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Fungal Mounting and Staining Procedure

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In Development Share

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ABSTRACT

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Mounting

1 **Water mounting**

Regular mounting solution for every kinds of fungal tissue.

2 **2% KOH**

1. Clarifying mounts and making tissues and structures visible. (mushroomexpert.com)

2. Is used to test for color changes. KOH is used in the identification of many mushrooms, including boletes, polypores, and gilled mushrooms. For boletes, place a drop of KOH on the cap, stem, sliced flesh, and pore surface. For polypores, apply the KOH to the flesh and the cap surface. For gilled mushrooms, place a drop on the cap surface. Note any color changes that take place. A change to yellow is sometimes found in species of Agaricus and Amanita; magenta or olive reactions can help identify species of Russula and Lactarius; deep red or black reactions can help sort out many gilled mushrooms; black reactions among polypores are crucial separators; and various colors are produced with boletes. Don't forget that a "negative" reaction (no color change) may also be an informative character! (mushroomexpert.com)

10% KOH (Dermatology use)

As mounting solution to dissolves the background keratin, unmasking the fungal elements to make them more apparent.

3 **Permanent mounting media**

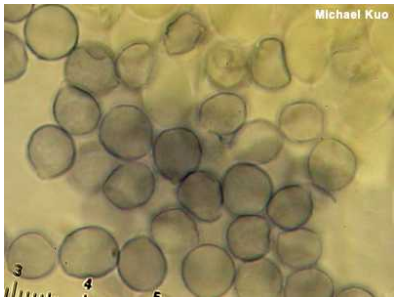
Apply as using water, sealing free

Staining

4

5 **Commercial Lugol's Iodine (5%):** to examine amyloid, inamyloid, and dextrinoid reaction of basidios (mostly spores) and ascos (mostly asci).

Dilute the commercial (5%): distilled water = 1:4 as working solution. (c.a. 1/6)



Amyloid spores of Amanita brunnescens

Dextrinoid spores of Rhodocollybia butyracea

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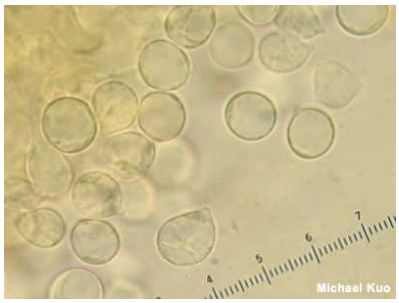
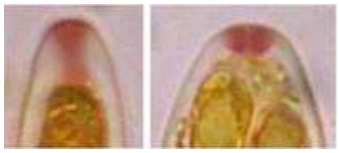


Inamyloid spores of Amanita vaginata



Dextrinoid reaction of ascus opening

Amyloid reaction of ascus opening

Pictures from mushroomexpert.com & Wikipedia

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