



Tutorial EN

Institute of Natural Sciences

Unveil the collembola collection of the Institute of Natural Sciences

What this project is about

Are you interested in science but have no formal scientific training? Do you want to contribute to scientific research while learning about the world around you and meeting people with similar interests? Then come join us on a journey of discovery and help us preserve our biology collections by contributing to research from the comfort of your home. You can help by transcribing the labels of the collembola in our collection.

Welcome to the bug squad where we dive into the extraordinary world of the Institute of Natural Sciences !

What we invite you to do and why it matters

Wouter Dekoninck, Entomology collection curator, needs your help to transcribe the labels of the the collembola in our collection.

Sandrine Salmon, Engineer at the Muséum National d'Histoire Naturelle describes collembola in the following words : *“Among the invertebrates living in the soil, Collembola (or springtails) are important because of their abundance and therefore their ability to impact the functioning of an entire ecosystem. They have a wide variety of forms and live in a wide variety of habitats. Their main role is to regulate the microorganisms responsible for the decomposition of organic matter and the recycling of nutrients that will be used by plants for their development. Unfortunately, many human activities can affect the communities of Collembola. These include, for example, soil pollution by metals, pesticides, etc., but also human practices such as the introduction of exotic plants or the use of waste to fertilize the soil.”* ([Source](#))

What has already happened

So far 2.300 slides of mites (acari) have been transcribed by Citizen Rescuers active on DoeDat. The metadata is imported in DaRWIn, our collection management database. Another 6.000 slides of collembola are still to be transcribed. These slides contain less information than the mite slides.

What we offer to online volunteers

We offer you free access to a social event and a behind-the-scenes visit where you will meet other volunteers and researchers and talk about your findings. The event will take place between September and December 2023.

For volunteers completing at least 1000 tasks, we offer an annual subscription to the Institute of Natural Sciences.

What we will do with this data

We aim to publish all the data produced during the project. It will be imported in the DaRWIN collection database system after control by a collection collaborator responsible for digitizing the collection at RBINS. Shortly after import into DaRWIN, the slides will also be available for free consultation on our [Virtual Collections](#) website. Data will be published in HTML format, with images links.

Personal data

The project will not process your personal information (name, email, phone number) for the purposes explained here. All personal information will be handled by DoeDat. We will communicate with you exclusively through DoeDat.

Tutorial

Each project will consist of a maximum of 1000 slides / tasks to transcribe. Click on Get started to proceed. The page will refresh to show you an image – a virtual collembola slide! – and a form consisting of several fields next to and under it. On each image you will notice two text labels placed right and left the mite specimen(s).

Your task is to transcribe all information present on the specimen's original label, written by the collector. You find some examples bellow.

Each field on the form is meant for a particular kind of information and we ask you to respect this as much as possible. You can find a description of each field's purpose and label examples hereunder. Furthermore, a shorter explanation is always available on the form itself if you click on the help button: the question mark next to each field.

You will soon need to jump around from field to field. Given the form's length and most computers' screen size, you will eventually get the specimen out of sight. To avoid going up and down all the time, you may want to first click on one of the symbols on the image, right under:



By clicking on the first symbol, a second window will open with only the specimen. By adapting both windows' sizes, you can arrange them so that the specimen is always in place on one and you may move around the form freely on the other.



By clicking on the second symbol, you fix the image at its place and may then move around freely on the form.

Some general conventions

Use “[]” for information that you cannot decipher.

Use a “.” after an entire sentence or to separate paragraphs.

Use a “~” before and after strikethrough text that you can decipher.

Use a “~” before and after strikethrough text that you cannot decipher. In this case, your transcription should look like this ~[]~

Some recurrent abbreviations used on the slides:

Sp. n. = new species

Var. = variant

ds = dans

s/ = sur

Lv = larva

N = nymph

NN = nymph (Count 2) . There are two nymphs on the slide.

Pn = protonympha

Ad or A = adult

Diss. = dissocié / dispersé

You should transcribe the label in its original language. Under no circumstance should you translate the information on the specimen label: enter it exactly as written on the label!

Also pertaining to language, we advise you not to change between languages once you have started a task, because otherwise all the information you have already entered will be lost.

Always capitalize the first word in the beginning of a sentence and end the sentence with a full stop, independently of how it shows on the label. Full stops apply only to entire sentences (e.g. uses, habitat, description, locality), not to sentence fragments or to loose keywords (e.g. collector, collection number, country).

If different paragraphs on the label belong to the same field on the form, separate them with full stops and follow the guidelines above (e.g. read “surroundings of the farm | near the old house”, write “Surroundings of the farm. Near the old house.”).

Whenever you are not sure of the information you are transcribing, may it be because the handwriting is hard to read, the ink has almost disappeared, the information is covered, take your best shot and write your interpretation between square brackets “[]” (e.g. write “500 m from the [coast]” or “between [Hasselt] and [Genk]” when certain words or parts thereof are not clearly written).

If despite any efforts, you really have no idea whatsoever of what’s written, enter simply “[]”. To enter square brackets is only possible for free-text fields; for all others, write your interpretation under Notes and leave the corresponding field empty.

If there is no information for a specific field, leave it empty.

LEFT LABEL

You will notice that the information on the collembola slides is more scarce than the one on the mite slides in the previous project.

Research Institute

All specimens belong to the Royal Belgian Institute of Natural Sciences. In case you find another Institute on the slide, leave this field empty and write it down in the Notes section.

I.G.

An inventory number is given to the specimen by the collection manager at the Institute of Natural Sciences. Copy the number when it is present, always using full stops. If no number exists after I. G., leave this field empty.

25.956



Habitat

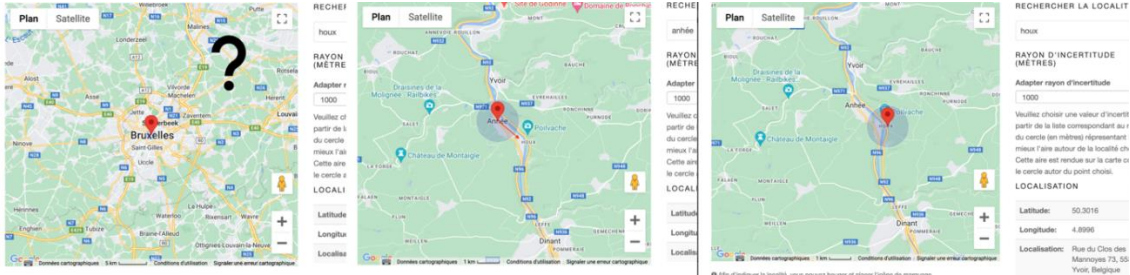
In this field, transcribe the information on the habitat in which the collembola was found as such. Usually, this information is given before the location. If the information is absent, leave the field empty. In 95% of the cases, this field is empty. There is usually no additional information on the host or the sampling place.

Location (mapping tool)

Write the location in the Locality search tool. The tool will fill in the coordinates automatically. Press copy values to main form.

Coordinate uncertainty (meters) Expressed as a radius around the location, this measure reflects the area within which one may reasonably assume the plant was collected. Choose the radius which best covers the area one may reasonably assume given the locality description (e.g. Brussels and Herstappe have very different geographical extents; Antwerp might be the city or the province; 8 km from Namur clearly indicates the distance to the nearest known reference...). Leave empty if the reasonable radius exceeds 10 km.

*If the mapping tool doesn't find the location, perform a google maps search, identify the nearest location, perform the search again with the mapping tool and move the point.



Country (free text)

Copy the name of the country in the free text field as such.

Locality (free text)

Copy the name of the locality in the free text field as such

Sometimes there are additional notes like “zone de transition”. Transcribe everything as such.

Santa Cruz. Zone de transition.



Station number (free text)

Copy the number of the station in the free text field. Sometimes, a letter follows, for example:

76c



Day of collection

On some slides, there will be a day of collection. If the information is missing, leave the field empty.

Month of collection

Write the month. If the information is missing, leave the field empty.

Year of collection

All dates must be entered in a standardized form across three fields: day (DD), month (MM), and year (YYYY). All specimens have been collected after 1900.

If the year is missing although day and/or month are mentioned, leave the year field empty. Similarly, if the collection date is missing altogether, leave the field empty.

Collector

In 95% of the cases, the name of the collector is missing. Write the name of the collector as such.

Slide number

Transcribe the number on the right of the specimen as such. If the information is missing, leave the field empty.

RIGHT LABEL

Identifier

In most of the cases the identifier will be S. Jacquemart.

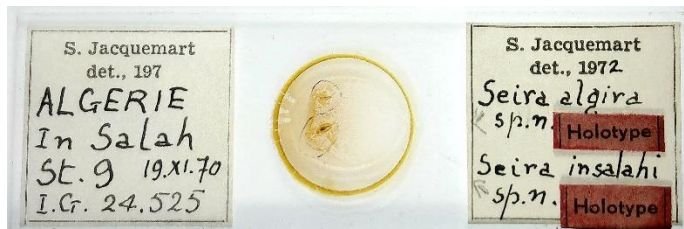
In case you find another identifier, just transcribe the identifier's name as such.

Year of identification

This is the year in which the specimen was identified by S. Jacquemart. In case there is no year, leave the field empty.

Type

Very few specimens are type specimens, meaning they are representative of a species. If you find a label with one of the words in the list, tick the Type box and select the word (e.g. holotype) from the list.



Scientific name 1

Transcribe the name of the specimen and of the author as such. A scientific species name, in Latin, consists of two parts: a genus (first letter written in upper case) and a specific epithet (first letter written in lower case) identifying the species within the genus (e.g. *Camisia exuvialis*) and sometimes yet another epithet for the subspecies or the variety. The author's name follows quite often, sometimes in brackets (e.g. Gdj.) and should be transcribed as such. When it is written between brackets, make sure to copy them as well.

Write strikethrough text in between ~ ~.

Tip: In case you are not sure of a name, you can always search for it on the GBIF database <https://www.gbif.org/species/367>. GBIF is the global biodiversity international facility, used by scientists worldwide to record taxons.

Here the label is slightly transparent and you may be able to read the initial identification. However, you are not required to transcribe it. Just transcribe the final identification.



Reviewed scientific name

Has the initial scientific name on the slide been reviewed? In case the initial scientific identification is stroke through, write here the new identification, including the non-stroke through text associated with it.

In the case of the collebola, the reviewed name will be added on top of the initial identification on a separate label preceded by "Rev.". It will appear on a different piece of paper glued on top of the slide.



Total count

On some labels, you will find the specimen count on the right followed by "ex.". Copy the number without writing "ex.". Other times, there will be a number next to the scientific name, without the "ex.". That represents the count. Other times, you will need to add up the numbers yourself. In case there is no count on the label, then write NA. Only write the count (if present) for the first specimen (if more than one genus has been identified). The rest of the specimens (from another genus) and their count should be written in the next field.

Development stage

Most of the times, no development stage is mentioned on the slide. Sometimes, you may find the following development stages. Copy the development stage in full letters and the number. Separate them by a full stop. There are few cases in which the development stage is given.

Lv = larva

N = nympha

NN = nympha. Two "N" mean there are two nymphae on the slide.

Pn = protonympha

P

Ad or A = adult

Sex

M = Male

F = Female

U = Unknown

X = Mixed (mixed specimens, males and females)

On some specimens, you will find a female (♀) or male (♂) symbol. Then select M for male or F for female. In this case, it is not present, select U for unknown. For mixed specimens, select X. Sometimes you have two symbols, or more. This gives you an indication of the count as each symbol corresponds to one specimen.

Is there another species on this slide? (scientific name 2, 3, etc.)

If yes, then transcribe them in the following free-text section as such, writing the scientific name, the count (when known) and sex (M/F/U/X) and using a “\$\$\$” between the different specimens. This will allow us to separate them during post-processing. Transcribe the count within brackets after the name of each taxon.

Synonymy

In taxonomy, a synonym is a scientific name that applies to a taxon that (now) goes by a different scientific name. Sometimes this information is not present on the slides. When it is present, you will most probably find it in between brackets. If more than one synonym is given, put a \$\$\$ sign after each synonym. Transcribe everything as such, without the brackets or other symbols. For example, the “=” symbol should not be transcribed. The synonyms refer to other species. Always write the name of the species (exuvialis) in small letters. Only genus names (Camisia) take a capital letter. In case there is no synonymy given, leave this field empty.

Trap (free text)

Copy the name of the trap which was used for catching the insect as such. If present, it will be in the lower left corner of the right-side label. Taxonomists must record the way in which the insect was caught. A Berlese trap is an apparatus used to extract living organisms, particularly arthropods, from samples of soil.

Trap n°

After the name of the trap, you will sometimes find the number of the trap. Write as such, without using full stops. In case there is no trap number, leave the field empty.

New species

Is this specimen a new species? Whenever a new species is described, you will find a “sp. n.” note on the slide. Tick the new species box.



Variant

Is this specimen a new variant? Then you will encounter a “var. n.” abbreviation.

Just tick the variant box and write the name of the variant after the scientific name.



Miscellaneous

Is there other information on the slide that you cannot fit into one of the fields? Then write it here, adding a \$\$\$ sign after each piece of information.

Notes

Notes is your space! No information from the specimen should be written here. Instead, you are free to add any doubt or remark linked specifically to this specimen which will help us validate the data later.

Save task

All the information available on the page must find its way to one of the fields in the form. Once you have done that, you have finished this task! If you have entered all the information, you may then click on Save at the bottom of the page. Here, you may also want to save an unfinished task to get back to it later, skip the task, or post a question on the Forum about this specimen.

In case of doubts or questions, it may be useful to visit our Forum and either search for existing answers or even create a topic yourself. If the available help buttons and the forum entries do not suffice, we can always be reached by email (see the contacts listed under Contact on the main page). We will try to answer as soon and clearly as possible.

Finally, we remind you that every contribution, big or small, regular or sporadic, is greatly appreciated! Do your best while keeping in mind the guidelines above, but never take a DoeDat-project as a chore or worry too much! Everyone makes mistakes and all data will be validated.

Thank you for joining the “Bug” squad !