

**Here's a more detailed breakdown of each bullet point for a 3-hour reishi extraction class:**

1. Welcome and introduction to medicinal mushrooms and reishi
2. Instructor introduces themselves and gives a brief background on their experience with medicinal mushrooms
3. Brief overview of medicinal mushrooms and their health benefits
4. Explanation of what reishi is, where it comes from, and its history of use in traditional medicine
5. Overview of different extraction methods and their benefits
6. Explanation of the hot water and alcohol extraction methods, and how they differ in terms of what compounds they extract and their potency
7. Discussion of which method may be best for certain situations or individuals
8. Pros and cons of each method
9. Hands-on demonstration of hot water and alcohol extraction methods
10. Instructor demonstrates each method step-by-step, with explanations of each step
11. Students have the opportunity to watch and ask questions
12. Instructor emphasizes the importance of proper technique and equipment, and provides tips for getting the best results
13. Students will have the opportunity to practice both methods and compare the results
14. Each student will be provided with materials and equipment to practice both hot water and alcohol extraction
15. Students will be encouraged to compare the results of each method and discuss which they prefer and why
16. Instructor will be available to answer any questions and provide guidance as needed
17. Discussion of storage and usage of reishi extracts
18. Explanation of how to properly store reishi extracts to ensure potency and freshness
19. Tips for incorporating reishi extracts into daily health routine, such as mixing with tea or other beverages
20. Discussion of dosage and how much to consume for maximum health benefits
21. Health benefits of reishi and how to incorporate it into your daily routine
22. In-depth discussion of the many health benefits of reishi, including its immune-boosting properties, anti-inflammatory effects, and potential for reducing stress and anxiety
23. Discussion of how reishi can be incorporated into a daily health routine, and how it may be particularly beneficial for certain individuals or health conditions
24. Q&A session
25. Open forum for students to ask any remaining questions or seek further clarification on any topics covered in the class
26. Instructor provides additional tips and insights, and encourages discussion among the students

\*Extraction methods on Back\*

**Hot water extraction is a common method used to extract the beneficial compounds from medicinal mushrooms like reishi. Here are the steps for hot water extraction of reishi mushroom:**

1. Start with high-quality dried reishi mushroom. Use a coffee grinder to grind the dried reishi into a fine powder.
2. In a large pot, add 4 cups of filtered water for every 1 ounce of dried reishi powder. Bring the water to a boil.
3. Once the water is boiling, reduce the heat to low and add the reishi powder to the pot.
4. Stir the mixture well to ensure that the reishi powder is fully submerged in the water.
5. Let the mixture simmer on low heat for at least 2 hours. You can let it simmer for up to 4 hours to extract more of the beneficial compounds.
6. After simmering, turn off the heat and let the mixture cool down to room temperature.
7. Strain the mixture through a cheesecloth or fine-mesh strainer to remove the reishi powder.
8. Squeeze the cheesecloth or strainer to extract as much liquid as possible.
9. The resulting liquid is your reishi mushroom extract, which can be stored in the refrigerator for up to 2 weeks.
10. You can consume the reishi mushroom extract as is, or you can mix it with other liquids like tea or juice.

**Alcohol extraction is another common method used to extract the beneficial compounds from medicinal mushrooms like reishi. Here are the steps for alcohol extraction of reishi mushroom:**

1. Start with high-quality dried reishi mushroom. Use a coffee grinder to grind the dried reishi into a fine powder.
2. Place the reishi powder in a glass jar with a tight-fitting lid.
3. Add enough high-proof alcohol, such as vodka or Everclear, to completely cover the reishi powder. The ratio of reishi to alcohol should be about 1:5.
4. Seal the jar tightly and store it in a dark, cool place for at least 2 weeks. You can let it sit for up to 6 weeks to extract more of the beneficial compounds.
5. Shake the jar every day to ensure that the reishi powder is fully immersed in the alcohol.
6. After 2-6 weeks, strain the mixture through a cheesecloth or fine-mesh strainer to remove the reishi powder.
7. Squeeze the cheesecloth or strainer to extract as much liquid as possible.
8. The resulting liquid is your reishi mushroom extract, which can be stored in a dark glass bottle in a cool, dark place for up to 1 year.
9. You can consume the reishi mushroom extract as is, or you can mix it with other liquids like tea or juice.

# Edible Wild Mushrooms in Arizona:

## **Lobster Mushroom (*Russula brevipes* with *Hypomyces lactifluorum*)**



Lobster mushroom[\[iii\]](#) isn't a species. It's what happens when the parasitic fungus, *Hypomyces lactifluorum*, attacks a mushroom of some other species. The attacker grows over the mushroom in a thin, hard, red crust, eventually distorting the shape of the host mushroom as well as changing its color.

The crust derives its nutrition from the host and releases its own spores, while the host mushroom cannot produce spores at all—but the mycelium that produced the mushroom isn't harmed and can produce more mushrooms. It's difficult to identify the host species under the crust, but it's usually *Russula brevipes*, an edible but boring-tasting species on its own. *Lactarius piperatus* is another common host, a mushroom that, by itself, is too spicy for most people to eat. Fortunately, the *H. lactifluorum* infestation also alters the flavor to the point that regardless of the host species, lobster mushroom has a mild yet lovely slightly seafood-like flavor. Proper cooking or drying really brings out the taste[\[iv\]](#).

## **Boletes**



The Boletes are a group of mushrooms that all share the classic toadstool shape but have pores rather than gills under the cap (as opposed to those with pores but a shelf-like shape). Once, they were all lumped together in the same genus, but many of them have since been split off after it was discovered they aren't closely related to the others. Some boletes are poisonous, but many are good to eat. Arizona hosts at least three of the edible species.

**Kaibab Slippery Jack (*Suillus kaibabensis*)** is medium-sized, fruits prolifically, and has a slimy cap. **The Barrows Bolete (*Boletus barrowsii*)** is much larger, with a much thicker stem. **The King Bolete** is similar to the barrows, and a choice edible, but its scientific name is trickier—though once confidently referred to as *Boletus edulis*, the king may actually be a group of species. Since the taxonomy is still being worked out, it's hard to be sure which king reigns in Arizona.

## Golden Chanterelle (*Cantharellus cibarius*)



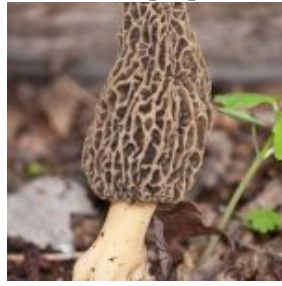
There are many chanterelle mushrooms, but this species is perhaps the most prized. It is large, yellow, and delicious. The vase-like shape and the presence of ridges rather than gills are distinctive, but misidentification is still possible.

## Oyster Mushroom (*Pleurotus ostreatus*)



“Oyster mushroom” can refer to any of a large group of mostly edible species, but when not otherwise specified, this one is *the* oyster. It is named for its vaguely oyster-like appearance when sitting cooked on a plate, not its taste, which is mild and delicate, with a soft, almost dry texture.

## Morels (*Morchella* sp.)



The morels<sup>[v]</sup> are a very distinctive group of delicious mushrooms, notable for their narrow, honeycombed caps. There are a few look-alikes (some of them toxic), but spotting the differences is not usually difficult. What is difficult is figuring out which morel is which, since many species are variable, almost identical to each other, or both. A single common name can refer to multiple species, or multiple common names can refer to the same species. Some species might not yet have scientific names at all.

Which scientifically-defined species Arizona has is hard to say. Going by the common names used by foragers, there are six that could be found in Arizona: [Yellow Morel \(\*Morchella esculenta\*\)](#), [Mountain Blond \(\*Morchella americana\*\)](#), [Black Morel \(\*Morchella elata\*\)](#), Gray Morel (*Morchella tomentosa*), [Half-Free Morels](#), and Red-Brown Morel.

## Magic Mushrooms in Arizona:

Arizona is not a hot-spot for wild, psychoactive mushrooms, but the state does have a few species[\[vi\]](#), mostly or entirely in the mountains. Most of these depend on the substance, [psilocybin](#), for their activity and are thus illegal to use or possess under both Federal and state law[\[vii\]](#). There doesn't seem to be any pressure in the state for these laws to change. Besides avoiding jail time, users need to be very cautious about identification, since many of these species have a deadly look-alike that in some cases will grow right next to the active species being sought.

### ***Gymnopilus luteofolius***



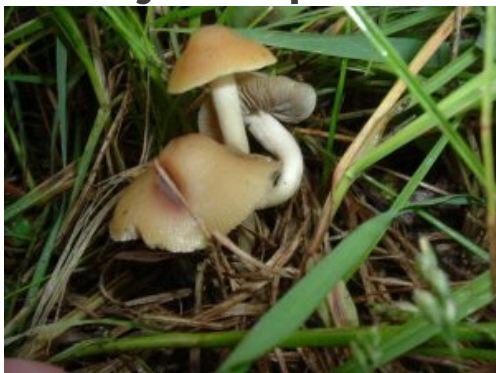
There are both psychoactive and non-psychoactive *Gymnopilus*[\[viii\]](#) species, but the active ones are so rarely used that not much has been written about what taking them is like. This species is among the most wide-spread of the actives and usually has a pretty, reddish color to the cap.

### ***Panaeolus cinctulus***



Though psychonauts tend to use scientific names exclusively, this one does have a common name: Banded Mottlegill[\[ix\]](#). The gills are indeed mottled, since the spores develop and darken unevenly. The outer margin of the cap is paler than the middle, forming a band of color. These mushrooms are psychoactive, but not very potent. Some people prefer low potency.

### ***Psilocybe hopii***



This mushroom is in the same genus as the most famous “magic mushroom,” the widely-cultivated [P. cubensis](#), famous for [microdosing](#), and it is psychoactive, but there is little if any information about its potency. Other *Psilocybes* may also occur in Arizona, but they would be rare and should not be disturbed.



## Fly Agaric (*Amanita muscaria*)



The fly agaric (so called because it can be used to make a fly-poison) has a history of use as a psychoactive going back thousands of years, but these days it is less popular than the psilocybin-containing species. Why? Because it's poisonous. Fly agaric has a different "active ingredient," one that is less visual and more dangerous, plus it has other toxins. If the mushroom is processed properly, the toxic effects can be minimized, but it's not something to play around with casually.

## Poisonous Mushrooms in Arizona:

Do not assume a mushroom is safe to eat just because it's not on this list [\[x\]](#). There are too many poisonous species to discuss all of them here, and many mushrooms are of unknown status and thus could be poisonous also. Here, we discuss just some of the most common species to watch out for.

### Earthball (*Scleroderma citrinum*)



Earthballs, sometimes called Pigskin Poison Puffballs, are the major exception to the principle that [Puffballs](#) are categorically edible. Fortunately, they are much firmer than other Puffball species, and their interior flesh starts to darken much younger.

### Destroying Angel (*Amanita* sp.)



Destroying angels are a subset of the *Amanita* genus, a group of very similar, closely-related species. All produce large, white, handsome mushrooms that start out as round, white "eggs." It's hard to be sure which species Arizona has *Amanita* genus ([Amanita bisporigera](#), *Amanita ocreata* or [Amanita virosa](#)). What is certain is that eating any of the destroying angels will probably kill the eater. Medical intervention can save some, but the poisoning is difficult to diagnose because symptoms can take up to a day to appear and then sometimes go away again before escalating to organ failure. Although destroying angels are not difficult to differentiate from other mushrooms, it does take attention to detail. People who skip steps in the identification process may mistake these for any number of edible, white mushrooms. Do not skip steps.

## Deadly Galerina (*Galerina marginata*)



Deadly Galerina contains the same toxin as the destroying angels do and is thus well-named. It's also a close look-alike for several edible species that are also [little brown mushrooms](#), like [Enokitake](#) and most of the “magic” mushrooms—and has the disconcerting habit of sometimes growing mixed in with patches of the species people want to harvest. It's entirely possible to carefully identify nineteen mushrooms in a seemingly identical patch of edible mushrooms, harvest all twenty, and then die because the twentieth was the Deadly Galerina

## False Parasol (*Chlorophyllum molybdites*)



This one is the most poisonous of a small group of species that are poisonous sometimes under certain conditions but safely edible at other times. How often does a mushroom have to make people sick before it counts as poisonous, rather than edible with caution? There's no clear line, but if there were, this mushroom would be on the poisonous side of it. Most of the people who eat it mistake it for some other white or whitish species. Again, it's important not to skip steps in identification. This mushroom is not usually deadly, but the symptoms of eating it are quite serious.

## Sickener (*Russula* sp.)



The name, *Russula emetica*, was once defined so as to include pretty much all red-capped *Russulas*. Since then, it's become clear that the entire *Russula* genus is a swarm of variable look-alikes, and that only people who enjoy arcane puzzles really need to know which *Russula* is which. For everyone else, it's enough to apply the old common name, sickener, to the whole red-capped tribe, since it's a bad idea to eat any of them (*Russulas* also come in other colors, such as green and all-white, but most of those shouldn't be eaten either). Not usually deadly, but the name is quite apt