

## How to Distinguish *Amanita smithiana* from Matsutake and *Catathelasma* species

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A recent rash of mushroom poisonings involving liver failure in Oregon prompted Michael Beug to issue the following photos and information on distinguishing the differences between the toxic *Amanita smithiana* and edible Matsutake and *Catathelasma*.



Distinguishing the choice edible Matsutake (*Tricholoma magnivelare*) from the highly poisonous *Amanita smithiana* is best done by laying the stipe (stem) of the mushroom in the palm of your hand and then squeezing down on the stipe with your thumb, applying as much pressure as you can. *Amanita smithiana* is very firm but if you squeeze hard, the stipe will shatter. The stipe of the Matsutake is much denser and will not shatter (unless it is riddled with insect larvae and is no longer in good edible condition). There are other important differences. The flesh of Matsutake peels or shreds like string cheese. Also, the stipe of the Matsutake is widest near the gills and tapers gradually to a point while the stipe of *Amanita smithiana* tends to be bulbous and is usually widest

right at ground level. The partial veil and ring of a Matsutake is membranous while the partial veil and ring of *Amanita smithiana* is powdery and readily flocculates into small pieces (often disappearing entirely). For most people the difference in odor is very distinctive. Most collections of *Amanita smithiana* have a bleach-like odor while Matsutake has a distinctive smell of old gym socks and cinnamon redhots (however, not all people can distinguish the odors). Both species taste great! *Amanita smithiana* causes delayed kidney failure and is seriously toxic



*Catathelasma* species (on left) are as dense and solid as Matsutake (they will not rupture when the stipe is placed in the palm of your hand and then squeezed as hard as possible with your thumb). Like Matsutake, they also have a membranous ring – versus the flocculose ring of *Amanita smithiana*. However, *Catathelasma* species have a double ring (hard to see) and have little odor. While edible, *Catathelasma* species are not nearly as delicious as the Matsutake.