# MAMIAS User Guide

Marine Mediterranean Invasive Alien Species (MAMIAS) · 11 November 2026


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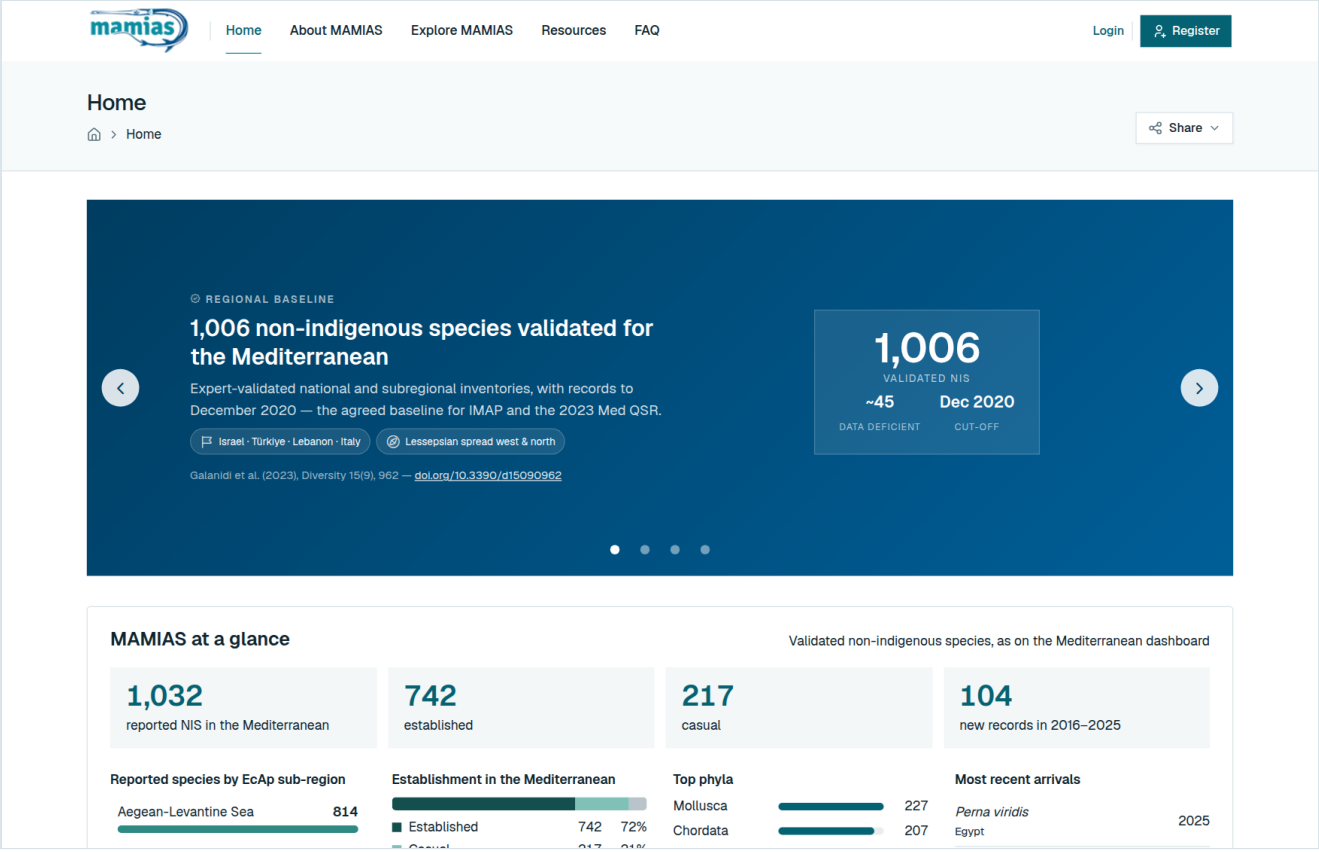

## Getting started

### Find your way around MAMIAS

Where: Home page · about 2 minutes

MAMIAS is the regional database of non-indigenous marine species in the Mediterranean, run by SPA/RAC for UNEP/MAP. Anyone can browse it; a free account lets you contribute.

1. **Open the home page. MAMIAS at a glance** sums up the Mediterranean: species reported, per EcAp sub-region, how established they are, main groups and latest arrivals.
2. **Explore MAMIAS** leads to the data explorer, the maps, the literature and the dashboards. None of them needs an account.
3. **Sign up** only to contribute: references, sightings and new species suggestions.
4. Everything contributors send is **checked by the MAMIAS team** before it appears in the database.




The home page and its MAMIAS at a glance block.

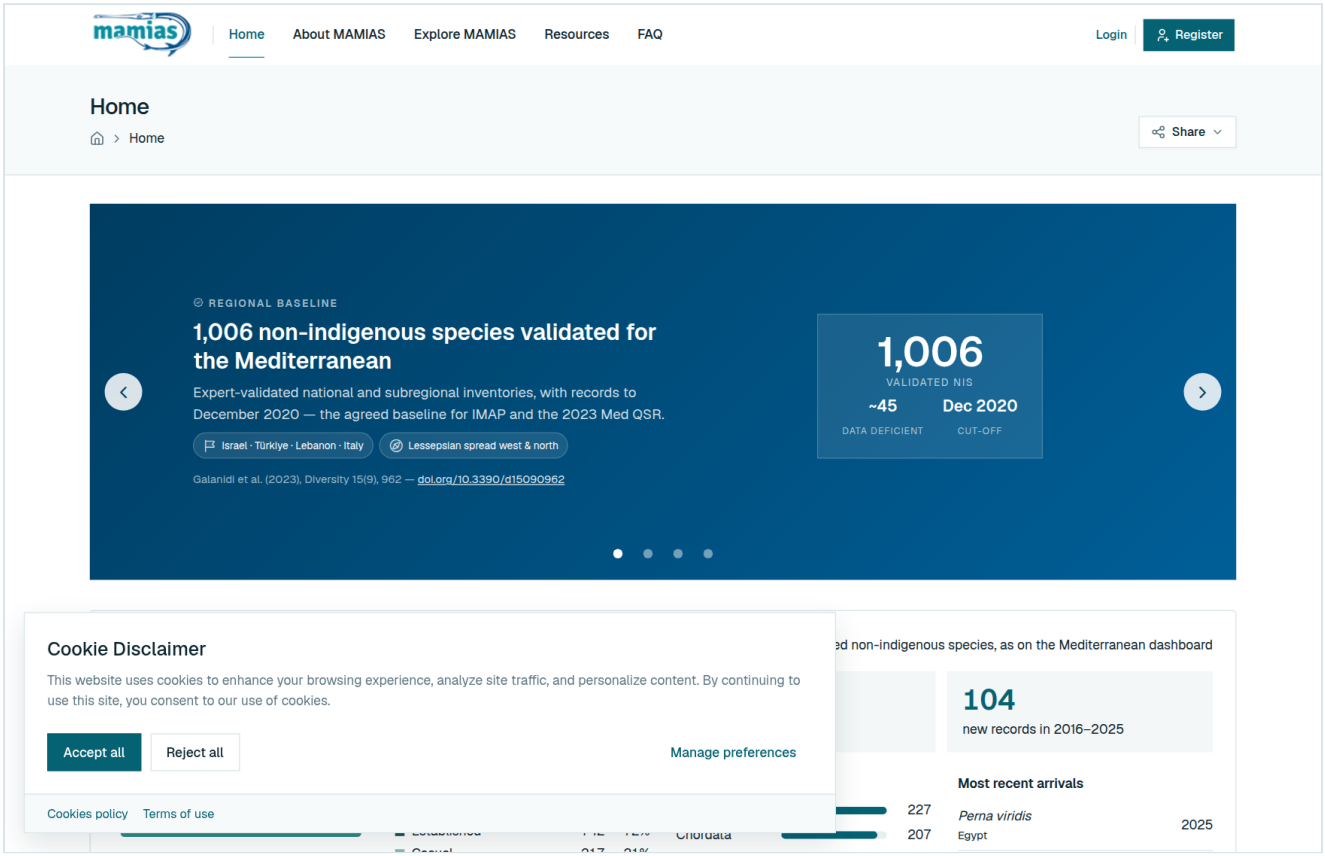
> **Tip.** Use a computer or a tablet: on a phone-sized screen the site asks for a larger screen.

## Choose your cookies

Where: Any page · about a minute

On your first visit a dialog asks for your choice. The site stays dimmed and does not respond until you answer.

1. Click **Accept all** or **Reject all**. The site works either way.
2. To change your mind later, click **Change Cookie Preferences** at the bottom of any page.
3. The **Cookies policy** page lists each cookie, why it is set and for how long.




The cookie dialog on a first visit.

### Get help on a page

Where: Any page · about 2 minutes

Most pages explain themselves. When they do not, help is one click away.

1. **Rest the pointer** on a button: a short explanation appears.
2. Click **Guide**, in the page header next to the breadcrumbs, for step-by-step help on that page.
3. Page dimmed and nothing responds? Answer the **cookie dialog**. A map stays grey? The map server is briefly unreachable: reload later.
4. For anything else, write to the MAMIAS team at the contact address on the **Legal notice** page.

> **Tip.** Phone screens are not supported yet: the site asks for a computer or a tablet.

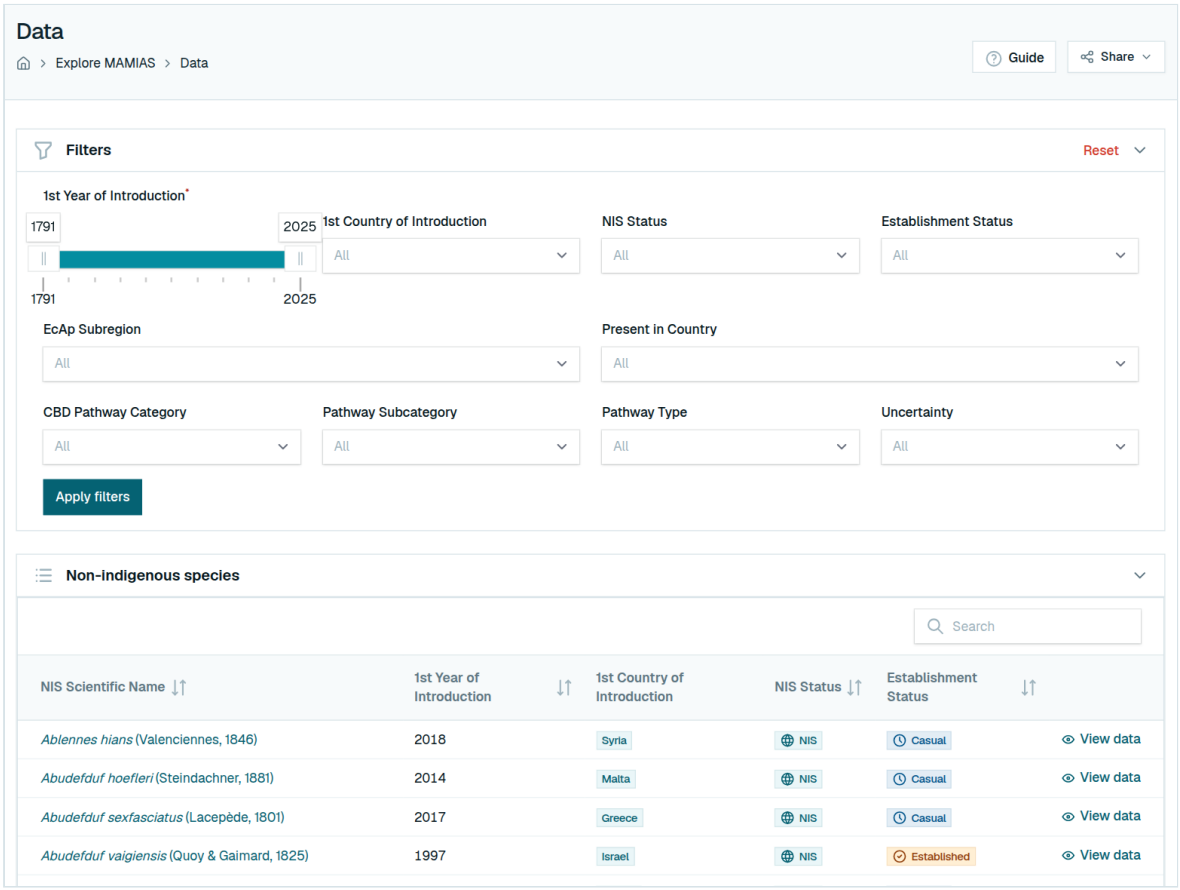
## Explore the data

### Search the species catalogue

Where: Explore MAMIAS › Data · about 2 minutes

The data explorer lists every non-indigenous species in the catalogue, one row each, with its first record in the Mediterranean.

1. **Open** Explore MAMIAS › Data.
2. Type in **Search**: a name, or a family such as *Gobiidae*. The table narrows as you type.
3. Click a **column title** to sort by it, again to reverse. Choose how many species per page under the table.
4. Click a species, or **View data** at the end of its row, to open its page.




Filters above the species table.

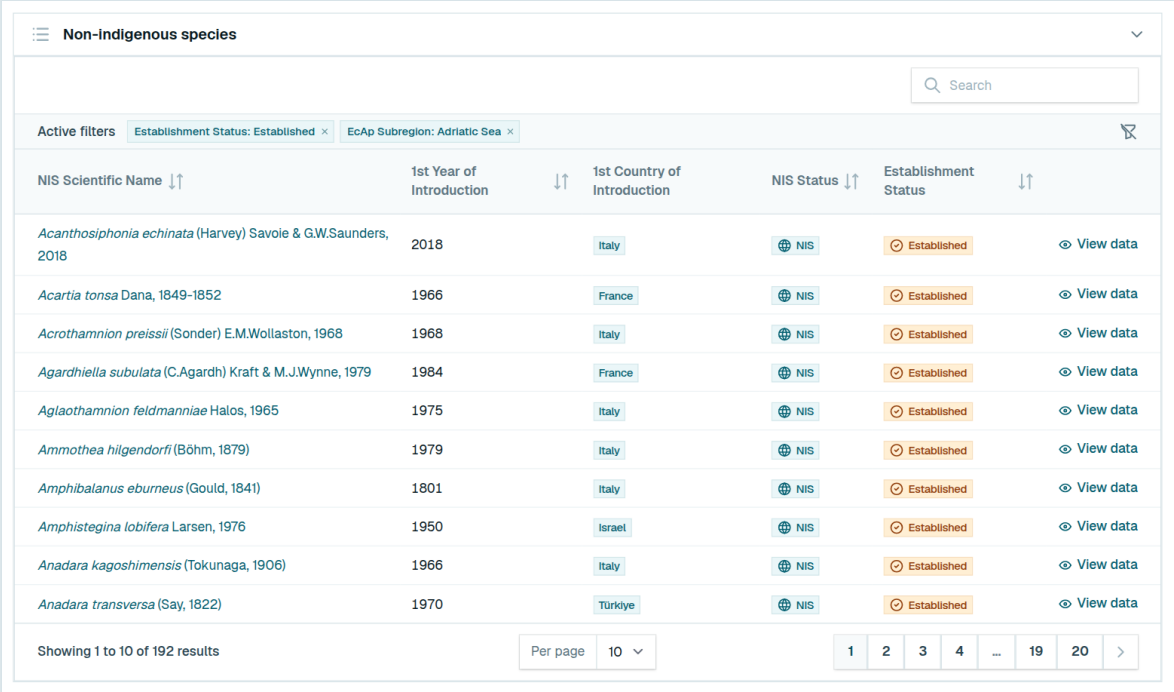
> **Tip.** "Recorded as …" under a name means the species was first published under another name.

## Filter the species catalogue

Where: Explore MAMIAS › Data › Filters · about 2 minutes

The filters change the table only when you apply them, so you can set several at once.

1. Pick values in **1st Year of Introduction**, **1st Country of Introduction**, **NIS Status**, **Establishment Status**, **EcAp Subregion**, **Present in Country** or the **CBD Pathway** filters.
2. Click **Apply filters**. Within a filter a species matches any value; across filters it must match all.
3. Each filter now shows as a chip under **Active filters**. Click its **×** to drop it alone.
4. **Reset**, in the filters' title bar, clears them all.




Applied filters shown as chips above the table.

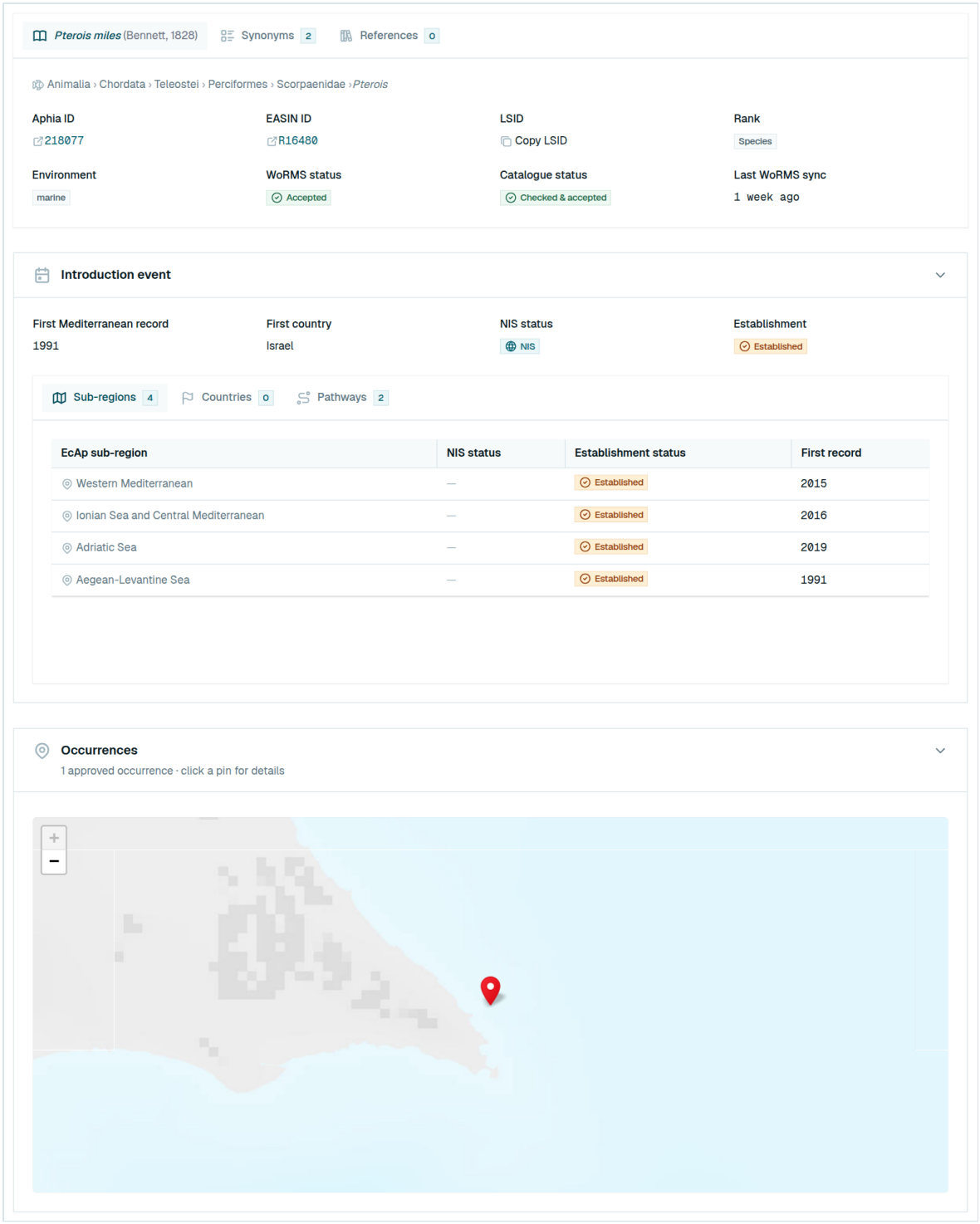
> **Tip.** With both year handles at the ends, species whose year is unknown are kept too.

## Read a species page

Where: Explore MAMIAS › Data › a species · about 3 minutes

A species page holds everything MAMIAS knows about one species, in three parts.

1. **The species tabs**: classification, Aphia ID (a link to WoRMS), EASIN ID, LSID (click to copy) and statuses. **Synonyms** and **References** sit beside it.
2. **Introduction event**: its first Mediterranean record, statuses and the reference behind it, with tabs for **Sub-regions**, **Countries** and **Pathways**.
3. **Occurrences**: a map of every approved sighting. Click a pin for its date, coordinates, depth, abundance and habitats.
4. **View expansion over time** opens the species on the expansion timeline. The breadcrumb leads back to the data explorer.




A species page.

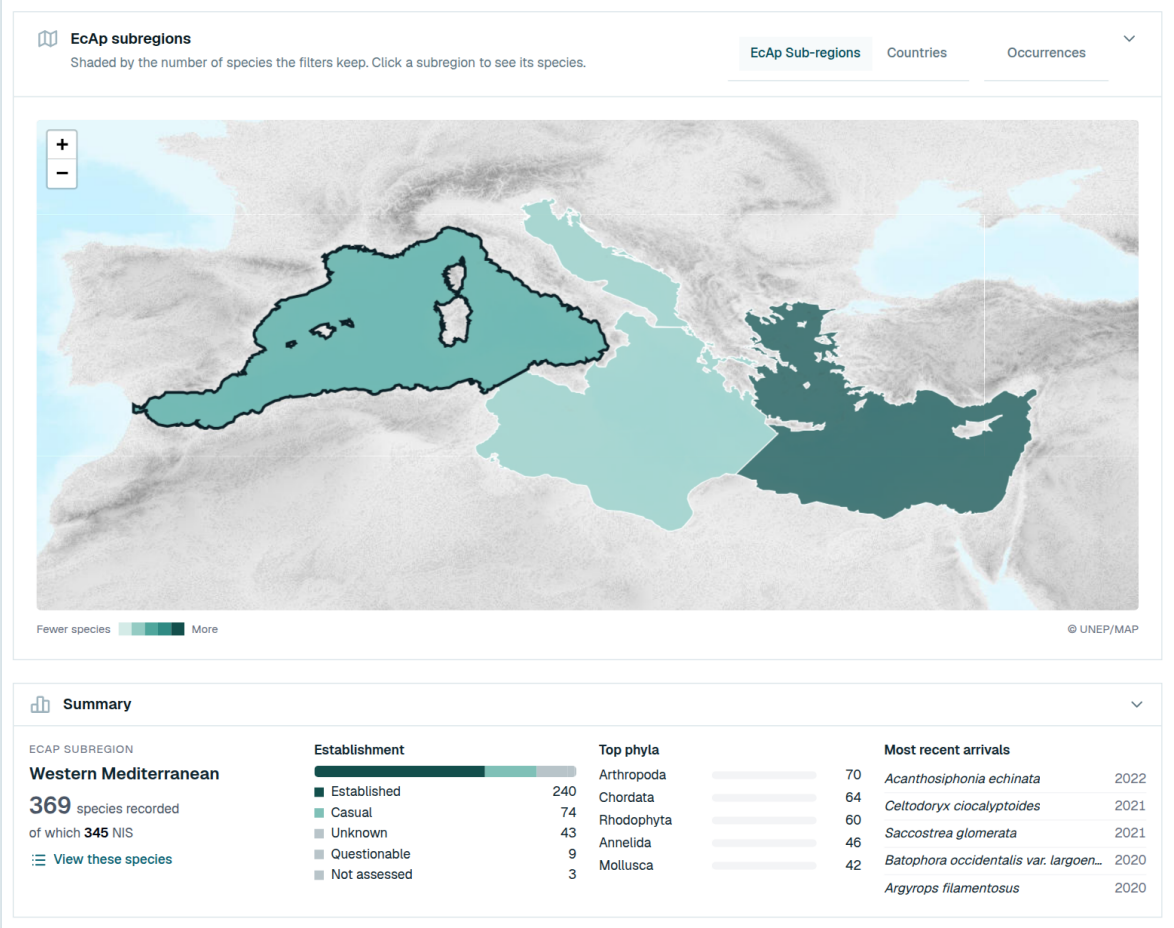
> **Tip.** The Pathways tab gives the Mediterranean pathway first, then each country's and sub-region's where experts described them.

## See where species were recorded

Where: Explore MAMIAS › Maps › Distribution · about 3 minutes

The map shows the species by EcAp sub-region, or by the country where each was first recorded in the Mediterranean.

1. Choose a layer in the map's title bar: **EcAp Sub-regions** (shaded by number of species) or **Countries** (one bubble per country of first record).
2. **Click a sub-region or a bubble** to pick it. The summary and the table below switch to it.
3. Read the **summary**: number of species, establishment, top phyla and most recent arrivals.
4. Use the **species table**: search, sort, and click a row or **View data** to open the species.




A sub-region picked, with its summary.

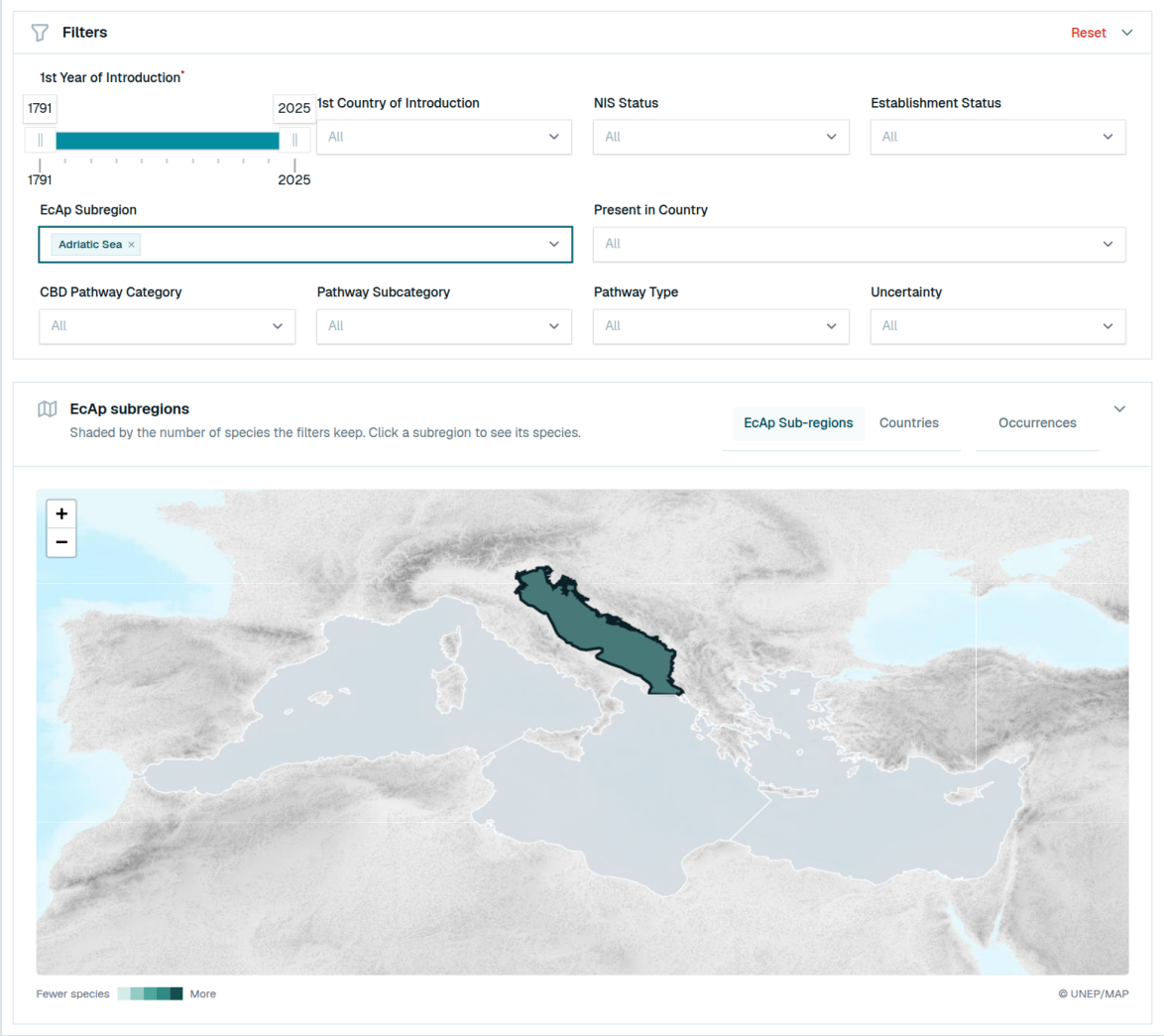
> **Tip.** The address keeps the layer and the area you picked, so a link opens the same view.

## Filter the map

Where: Explore MAMIAS › Maps › Distribution › Filters · about 2 minutes

The map has the same filters as the data explorer, but they apply at once: there is no button to press.

1. Change any filter: year, country, NIS or establishment status, sub-region, country of presence or pathway.
2. The map, the summary and the table redraw together.
3. With **EcAp Subregion** set, only the sub-regions you picked are shaded; the others turn grey and cannot be picked.
4. **Reset**, in the filters' title bar, clears them all.




The EcAp filter narrowing the map to the Adriatic Sea.

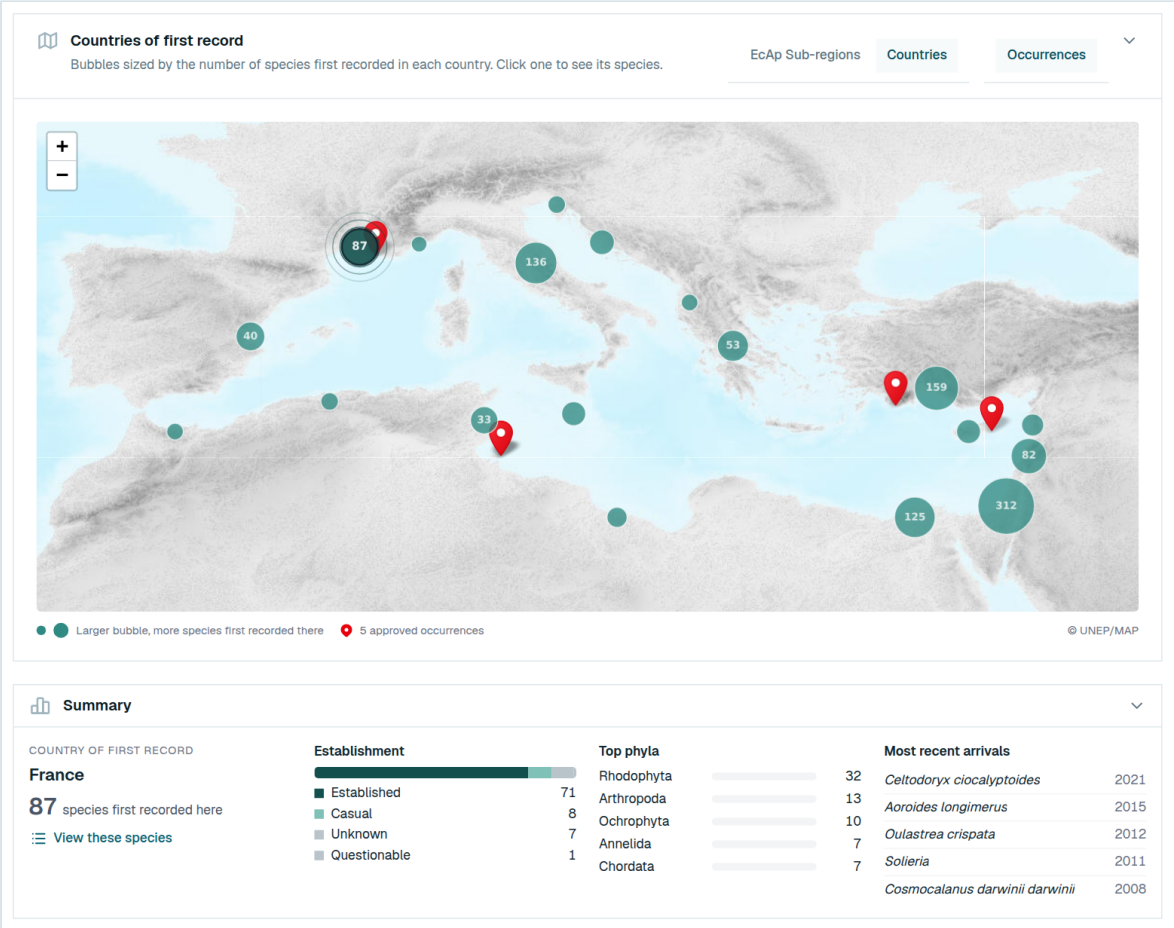
> **Tip.** NIS and Establishment Status are basin-wide; the summary's Establishment block is for the picked sub-region, so the two can differ.

## Show sightings on the map

Where: Explore MAMIAS › Maps › Distribution · about a minute

Sightings are reported by contributors and checked by the MAMIAS team before they appear.

1. Click **Occurrences** in the map's title bar. It works on either layer.
2. Zoom with **+** and **−** or the mouse wheel, and drag to move.
3. Click a pin for its date, coordinates, depth, abundance and habitats.




Countries of first record, with the occurrence pins.

> **Tip.** Following Barcelona Convention practice, the map draws no national boundaries.

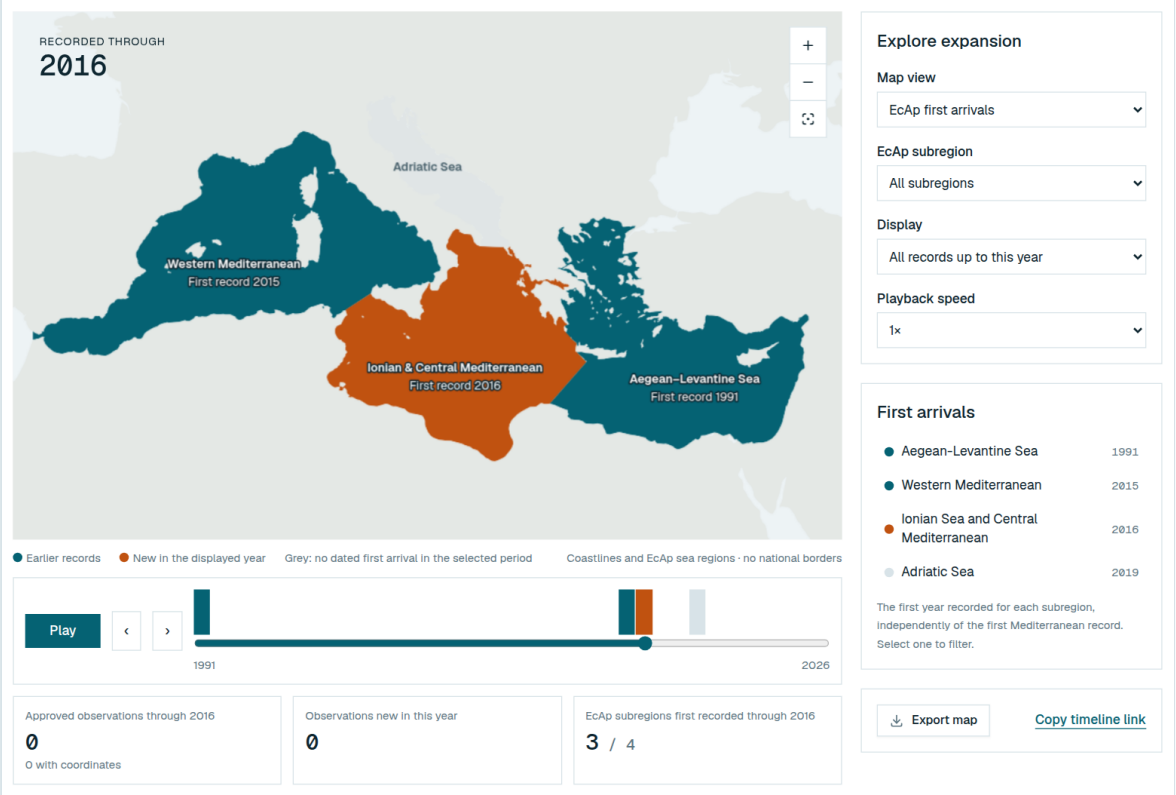
## Follow one species through the years

Where: Explore MAMIAS › Maps › Species expansion · about 3 minutes

The page shows one species' approved observations, and the first year it was recorded in each EcAp sub-region.

1. **Pick a species** at the top right. Without one, the page opens on *Pterois miles*.
2. Choose a **Map view**: **Approved occurrences** or **EcAp first arrivals**. Set **Display** and, if you like, one sub-region.
3. Press **Play**, use ‹ and ›, drag the slider or click a bar to change year.

4. Read **First arrivals** and the **Observations** table under the map.




Teal is earlier records, orange is new in the displayed year.

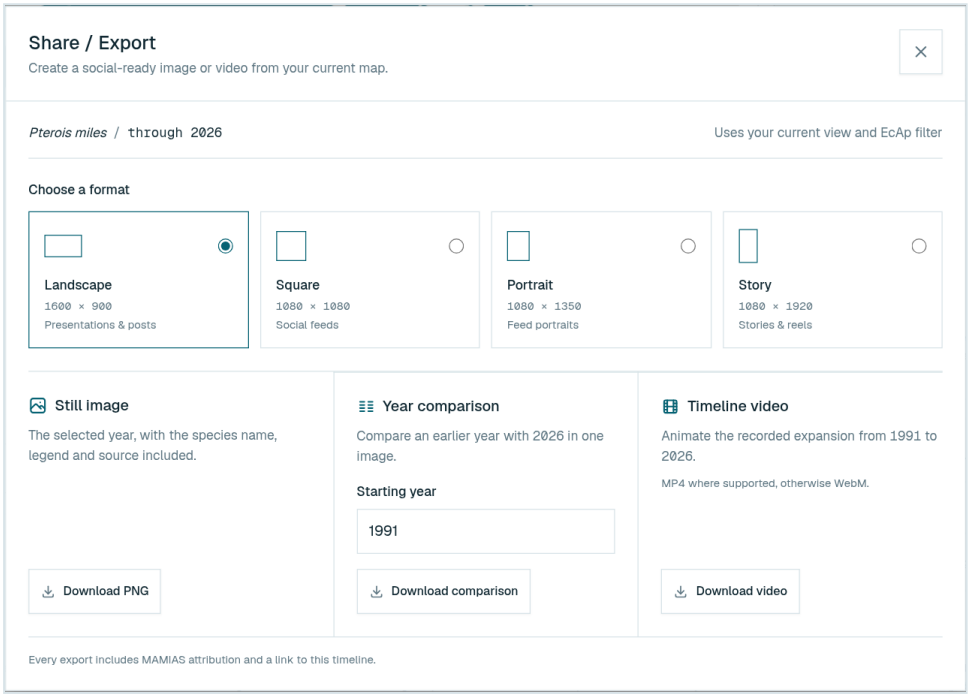
> **Tip.** A gap in observations does not mean the species is absent, and recorded spread is not its actual route.

## Export or share an expansion map

Where: Explore MAMIAS › Maps › Species expansion › Export map · about 2 minutes

Exports use your current view, year and sub-region.

1. Click **Export map** and choose a format: landscape, square, portrait or story.
2. **Download PNG** for the displayed year, **Download comparison** for an earlier year beside it, or **Download video** for the whole timeline.
3. **Copy timeline link** keeps the species, year, view, display and sub-region.




Formats, image, comparison and video.

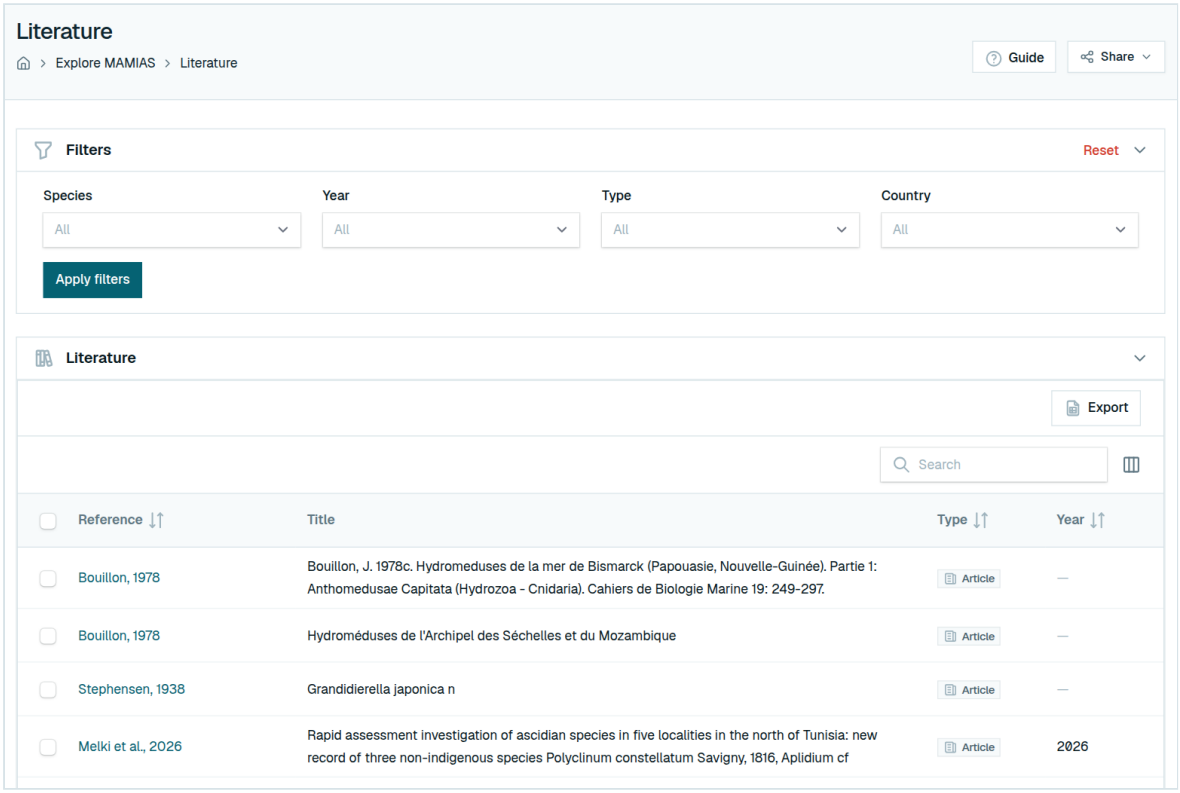
> **Tip.** The video is MP4 where the browser supports it, otherwise WebM.

## Find a publication

Where: Explore MAMIAS › Literature · about 2 minutes

The literature list holds the checked papers, reports, theses and books behind the records, newest first.

1. Type in **Search**: it looks through the references, their full text and their DOI.
2. Pick a **Species**, **Year**, **Type** or **Country**, then click **Apply filters**.
3. Click the short **reference** to open the publication through its DOI, or its web link.
4. Remove a filter with the **×** on its chip, or all of them with **Reset**.




Filters above the literature list.

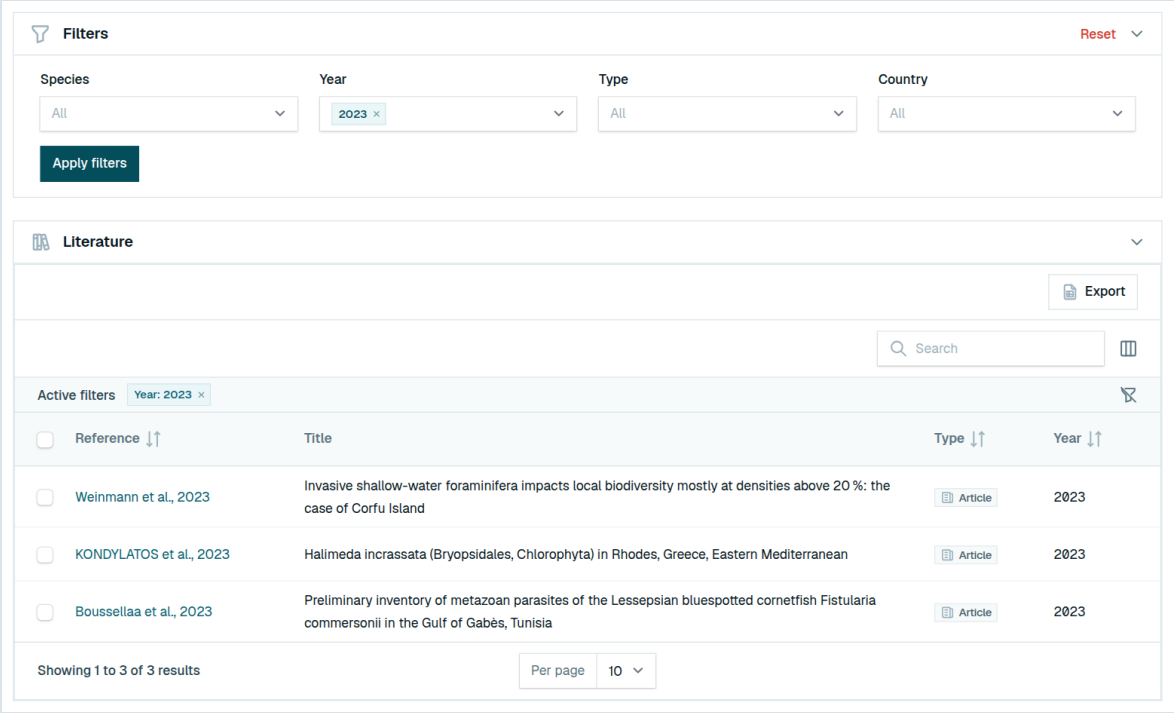
> **Tip.** A reference in red marked Retracted was withdrawn by its journal; do not rely on its findings.

## Export the literature to Excel

Where: Explore MAMIAS › Literature › Export · about a minute

The file holds the MAMIAS code, short and full reference, type, year, DOI, link and whether it was retracted.

1. Set your filters, search and sort first: the export follows them, all pages included.
2. Click **Export**. You get `MAMIAS_<date>_literatures.xlsx`.
3. For only some rows, tick their boxes, then choose **Export selected**.




The list filtered on one year, ready to export.

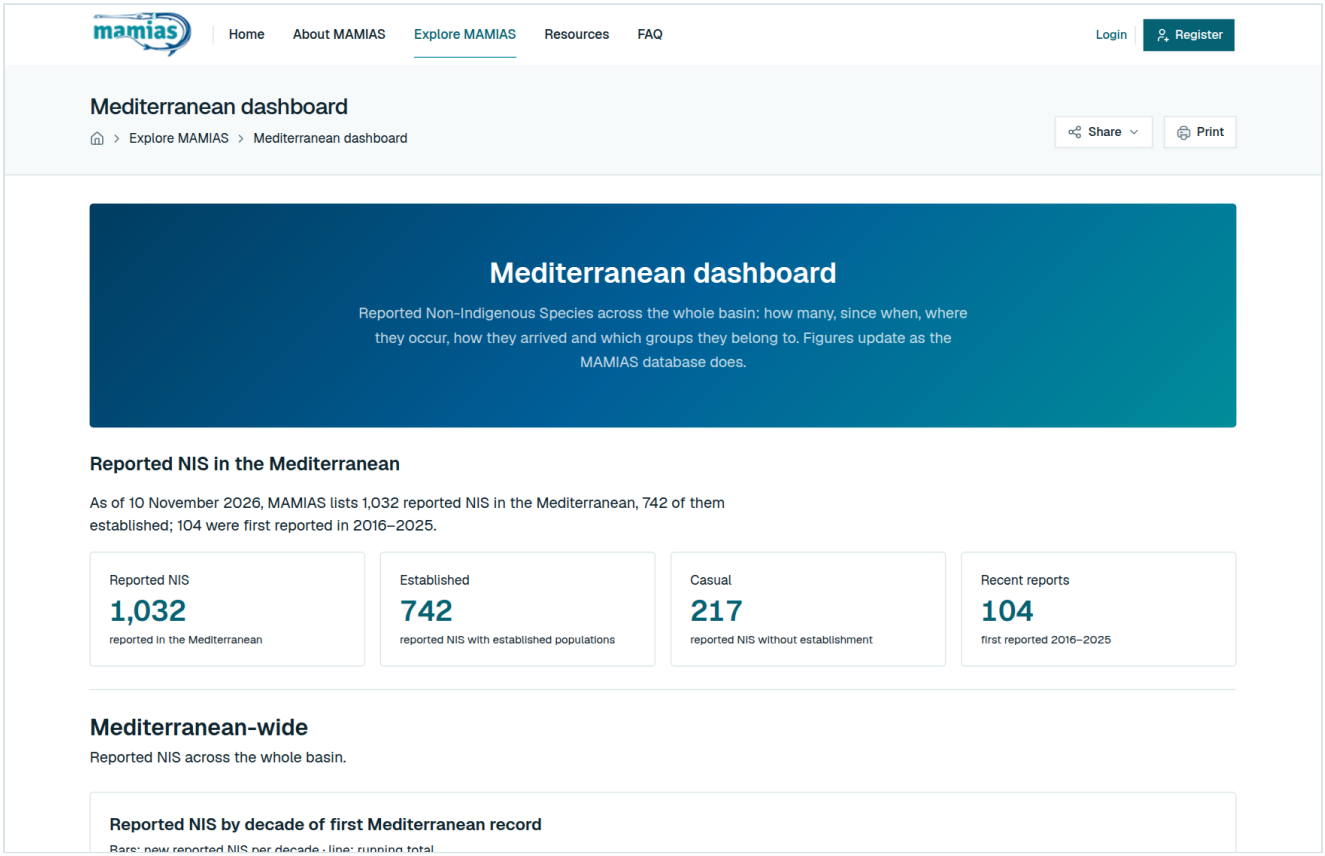
> **Tip.** The data may be reused under CC BY 4.0; please cite MAMIAS.

## Read the dashboards

Where: Explore MAMIAS › Dashboards · about 2 minutes

Both dashboards count only validated non-indigenous species, following the baseline of Galanidi et al. (2023).

1. Open the **Mediterranean dashboard** for the whole basin: how many species, since when, where, by which pathway, in which groups.
2. Open the **Dashboard by country** and pick a country for the same picture there.
3. On the home page, click a sub-region in **MAMIAS at a glance** to see it on the map.




The Mediterranean dashboard.

### Download and cite the data

Where: API documentation (/api-docs) · about 3 minutes

MAMIAS data is free to reuse under the CC BY 4.0 licence. No account is needed.

1. The species list as one spreadsheet: open `/api/v1/species?format=csv`.
2. Every approved sighting in Darwin Core: open `/api/v1/occurrences/darwin-core`.
3. From a script (R, Python): the JSON queries and their filters are listed at `/api-docs`, with an example answer each.
4. Cite MAMIAS as **How to cite MAMIAS** on the About page says; each API answer carries the same citation.

> **Tip.** The API is read-only and allows 60 requests a minute, 10 for the Darwin Core file.

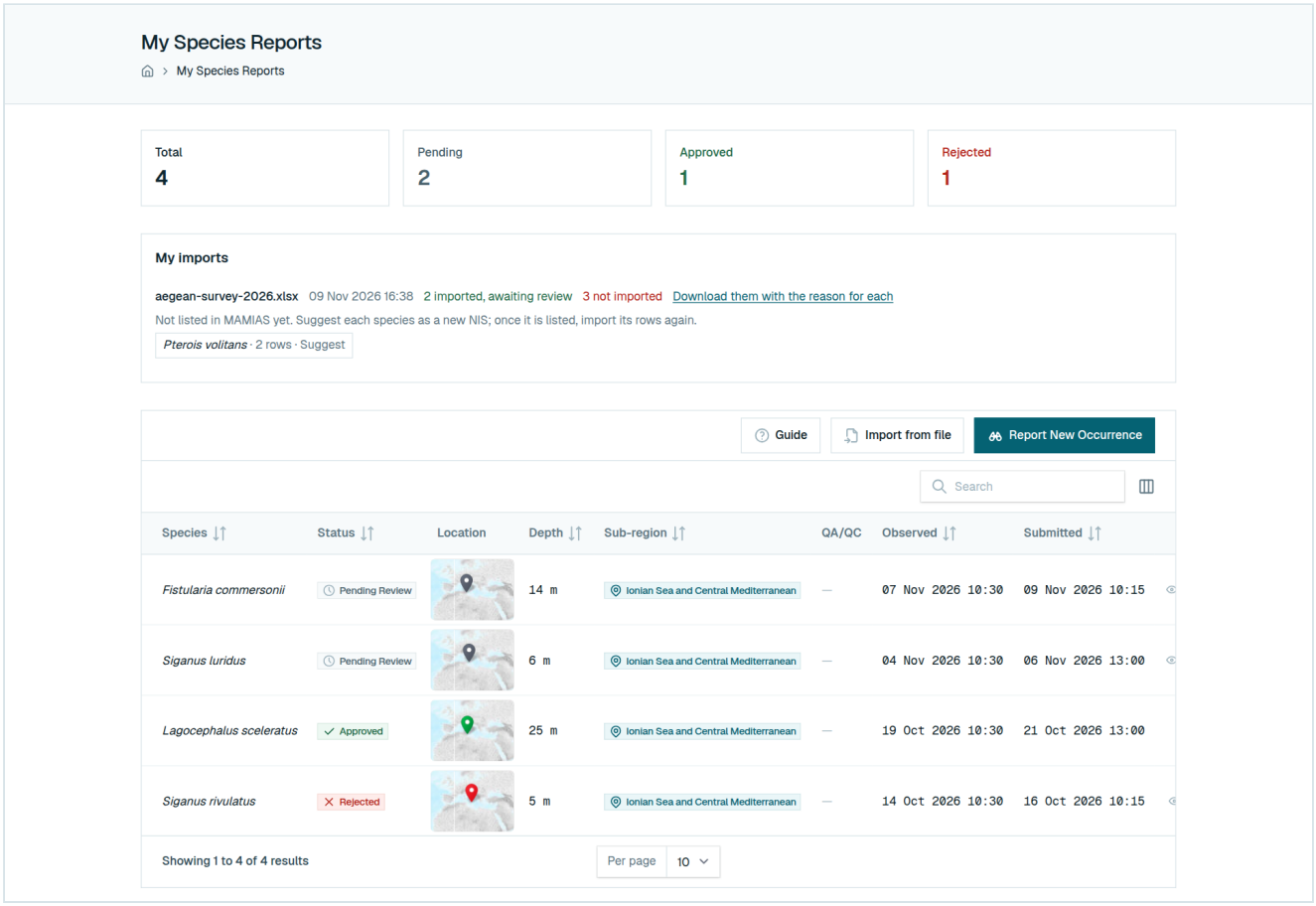
## Contribute

### Choose how to contribute

Where: Your menu · about a minute

There are three contributor pages, each in your menu. You need a confirmed account.

1. A publication recording a non-indigenous species: **My Bibliographic references** › **Add New Reference**.
2. A sighting of a species MAMIAS already lists: **My Species Reports** › **Report New Occurrence**.
3. Many sightings from a survey or logbook: **My Species Reports** › **Import from file**.
4. A species MAMIAS does not list yet: **My Species Suggestions** › **Suggest New NIS**.




My Species Reports, with its counters.

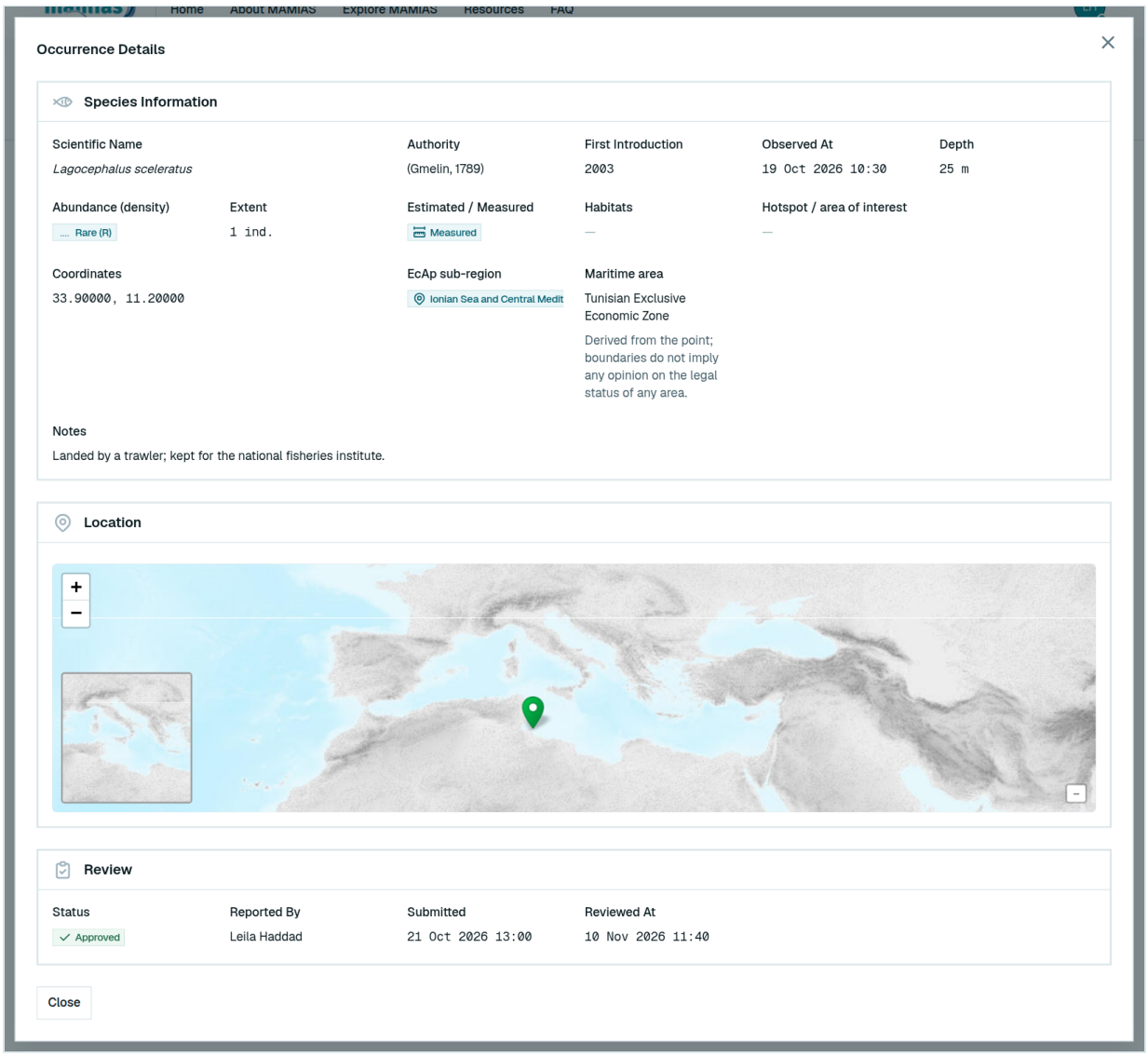
> **Tip.** Each page shows your submissions with their status and counters for Pending, Approved and Rejected.

## Follow a submission through review

Where: Your menu › any contributor page › View · about a minute

Each submission is Pending Review, Approved or Rejected. You also get an email when it is received and when it is decided.

1. Read the **status** in your list. Hover a *Rejected* status for the reason; on references, click the status to read the comment.
2. Click **View** to open the record.
3. Its **review progress line** shows **Submitted → Under review → Approved** or **Rejected**, each step with its date.
4. Below it: the reviewer's notes, and on references and suggestions the **Discussion**.




A report's details and its review.

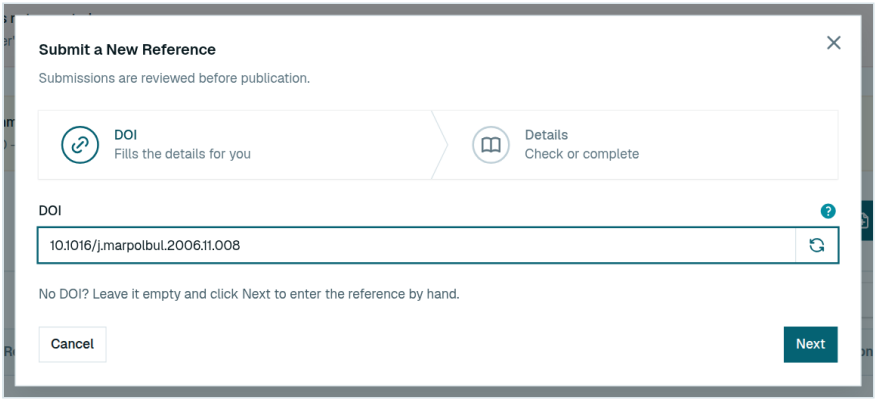
> **Tip.** Reviewers sometimes correct small details before approving; the comment says what changed.

## Add a bibliographic reference

Where: Your menu › My Bibliographic references › Add New Reference · about 3 minutes

A reference must be approved before it can be cited in the database.

1. Click **Add New Reference** and paste the **DOI** (a link, `doi:10.…` or the bare DOI). Click outside the field.
2. MAMIAS fetches the title, authors, year and type from Crossref. Click **Next**. No DOI? Leave it empty and fill in the details by hand.
3. Check the **Short reference**, **Resource type**, **Year** and **Full reference**. Upload the **PDF** (10 MB at most) or paste a **PDF link**.
4. Click **Submit**. It appears as *Pending Review* and you get a "received" email.




The DOI step of a new reference.

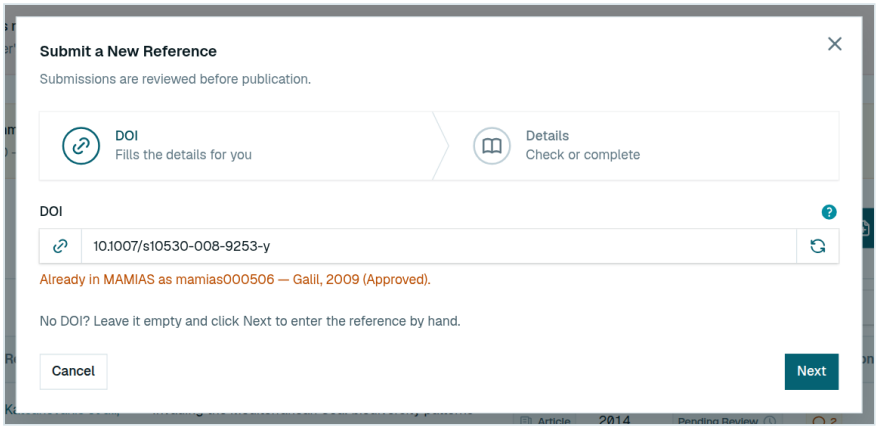
> **Tip.** "Already in MAMIAS as mamias000…" under the DOI means there is no need to submit it.

## Avoid submitting a reference twice

Where: My Bibliographic references › Add New Reference · about a minute

MAMIAS checks a DOI against the database before fetching anything from Crossref.

1. *Already in MAMIAS as mamias000…* under the DOI: the reference is already there. Stop here.
2. Nothing is fetched from Crossref in that case, so what you typed stays as it is.
3. *Looks like mamias000…* under the full reference: a very similar one exists. Check it is not the same publication before submitting.



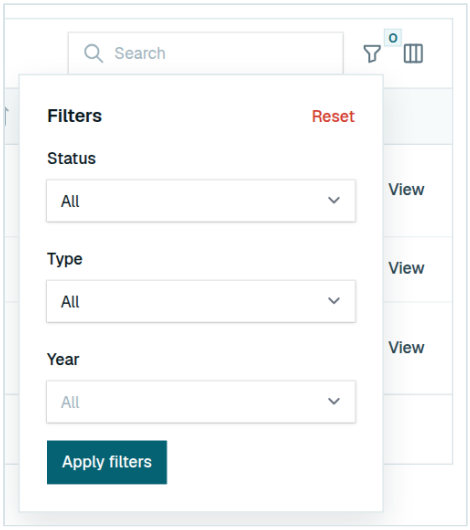

A DOI that is already in MAMIAS.

## Find one of your references

Where: Your menu › My Bibliographic references · about a minute

Each row shows the code (e.g. mamias000005), reference, title, type, year, status and file.

1. **Search** looks in the code, short reference, DOI and title.
2. The **filter** button narrows by status, type or year: choose, then **Apply filters**. **Reset** clears them.
3. Click the **reference** to open the publication. **PDF**, when shown, opens a free legal copy in a viewer.




The filters, by status, type and year.

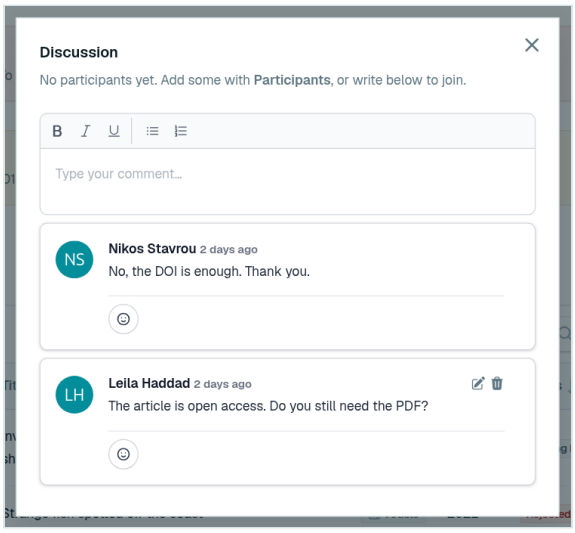
> **Tip.** A PDF you uploaded is for the reviewers only and is not shown in the list.

## Talk to the reviewers about a reference

Where: My Bibliographic references › Discussion badge · about 2 minutes

Every reference has a Discussion. It is also the place to disagree with a rejection, which is final for references.

1. Click the **Discussion** badge on the reference. Its number is how many messages it holds.
2. Write in the box at the top. Edit or delete your earlier messages with the icons on the right.
3. An **amber** badge, and a banner at the top of the page, mean new replies since your last message. Replying clears it.




A discussion between the submitter and a reviewer.

> **Tip.** A rejected reference cannot be sent again; common reasons are out of scope, not a usable source, or already in MAMIAS.

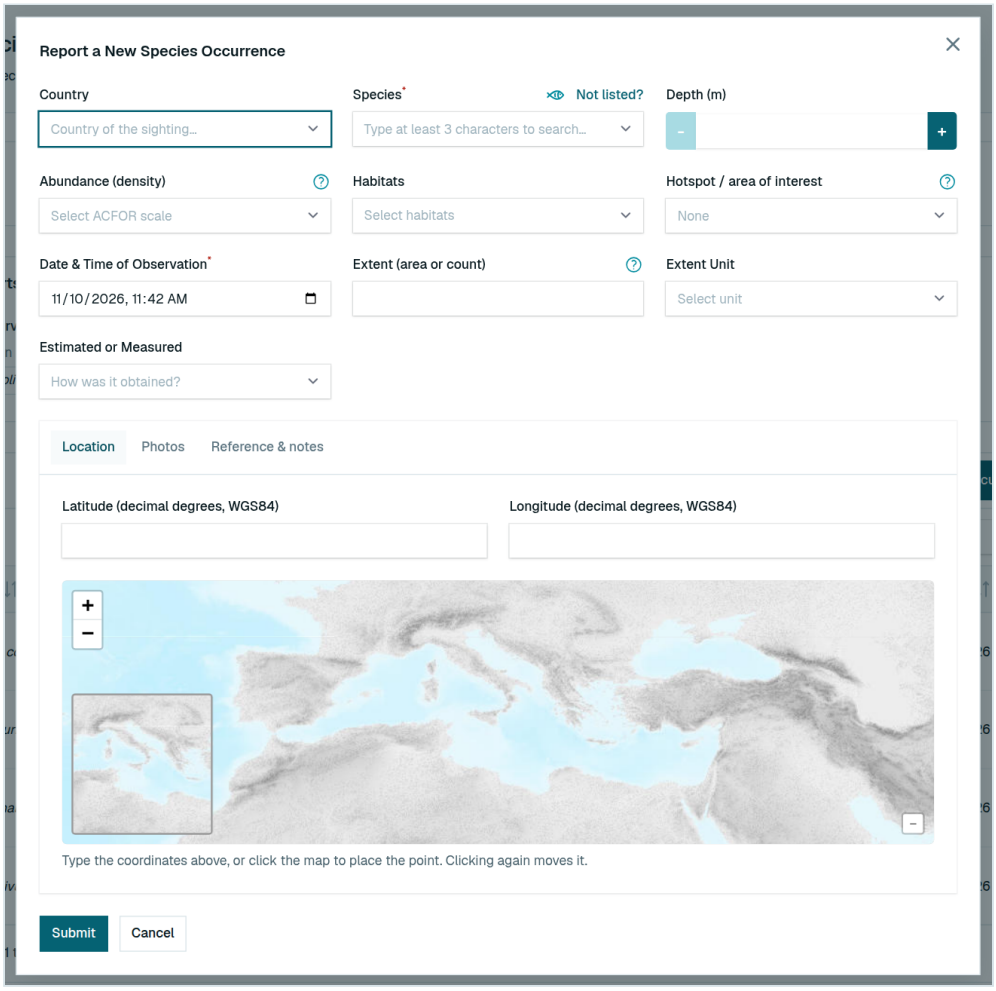
## Report a sighting

Where: Your menu › My Species Reports › Report New Occurrence · about 4 minutes

Only species already in the catalogue can be reported. Each report is checked before it is published.

1. Pick the **Country** (optional; species first recorded there come on top), then the **Species**: type at least three letters.
2. Set the **Date & Time of Observation**, and as far as you know them **Depth**, **Abundance** (ACFOR), **Habitats**, **Hotspot** and **Extent** (measured or estimated).
3. On **Location**, type the latitude and longitude or click the map, in the sea, not on the shore. The point must lie in the chosen country's sea area, or the form refuses it.
4. Add **Photos** (JPEG, PNG or WebP, 5 MB each) and, under **Reference & notes**, the publication and how you identified it.

5. Click **Submit**. It appears as *Pending Review* and you get a "received" email.




The sighting report form.

> **Tip.** The pin's bubble on the map sums up the report: species, coordinates, the fields you filled in and Observed on dd/mm/yyyy.

## Report a species MAMIAS does not list

Where: My Species Reports › Not listed? · about a minute

A species missing from the report form or the import template is not catalogued yet.

1. Click **Not listed?** above the Species field. My Species Suggestions opens in a new tab.
2. Suggest the species there.
3. Once it is accepted, report your sightings. For imports, download the template again: its list then includes the species.

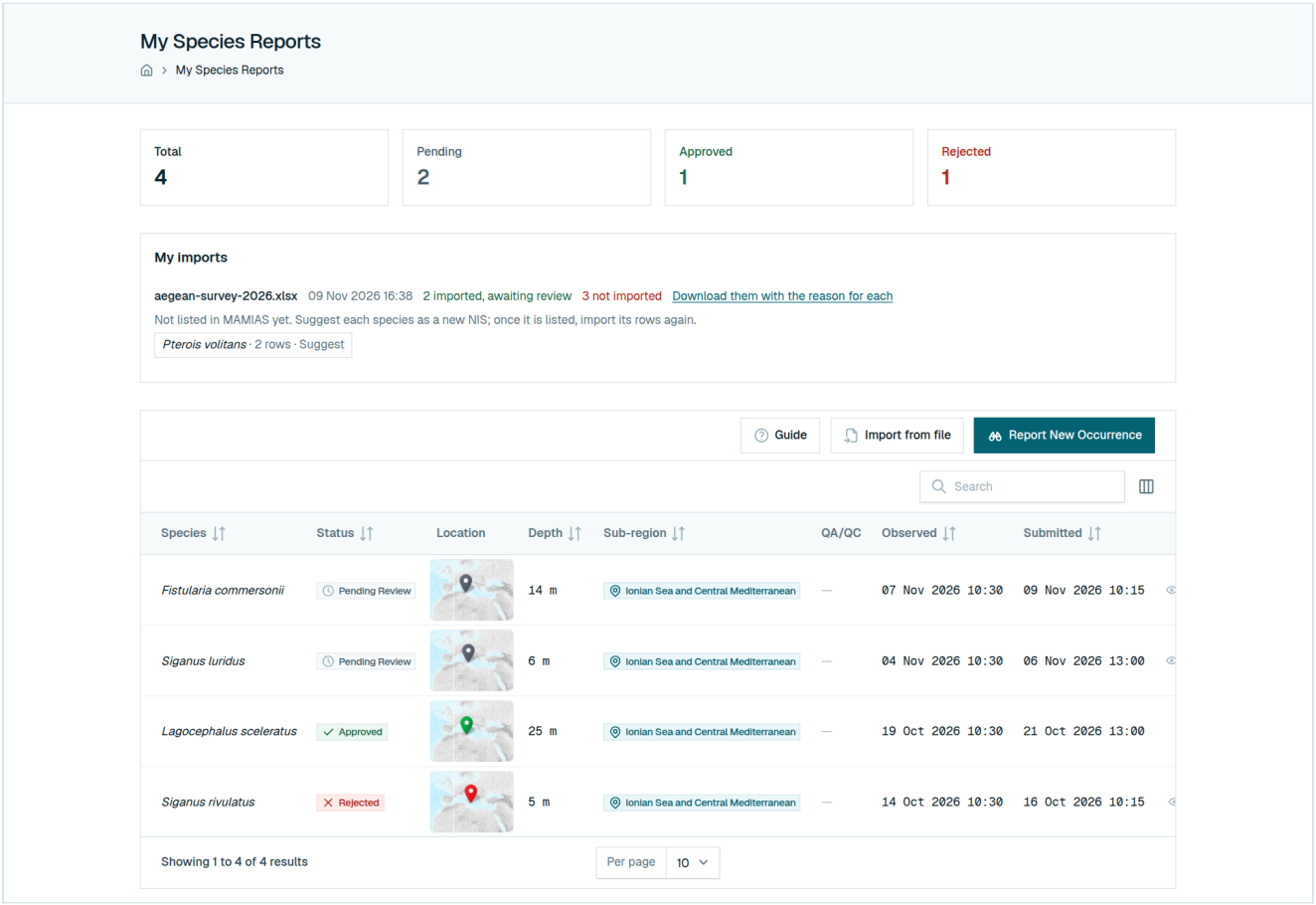
> **Tip.** An import row naming a valid species MAMIAS does not list comes back with a Suggest link that fills in the form.

## Read your list of reports

Where: Your menu › My Species Reports · about a minute

The counters give your Total, Pending, Approved and Rejected reports. The newest come first.

1. Each row shows the species, status, a small map, depth, and when you observed and submitted it, as dd/mm/yyyy.
2. The pin takes the status's colour: green approved, grey pending, red rejected.
3. Hover the **map thumbnail** for the same bubble as on the form: species, coordinates and the fields you filled in.
4. The row's actions (View, Withdraw, Revise & resubmit) are in its ⋮ menu.




My Species Reports, with its counters.

> **Tip.** An approved report appears on the species' page in the data explorer.

## Withdraw a pending report

Where: My Species Reports › ⋮ › Withdraw · about a minute

A pending report cannot be edited, but it can be withdrawn. An approved report can no longer be changed.

1. Find the report marked *Pending Review*.
2. Open its ⋮ menu and choose **Withdraw**.
3. Confirm. This cannot be undone.

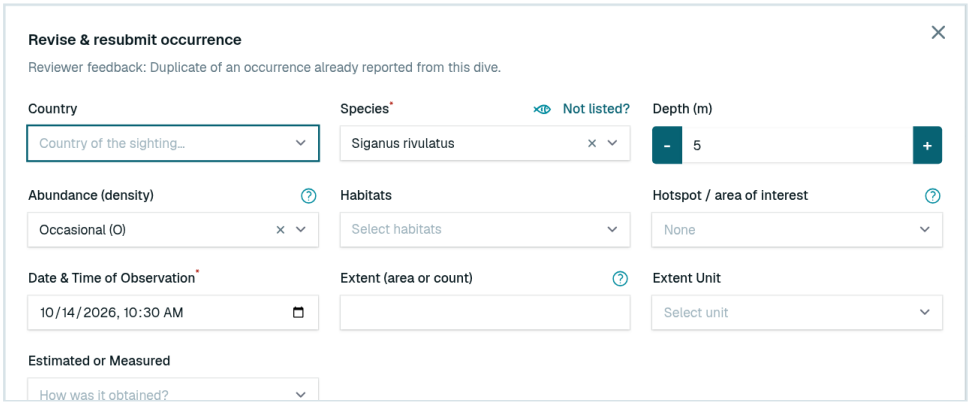
> **Tip.** Spotted a mistake in a pending report? Withdraw it and report the sighting again.

## Fix and resubmit a rejected report

Where: My Species Reports › ⋮ › Revise & resubmit · about 3 minutes

A report can be edited only once it is rejected. Common reasons are a pin on land, a native look-alike in the photo, or a sighting already reported.

1. Hover the *Rejected* status to read the reason.
2. Open the row's ⋮ menu and choose **Revise & resubmit**. The reviewer's feedback is at the top of the form.
3. Make the changes it asks for, then click **Resubmit for review**.
4. The report returns to *Pending Review*; reviewers see why it was rejected the first time.



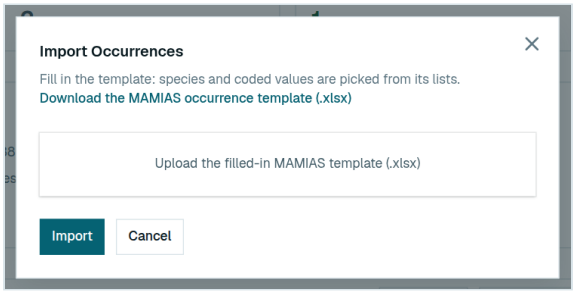

Revising a rejected report.

## Import many sightings from a file

Where: My Species Reports › Import from file · about 10 minutes

For surveys and logbooks. Only the MAMIAS template (.xlsx) is accepted: up to 500 rows and 5 MB per file, five imports an hour.

1. Click **Import from file**, then **Download the MAMIAS occurrence template**.
2. Fill in the **Occurrences** sheet, one sighting per row. Each row needs a species, a date and coordinates in the Mediterranean; species, abundance, habitats and country come from dropdown lists.
3. Upload the file, check that each column matches the right field, and click **Import**.
4. Follow it under **My imports**; you also get an email when it finishes.




The import window, with the link to the template.

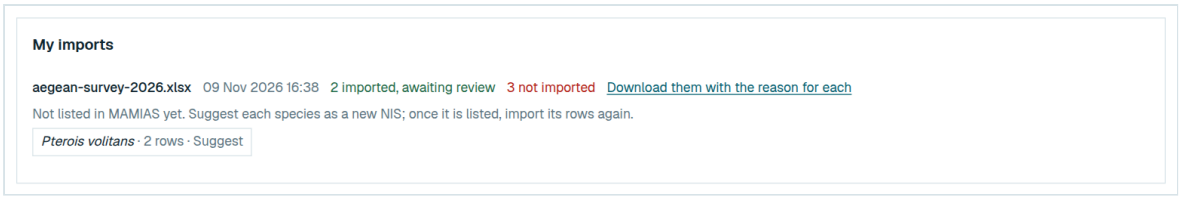
> **Tip.** Dropdowns do not open? Excel is in Protected View: click Enable Editing.

## Check what an import brought in

Where: My Species Reports › My imports · about 2 minutes

The import runs in the background. Every imported sighting waits for review like any other report.

1. Open **My imports** at the top of the page for progress and result.
2. Download the file of rows that were not imported, each with its reason.
3. Correct those rows and import that file again. A row you already reported (same species, date and point) is skipped, not doubled.




My imports: what came in, what did not, and species to suggest.

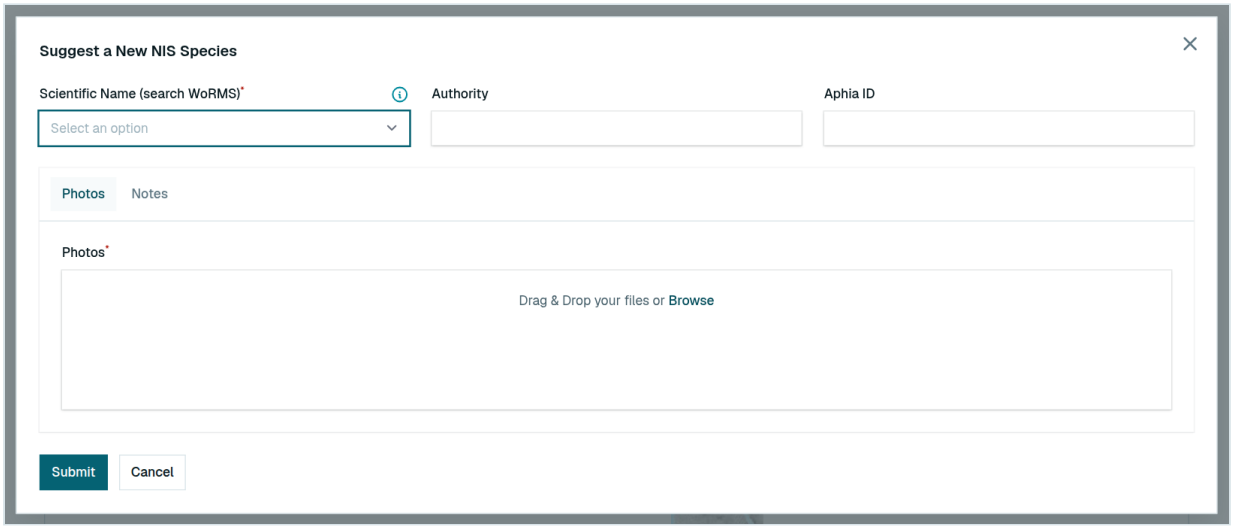
> **Tip.** Species MAMIAS does not list are named with a Suggest link.

## Suggest a new species

Where: Your menu › My Species Suggestions › Suggest New NIS · about 3 minutes

For a species MAMIAS already lists, report a sighting instead.

1. Click **Suggest New NIS** and type at least four letters of the **Scientific Name**. Names come from WoRMS; prefer the one marked *[verified]*.
2. **Authority** and **Aphia ID** fill in by themselves.
3. Add **Photos** (required; JPEG, PNG or WebP, 5 MB each).
4. Under **Notes**, link the publications that record it in the Mediterranean (**+** adds one by DOI). Click **Submit**.




The species suggestion form.

> **Tip.** An approved species joins the catalogue as a draft for the team to complete before it is published.

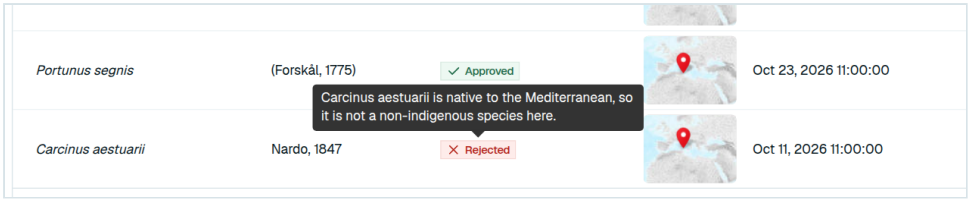
## Change, discuss or resubmit a suggestion

Where: Your menu › My Species Suggestions · about 2 minutes

Common rejection reasons are a native species, one already catalogued, or not enough evidence it was found here.

1. While a suggestion is *Pending Review*, **Edit** opens the form again. Once decided, it can no longer be edited.
2. Click **View**; at the bottom, **Discussion** is where you talk with the team. Replies are not emailed, so look back for them.

3. If rejected, hover the status for the reason, then click **Resubmit**. A new copy goes back to *Pending Review*; edit it to add what was missing.




The reason for a rejection, on hover.

> **Tip.** The rejected suggestion stays in your list beside the new copy.

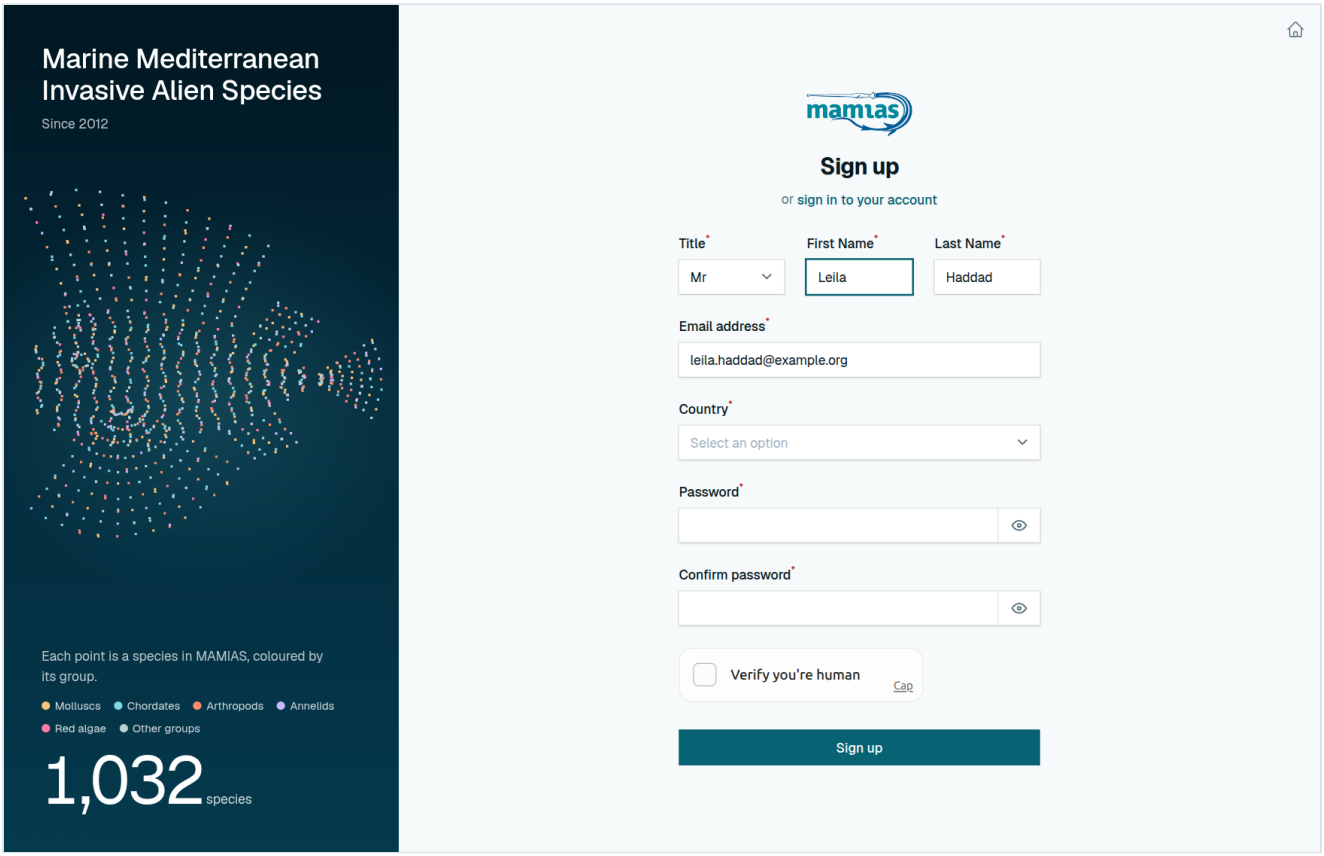
## Your account

### Create an account

Where: Sign in › sign up for an account · about 2 minutes

You need an account only to contribute. It is free.

1. Open **/login** and click **sign up for an account**.
2. Fill in your title, first and last name, country, email address and a password, then tick the human check.
3. Click **Sign up**. MAMIAS emails you a confirmation link.
4. Click **Visit MAMIAS** in that email to confirm your address.




The sign-up form.

> **Tip.** Until you confirm your address you can sign in, but not contribute.

## Confirm your email address

Where: Confirmation email · about a minute

MAMIAS sends a confirmation link when you sign up or change your email address.

1. Open the email and click **Visit MAMIAS**.
2. No email after a few minutes? Check your spam folder.
3. Still nothing: use the link on the confirmation screen to send it again.

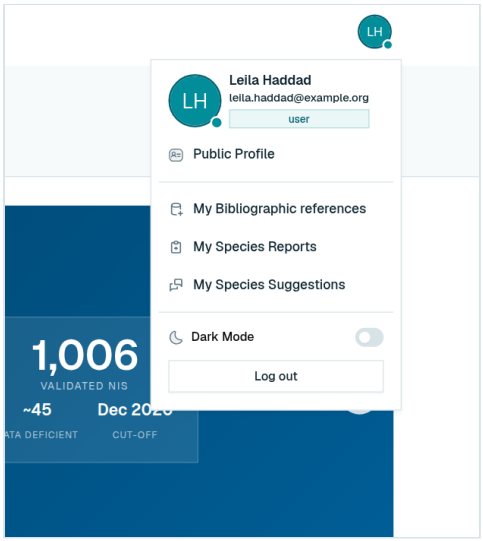
> **Tip.** Can sign in but not open My Species Reports? Your address is not confirmed yet.

## Sign in and out

Where: Sign in (/login) · about a minute

After signing in you land on the home page.

1. Open **/login** and enter your email and password.
2. Click **your name** at the top right to open your menu.
3. It holds **Public Profile**, **My Bibliographic references**, **My Species Reports**, **My Species Suggestions** and **Log out**.




Your menu.

## Reset a forgotten password

Where: Sign in › Forgot password? · about a minute

You can reset your password yourself.

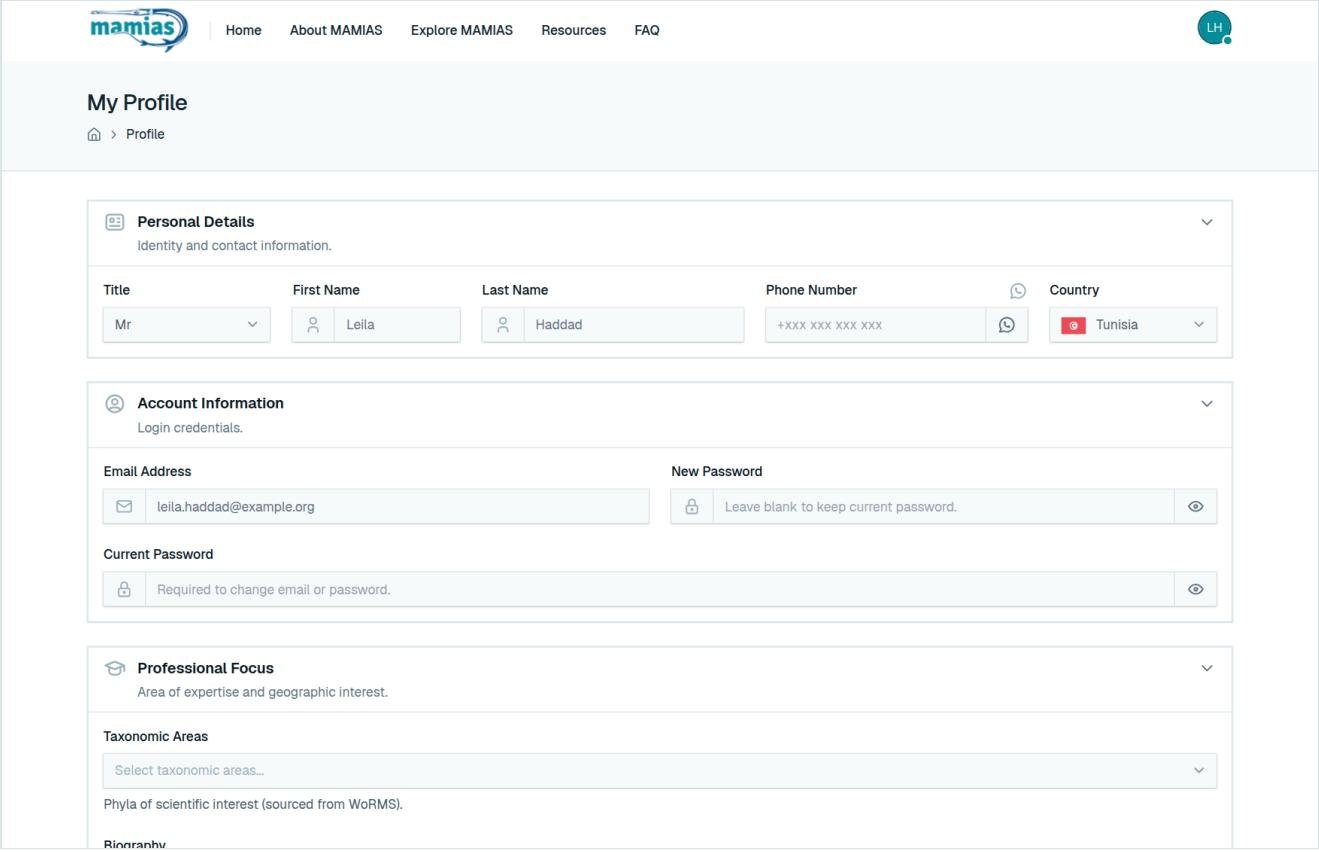
1. Click **Forgot password?** on the sign-in page.
2. Enter your email address. MAMIAS emails you a link.
3. Open the link and choose a new password.

## Keep your profile up to date

Where: Your menu › Public Profile · about 2 minutes

Your profile helps the MAMIAS team know whom to ask about a record.

1. **Personal details**: title, name, phone (a button checks whether it is on WhatsApp) and country.
2. **Account**: email address and password. A new email address must be confirmed again.
3. **Professional focus**: the taxonomic groups you know, a short biography, and the EcAp sub-regions and countries you work in.
4. Click **Save Data**.




Your profile.

## Know which emails MAMIAS sends

Where: Your inbox · about 2 minutes

MAMIAS emails you only about your own account and submissions. Their buttons open the site in a normal browser tab.

1. **Account**: confirm your address when you sign up or change it; reset your password when you ask.
2. **Received**: each reference, sighting report or species suggestion you submit is acknowledged as received and pending review.
3. **Decided**: another email when it is approved or rejected, and when an import from file finishes.
4. **Comments**: a reviewer's new comment on your reference. Suggestion discussions are not emailed.

> **Tip.** The Terms of use set the conditions for contributing; the Legal notice names the publisher and host.