

MycoMatch User Manual

Version 1.1.4 (build 42)

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Introduction

MycoMatch helps you identify mushroom species found in the Pacific Northwest of North America. You describe what you see — cap color, gill attachment, spore color, size, habitat, and dozens of other visual and physical characteristics — and the app ranks species by how well they match.

Think of it like shopping for products online. You narrow down the possibilities by filtering on features until you find likely candidates. Instead of searching for *“women’s running shoes, brown, size 9, wide width”*, you search for *“gilled mushroom, brown cap, 2 cm wide, 5 cm high, black gills, growing on wood chips.”*

Privacy Notice: MycoMatch does **not** collect any data whatsoever about you, the user. The only connection this app makes to the internet is to let you look up more information about a species on outside websites. Everything else — matching, browsing, your favorites lists — works entirely offline, on your device.

Caution: Never eat any mushroom based solely on this or any other single source.¹ Always confirm unfamiliar mushrooms using many sources, particularly by checking with more experienced mushroom identifiers. When in doubt, do not eat the mushroom.

What you can do with this app

- Use the app without an internet connection — the full species database, photos, and descriptions are bundled on your device.
- Browse hundreds of species and thousands of photos.
- Select the criteria that describe what you observe and understand.
- Choose from dozens of characteristics of the cap, stipe (stem), gills, spores, habitat, taste, smell, and more.
- Read detailed scientific descriptions drawn from many sources.
- Check other websites for more information about the same species.
- Tap mycological terms and references to see definitions and details.
- Choose in any order what to observe — unlike a printed dichotomous key.
- Compare the facets (features/characters) of multiple candidate species side by side.
- Look up mushrooms you already know by scientific or common name.

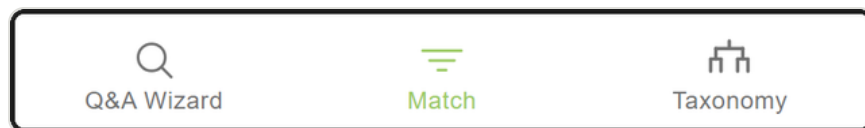
No image recognition

MycoMatch does **not** use image recognition to try to identify your mushroom for you — you describe what you see, and the app finds species matching that description.

The authors of this app do not recommend relying on apps that use image recognition for several reasons:

- You have to know how to provide good images — many species look alike from certain angles, or have similar gills. Many bald men look the same from above.
- Nearly all of these apps disclose neither how they were trained nor the range of species they are trying to identify.²
- Even a strong image-recognition system still requires good photos and an understanding of that tool's limits.

Three ways to search, one shared species database



Q&A Wizard, Match, and Taxonomy tabs

MycoMatch offers three complementary ways to find a species, so you can start wherever your own knowledge and observations happen to begin. All three work from — and feed back into — the same set of selected facets, so switching between them never loses your progress.

- **Q&A Wizard** — Answer simple guided questions; no mycology vocabulary required. A question calculation engine picks whichever remaining questions will narrow the field the most.
- **Match** — Tap the facets you can observe yourself, organized into sections (cap, gills, stem, habitat, and more). Results re-rank live as you go. This is the primary tab of the app.
- **Taxonomy Tree** — Browse or search the full tree of life, from Kingdom down to species, for when you already know — roughly or precisely — what you're looking at.

The **Q&A Wizard** and **Match** tabs work together — wizard answers feed directly into facet selections, and facets you select on **Match** affect which questions the **Q&A Wizard** asks next.

Keeping up to date

The data behind this app has been collected over many years from a wide range of sources by expert mushroom identifiers, and is updated with each new release. This manual documents app version 1.1.4 (build 42). To get the latest information and the newest species, download the latest version from the iPhone App Store or the Android Play Store.

Getting more help

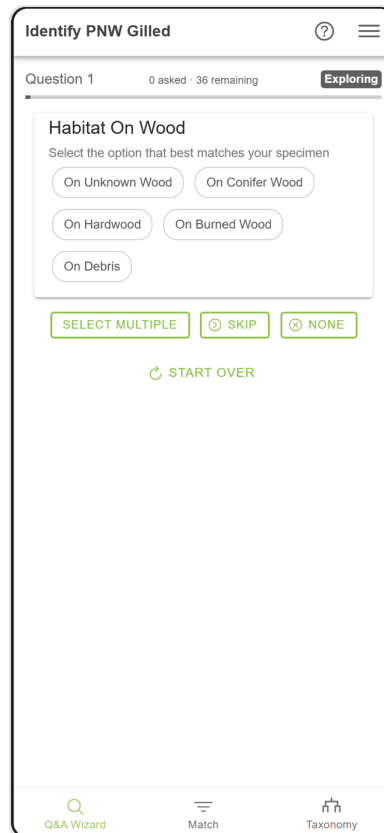
This manual describes every screen and dialog in the app. While you're using the app itself, most tabs and dialogs also have their own in-app **Help (?)** button in the toolbar, giving you a quick, screen-specific reminder without leaving what you're doing.

You'll also find many small help buttons right next to individual mycological terms wherever they appear — tap one to look up that term and learn the terminology as you go, without having to leave the screen you're on. See the [Glossary](#) chapter for more.

For bugs, feature requests, or general feedback, see [Contact Developers](#) in the App Menu chapter.

Q&A Identify Wizard

The Q&A Identify Wizard guides you through a series of questions about your mushroom's features. At each step it picks the single most useful question to ask next, progressively narrowing the candidate species with every answer.



The Q&A Identify Wizard

How questions are chosen

The wizard picks whichever question is most likely to split the remaining candidates roughly in half. A question that almost every remaining species would answer the same way tells you very little, so it's saved for later.

For example, say you're down to 20 boletes:

- *"Cap Color?"* — 10 species have brown caps, 10 have other colors, splitting the candidates evenly (50/50) → asked first.
- *"Stem Width?"* — 18 of the 20 species have medium stems, almost no split → asked later.

After just a few well-chosen questions, the candidate list collapses quickly, without you having to work through every possible characteristic.

For the mathematically interested: the engine uses Bayesian inference to update each species' probability after every answer, and selects the next question by maximizing expected information gain (entropy reduction).

Answering questions

Each question presents a set of options. Tap the option that best matches your specimen. When you don't know or forget the meaning of a possible answer, you can hit the help button by most possible answers.

- **Select multiple** — Switch to multi-select mode if more than one option applies. Tap all that match, then tap **Submit**.
- **Skip** — Skip the question if you're unsure. The wizard continues without recording an answer.
- **None** — None of the listed options match your specimen. This still counts as an answer — ruling out every option eliminates species that require one of those features.
- **Start over** — Clears all your answers and restarts the wizard from the beginning.

Progress bar

The progress bar and its badge show how well the wizard has narrowed the field:

Stage	Meaning
Exploring	Early stage; many candidates still possible.
Narrowing	The field is reducing with each answer.
Genus Level	Candidates are converging on a single genus.
Moderate Confidence	A leading candidate has emerged.
High Confidence	One species is strongly favored.

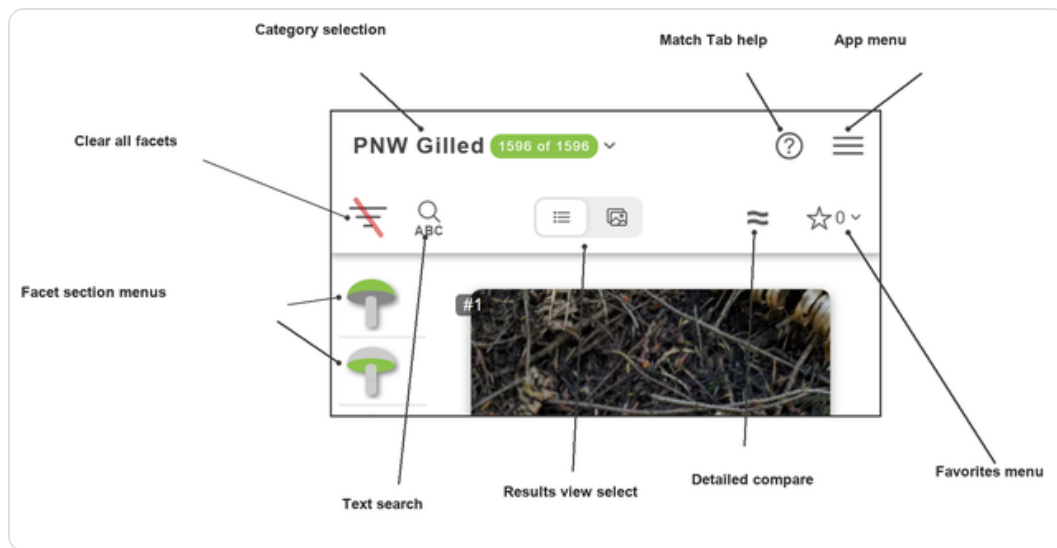
Viewing results

Your answers are applied as facet selections on the [Match](#) tab. When the wizard finishes — or you tap **View Results on Match Tab** at any time — switch to Match to see the ranked list of matching species.

Match Tab

The Match tab is the primary screen of the app. Select **facets** on the left to describe your specimen — the species results on the right rank by how well they match. Once the list is short enough, tap a species for [details](#).

You can also use the [Q&A Wizard](#) to answer guided questions instead — its answers feed directly into the same facet selections used here, so you can freely combine both approaches to narrow down the candidates.



The Match tab's buttons at a glance

Header

Top row

- **Category name and count** (e.g. "PNW Gilled — 9 of 67") — Tap the category name to open the [Category menu](#). The number shows how many species currently match your selected facets out of the total in the category. When **Show only favs** is on, it instead shows how many favorites match (e.g. "5 ★ of 120").
- **Help (?)** — Opens this tab's in-app help.
- **App menu (≡)** — Opens the [App Menu](#), with access to Settings, Bibliography, Glossary, About MycoMatch, Contact Developers, and Help.

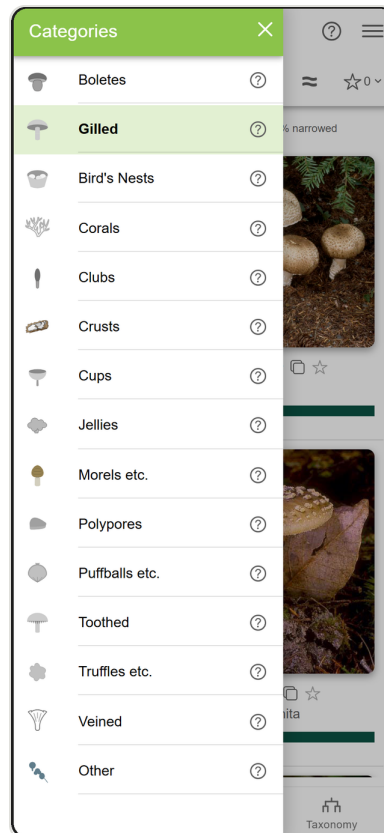
Action row

- **Clear all facets** — Clears every selected facet at once.
- **Text search toggle** — Shows or hides the text search bar (see [Search row](#) below). Its icon stays colored to show a search is active even while the bar itself is hidden.
- **Results view buttons** — Choose how matching species are displayed:
 - **List** (default) — a scrollable list with a thumbnail, names, and match score for each species.
 - **Gallery** — a photo wall showing every photo of every matching species, grouped with an alternating color tint. Tap any photo to open that species' details at that exact image. A +/- stepper at the top adjusts how many photos fit per row (2 to 5); your choice is remembered on this device.
- **Compare button** — Opens [Compare](#) in its own dialog: a detailed, spreadsheet-like table of your current species results and their facets, so you can spot which traits are shared or differ between candidates.
- **Favorites menu** — Opens the [Favorites menu](#). The number shown is how many species are in the active list; the chevron (▼) indicates there's a menu to open.

Search row (hidden by default)

- **Search fields** — Tap the funnel icon to choose which description fields to search (binomial name, English name, habitat, spores, etc.) Tap a field name to toggle searching that field on or off, and tap the reset icon to restore the defaults. The names of the currently active fields are shown in small text below the search bar and below the Match tool bar when the text search is closed.
- **Search bar** — Type text to filter the species list down to those matching your text in the selected search fields. The word searching uses a form of "fuzzy" spelling matching on the binomial name, the latin name(s), and the English Name(s), so you don't have to spell the names exactly right - particularly the vowels.

Category menu



Category menu

Tap the category name at the top of the Match tab to open the Category menu and switch which growth-form category you're browsing (gilled mushrooms, boletes, cups, and so on — MycoMatch covers all the major fungal forms found in field guides, not just gilled mushrooms). The currently selected category is highlighted. A ? next to each entry opens that category's own description.

Facet sections

Facets are grouped into sections — for example, every cap-related facet lives in the “Cap” section. Tap a section's icon to open its facet menu, and tap a group header inside that menu to expand or collapse it. The number badge on a section icon shows how many facets you've already selected in that section.

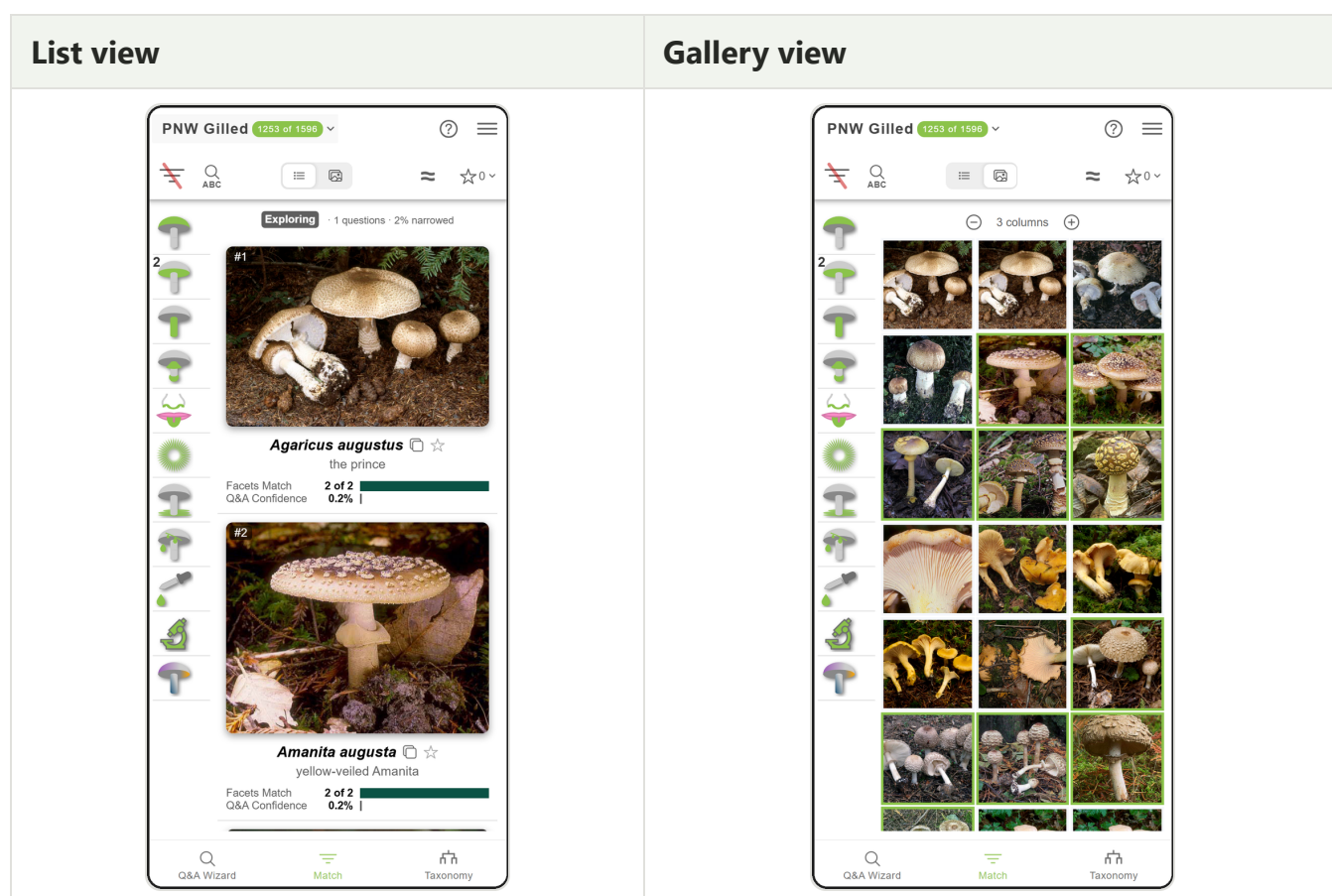
Each selected facet counts equally toward a species' match score. When selecting dimensions (like cap diameter), a good strategy is to pick only the minimum or maximum you actually

observed — there's no need to select every size you saw.

When you don't know or forget the meaning of a possible answer, you can hit the help button by most possible answers.

Species results

Species are ranked by how many of your selected facets they match. Tap a species' name or image to open its [details](#). There are two possible views — List and Gallery — selected using the results view buttons in the toolbar's [Action row](#) above.



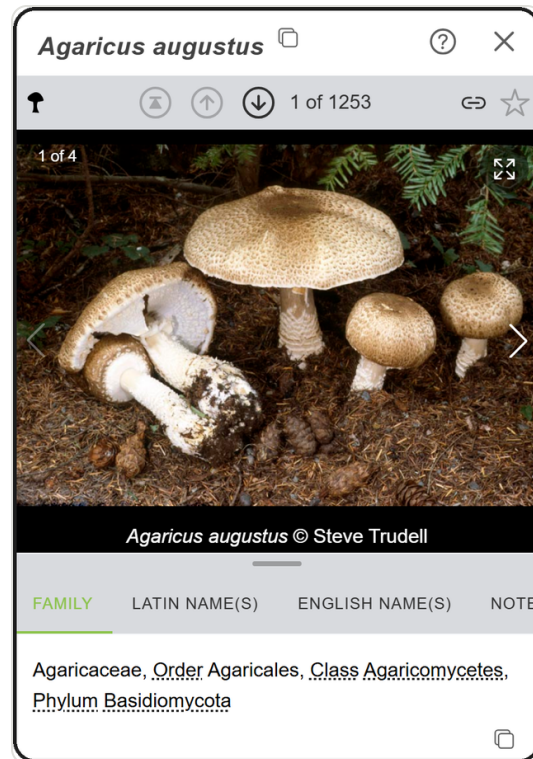
Next to each species' name in the results list:

- **Copy name** — Copies the species' scientific name to the clipboard.
- **Favorite (★)** — Adds or removes the species from your active favorites list (see [Favorites & Lists](#)). The star is dimmed and inert while the active list is locked.

For links to external websites about a species, open its details — the link icon is in the details header (see [External Links](#)).

Species Details

The Details dialog shows comprehensive information about a single species — images, descriptions, and provides navigation through your current results list. Open it by tapping a species' name or image from the [Match](#) results, the [Q&A Wizard](#), or the [Taxonomy Tree](#).



Species Details

Header

- **Help (?)** — Opens this dialog's in-app help.
- **Close (X)** — Closes Details and returns to the previous screen.

Navigation

- **Go to first** — Jumps to the first species in your current results.
- **Previous / Next** — Moves to the previous or next species in your current results.
- **N of M** — Shows your current position in the results list.

- **External links** — Opens a list of links to external websites for more information about this species. See [External Links](#) below.
- **Favorite (★)** — Tap to favorite this species; tap the filled star to remove it from your active favorites list.

You can also swipe up or down anywhere in Details to move to the next or previous species in your results.

Image viewer

Swipe left or right on the photo to browse that species' other photos. Swipe up or down to move to the next or previous species, same as elsewhere in Details.

- **Expand** — Opens a fullscreen image viewer for the photos of the current species.

Description sections

Below the images, expandable sections contain detailed species information (family and taxonomy, names, notes, and more depending on the category). Tap a section header to expand or collapse it. Your open/closed preferences for these sections carry over as you move between species — see also the **Wrap detail section tabs** setting in [Settings](#).

External Links

Opening **External links** shows a list of outside websites you can search for more information about the current species:

- **iNaturalist** — taxa search
- **MycoMap**
- **Alpental Mushrooms** (D. Miller's website) — its search includes many of the same images and species as this app, but also more information including recent DNA analysis (look for links containing *ddd* in the path)
- **Wikipedia** (English)
- **Google images**

There is no guarantee a species will be found on any of these outside websites, and the app's authors do not guarantee or endorse the information found there. Be particularly cautious of AI-generated summaries. Results may include images or information about a different, similar-looking species, and other sites may use a different taxonomy or binomial name than this app, since each site updates on its own schedule.

Compare

Compare opens as its own dialog from the **Compare** button in the [Match](#) tab’s toolbar. It shows a spreadsheet-like table of your current species results and their facets — the nitty-gritty details behind the scoring — so you can spot which traits are shared or differ between candidates. It’s best viewed in wide, landscape orientation. This table is a lot less overwhelming if you narrow it down to a short list of species first — usually by building a [favorites list](#) of just the candidates you want to examine, then using the ★ **Only** chip described below.



The screenshot shows a window titled "PNW Gilled" with a close button (X) in the top right corner. Below the title bar, there's a status bar showing "1253 of 1596". The main area contains a table with facets at the top: "All", "Selected", and "Diffs". To the right of these facets are two buttons: "☆ Only" and "?". The table itself has a header row with "Species" and "Diameter > <". The "Species" column lists various species names with a "2:2" ratio below each. The "Diameter" column is expanded, showing six sub-columns: "2.5-5mm", "5-10mm", "1-2.5cm", "2.5-5cm", "5-10cm", and "10-15cm". Each row represents a species, and the cells in the diameter columns contain checkmarks indicating the presence of that species in that diameter range.

Species	2.5-5mm	5-10mm	1-2.5cm	2.5-5cm	5-10cm	10-15cm
Ag. augu. 2:2					✓	✓
Am. augu. 2:2				✓	✓	✓
Ca. form. 2:2			✓	✓	✓	✓
Ch. oliv. 2:2				✓	✓	✓
Co. pero. 2:2			✓	✓	✓	
Hy. capn. 2:2			✓	✓	✓	
Le. cere. 2:2			✓	✓	✓	
Ma. cand. 2:2	✓	✓	✓	✓	✓	
Ma. plic. 2:2		✓	✓	✓	✓	
Pl. porr. 2:2				✓	✓	✓
Ag. abru. 2:2			✓	✓	✓	
Ag. albo. 2:2					✓	✓

Compare view

Facet chips

Three chips at the top of the table control which facet **columns** are shown:

- **All** — shows every facet relevant to the compared species.
- **Selected** — shows only the facets you currently have selected.
- **Diffs** — shows every facet, but one that every compared species shares (no current difference) collapses to a thin blank column instead of being hidden. See [Facet columns](#)

below for what that thin column means and when it's worth expanding back out.

A separate ★ **Only** chip narrows the table's **rows** — which species are compared — down to your favorites, rather than affecting which columns show. Tap it again to bring back every filtered result.

Species name column

The first column lists each compared species.

- Tapping the toggle button below **Species** switches every name in the column between abbreviated ("*Am. musc.*") and full ("*Amanita muscaria*").
- A favorite star appears next to each name, letting you add or remove that species from your favorites — but only when names are set to Full; switch to Full if you don't see it.
- Once you have facets selected, a small *n:m* ratio appears next to each name — that species' matching facets out of your total selected facets. Tap the name itself to open that species' [Details](#).

Facet columns

Tap a facet's column header to select or deselect it for scoring — this changes your selection everywhere in the app, not just in Compare. Deselecting an already-selected facet asks you to confirm first, since it removes it from scoring everywhere, not just from this table.

Under the **Diff** chip, a facet with no current difference between the compared species collapses to a thin blank column — no checkmarks, no label — instead of disappearing, so you can tell it's still there and switch to **All** if you want to see it in full. If that thin column is colored instead of plain gray, the facet is selected for scoring even though it isn't currently showing a difference — worth a second look before assuming **Diff**s is showing you everything that matters.

Facet groups

Facet columns are organized into **groups** (e.g. "Diameter") within **sections** (e.g. "Cap", one level up, spanning all of that section's groups). You can compact any of these down to a single

narrow summary column when you already know the answer for it and just want to reach other columns without scrolling past it:

- Tap a group's name, or the compact/expand icon next to it, to compact or expand just that one group.
- Tap a section header's name or icon to compact or expand *every group in that section* at once.
- The same icon in the table's fixed top-left corner, just above the **Species** label, compacts or expands *every group* in the whole table at once — reachable from a fixed spot no matter how far the table is scrolled.

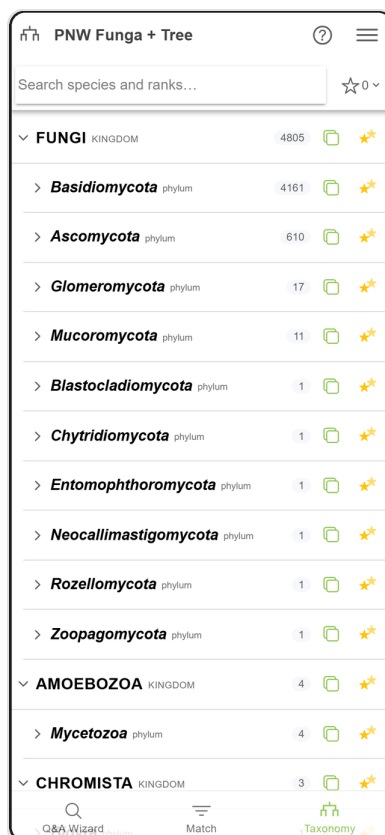
A compacted group's single column shows a small, light checkmark only if *any* facet in that group matches the species — a summary, not the exact per-facet result the expanded columns would show.

Table cells

A checkmark means the species has that facet. A **filled** checkmark means the facet is currently selected for scoring.

Taxonomy Tree

The Tree tab shows the full species database organized by taxonomy: Kingdom → Phylum → Class → Order → Family → Genus → Species. Use it to browse all species, check which groups are covered, or jump straight to a species you already know.



The Taxonomy tree

Header

- **Help (?)** — Opens this tab's in-app help.
- **App menu (≡)** — Opens the [App Menu](#).
- **Search bar** — Type at least two characters to filter the tree. Matches species (scientific and English name) as well as rank names — Kingdom, Phylum, Class, Order, Family, and Genus. A rank match reveals that row plus its immediate children, so you can see what's there without opening everything below it, and you can still tap further down from there to reach species normally. Non-matching nodes are hidden. Clear the bar to restore the full tree. The word searching uses a form of "fuzzy" word matching, so you don't have to spell the names exactly correctly.

- **Favorites menu** — Opens the [Favorites menu](#). The number shown is how many species are in the active list. Turning on **Show only Favorites** filters the tree to favorited species only, and works together with the search bar.
-

Tree structure

Each level can be expanded or collapsed by tapping its row. The count badge next to a row shows the total number of species under that node.

- **Collapsed row (▶)** — Tap to expand and show its children.
 - **Expanded row (▼)** — Tap to collapse and hide its children.
 - **Press and hold the chevron** — Keeps expanding two levels at once instead of one, for as long as you hold. Hold again on a newly revealed row to keep going deeper.
 - **Copy** — Copy just this row's name, its full path from the top rank down to this row, or — on any non-species row — a list of every species below it.
 - **New fav list** — Prompts for a name, then creates a new favorites list containing every species below this row and makes it the active list. Useful for building a working list for a whole family, order, or other group of interest.
-

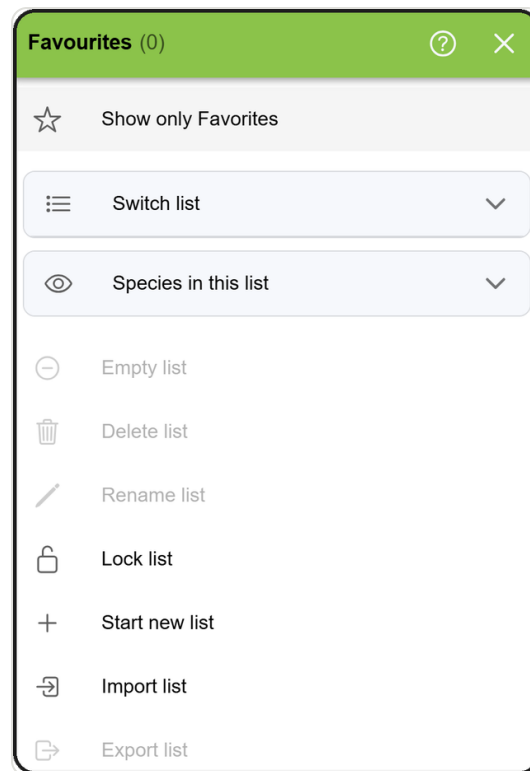
Species rows

Each species row shows an abbreviated name (*G. epithet*), its English name, and a small category icon showing which growth-form group it belongs to (gilled mushroom, bolete, cup, etc.).

- **Tap the name** — Opens [Species Details](#) with images, descriptions, and facets. Swipe up or down there to move to the next or previous species in the same genus.
- **Favorite (★)** — Adds or removes the species from your active favorites list. A filled star means the species is already in the list. The star is dimmed and inert while the list is locked.
- **Copy** — Copy just the species name, or its full taxonomic path from the top rank down to it.

Favorites & Lists

The Favorites menu lets you build, manage, and share named lists of species — a trip list, a life list, a list of toxic species to remember, or a list of species you'd like to find. Open it from any page by tapping the star button in the toolbar.



The Favorites menu

Header

- **Active list name and count** (e.g. *"My Favs (3)"*) — Shows the list you're currently building and how many species it holds. Tap it to switch lists or see all your lists.
- **Help (?)** — Opens this dialog's in-app help.
- **Close (X)** — Closes the menu.

Menu items

- **Show only Favorites** — Filters the species list (and the Taxonomy Tree) to show only species in the active list. Tap again to show everything. A filled amber star means the filter

is on.

- **View list** — Opens a summary of every species in the active list, grouped by category. Tap the clock icon next to a species to see when it was added, or the bin icon to remove it from the list.
- **Empty list** — Removes every species from the active list but keeps the list itself (asks for confirmation first). Disabled while the list is locked.
- **Delete list** — Permanently deletes the active list and all its species. The default list can't be deleted. Disabled while the list is locked.
- **Rename list** — Changes the active list's name. The default list can't be renamed. Disabled while the list is locked.
- **Lock / Unlock list** — Locking prevents accidental changes: species can't be added or removed, and the list can't be renamed, emptied, or deleted while locked. Tap again to unlock. This is handy for a reference list — a field guide, say — that you want to keep intact while still browsing it.
- **Start new list** — Creates a new, empty list and switches to it. You'll be prompted for a name; list names must be unique.
- **Import list** — Loads a list from a file on your device (JSON or CSV). See [Import](#) below.
- **Export list** — Saves the active list to a file on your device. Disabled when the list is empty. See [Export](#) below.

Export

Tap **Export list** and choose a file format. The file is saved automatically, with no extra steps.

Formats:

- **JSON** — Full round-trip format. Preserves species IDs, categories, timestamps, and the locked/unlocked state. Best for backing up a list or moving it to another device running MycoMatch.
- **CSV — names only** — A plain list of species names, one per line. Easy to read or edit in any spreadsheet or text editor.
- **CSV — all fields** — Includes name, categoryTag, id, and addedAt columns. Useful for processing the list in a spreadsheet or script.

Where the file goes:

- **Android** — Saved directly to the **Downloads** folder as MycoMatch_ListName_date.json (Or .csv). Requires Android 10 or later; on older devices the export explains the limitation

instead.

- **iPhone** — The native share sheet opens. Choose **Save to Files** to keep it on your device, or share it via AirDrop, Mail, or another app.

Import

Tap **Import list**, then choose a JSON or CSV file. Imported species are always added as a **new list** — they are never silently merged into your current list.

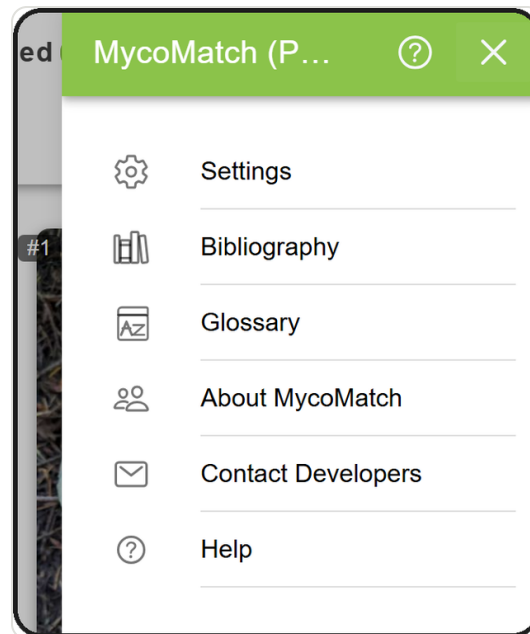
JSON import: The list name from the file is used by default; if that name is already taken you'll be asked to rename or overwrite. Species are re-matched against the current taxonomy — if one isn't found (for example, the database has been updated since the file was exported), it's imported as invalid and shown with a warning. The original list's locked state is restored.

CSV import: You'll be prompted for a list name, defaulting to the filename with the *MycoMatch* prefix and date stripped. Each row is looked up by name in the species database — rows with a `categoryTag` and `id` column are matched directly, while name-only rows are resolved by searching the full taxonomy.

Unrecognised species: Names that can't be matched to any species in the database are still imported, but flagged as invalid. They appear at the top of the View List screen under *"Imported but not matched to a species"* with a warning icon, and can be removed individually from there. This can happen if a name is misspelled, uses an older taxonomy, or refers to a species not yet in the MycoMatch database.

App Menu

The App Menu is opened from the ☰ button in any tab's toolbar.



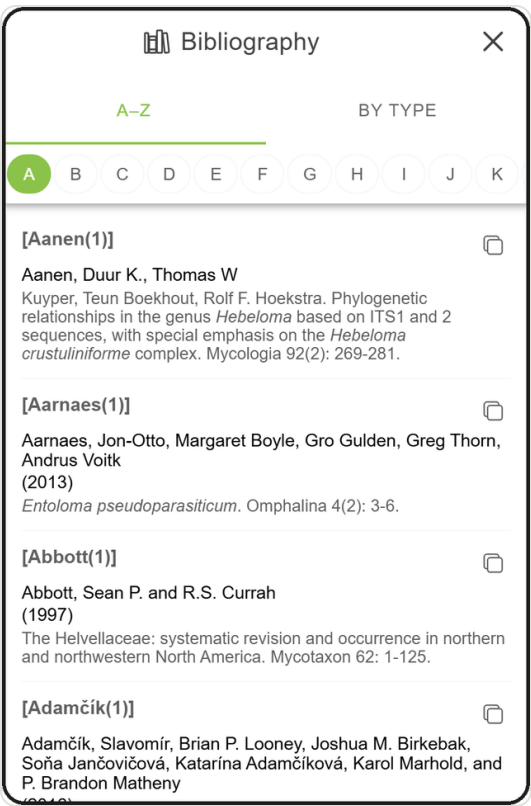
The App Menu

Settings

App-wide preferences:

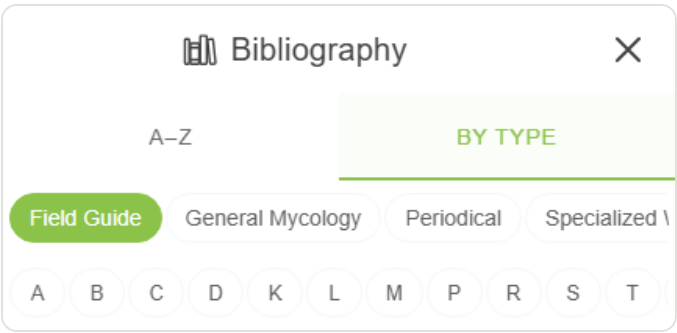
- **Show photoless species** — Whether species that have no photos are included in results.
- **Wrap detail section tabs** — How the description-section tabs behave on the [Species Details](#) screen when there isn't room to show them all at once.
- **Swipe photo to change species** — Whether swiping a photo in Species Details moves to the next/previous species, as described in [Image Viewer](#). On a small phone screen, up/down swipes on a photo compete with other gestures, so this reduces the number of possible actions available on the photo itself. If you find yourself accidentally navigating to the next species while trying to do something else with a photo, turn this off.
- **Start tab** — Which tab (Q&A Wizard, Match, or Taxonomy) the app opens to.

Bibliography



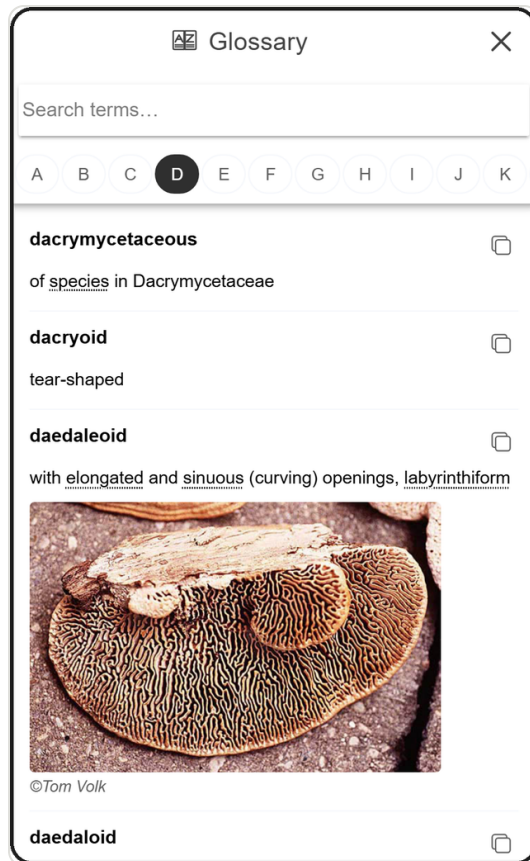
Bibliography

Sources and references for mycology in general — not just the ones directly cited in species descriptions, but many other references useful for further reading and research. Switch between an **A–Z** view and a **By Type** view using the segment control, then jump around with the letter (or type) chips. Each entry shows the author, title, and publication details; tap the globe icon to open its source URL if it has one, or the copy icon to copy the full citation.



Top of the Bibliography dialog with By Type selected — type chips (Field Guide, General Mycology, Periodical, Specialized Works, ...) plus a secondary row of letter chips underneath

Glossary



Glossary

Definitions of the mycological terms used throughout the app. Search by typing in the search bar, or jump to a letter using the A–Z chips. Many entries include a reference photo. Underlined terms within a definition are themselves links to other glossary entries — tap one to jump straight to it. Tap the copy icon on an entry to copy its term and definition.

Glossary links like this appear throughout the app wherever an unfamiliar term is used — not just here in the standalone Glossary screen.

About MycoMatch

A list of the authors and photographers who contributed to the app, along with the technology used to build it.

Contact Developers

Send feedback, bug reports, or feature requests to the MycoMatch development team. Tap **Send Email** to open your email app with the address and subject pre-filled — a picture is worth a thousand words, so a screenshot is an easy way to show a layout bug or a place you'd like a UI change.

Help

Opens a quick overview of the app as a whole — what MycoMatch does and how its three tabs relate — rather than help for whichever tab or dialog you had open. For screen-specific help, use that screen's own **Help (?)** button instead.

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1. On-line discussion groups can be helpful, but never rely solely on just one on-line identification. You rarely know the experience of each person commenting — if you can comment, so can anyone else. If multiple people agree on an identification, that is more reliable. If there is not overwhelming consensus, do not trust the identification. When you ask, encourage those commenting to support their identification — the specific features they're going by, not just a name — so you (and others reading along) can judge the reasoning, not just the verdict.↩
 2. A possible exception is iNaturalist, which bases its suggestions on many human-confirmed observations. iNaturalist requires an internet connection to offer suggestions.↩