



Guidelines for Submitting Fungi and Fungi photos for Identification



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Dr. Matthew E. Smith (Dept. of Plant Pathology) identifies fungi for Florida residents.

This service is intended to help in cases of:

- Human poisonings or potential human poisonings
- Veterinary poisonings or potential veterinary poisonings
- Wood decay with the potential to harm humans

Dr. Smith also consults with residents in cases of indoor air quality related to molds (but does not identify fungi in these cases).

For issues related to fungal plant pathogens, samples should instead be submitted directly to the UF/IFAS Plant Diagnostic Center:

<https://plantpath.ifas.ufl.edu/extension/plant-diagnostic-center/>

For emergencies related to potential mushroom poisonings contact:

Dr. Matthew E. Smith – 352-273-2837 and trufflesmith@ufl.edu

Backup contacts: Dr. Rosanne Healy (rhealy1@ufl.edu) and Florida Poison Control 1- 800-222-1222 <https://floridapoisontcontrol.org/>

Florida has hundreds of fungal species. Identification of fungi is difficult and can sometimes be impossible, depending on the quality of the sample and the taxonomic group. For the best chance of identification, please provide as much information as possible.

The following are critical for fungal identification:

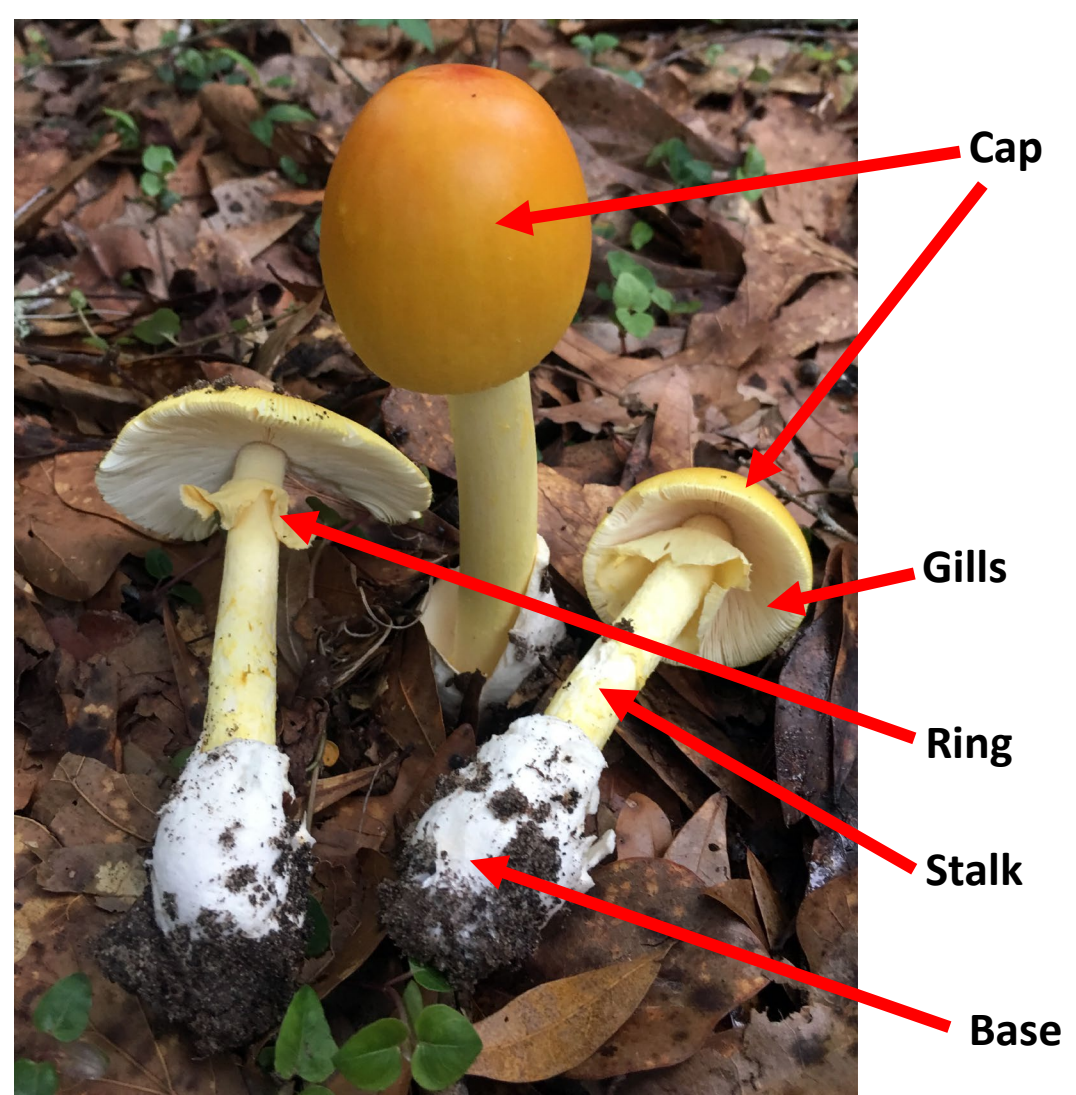
- The date and time of the collection
- The geographic location of the fungal collection (e.g. city and county)
- Substrate where the fungus was found (on wood, on the ground, on dung)
- If the fungus was found on the ground, explain whether the collection was found close to trees, in a lawn, in the forest, or any other details possible.
- If there are any staining or bruising reactions, note these (e.g. does it turn blue or black when you push on the tissue with your finger)
- Note if the mushroom exudes a latex when it is cut or damaged

Photos are the most efficient way to have your fungus identified. Good quality photos can often be used to identify your fungus to species or genus. Even if a definitive identification is not possible, it may still be possible to determine whether your fungus is poisonous or not.

For the best results from photograph identification, follow these guidelines:

1. Take a photo of the entire fungus (if possible in the place where it was found)
2. Take close-up photos of the gills or other fertile surface (pores, teeth, ridges, etc.).
3. Take close-up photos of the top of the mushroom, the base of the mushroom, and the stalk (if there is one)
4. If there are any spores that are obvious, note the color and photograph them (*see the following page*)
5. Be sure to include a ruler, pencil, coin or other scale item to help display the size of the mushroom.
6. Make sure your photos are in focus.
7. Be sure that the resolution of the photos is high enough to zoom in for details.

The following guide will you identify the parts of your mushroom. Here is a “typical” mushroom.



An example of a good mushroom picture, showing all the parts and the fruiting habit.

However, not all mushrooms have all the same parts. Here are some examples:



If your photos are insufficient for diagnosis, Dr. Smith may request a specimen. Here are some quick guidelines to help get your specimen safely and efficiently to Dr. Smith.

1. Never send a specimen prior to consulting with Dr. Smith – photo identification should be attempted first.
2. Mushrooms and other fungi rot quickly so they need to be stored properly. Never store a *fresh* mushroom in a plastic bag because it will quickly be destroyed. Paper bags and tupperware containers are best for short term storage of mushrooms.
3. You need to dry your mushroom sample prior to sending it. Mushrooms should be sliced carefully and then placed in a food dehydrator or in front of a fan in a dry room. Most fungi will take at least 24-48 hours to dry.
4. Make sure your mushroom is totally dry before you send it (moldy mushrooms are impossible to identify!)
5. Place your mushroom in a paper packet or envelope in a padded box. If you do not properly package your mushroom, it may be too broken and damaged to allow identification upon arrival.