	(PreservedSpecimen)  BOT  24a0f015-c0f4-45d9-afcd- 783de91d7168 ©; The Trustees of the Natural History Museum London  Amoebozoa	Auto-populated by the CMS system default/script  Auto-populated by the CMS system default.  Bulk update of records when image ingests/record creation hanners  Auto-populated based on existing CMS data  Auto-populated based on existing CMS data
1 ObjectType	CollectionCode  occurrenceID  rightsHolder  kingdom  phylum  class	The specific nature of the data record.	(PreservedSpecimen)  BOT  24a0f015-c0f4-45d9-afcd- 783de91d7168 ©; The Trustees of the Natural History Museum London  Amoebozoa	Auto-populated by the CMS system default/script  Auto-populated by the CMS system default.  Bulk update of records when image ingests/record creation hanners  Auto-populated based on existing CMS data  Auto-populated based on existing CMS data  Auto-populated based on existing CMS data
1 ObjectType	CollectionCode  occurrenceID  rightsHolder  kingdom  phylum  class  order	The specific nature of the data record.	(PreservedSpecimen)  BOT  24a0f015-c0f4-45d9-afcd- 783de91d7168 ©; The Trustees of the Natural History Museum London  Amoebozoa	Auto-populated by the CMS system default/script  Auto-populated by the CMS system default.  Bulk update of records when image ingests/record creation hanners  Auto-populated based on existing CMS data  Auto-populated based on existing CMS data  Auto-populated based on existing CMS data  Auto-populated based on existing CMS data

	MIDS Level 2	an internationally standardised neta.
Bio-geographic region	North America	Collected by the digitisers for institutional use; not an internationally standardised field.
Sub-department	Lichens and Slime Moulds	Auto-populated by the CMS system default/script
disposition	Currently held	Auto-populated by the CMS system default/script
preparations	Вох	Bulk update of records when image ingests/record creation happens.
MaterialEntity		Auto-populated by the CMS system default/script
higherClassification	Amoebozoa; Myxogastria	Auto-populated by the CMS system default based on existing data in the CMS
nomenclaturalCode	ICBN	Auto-populated based on existing CMS data
taxonRank	Species	Auto-populated based on existing CMS data
scientificNameAuthorship	(Alb. & Schwein.) O.F.Cook	Auto-populated based on existing CMS data  Auto-populated based on existing CMS data
	taxonRank  nomenclaturalCode  higherClassification  MaterialEntity  preparations  disposition  Sub-department	scientificNameAuthorship  taxonRank  Species  nomenclaturalCode  ligherClassification  Amoebozoa; Myxogastria  MaterialEntity  preparations  disposition  Sub-department  Bio-geographic region  (Alb. & Schwein.) O.F.Cook  Species  ICBN  Amoebozoa; Myxogastria  Box  Currently held  Lichens and Slime Moulds





Figs. 1 & 2, BM013406622, Pterocarpus macrocarpus Kurz specimen and associated labels, scale bar and colour chart

MIDS					
level	Label	Darwin Core terms	Description	Data	Notes
		Example D - ODA			
			MIDS Level 0		
	0 Organization	InstitutionCode	The name (or acronym) in use by the institution having custody of the object(s) or information referred to in the record.	NHMUK	Auto-populated by the CMS system default.
	0 PhysicalSpecimenID	CatalogNumber	An identifier (preferably unique) for the record within the data set or collection.	BM013406622	Unique Identifier, encoded into a machine readable barcode including the "BM" prefix.
			MIDS Level 1		

1 License	license	A legal document giving official permission to do something with the resource.	Image = CC0, Data = CC BY	CCO waives all copyright and related rights, effectively placing the data in the public domain. CC BY allows anyone to use, share, adapt, and build upon copyrighted data, as long as they give credit to the original creator
1 Modified	modified	The most recent date-time on which the resource was changed.	2023-05-24T13:34:03+00:00	Auto-populated by the CMS system default.
1 Name	scientificName	The full scientific name, with authorship and date information if known. When forming part of a dwc:Identification, this should be the name in lowest level taxonomic rank that can be determined. This term should not contain identification qualifications, which should instead be supplied in the dwc:identificationQualifier term.	Pterocarpus macrocarpus Kurz	Whilst this data is not always present on the specimen image, this is denoted by labels within the collection.
1 ObjectType	basisofRecord	The specific nature of the data record.	Specimen (PreservedSpecimen)	Auto-populated by the CMS system default/script
	CollectionCode		ВОТ	Auto-populated by the CMS system default/script
	occurrenceID		c5e1e261-2a08-4867-bf7a- 02befc2ff6c0	Auto-populated by the CMS system default.
	rightsHolder		©; The Trustees of the Natural History Museum, London	Bulk update of records when image ingests/record creation happens.
	kingdom		Plantae	Auto-populated based on existing CMS data
	phylum			Auto-populated based on existing CMS data
	class			Auto-populated based on existing CMS data
	order		Fabales	Auto-populated based on existing CMS data
	family		Fabaceae	Auto-populated based on existing CMS data
	genus		Pterocarpus	Auto-populated based on existing CMS data

	specificEpithet	macrocarpus	Auto-populated based on existing CMS data
	infraspecificEpithet		Auto-populated based on existing CMS data
	scientificNameAuthorship	Kurz	Auto-populated based on existing CMS data
	taxonRank	Species	Auto-populated based on existing CMS data
	nomenclaturalCode	ICBN	Auto-populated based on existing CMS data
	higherClassification	Fabales; Fabaceae; Papilionoideae	Auto-populated by the CMS system default based on existing data in the CMS
	MaterialEntity	Sheet	Auto-populated by the CMS system default/script
	preparations	Sheet	Bulk update of records when image ingests/record creation happens.
	disposition	Currently held	Auto-populated by the CMS system default.
	Sub-department	Gen Herb	Auto-populated by the CMS system default/script
	Bio-geographic region	Indo-china	Collected by the digitisers for institutional use; not an internationally standardised field.
	MIDS Level 2		
2 Media	associatedMedia	013406622	Photographs of specimen and labels
2 CollectingNumber	fieldNumber	19900	Transcribed from label data
2 DateCollected	eventDate habitat	1/20/1931	Transcribed from label data Transcribed from label data
2 CollectingAgent	recordedBy	Arthur Francis George Kerr	Transcribed from label data
3 3	locality	Sikiu [= Sikhio]	Transcribed from label data
2 QualitativeLocation	verbatimLocality	Siam, Korat, Sikiu; alt. c. 200 m.	Transcribed from label data
	Location	Sikiu [= Sikhio]	Interpreted Georeference from Transcribed data
	continent	Asia	Interpreted Georeference from Transcribed data
	islandGroup		Interpreted Georeference from Transcribed data
	island		Interpreted Georeference from Transcribed data
	country	Thailand	Interpreted Georeference from Transcribed data
		Thailand	

	stateProvince	Nakhon Sawan	Interpreted Georeference from Transcribed data
	county		Interpreted Georeference from Transcribed data
	minimumElevationInMeters	200	Interpreted Georeference from Transcribed data
	maximumElevationInMeters		Interpreted Georeference from Transcribed data
2 QuantitativeLocation	decimalLatitude	14.916667	7 Interpreted Georeference from Transcribed data
2 QuantitativeLocation	decimalLongitude	101.716667	7 Interpreted Georeference from Transcribed data
	coordinateUncertaintyInMeters		Interpreted Georeference from Transcribed data
	georeferencedBy	Jacek Wajer	Filled in by the Georeferencer
	georeferencedDate	3/14/2019	Filled in by the Georeferencer
	georeferenceProtocol	Google Maps	Filled in by the Georeferencer
	georeferenceSources		Filled in by the Georeferencer
	higherGeography	Asia; Thailand; Nakhon Sawan	Auto-populated by the CMS system default based on existing data in the CMS

MIDS					
level	Label	Darwin Core name		Information type	Notes
			The name (or acronym) in use by the institution having custody of the object(s) or		Auto-populated by the CMS
	0 Organization	InstitutionCode	information referred to in the record.	e.g. NHMUK	system default.
	0 PhysicalSpecimenID	CatalogNumber	An identifier (preferably unique) for the record within the data set or collection.	Unique identifier	
					Bulk updating records when
	1 License	license	A legal document giving official permission to do something with the resource.	e.g. CC0-1.0	image ingest happens.
					Auto-populated by the CMS
	1 Modified	modified	The most recent date-time on which the resource was changed.		system default.
			The full scientific name, with authorship and date information if known. When		
			forming part of a dwc:Identification, this should be the name in lowest level		
			taxonomic rank that can be determined. This term should not contain		
			identification qualifications, which should instead be supplied in the		
	1 Name	scientificName	dwc:identificationQualifier term.		
					Bulk updating records when
					image ingest/record creation
	1 ObjectType	basisofRecord	The specific nature of the data record.	e.g. Specimen	happens.
			A list (concatenated and separated) of identifiers (publication, global unique		
	2 Media	associatedMedia	identifier, URI) of media associated with the dwc:Occurrence.	Media (photograph)	





Figs. 1 & 2, NHMUK 010809009, Bombus (Megabombus) hortorum (Linnaeus, 1761) specimen and associated labels and scale bar

MIDS lev	el Label	Darwin Core name	Description	Example Data	Notes
			MIDS Level 0		
	0 Organization	InstitutionCode	The name (or acronym) in use by the institution having custody of the object(s) or information referred to in the record.	NHMUK (acronym for Natural History Museum, London)	Auto-populated by the Collection Management System (CMS) system default.
	0 PhysicalSpecimenID	CatalogNumber	An identifier (preferably unique) for the record within the data set or collection.	010809009	O Unique Identifier, encoded into Data Matrix Barcode
			MIDS Level 1		
	1 License	license	A legal document giving official permission to do something with the resource.	Image = CC0, Data = CC BY	CCO waives all copyright and related rights, effectively placing the data in the public domain. CC BY allows anyone to use, share, adapt, and build upon copyrighted data, as long as they give credit to the original creator
	1 Modified	modified	The most recent date-time on which the resource was changed.	2021-01-30T14:58:00+00:00	Auto-populated by the CMS system default.

	1 Name	scientificName	The full scientific name, with authorship and date information if known. When forming part of a dwc:Identification, this should be the name in lowest level taxonomic rank that can be determined. This term should not contain identification qualifications, which should instead be supplied in the dwc:identificationQualifier term.	Bombus (Megabombus) hortorum (Linnaeus, 1761)	Whilst this data is not present in the specimen image, this is denoted by labels within the collection.  Higher classifications (e.g., Hymenoptera, Insecta etc.) are also noted within the CMS Taxonomy module.
	1 ObjectType	basisofRecord	The specific nature of the data record.	Specimen	Bulk update of records when image ingests/record creation happens.
			MIDS Level 2		
	CollectingAgent	recordedBy	A person, group, or organization responsible for recording the original dwc:Occurrence.	K.M. (= Kenneth MacKinnon) Guichard	Transcribed from label data, data in parenthesis is interpreted from label data
	CollectingNumber	fieldNumber	An identifier given to the event in the field. Often serves as a link between field notes and the dwc:Event.		This specimen has no collector number. Primarily seen with Botanical specimens though some Entomology collectors have also utilised these
	DateCollected	eventDate	The date-time or interval during which a dwc:Event occurred. For occurrences, this is the date-time when the dwc:Event was recorded. Not suitable for a time in a geological context.	/08/1939	Transcribed from label data
	Media	associatedMedia	A list (concatenated and separated) of identifiers (publication, global unique identifier, URI) of media associated with the dwc:Occurrence.		Photographs of specimen and labels
	QualitativeLocation	verbatimLocality	The original textual description of the place.	Dunvegan, Skye	Transcribed from label data
	QuantitativeLocation	decimalLatitude	The geographic latitude (in decimal degrees, using the spatial reference system given in dwc:geodeticDatum) of the geographic center of a dcterms:Location. Positive values are north of the Equator, negative values are south of it. Legal values lie between -90 and 90, inclusive.	57.4366	Interpreted Georeference from Transcribed data
	QuantitativeLocation	decimalLongitude	The geographic longitude (in decimal degrees, using the spatial reference system given in dwc:geodeticDatum) of the geographic center of a dcterms:Location. Positive values are east of the Greenwich Meridian, negative values are west of it. Legal values lie between -180 and 180, inclusive.	-6.5813	Interpreted Georeference from Transcribed data
2	TypeStatus	typeStatus	A list (concatenated and separated) of nomenclatural types (type status, typified scientific name, publication) applied to the subject.		Specimen is not a type specimen, so no status is recorded