

## Hedgehogs (*Hydnum* spp.)

Five species of Hedgehog mushrooms have generally been recognized from the eastern US. Baroni's *Mushrooms of the Northeastern United States and Eastern Canada* illustrates and describes three, *Hydnum repandum*, *H. rufescens*, and *H. umbilicatum* and mentions a fourth, *H. albidum*. A recent study of the genus, Rachel Swenie, at the University of Tennessee, and her colleagues, have identified seventeen species from the eastern US, including six newly described species. The 17 species have been grouped into four subgenera based in primarily on DNA sequences. They are the subgenus *Hydnum*, subgenus *Rufescentia*, subgenus *Alba*, and subgenus *Pallida*.

The New Hampshire Wild Mushroom Harvesting regulations include three of the subgenera in the Tier 1 list of permitted mushrooms.

**Hydnum subgenus Hydnum** - The subgenus includes *Hydnum repandum*, but several studies have concluded that *H. repandum* is a European species and does not occur in North America. What we have been calling *H. repandum* in New England is, in most cases, *Hydnum subolympicum*. Other members of the subgenus that have been found in the Northeast include *H. washingtonium* and *H. vagabundum*. *Hydnum washingtonium* is common in the British Columbia and the Northwestern US but has been found in Newfoundland and Labrador. *Hydnum vagabundum* has a wide distribution and has been found in the northeastern US. Because of the way the NH regulations are written, it is not imperative to determine which species in the subgenus *Hydnum* you have harvested. It is sufficient to label the container as "*Hydnum* subgenus *Hydnum*", or as "*Hydnum repandum* Group"

The subgenus is distinguished from subgenus *Rufescentia* by its larger size (often 4 to 6" across), lighter buff color, lack of a central depression in the cap, teeth are at least slightly decurrent, and a generally off-center stem that is larger toward the base.

**Hydnum subgenus Rufescentia** – Nine species from the subgenus have been documented in the eastern US. The species for which the subgenus is named, *H. rufescens* is a European species and does not appear to be present in North America. Of the nine species, three have been confirmed from New Hampshire including *Hydnum umbilicatum*, *H. subconnatum*, and *H. cuspidatum*. It is likely that some of the remaining six occur here as well. Again, you are not required to provide the species name on container labels. They can be labeled as "*Hydnum* subgenus *Rufescentia*" or "*Hydnum umbilicatum* Group"

Compared with *Hydnum* subgenus *Hydnum*, the distinguishing features of subgenus *Rufescentia* are smaller size (usually less than 2" across), a darker, more orange color, generally a dimple near the center of the cap, teeth are not decurrent, the stem is often centrally attached and does not expand downward.

**Hydnum subgenus Alba**– Three species from the subgenus have been documented in the eastern US - *Hydnum albidum*, *H. alboaurantiacum*, and *H. albomagnum*. The subgenus *Alba* is distinguished from the other two primarily by color, which is white to pale cream. *Hydnum albidum* and *H. alboaurantiacum* are small to medium size, generally less than 3" across, while *H. albomagnum* can be 3 to 4". *Hydnum alboaurantiacum* quickly stains bright orange on handling, *H. albidum* stains slowly orange, while *H. albomagnum* stains only very little after an hour.

Reference:

Swenie RA, Baroni TJ, Matheny PB (2018) Six new species and reports of *Hydnum* (Cantharellales) from eastern North America. *MycoKeys* 42: 35–72. <https://doi.org/10.3897/mycokeys.42.27369>