

GRDC Guideline for data upload and metadata creation in Zenodo for Research Partners

This guideline provides detailed steps on how to enter metadata into the Zenodo Repository upload form to ensure a high-quality metadata record is successfully harvested into the GRDC Data Catalogue.

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1. Selecting 'GRDC' Community

The first step is to select the 'GRDC' community, so that the dataset you are uploading will be added to it. The GRDC Community plays a crucial role by offering a shared space where both GRDC and its partners collaborate to review submissions, and curate content.


You will see the following at the top of the upload form page:

Select the community where you want to submit your record. [Select a community](#)


Select '**Select a community**' and the following popup will appear, where 'GRDC' has been entered into the search string and the GRDC community can be seen:

Select a community ✕

All My communities

 Grains Research and Development Corporation [↗](#)
GRDC

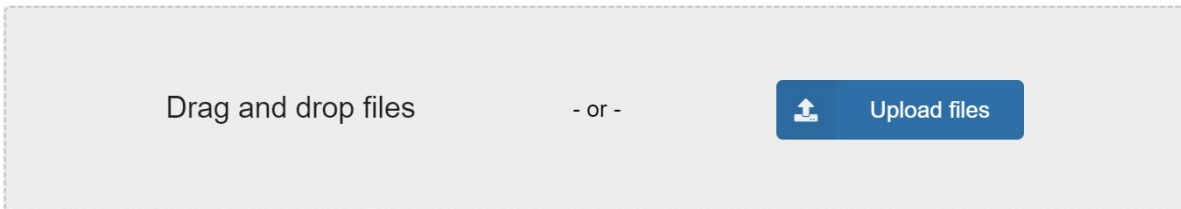
Click 'Select' and you will now see this in the bar at the top of the webpage:

 Grains Research and Development Corporation

This indicates that you have successfully attributed the dataset to the 'GRDC' community.

2. Uploading dataset


Uploading the RD&E data is a simple drag-and-drop process. You can enter up to 100 files per record. To begin, simply drag the first file into this region:

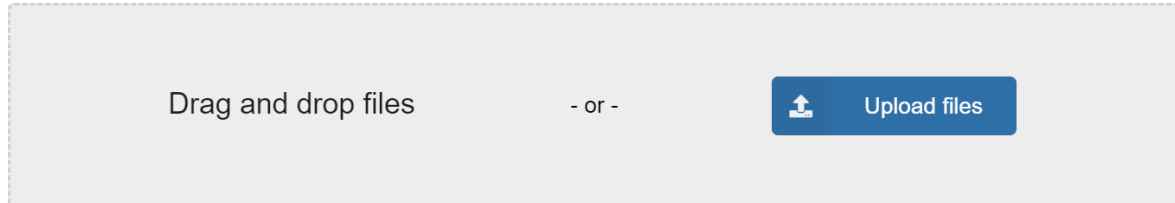


It's also possible to add files using your file explorer by selecting 'Upload files'. Once you have successfully added a file for upload, you should see a screen like this:

Storage available 1 out of 100 files 8.89 KB out of 50.00 GB

Default preview	<input type="checkbox"/>
Filename	2024 wheat frost tolerance riverina.xlsx md5:df6c25f821d6df26270ac050edea36d1 ⓘ
Size	8.89 KB
Progress	<div style="width: 100%;"><div style="width: 100%;"></div></div> 100%





Where you can add more files in the same way using the window below the summary of your added file.

3. Digital object identifier

■ Digital Object Identifier *

Do you already have a DOI for this upload? Yes No

A DOI allows your upload to be easily and unambiguously cited. Example: 10.1234/foo.bar

It is not necessary to fill out this field unless you already have a DOI (e.g., 10.1234/foo.bar), in which case it can be added in the 'Digital object Identifier' field. Otherwise, a DOI be automatically created for your record upon publication.

If you select NO, a pop up appears that says Get a DOI now

■ Digital Object Identifier *

Do you already have a DOI for this upload? Yes No

Reserve a DOI by pressing the button (so it can be included in files prior to upload). The DOI is registered when your upload is published.

Press Get a DOI now

Do you already have a DOI for this upload? Yes No

Reserve a DOI by pressing the button (so it can be included in files prior to upload). The DOI is registered when your upload is published.

4. Resource type

◆ Resource type *

Select 'Dataset' from the dropdown menu.

5. Title

■ Title *

Enter the title of the dataset. There is an option to add multiple titles, however the GRDC Data Catalogue will only import the first title from this record.

6. Publication date

Publication date *

2024-05-21

In case your upload was already published elsewhere, please use the date of the first publication. Format: YYYY-MM-DD, YYYY-MM, or YYYY. For intervals use DATE/DATE, e.g. 1939/1945.

This will default to the current date. There is no need to change this unless the dataset has already been published elsewhere, in which case it is best practice to enter the date of first publication.

7. Creators and Contributors

Information about the persons and organisations that are associated with the dataset are collected in Zenodo via the 'Creator' and 'Contributor' metadata fields as defined in the table below:


Zenodo field	Type	Role
Creator	Person	Principal investigator
Contributor	Person	<Selected by user>
Creator	Organization	Owner
Contributor	Organization	<Selected by user>

This will become clear in the following subsections, where creators are added for persons and organisations to identify the principal investigators and the owners of the datasets, respectively. Contributors are added where it is possible to identify other roles for persons and organisations.

Creators (Person)

A Creator person is a **principal investigator** related to the dataset. To add a Creator, select 'Add creator' and a popup will open.

Creators *

 Add creator

Select 'Person' from the radio buttons at the top of the popup:

Add creator ✕

Person Organization

Search for persons by name, identifier, or affiliation...

Family name * **Given names**

Identifiers

Affiliations

Role

✕ Cancel
✓ Save and add another
✓ Save

You can use the top dropdown menu to search for persons by name, identifier, or affiliation. Search for the person in the dropdown menu at the top and select according to the correct ORCID. The name fields and the identifier will then be automatically generated.

Note: if the person does not have an ORCID, they will need to register for one at <https://orcid.org> before the record can be created.

Identifiers – enter the ORCID for the person

Affiliations: Enter the name of the organisation associated with the person. If the affiliation was automatically populated with more than one organisation by entering the ORCID, please deleted all affiliations except the most relevant.

Role: It is not necessary to select a 'Role' a persons will be credited as a 'Principal Investigator' in the GRDC Data Catalogue. Multiple principal investigators can be added by selecting 'Add creator' and going through this process again.

Contributors (Person)

 Contributors

+ Add contributor

To add other people as 'Contributing people', select 'Add contributor' further down the page under the 'Recommended information' section. Select 'Add contributor' and fill out the popup as detailed above in the 'Creator (person)' section.

A contributor can adopt one of many types of roles. These can be selected from the 'Role' dropdown menu in the popup:

Role *

Contact person

Contact person

Data collector

Data curator

Data manager

Distributor

Editor

Hosting institution

Other

Type	Description
------	-------------

Creators (Organization)

 Creators *

+ Add creator

To add an organisation involved in the creation of the dataset, select 'Add contributor' This time, select 'Organization' from the radio buttons at the top of the popup:

Add creator ✕

Person Organization

Search for an organization by name, identifier, or affiliation... ▼

Name *

Grains Research and Development Corporation

Identifiers

02xwr1996 ✕

Affiliations

Search or create affiliation ▼

Role

Select role ▼

✕ Cancel

✓ Save and add another

✓ Save

This popup has different fields that are related to an organisation. You can search for an organisation using the search tool at the top or manually enter the information in the fields provided. As with the Creators (person) popup, entering the organisation as a result of the search will automatically populate some of the fields.

Name: Enter the name of the organisation.

Identifiers: Enter the ROR for the organisation. See <https://ror.org/> for details on registering your organisation for an ROR identifier if you don't already have one.

Affiliations: *Not required*

Role: *Not required*

Multiple 'owners' can be added to the record by selecting 'Add creator' again and entering another organisation in the same way.

Contributors (Organisation)

Organisations that are not owners of the dataset can be added under the 'contributors' field.

+ Contributors



Select 'add contributor' and enter the following information into the popup:

Name: Enter the name of the organisation.

Identifiers: Enter the ROR for the organisation. See <https://ror.org/> for details on registering your organisation for an ROR identifier if you don't already have one.

Affiliations: *Not required*

Role: Select appropriate role of the organisation from the dropdown menu:

Role *

Contact person

Contact person

Data collector

Data curator

Data manager

Distributor

Editor

Hosting institution











Other

8. Description

Enter a detailed description of the data contained in the dataset that you are uploading. The description should provide details about the collection or dataset that would enable someone to use the data, without contacting the original researchers for further information. A full description of the collection or dataset is not the same as a project summary or manuscript summary.

When formulating your description, try to ensure that all the necessary information is there for future users of the data. Guidelines for creating a good description can be found in the [GRDC RD&E Data Capture and Storage Guidelines for Research Partners](#) under Section D-3.

Description

Paragraph ▼
B
I











An RNA-seq data from two commercial Australian wheat varieties with contrasting cold/chilling tolerance after a short-term and long-term cold exposure. We compared the cold response of two wheat varieties with contrasting cold tolerance using transcriptome profiling. Young microspore (YM) stage spike samples were harvested from cold-tolerant Young and cold-sensitive Wyalkatchem wheat cultivars following 4h and 12h cold treatment. A long-term (4 days) transcriptome profiling was also conducted to gain a better understanding about the differences in cold acclimation in young microspore (YM) stage wheat spikes of the two wheat cultivars

9. Licences

Licenses

☰ Creative Commons Attribution 4.0 International

The Creative Commons Attribution license allows re-distribution and re-use of a licensed work on the condition that the creator is appropriately credited. [Read more](#)

[Edit](#)
[Remove](#)

[Add standard](#)

[Add custom](#)

Each new record will have a Creative Commons Attribution 4.0 International (CC-BY 4.0) licence associated with it. This licence means that the dataset is available for direct download for all who wish to do so. If there are restrictions that must be placed on the data due to sensitivities, click ‘Add custom’ and under Title, add “Other”. In the description section, you may include the following “by negotiation upon request” or “Available to Third Parties under terms and conditions to be agreed by co-owners of the data”.

Other Creative Commons licences that are more restrictive can be placed on the data. See <https://creativecommons.org/share-your-work/cclicenses/> for an explanation of the different licences. For example, if you would like to restrict the dataset from being used in commercial applications by anyone else, then you could select the Creative Commons Attribution-NonCommercial 4.0 International (CC-BY-NC) licence for the dataset.

To add a new licence, select ‘Add standard’ and in the popup window, select ‘Data’ as the licence type.

Add standard license ✕

Q

Recommended

All

Data

Software

- Community Data License Agreement Permissive 1.0
- Community Data License Agreement Sharing 1.0
- Creative Commons Attribution 1.0 Generic
- Creative Commons Attribution 2.0 Generic
- Creative Commons Attribution 2.5 Generic
- Creative Commons Attribution 3.0 Austria
- Creative Commons Attribution 3.0 United States
- Creative Commons Attribution 3.0 Unported
- Creative Commons Attribution 4.0 International

The Creative Commons Attribution license allows re-distribution and re-use of a licensed work on the condition that the creator is appropriately credited.

From the list, you can choose any of the Creative Commons licences that have version 4.0 associated with them like in the final listing in the screenshot above. If you have any questions about licensing, please speak to your data librarian or your relevant GRDC contact.

10. Keywords and subjects

Keywords and subjects

Suggest from

All

Search for a subject by name

This is an opportunity for you to apply keywords to your dataset to help users of the GRDC Data Catalogue find it.

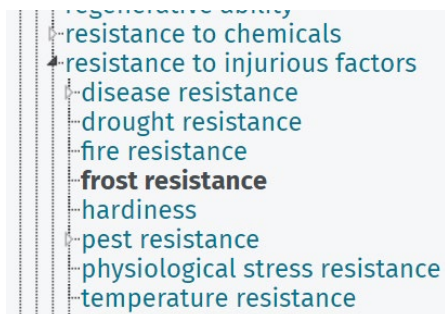
The first dropdown menu on the left, where 'All' is written, can be ignored.

Multiple keywords can be entered in the right-hand side dropdown.

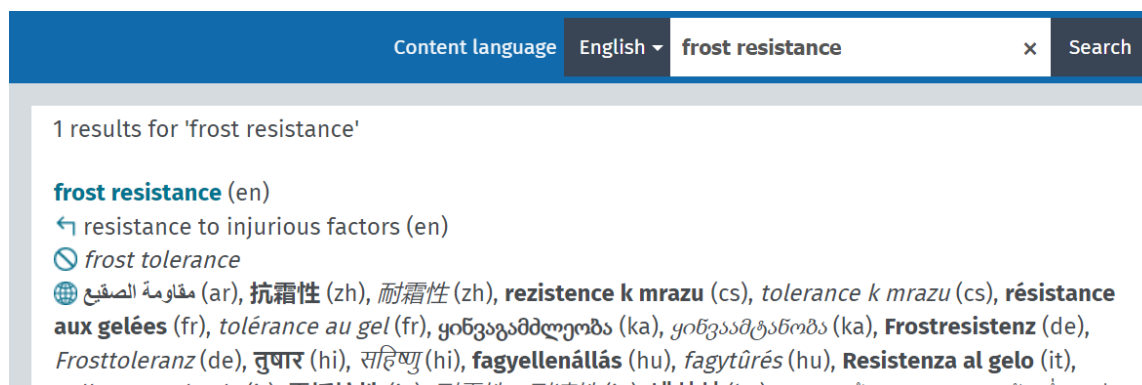
AGROVOC Vocabulary for Keywords

To enhance data findability, please enter keywords that match those found in the [AGROVOC agricultural metadata standard](#). By following this link, you can browse through the standard for relevant keywords by clicking on the 'Hierarchy' tab in the sidebar and viewing a menu of the different terms.

Feel free to include terms from any level of the hierarchy. For example, you might choose to browse 'properties' that relate to your dataset, eventually finding the term, e.g., 'frost resistance' (found under **properties > biological properties > resistance to injurious factors > frost resistance**) that is relevant to your data.



There is also a search bar that you can use to find a keyword that you already had in mind. In this example, enter 'frost resistance' into the search bar and click on the 'search' button:



As you can see from the previous image, the search term ‘frost resistance’ returns 1 result that we found earlier by browsing the hierarchy.

Once you have found the keywords that you would like to enter, you can simply add them as keywords in the Zenodo ‘Keywords and subjects’ field and know that it falls within the AGROVOC vocabulary. In the example image below, three keywords from the AGROVOC vocabulary have been used.

Keywords and subjects

Suggest from

RNA sequence × frost resistance × wheat ×

11. Languages

Choose English

12. Dates

The dates fields cover a time period that the data is related by by defining a start and a finish time.

Dates

Date*	Type*	Description
<input type="text" value="2024-05-28"/>	<input type="text" value="Collected"/>	<input type="text"/>
<input type="text" value="2024-06-30"/>	<input type="text" value="Collected"/>	<input type="text"/>

Format: DATE or DATE/DATE where DATE is YYYY or YYYY-MM or YYYY-MM-DD.

+ Add date

In this example, a second date field was created by selecting ‘Add date’.

The first date field:

Date: Enter the start time of time period in YYYY-MM-DD format

Type: Select ‘Collected’

Description: Not required

For the second date field, the fields are filled out in the same way, with the date corresponding to the end time of the time period.

13. Awards (GRDC Contract Codes)

The 'Awards' field is used to store the GRDC Contract Code and is required. To add a GRDC Contract Code, select '+Add Award'.

 Awards

+ Add award

Where you will see this popup:

Add standard award
✕

Q

▾

- Self-Adaptability for a HAR System** 2023.00899.BD
Fundação para a Ciência e Tecnologia
- Motivação Autodeterminada, satisfação profissional e sentido de agência em professores do ensino básico** 2023.04804.BD
Fundação para a Ciência e Tecnologia
- DNA damage response mechanisms** G0600233/1
UK Research and Innovation
- Development of condition monitoring techniques for SF6 alternatives in high voltage plant** 2856830
UK Research and Innovation
- Development of defect models for the ankle to evaluate changes in joint geometry and tribology as a predictor for degeneration** 1958375
UK Research and Innovation

« < 1 2 3 4 5 ... 2000 > »

Did not find your award? [Add a custom award.](#)

✕ Cancel

✓ Add award

Here you must select the 'Add a custom award' at the bottom of the popup, and the popup will change to this:

Add custom award ✕

Funder *

Grains Research and Development Corporation, AU, 02xwr1996 ✕

Award information (optional)

Number

CSP1606-002RTX

Title

GRDC Contract

URL

Award URL

✕ Cancel

✓ Add award

Note: Where it says ‘Award Information (optional)’, this is an optional field for the Zenodo platform, but not optional for GRDC datasets, i.e., we require the contract code for our metadata records.

The fields for this popup were entered as follows:

Funder: Find the GRDC record as it appears in the image above by beginning to type the name ‘*grains research and development ...*’ and the record for GRDC will be selectable. Select it.

Number: Enter the GRDC contract code here.

Title: Simply write ‘GRDC Contract’.

URL: This is not required.

For any related GRDC contracts, simply repeat this process.

Note: If there are multiple contracts that are associated with this dataset, it is essential that the contract in which the dataset was generated is first in the list of ‘Awards’ that are provided in this section.

14. Related works, i.e., records

Here you can enter identifiers for any related dataset record to place your dataset in context and help the user find any supporting data. The record must have either a **Handle** or **DOI** identifier that you can use to reference it. There is no need to enter the title of the related record as this will be found using the identifier that you enter.

Related works
▼

Specify identifiers of related works. Supported identifiers include DOI, Handle, ARK, PURL, ISSN, ISBN, PubMed ID, PubMed Central ID, ADS Bibliographic Code, arXiv, Life Science Identifiers (LSID), EAN-13, ISTC, URNs, and URLs.

Related works

Relation *	Identifier *	Scheme *	Resource type
Has part ✕	10.1234/foo.bar	DOI ✕	Dataset ✕

+
Add related work

Relation: Any one of the following relationships are supported: {‘has part’, ‘is part of’, ‘has derived collection’, ‘is derived from’, ‘has version’, ‘is version of’, ‘associated’}. If you select an unsupported type, then the record will appear as ‘associated’ when harvested into the GRDC Data Catalogue.

Note: the label for the relationship is defined in reference to the dataset you are uploading and how the record being entered here relates to it, not the other way around.

Identifier: Enter the identifier here. The text that you enter here must agree with the type of identifier that is entered in the ‘Scheme’ field.

Scheme: Select ‘DOI’ or ‘Handle’ depending on the type of identifier that you have used.

Resource type: Select ‘Dataset’.

To identify multiple related records, simply select ‘Add related work’ and enter more records as required.

15. Related publications

Here you can enter identifiers for publications that are related to the dataset that you are uploading. This is done in the same way as entering 'related records' above with a few minor changes.

Related works
▼

Specify identifiers of related works. Supported identifiers include DOI, Handle, ARK, PURL, ISSN, ISBN, PubMed ID, PubMed Central ID, ADS Bibliographic Code, arXiv, Life Science Identifiers (LSID), EAN-13, ISTD, URNs, and URLs.

Related works

Relation *	Identifier *	Scheme *	Resource type
Is cited by ✕	10.1016/j.cpb.2022	DOI ✕	Publication ✕

+ Add related work

Relation: Any one of the following relationships are supported: {'is cited by', 'is referenced by', 'is documented by', 'is supplemented by', 'is supplement to', 'is reviewed by', 'is supported by'}.

Note: the label for the relationship is defined in reference to the dataset you are uploading and how the record being entered here relates to it, not the other way around.

Identifier: Enter the identifier here. The text that you enter here must agree with the type of identifier that is entered in the 'Scheme' field.

Scheme: Select 'DOI', 'Handle', 'IGSN', or 'Other' depending on the type of identifier that you have used.


Resource type: Select 'Publication'.

16. Visibility

This defines whether your dataset is accessible for direct download without seeking permission. This will be related to the type of licence that you have chosen for the dataset. If you have chosen a Creative Commons licence, then under 'files only' select 'Public' so that the data you upload can be used by others freely.

Files only

Public
Restricted



Public


The record and files are publicly accessible.

If you have a justifiable reason for not making the dataset open for download you can restrict data downloads to a limited number of people that you can specify via their email addresses.

Files only

Public
Restricted

The files of this record are restricted.



Public with restricted files


The record is publicly accessible. The files can only be accessed by users specified in the permissions.

There is also an option to apply an embargo. If the dataset must be made restricted to preserve first-mover advantage, then GRDC asks that an embargo is applied so that the dataset can be made available for download at a later date.

Files only

Public
Restricted

The files of this record are restricted.



Embargoed (files-only)

The record is publicly accessible. On 29 May 2025 the files will automatically be made publicly accessible. Until then, the files can only be accessed by users specified in the permissions.

Options

Apply an embargo ⓘ
Record or files protection must be restricted to apply an embargo.

📅 Embargo until *

2025-05-29

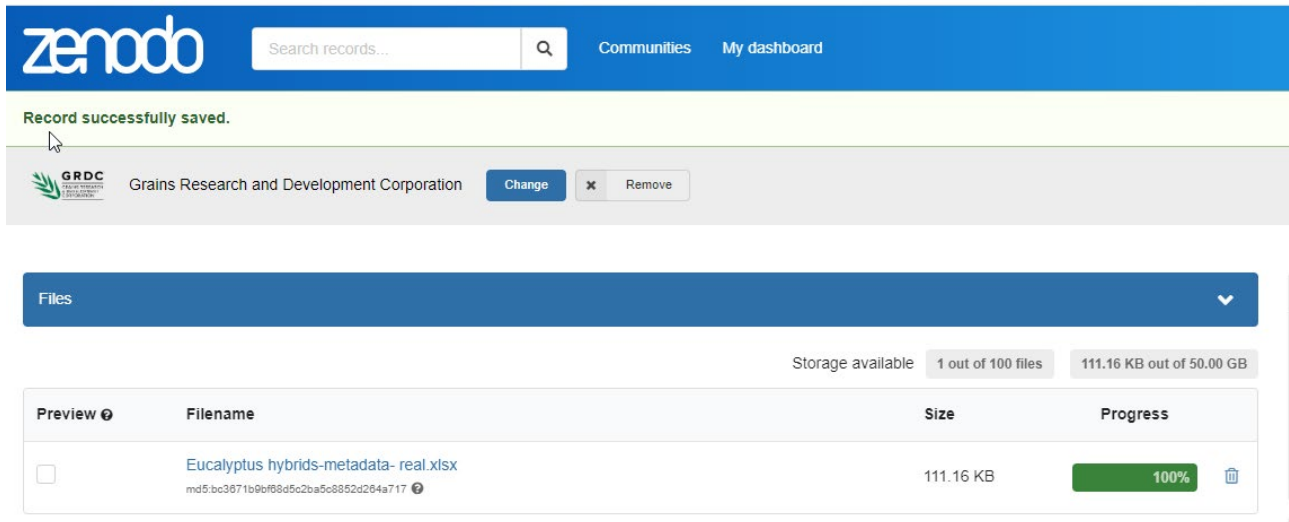
Format: YYYY-MM-DD

Embargo reason

The author has agreed with GRDC to apply a one-year embargo on this dataset to ensure that academic papers that draw upon this data can be published.

17. Click 'Save draft'

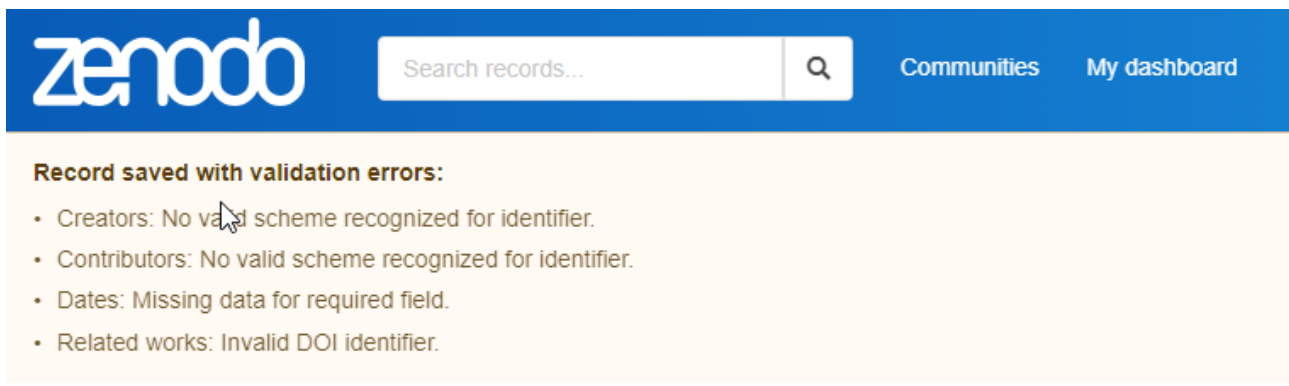
When you have completed populating all the required fields, this window pops up:



The screenshot shows the Zenodo interface. At the top, there is a blue header with the Zenodo logo, a search bar, and links for 'Communities' and 'My dashboard'. Below the header, a yellow message box states 'Record successfully saved.' with a mouse cursor pointing to it. Underneath, the GRDC logo and name 'Grains Research and Development Corporation' are displayed, along with 'Change' and 'Remove' buttons. A 'Files' section is visible, showing storage availability: '1 out of 100 files' and '111.16 KB out of 50.00 GB'. A table lists the uploaded file:

Preview	Filename	Size	Progress
<input type="checkbox"/>	Eucalyptus hybrids-metadata- real.xlsx <small>md5:bc3671b9e0f8d5c2ba5c8852d264a717</small>	111.16 KB	100%

If there is missing information, there will be a pop up at the top of the page indicating what and where the missing information is. Simply click **“Back to edit”** and fill in the missing information.

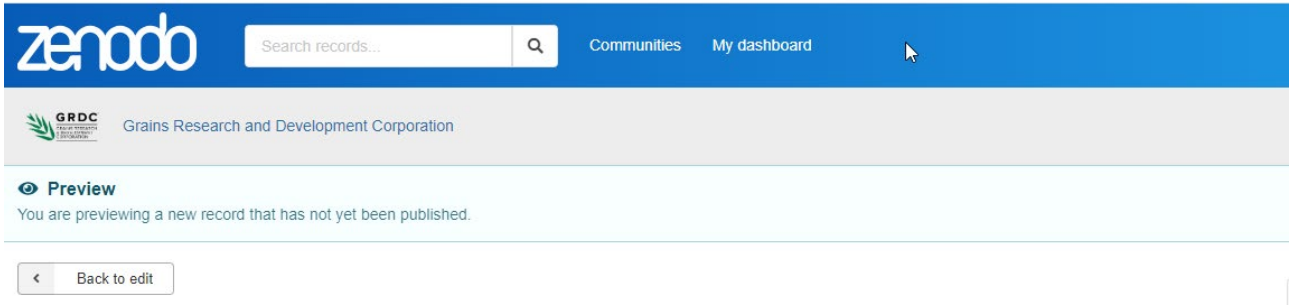


The screenshot shows the Zenodo interface with a validation error message. The header is the same as in the previous screenshot. Below the header, a yellow message box states 'Record saved with validation errors:' followed by a list of errors:

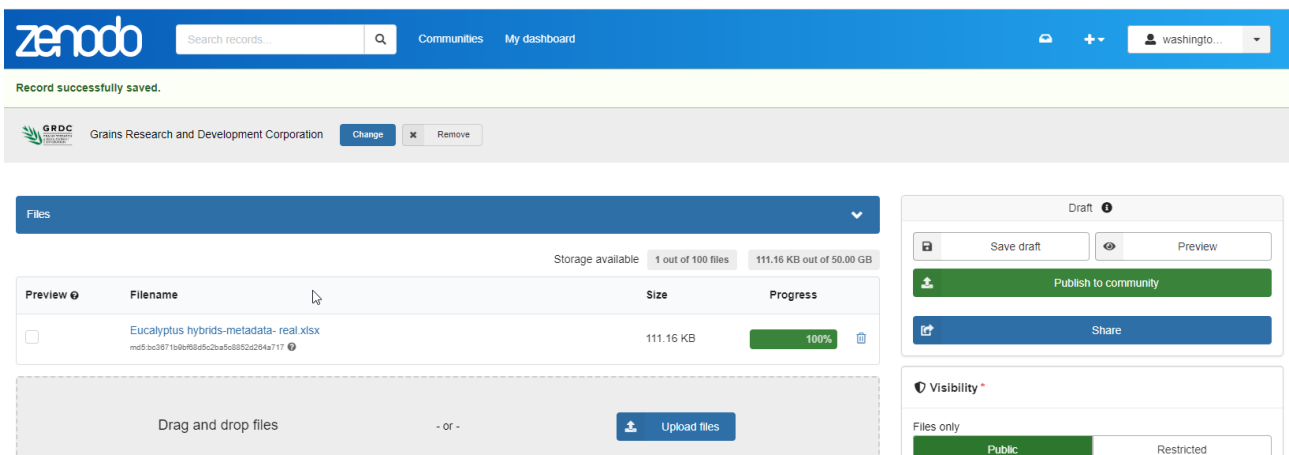
- Creators: No valid scheme recognized for identifier.
- Contributors: No valid scheme recognized for identifier.
- Dates: Missing data for required field.
- Related works: Invalid DOI identifier.

18. Preview the record

On right hand side of the screen, press Preview to preview the record – this allows easy read of the record.

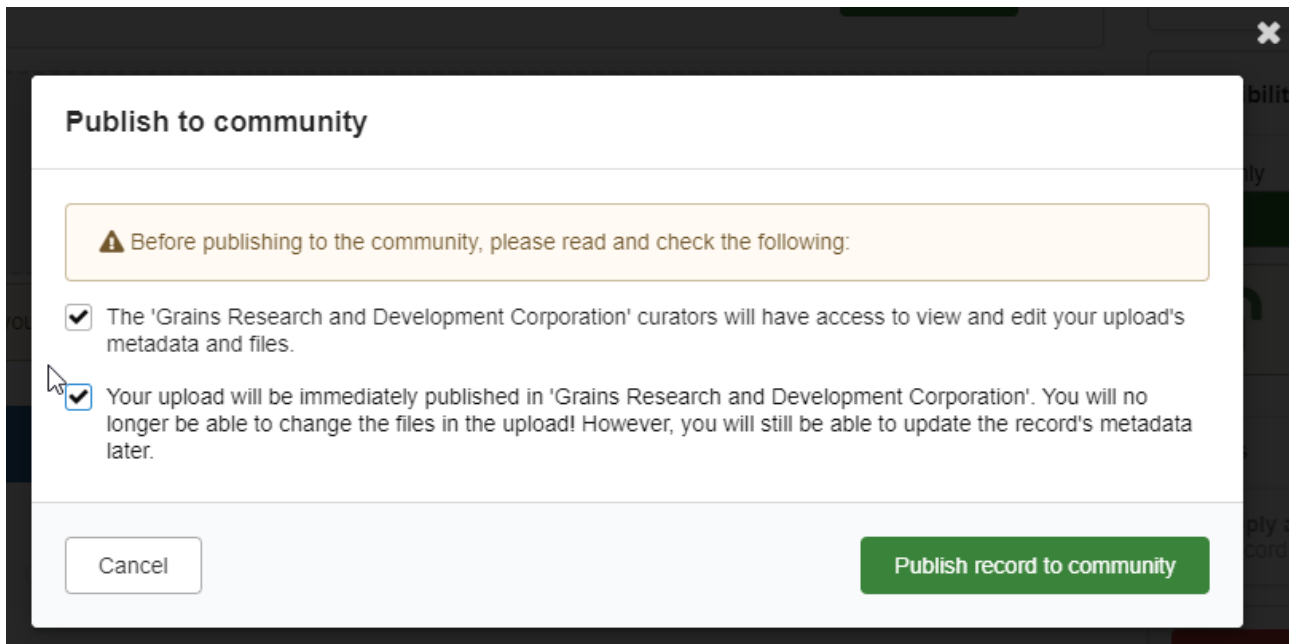


Thereafter press Back to edit and you see the screen below




19. Press Publish to Community

You will need to check some boxes:



Publish to community

 Before publishing to the community, please read and check the following:

- The 'Grains Research and Development Corporation' curators will have access to view and edit your upload's metadata and files.
- Your upload will be immediately published in 'Grains Research and Development Corporation'. You will no longer be able to change the files in the upload! However, you will still be able to update the record's metadata later.

FOR GRDC USE ONLY

Risks

- These guidelines apply to the version of the online form as at 2024-05-21. The Zenodo form may be updated at any time.
- Catalogue relies on GRDC Investment Service to retrieve investment names for 'Related GRDC Investments' metadata field.
- This catalogue harvester and others relies on the following APIs:
 - AGROVOC
 - Aristotle
 - DOI
 - GRDC Investment Service
 - ORCID
 - ROR
 - Scopus
- In addition this harvester relies on the Zenodo REST API
- Not all GRDC Contract Codes are publicly available via the GRDC Investment Service

Issues

- Re: Awards (GRDC Contract Code) section, what if there are several contracts contributing to a single dataset, but we can't harvest more than one contract as the primary contributor? This is an edge case but could cause an issue that might require manual editing of the GRDC metadata record.

Notes

- 'Title' element is required by Zenodo but will be replaced by GRDC's records for the investment title, taken from the GRDC Investment Service using the Contract Code as a lookup.
- Zenodo does not currently support the inclusion of spatial data in the record. It is possible, once the record has been harvested to the GRDC Data Catalogue, to add spatial data to that record to enhance findability of the dataset. Zenodo have plans to include spatial data in a future release sometime in 2024, at which point the Zenodo harvester in the GRDC Data Catalogue will need updating to successfully harvest this information.