

Amanita Mushrooms Beginner's Guide

A Live Version Of This Guide Can Always Be Found Here:

<http://amanitaguide.com>

What are these mushrooms?

Are they the same as psilocin-containing mushrooms?

These mushrooms are fruiting reproductive bodies of species in section Amanita of the Amanita genus and are considered both toxic and psychoactive. They contain the isoxazole-derivative alkaloids ibotenic acid (IBO) and muscimol (MUS). Muscimol is a GABA-receptor agonist, while ibotenic acid is a glutamate-receptor agonist which can also serve as a prodrug for muscimol – in contrast, psilocin is a tryptamine alkaloid and serotonin-receptor agonist. Unlike psilocin-containing mushrooms which span about a dozen genera [1] (none of which are Amanita), muscimol-containing mushrooms are so far only known to be contained within the Amanita section of the Amanita genus

The known species in this section can be seen here:

<http://www.amanitaceae.org/?section%20Amanita>

Please note that not all species in this section are psychoactive and some may even contain medically significant quantities of amatoxins [2] [3]).

There are Amanita species in [Section Validae](#) that contain bufotenine, but those species will not be covered by this guide.

What kind of experience can I expect from these mushrooms?

The experience you will have will depend on a variety of factors including the dosage, the preparation, the IBO:MUS ratio, and even your own body chemistry and body weight. Effects will typically begin anywhere from 15 to 120 minutes after consumption (although it can take as long as 3 hours) and primary effects can last anywhere from 3 to 8 hours or even several hours more with large doses. General effects can include tiredness, a drunken feeling, nausea, pain relief and suppression, body euphoria, delirium, repetitive thoughts and actions, clarity of thought but decreased ability to articulate, inability to walk/move well, muscle twitching, increased energy accompanied by a need to move around, a warm/cozy feeling, a sense of well-being, sedation, a deep and long sleep, increased ability to lucid dream, dissociation / an out-of-body sensation, increased salivation and sweating, objects appearing larger or smaller than they are, some colors appearing deeper, and the ability to have an introspective or spiritual experience through meditation. In addition, based on anecdotal evidence, some people seem to build a tolerance when consuming frequently, while others report experiencing reverse tolerance effects. It is also important to mention

that, when taking an amount higher than you're used to, someone should be there to monitor the experience and make sure you are safe.

Small-dose effects can include mild to moderate relaxing euphoria and warm body sensations, increased ability to meditate, as well as light muscle spasms and a somewhat energetic feeling, soon followed by a sense of peace and sleepiness. Sleep can be renewing, with intense, vivid dreams that are difficult to recall in detail upon waking. It can also significantly reduce the number of times one wakes up during sleep.

Moderate-dose effects can include a clear-minded drunken feeling accompanied by heavier muscle spasms and thought loops. Increased grogginess upon waking, potential for sleeping through an alarm, and if woken up feeling disoriented.

High-dose effects can come on quicker and can include more visual elements to the experience. Objects with moving edges moving in a jarring flurry (unlike from psilocin which can have slower, cyclic, and relaxing visuals). Involuntary limb movement and twitching, sometimes getting to intense levels accompanied by convulsions. A waking dreamlike state, and possible prolonged comatose state potentially lasting over a day. Heavier thought loops which can include the sensation of being in limbo or a void and experiencing an ego death. Experiencing a feeling of death and rebirth, or of experiencing heaven and hell. Experiencing the birth of consciousness, along with the unraveling of your own consciousness and having to slowly reconstruct it layer-by-layer.

For more info see:

https://erowid.org/experiences/subs/exp_Amanitas.shtml

Since these mushrooms are natural does that mean they are 100% safe? I have heard people experience nausea, vomiting, and convulsions from these mushrooms, is this true?

Please see:

https://www.reddit.com/r/AmanitaMuscaria/comments/peaxlw/possible_negative_effects_from_psychoactive/

How can I prepare these mushrooms?

The basics of preparation for beginners involve two main components: moving the alkaloids from the mushrooms into water to bypass chitin consumption (a possible nausea factor for individuals with sensitive stomachs), and using a large amount of mushrooms to create a potent liquid to provide several doses for gradual experimentation (the liquid will contain the average potency of all specimens used).

IBO and MUS are highly water-soluble when the mushrooms are submerged in boiling water. If using fresh specimens, dice into smaller cubes or cut into thin slices. If using dried, use scissors to cut into small pieces (or alternatively, rip apart with your fingers) – do not grind into powder because it will make it more difficult to strain out at the end. Bring a pot of water to a boil, then add the mushroom

pieces and reduce to a simmer. Keep the pot lid on for the duration of the simmer, and maintain simmer for 20–30 minutes. By this point, almost all alkaloids will have moved from the mushrooms to the water and you may then discard the mushrooms (squeezing any remaining liquid into the pot first). A cheesecloth may be helpful for straining the mushroom pieces out.

Potency of individual specimens can vary dramatically. Use as many mushrooms as you have available for this method that will fit into the pot – if using dried, try to use at least 60 grams if not 100 grams – if using fresh, as many as will reasonably fit. The idea is to create a high-potency liquid that will allow time for experimentation and to find your preferred dose, then allowing several doses after this. Using individual mushrooms or prepping with small amounts does not allow controlled dosing and leaves the user guessing which could lead to no effects or effects they are not ready for. When preparing, record the mushroom weight you start with and the volume of liquid you end up with so you can do the math necessary to figure out the starting dose, always erring on the safer/lower amount. Take it during the day while you are awake to see what the effects are, and if nothing happens then increase the amount on a different day.

You can also decarboxylate the ibotenic acid in the liquid to whatever degree you want to reduce the chance of nausea/vomiting (more info [here](#)). Ibotenic acid rapidly decarboxylates when submerged in 2.5–3.0 pH liquid at ~100C with the lid on and will complete a full decarboxylation after three hours under these conditions, but for first getting acquainted with the mushrooms a 30–50% decarboxylation is recommended rather than 100% so you can also get to know the effects of ibotenic acid serving as a muscimol prodrug (since a small amount of ingested IBO is likely decarboxylated endogenously after consumption and adds its own characteristics to the experience). (Full details on how to decarboxylate [here](#))

Once you have your liquid, freeze any you are unable to use within a week in either a plastic freezer container and/or ice cube trays. You can thaw the container for a half hour and break off a piece for the refrigerator whenever you'd like, or you can freeze into separate smaller containers that have a week's worth of liquid each.

Preservation of prepared liquid using alcohol (tincture):

<https://www.shroomery.org/forums/showflat.php/Number/25702199>

After getting to know the mushroom and being comfortable with it you can start looking into different methods of preparation and see what works for you.

I just found one or a few mushrooms and I'd like to experience them for the first time, and I don't have access to any additional specimens:

If you only have access to a small amount, you can prepare the equivalent of 3 dried grams of *A. muscaria*, which is an amount that is usually large enough to feel something, but small enough that the chance of unwanted effects is low. If you are preparing from fresh mushrooms, it is usually safe to assume that the fresh weight is 10x what the dried weight would be (30 grams fresh would be equivalent to 3 grams dried) – however, if your fresh specimens do not contain much water and are

already somewhat dried out from a prolonged low-humidity outdoor environment, you will want to use a much lower number than 10x! – be careful!

I just found a lot of mushrooms or have access to many:

Make a liquid preparation with as many as you can, so that you have a liquid with an expected potency to work with and gradually increase over the period of days or weeks. Start with a very small amount, such as the equivalent to 0.5–1.5 grams dried material, and slowly work your way up each separate day while you're awake to experience the effects. If you ingest and fall asleep shortly after, do not take a larger amount the next day – since you were asleep you cannot truly know the effects of the amount you had taken.

How do I know if the mushrooms I found are a psychoactive Amanita species?

The basics of Amanita identification include learning the features needed to tell apart the species you're looking for from possible look alike species. Important features for Amanita identification include the cap appearance, distribution or lack thereof of universal veil remnants on the cap, the cap margin including possible striations, gill appearance such as truncation, annulus or lack thereof (after the cap has opened), stipe texture, volva-to-stipe transition appearance, volva appearance, vellum coloration, and smell, among other features. Here are some videos on learning how to identify various Amanita species:

<https://www.youtube.com/user/Seditious100/videos>

Very basic guide for making an identification post for suspected Amanita-species mushrooms:

- Country and state/province, non-abbreviated (i.e. Maine, United States)
- Picture of the mushroom in its undisturbed state in its natural habitat

Clear up-close in-focus pictures, in natural sunlight, of:

- Cap
- Cap Margin
- Gills
- Annular Zone
- Stipe
- Stipe-To-Volva Transition
- Intact Volva

What species grow in my area?

Many different species of psychoactive Amanita mushrooms grow all over the world. A list of species by country is being worked on:

https://www.reddit.com/r/AmanitaMuscaria/comments/us3hww/list_of_pschoactive_amanita_species_by_location/

But for now you can research many of them on your own by using this list as a reference:

<http://www.amanitaceae.org/?section%20Amanita>

Please note that while all psychoactive species will be found in this list, not all species in this list are psychoactive.

What is the difference between Muscarioid, Pantherinoid, and Gemmatoid?

- The type species for the muscarioid category (**A. sect. Amanita subsect. Amanita stirps Muscaria**), for subsection Amanita, and the entire Amanita genus, is Amanita muscaria var. muscaria.
- The type species for the pantherinoid category (**A. sect. Amanita subsect. Pantherinae**) is Amanita pantherina.
- The type species for the gemmatoid category (**A. sect. Amanita subsect. Gemmatae**) is Amanita gemmata.

These are three categories you may hear mentioned when people talk about psychoactive Amanita species, but there are also psychoactive species outside of these categories. In addition, each category contains many different species, and there are some parts of the world where the actual type species does not occur at all (for example, while A. pantherina is not found in North America, there are many other pantherinoid species that are). Some people consider pantherinoids and gemmatoids to all be pantherinoid, and it is thought that A. gemmata might not be a valid species at all [4]. Please note that pantherinoid species are believed to be significantly more potent than other commonly consumed species (i.e. A. muscaria), so you may need to consume a lot less than you would with, for example, muscarioid species.

Are there other kinds of mushrooms I might mistake for psychoactive Amanitas?

There are many species that can be mistaken, some of which are in the following genera:

- Agaricus**
- Amanita, Caesareae, Phalloideae, Roanokenses, Vaginatae, Validae**
- Armillaria**
- Calvatia**

- Cercopemyces
- Chlorophyllum
- Coprinellus
- Coprinopsis
- Coprinus
- Echinoderma
- Floccularia
- Lepiota
- Leratiomyces
- Leucoagaricus
- Lycoperdon
- Macrolepiota
- Megacollybia
- Oudemansiella
- Pholiota
- Psilocybe
- Russula

Will ibotenic acid give me brain lesions?

While ibotenic acid is used as an effective brain-lesioning agent in brain-related rat studies, there is no evidence available that it will cause lesions in human brains through normal oral consumption. Ibotenic acid is neurotoxic, however, and might carry similar risks to other neurotoxic substances such as ethanol/alcohol, but there are precautions to minimize these potential risks such as having control over the IBO:MUS ratio via decarboxylation of IBO, and frequency of consumption.

If I drink a carbonated beverage with these mushrooms will the CO2 re-carboxylate the muscimol and convert it back to ibotenic acid?

No. There is no danger of consuming carbonated beverages while having an Amanita experience. But please be aware that there are dangers associated with alcohol consumption (whether carbonated or not) when mixing with these mushrooms.

Is it okay to consume alcohol with these mushrooms?

A small amount is probably okay, but combining two GABAergic substances may pose an increased risk of respiratory depression (inability to breath) so it is probably best to avoid using alcohol with these mushrooms.

Does ibotenic acid get converted to muscimol in our bodies after ingestion?

A small amount is likely decarboxylated endogenously via GAD after consumption, due to muscimol-related symptoms occurring after IBO ingestion in addition to typical IBO-related symptoms [5]. Both IBO and MUS are present in urine after consuming the mushroom.

What ailments do people use these mushrooms to treat?

They are used to varying degrees of effectiveness for anxiety, depression, alcoholism (as a GABAergic substitute), and pain (especially when applied topically). *Please note that these uses are not FDA-approved or verified, and although some people may use these mushrooms for these reasons please note that this guide is for informational purposes only.

Should I use the entire mushroom? Or just the cap?

Most IBO/MUS is found in the area just below the cap skin, but both are present throughout the entire mushroom [6]. The stipes on average are about half as potent as the caps [7] and contain NAC and Alpha GPC which assist MUS through the ligand binding [8].

Can I make an alcohol-based tincture with the mushrooms?

Yes, please see:

<https://www.shroomery.org/forums/showflat.php/Number/25702199>

Can I drink my urine after ingesting the mushrooms, and will I feel psychoactive effects from it?

MUS and IBO are both present in urine after digestion, and can be recycled by drinking the urine up to seven times.

Can I smoke the mushrooms?

You can experience a psychoactive effect from smoking the dried mushrooms, but you would need to either smoke a lot at once or smoke them in concentrated form. To make a significant experience more likely you will need to focus on only smoking the cap material, so this would mean removing the gills prior to drying and also setting aside the stipe; you can then break the dried cap material into small pieces and smoke using a water pipe or vaporizer, fitting as much as you can into the bowl or chamber and taking multiple large tokes. You may get much better results creating a resin by performing a water extraction (see "How can I prepare these mushrooms?" above) and then reducing the liquid to a shelf-stable paste and smoking a small amount of that either by itself or with other leafy herbs. Recipes for creating a smokable resin can be found [here](#) and [here](#).

How can I microdose with these mushrooms?

For microdosing it is best to make a liquid extraction with many specimens to create an averaged potency (outlined in "How can I prepare these mushrooms?" above) so that you can work with an expected potency over the weeks you are dosing. You can decarboxylate the liquid to whatever extent you would like (recipe shortcut for 'rapid decarboxylation' at the bottom of the guide) and then either keep your broth refrigerated (will keep fresh 4 to 7 days) or frozen. If kept frozen you may find it helpful to either freeze into ice cube trays and/or freeze into small containers with a week's worth of liquid each to unfreeze when you'd like. Alternatively you can microdose using Amanita mushroom polymer (recipe shortcut for 'polymer' at the bottom of the guide) or even by keeping/chewing a piece of dried mushroom in your mouth (40-50C drying temp. for 35% decarboxylation all the way up to 80C for 80% [9]). There are many ways to microdose with these mushrooms, so find what works best for you with this section serving as possible inspiration.

(Microdosing is defined here as experimenting with a preparation, ideally of expected potency, until your threshold dose is found (threshold dose being the first dose you notice non-placebo effects) and then taking the dose just below the threshold. Some people might refer to microdosing as taking a threshold dose or even a small dose (a dose above threshold), and you are free to define it however you'd like.)

Is there a way to prepare the mushrooms as non-toxic non-psychoactive food?

Yes, since the alkaloids are highly water-soluble, you can almost completely remove them from the mushrooms by following these steps:

1. Bring a large pot of water to a boil. (Optional – have a second large pot of water also boiling at the same time.)
2. Slice the mushrooms thinly, and add them to the pot.
3. Boil for 10–15 minutes with the lid off, strain out the mushrooms, and discard the water completely.
4. Add the slices to a brand new pot of water (can use the second pot from the optional step to save time) and boil for 10–15 minutes again, straining the mushrooms, and discarding the water completely.
5. Cook the mushrooms like how you would normal culinary mushrooms. They will now be devoid of toxins or psychoactivity.

You can optionally save the discarded broth for psychoactive use and possible further preparation, but since a large amount of water is required to make this method effective, the broth will not be very potent and a lot would need to be consumed. To increase the effectiveness of this method, use thinner slices, a larger pot with a larger amount of water, longer boil time, and additional separate boils.

Does drying the mushrooms decarboxylate the ibotenic acid?

Depending on the temperature dried, you can get different decarboxylation percentages and different IBO:MUS ratios. Typical dehydration temperatures (40–50C/104–122F) can result in about 35% IBO decarboxylation, while higher temperatures can result in higher decarboxylation. However, higher temperatures can also result in a loss in overall potency, with temperatures exceeding 80C/176F

decreasing potency dramatically [9]. For rapid submersion-based decarboxylation you want to start with as much IBO as possible, and IBO levels are highest in fresh mushrooms. For more info please see:

https://www.reddit.com/r/AmanitaMuscaria/comments/usqdk8/drying_as_a_means_of_decarboxylation/

-Does boiling the mushrooms decarboxylate the ibotenic acid?

Without adjusting the pH value of the water to a sub-4.0 level, there will be almost no decarboxylation occurring (it would take about 20 hours to complete [10]). However, if the pH value of the water is adjusted to between 2.5–3.0, rapid decarboxylation will occur when simmering at 90–100C. More details here:

https://www.reddit.com/r/AmanitaMuscaria/comments/pf0e2k/easy_method_for_a_full_decarboxylation_of/

Can I grow my own?

The mycelium can be grown/cultivated at an extremely slow rate (about 1 centimeter per month), but it is likely impossible to achieve any significant fruiting bodies since Amanita species are mycorrhizal and live in symbiosis with a host tree. However, you can spread spore water at the base of favorable trees as often as you can, and one day you may be rewarded if you are lucky! Also of note is that the mycelium does not produce any ibotenic acid or muscimol [11].

What is the best growth stage or maturity stage to pick the mushrooms?

The mushrooms are most potent before the cap has opened [12]; however, any stage is fine to pick them as long as you can identify them with 100% certainty. They should be picked before they begin to rot and before too many worms are inside.

What is the best method of storing the mushrooms, and how long will their potency keep? Does storing the dried mushrooms for 3 months lower the ibotenic acid content?

For storing dried specimens you will first need to make sure they are fully dried so that they will snap when broken (if they are soft then they may need further dehydration). They can then be stored in an airtight glass jar away from light and heat. It is better to store the dried mushrooms in larger pieces if possible because the more they are broken up the more surface area will be exposed to oxygen. It is not recommended to store dried mushrooms in a plastic bag of any kind, including vacuum-sealed bags, since the material allows for significant oxygen exchange (however, storing in a plastic bag within a glass jar is fine). There are studies that show potency in dry storage only keeping for 1 to 2.5 months [9]; however, anecdotal reports state that the mushrooms maintain potency even after a few years if stored properly. In storage, the IBO content of dried mushrooms is lowered, but the MUS content is lowered simultaneously [9], so therefore it should be considered misinformation that storage lowers IBO content.

References:

1:

<https://www.shroomery.org/8461/Which-psilocybin-mushrooms-grow-wild-in-my-area>

2:

https://www.researchgate.net/publication/290509868_Molecular_identification_of_poisonous_mushrooms_using_nuclear_ITS_region_and_peptide_toxins_A_retrospective_study_on_fatal_cases_in_Thailand

3:

<https://www.facesoffungi.org/amanita-pyriformis-facesoffungi-number-fof-02072/>

4:

https://www.researchgate.net/publication/291185823_A_tale_of_two_names_-_Amanita_junquillea_A_gemmata

5:

https://namyco.org/docs/McIlvainea_Vol_2.pdf (p. 17, The Course of an Intentional Poisoning)

6:

<https://doi.org/10.1016/j.forsciint.2006.01.004>

7:

https://www.reddit.com/r/AmanitaMuscaria/comments/y8r1ry/stipes_contain_half_the_alkaloid_content_of_caps/

8:

<https://www.ncbi.nlm.nih.gov/pubmed/25437454>

9:

<https://doi.org/10.3358/shokueishi.34.153>

10:

<https://doi.org/10.1111/j.1471-4159.1985.tb04052.x>

11:

<https://www.facebook.com/groups/amanitascienceandmagic/permalink/687326465960878/>

12:

<https://sci-hub.se/https://doi.org/10.3358/shokueishi.34.18>

Recipe Shortcuts:

Basic water extraction (with optional decarboxylation):

https://www.reddit.com/r/AmanitaMuscaria/comments/y7u0z5/basic_water_extraction_wit_h_optional/

Decarboxylation via drying:

https://www.reddit.com/r/AmanitaMuscaria/comments/usqdk8/drying_as_a_means_of_dec_arboxylation/

Rapid decarboxylation via low-pH simmer:

https://www.reddit.com/r/AmanitaMuscaria/comments/pf0e2k/easy_method_for_a_full_de_carboxylation_of/

Tincture:

<https://www.shroomery.org/forums/showflat.php/Number/25702199>

Polymer:

https://www.reddit.com/r/AmanitaMuscaria/comments/s20umy/polymer_tek_for_psychoac tive_amanita_mushrooms/

Topical cream:

https://www.reddit.com/r/AmanitaMuscaria/comments/tgw59q/muscimol_topical_cream_r ecipe_for_nerve_pain/

Smokable resin:

<https://www.reddit.com/r/druggardening/comments/d44f11/comment/f07nudh/>
<https://www.reddit.com/r/druggardening/comments/ii5451/comment/g34hwbo/>

Location guide:

https://www.reddit.com/r/AmanitaMuscaria/comments/us3hww/list_of_psychoactive_ama nita_species_by_location/

Studies of interest:

https://www.reddit.com/r/AmanitaMuscaria/comments/w38mc7/amanitarelated_studies_o f_interest/

Vendor list:

<https://ko-fi.com/post/Vendor-list-H2H8HF7ZT>

Books:

Fly Agaric: A Compendium of History, Pharmacology, Mythology, & Exploration (covering many aspects of psychoactive Amanita mushrooms):

<https://www.amazon.com/dp/0578714426>

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<https://www.barnesandnoble.com/w/1140608186>

Amanitas of North America (coffee table book for learning about a selection of North American Amanita species):

<https://www.fungimag.com/store.htm>

Websites:

<http://amanitaceae.org/> (database of all known Amanita species)

<https://www.inaturalist.org/> (for documenting finds)

<https://mushroomobserver.org/> (for documenting finds)

Social media:

[Amanita Muscaria Science and Magic \(Facebook\)](#)