

Macro Fungi Collection

(Student name is redacted)

Biology of Fungi (PBIO177)

The University of Vermont

Fall, 2021

Suillus americanus

American Slippery Jack



Fig 1A. *S. americanus* specimen recovered from ground under white pine. Exterior is yellow and surface is viscid to glutinous when moist.



Fig 1B. *S. americanus* gill structure. Irregular to maze like pattern. Spores 1-2 mm wide. Pore surface yellow when young and browns with age

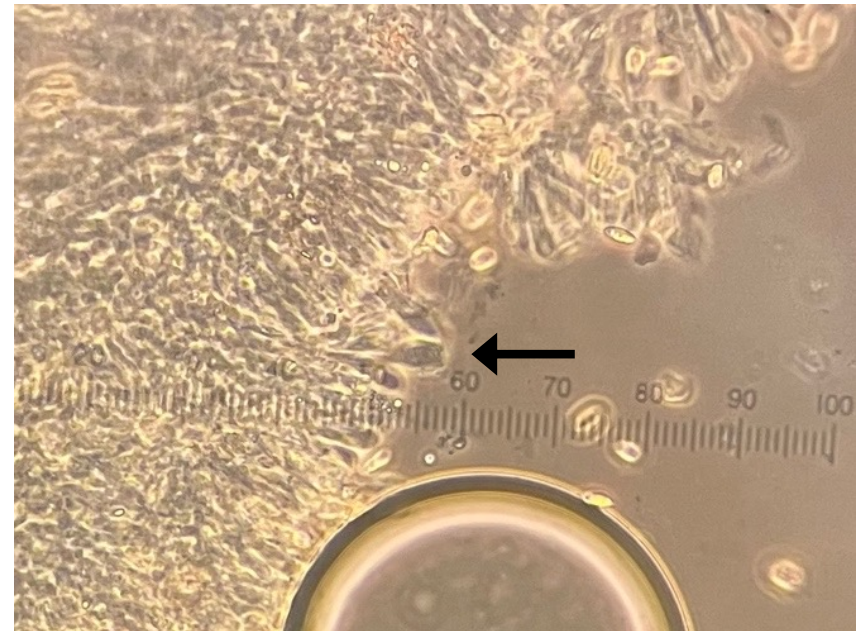


Fig 2. Hymenium. The arrow points to basidia. Image was taken at 100x. Scale bar = 2 μ M



Fig 3. *S. americanus* in nature.

Maddy Tregenza

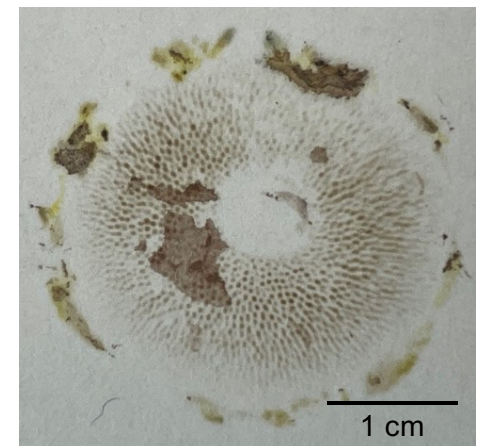


Fig 4. Spore deposit. Color is brown.

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Hygrocybe flavenscens

Golden Waxcap



Figure 1A. *H. flavenscens* convex cap that is yellow and ages to orange-yellow. A tapering stipe that fades to white.



Fig 1B. Close to near distant attached gills. Frequent short gills.



Fig 2. Found in woods under hardwoods or conifers.



Fig 4B. Spores are smooth and ellipsoid. Spores are 4.5 – 6 μ.

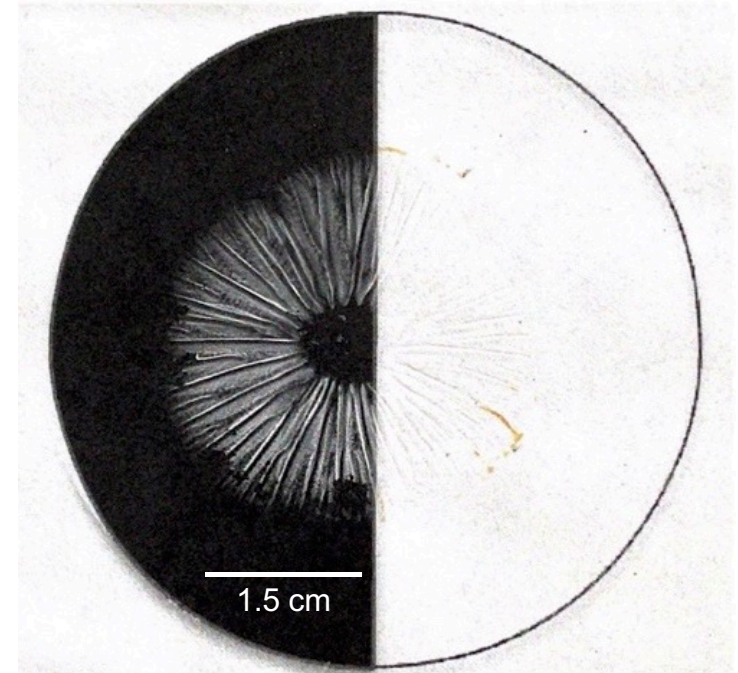


Fig 3. A white spore print is produced.

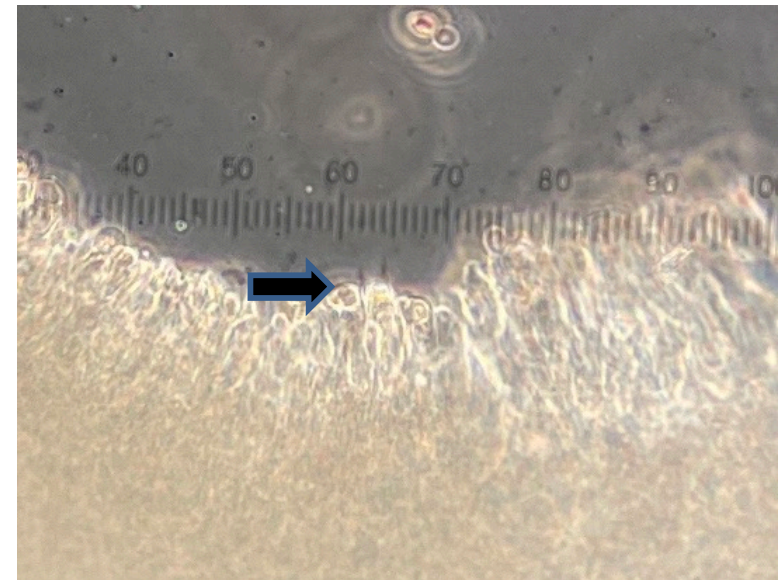


Fig 4A. Hymenium. Arrow points to basidium. Image taken at 100x. Basidium is 40 μ. Scale bar = 5 μM.

Gymnopilus luteus

Yellow Gymnopilus



Fig 1A. *G. luteus* cap ranges 2-10 cm. Yellow to orange-yellow cap occasionally with scales over center. Stipe is colored like cap.



Fig 1B. Partial veil leaves ring on stipe. Gills broadly attached to stipe, yellow and ages to rust.



Fig 2. Found on decaying hardwood, saprobic. Grows alone or in clusters

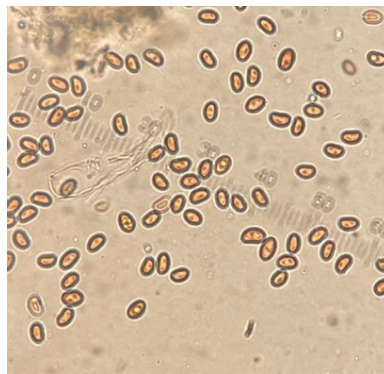


Fig 4B. Spores 6-9 x 4.5-5.5 μ . Warty, elliptical; dextrinoid

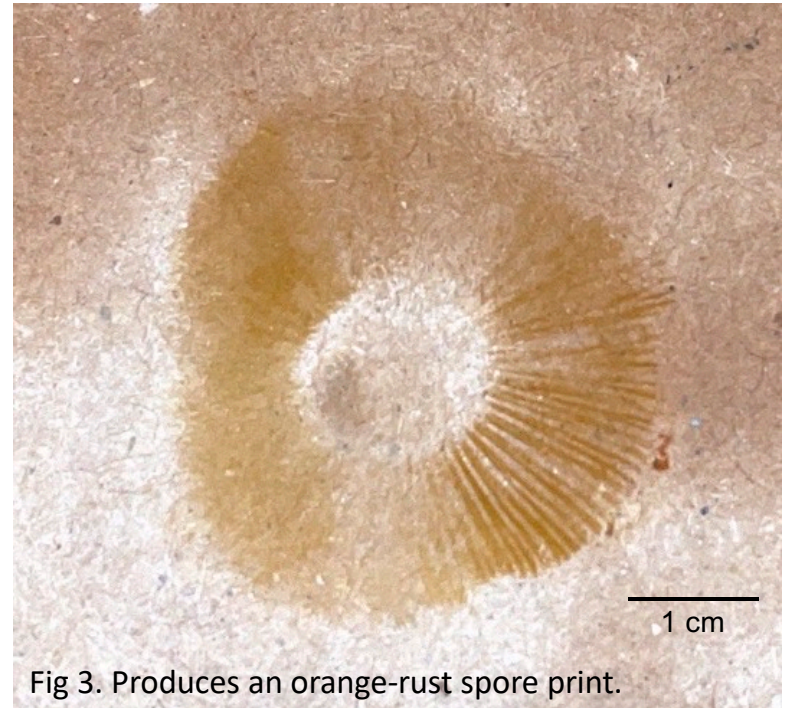


Fig 3. Produces an orange-rust spore print.

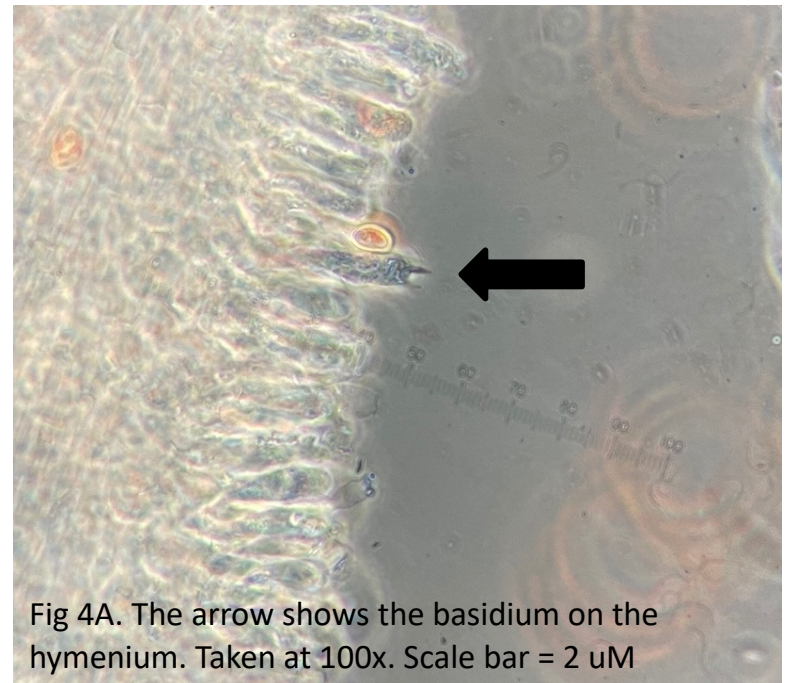


Fig 4A. The arrow shows the basidium on the hymenium. Taken at 100x. Scale bar = 2 μ M

Clitocybe robusta

Robust Clitocybe



Fig 1A. Cap ranges from 3-17 cm. Convex, flat cap. Stipe 4-10 cm long, enlarged downwards



Fig 1B. Gills are crowded and broadly attached to the stipe.



Fig 2. Saprobic, growing in disturbed areas. Grows in clusters.

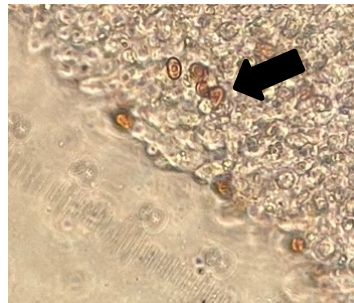


Fig 4B. Spores 5-8 x 3-5 μ ; elliptical; smooth; inamyloid

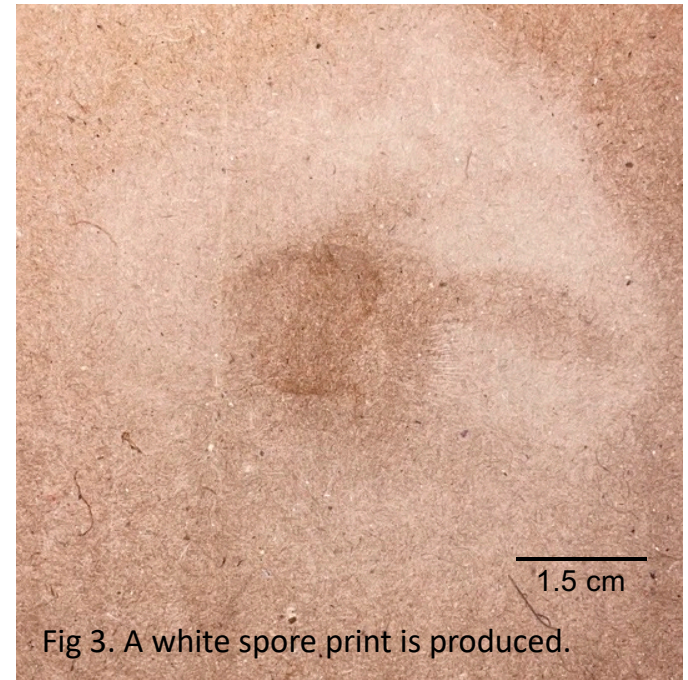


Fig 3. A white spore print is produced.

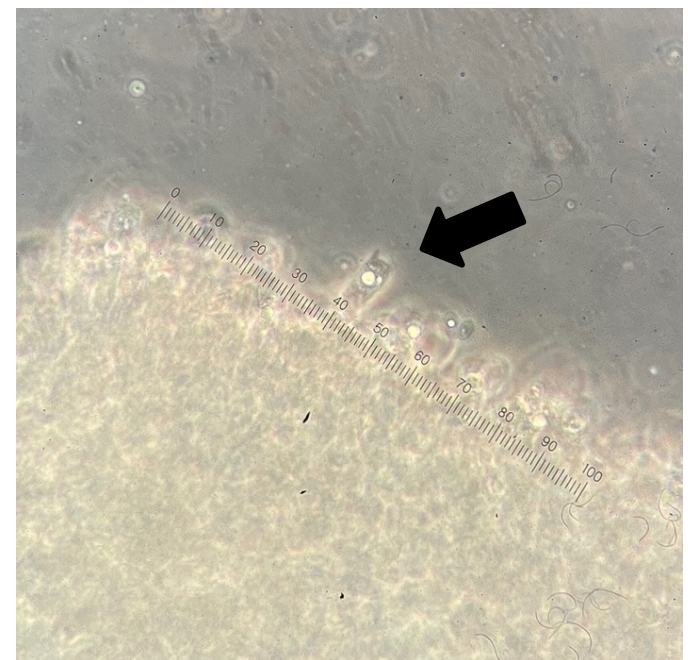


Fig 4A. The arrow shows the basidium on the hymenium. Taken at 100x. Scale bar = 2 μ m

Lactarius deliciosus

Saffron Milk Cap



Fig 1A. Convex to depressed cap, reddish-orange, bruising bluish-green.



Fig 1B. Gills are decurrent and crowded. Gills release a wine colored latex.

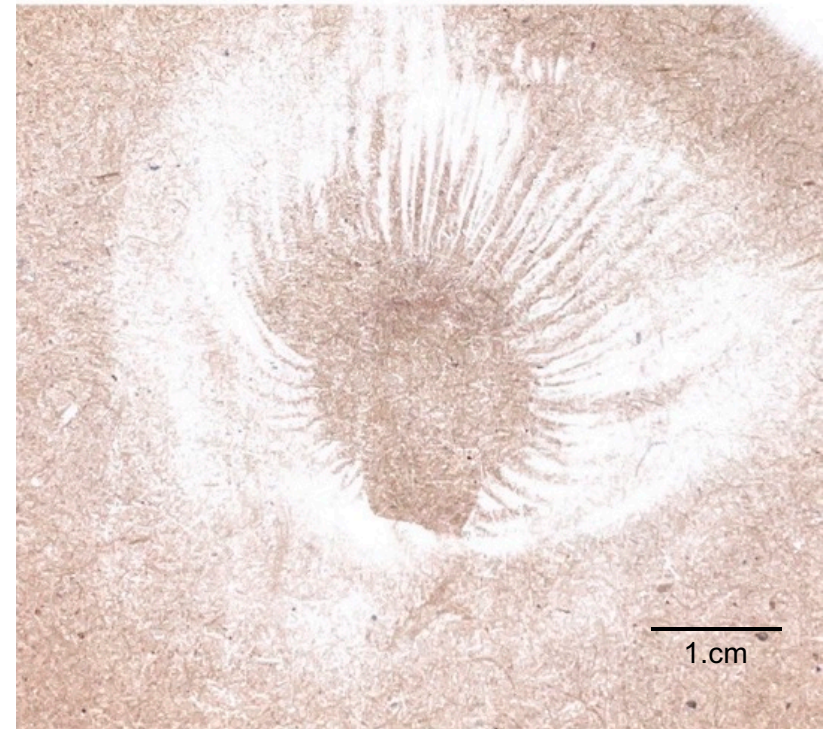


Fig 3. A white spore print is produced.



Fig 2. Mycorrhizal, in coniferous woodland, particularly pines

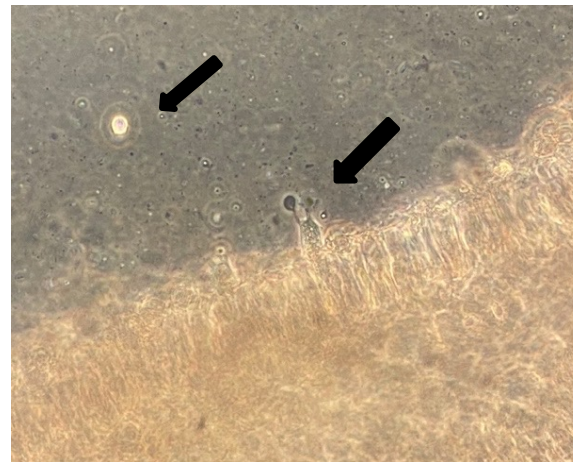


Fig 4B. A basidium with spores on the sterigmata. Spores 7.5-9 X 6-7 μ (left arrow); elliptical; smooth.

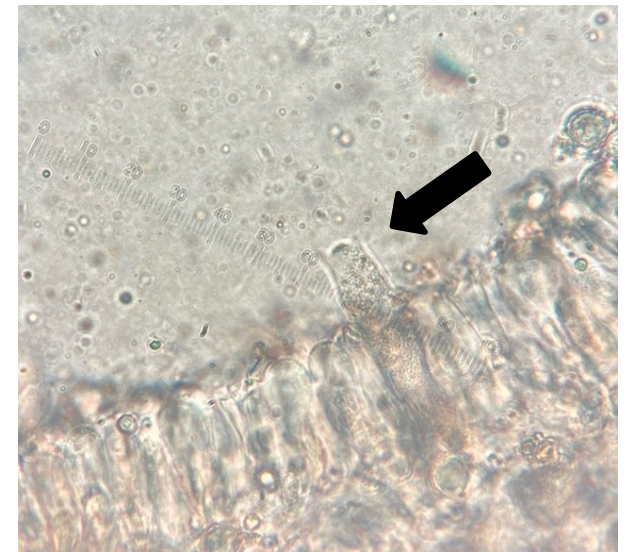


Fig 4A. The arrow shows the basidium on the hymenium. Taken at 100x. Scale bar = 2 μ m

Amanita citrina False Deathcap



Fig 1A. Cap fades quickly, near white. Scattered grayish patches. Rimmed basal bulb. Annulus and volva present. Stipe is 4-9 cm



Fig 1B. Gills are crowded and free from stipe.

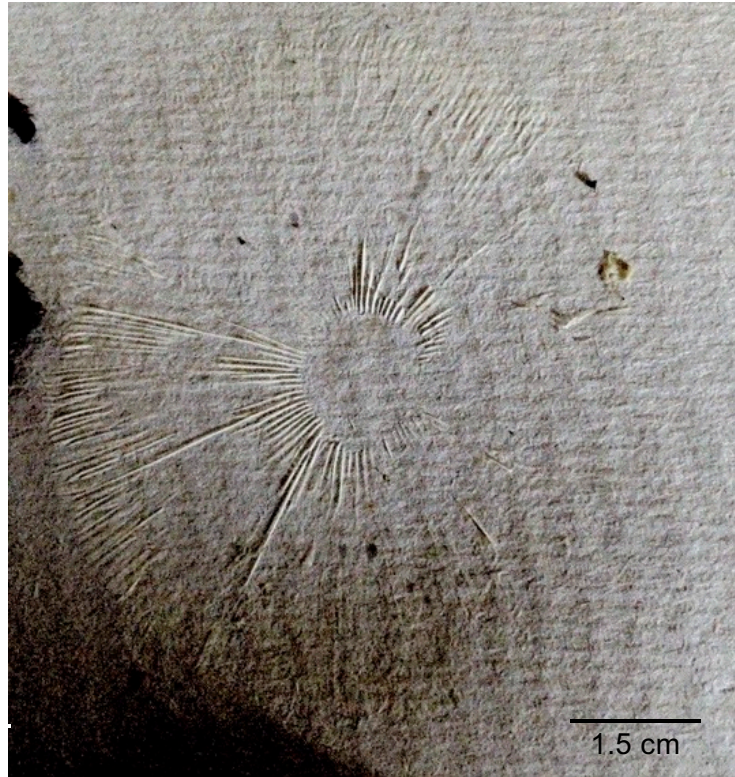
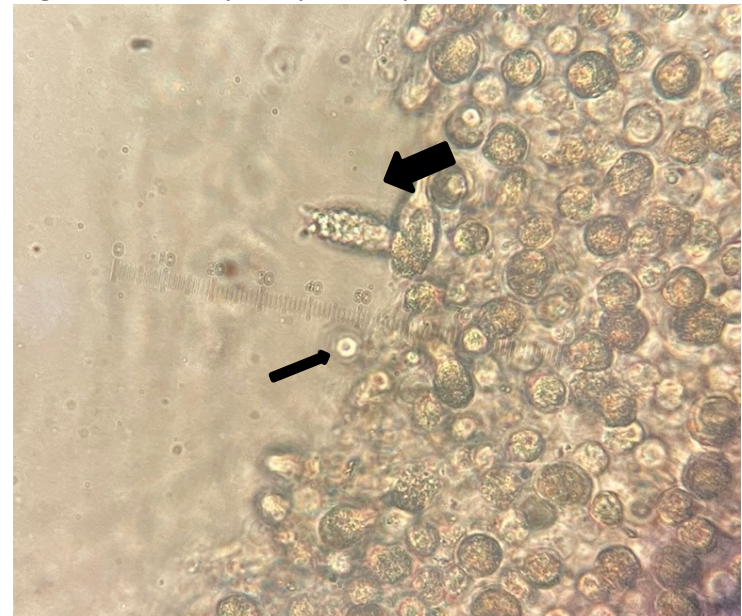


Fig 3. A white spore print is produced.



Fig 2 (left). Mycorrhizal with hardwoods and conifers. Grows alone and scattered.

Fig 4 (right). Larger arrow shows the basidium on the hymenium. Smaller arrow shows the spores. Spores are 6.5-9 μ and globose. Magnified at 100x. Scale bar = 2 μ M



Mycetinis sorodonius

Garlic Marasmius



Fig 1A. Cap is 2-20mm. Broadly convex, forming a central depression. Medium brown fading to pale tan. Stipe is up to 60mm. Dry and shiny.



Fig 1B. Gills are narrowly attached to stipe. Close to near distant

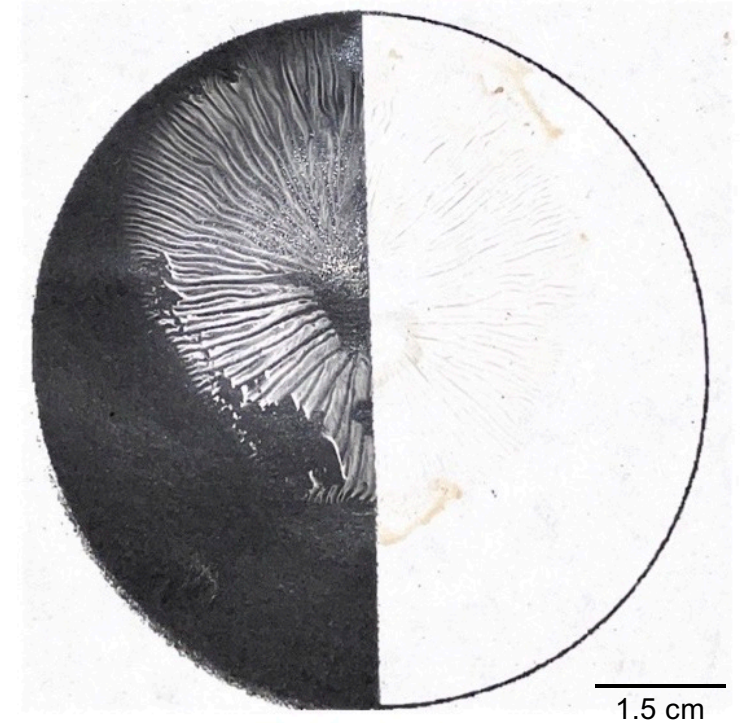
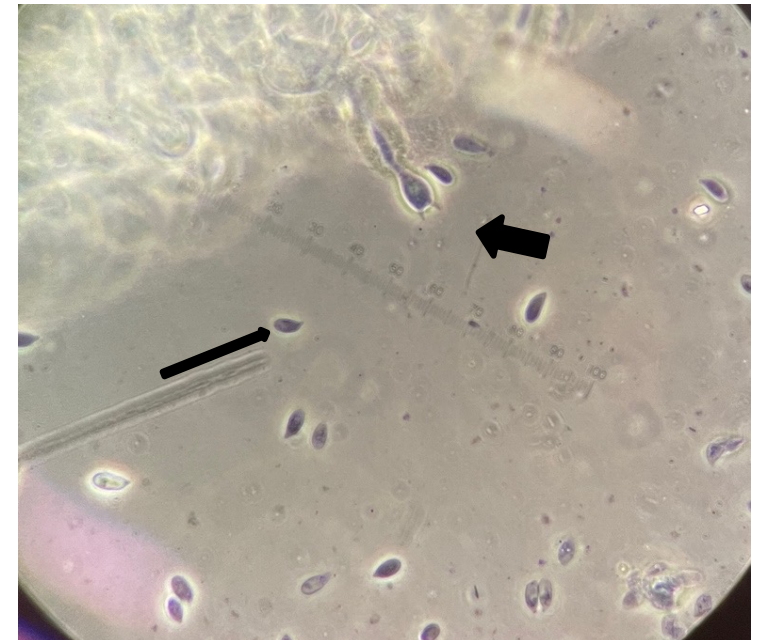


Fig 3. A white spore print is produced.



Fig 2 (left). Primarily found in fallen needles, but also found on mossy bark of living conifers.

Fig 4 (right). Larger arrow shows the basidium on the hymenium. Smaller arrow shows the spores. Spores are 6-10 x 3-5 μ ; smooth; pip-shaped or ellipsoid Magnified at 100x. Scale bar = 2 μ M



Pholiota limonella



Fig 1A. Cap 3-13cm, convex. Slimy orange, brownish. Covered in reddish scales. Stipe 4-15cm, 2cm thick. Annulus ring present. Yellowish scales.



Fig 1B. Gills attached to stipe, close. Yellowish to white then maturing to rust brown. Partial veil present when young



Fig 2 (left). Saprobic and possibly parasitic. Grows in clusters on living or dead logs. Widely distributed in North America, summer and fall.

Fig 4 (right). Larger arrow shows the basidium on the hymenium. Spores present on the sterigmata. Smaller arrow shows the spores. Spores 6-9 x 4-5.5 μ ; smooth. Magnified at 100x. Scale bar = 2 μ M

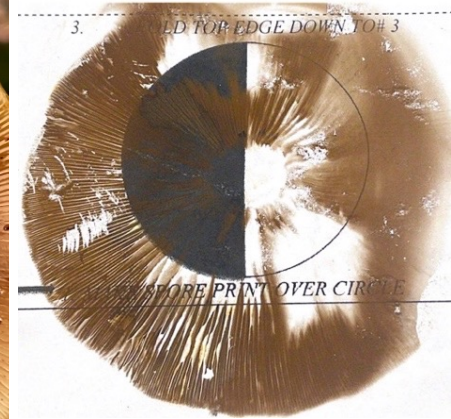


Fig 3. A brown spore print is produced.

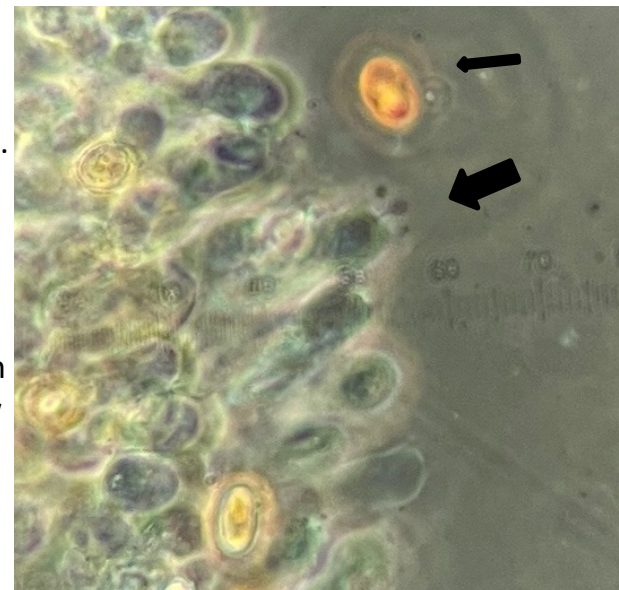


Fig 5 (above). Basidium with no spores on sterigmata.

Hypholoma lateritum

Brick Cap



Fig 1A. Brick red cap 3-10cm, convex to flat. Paler pinkish on the margins. Stipe 4-12cm, 1-2cm thick. Equal to tapering at the base. Yellow fading to reddish brown.



Fig 1B. Gills attached to stipe, close to crowded. Cover by white veil when young. Pale grey to dark purple

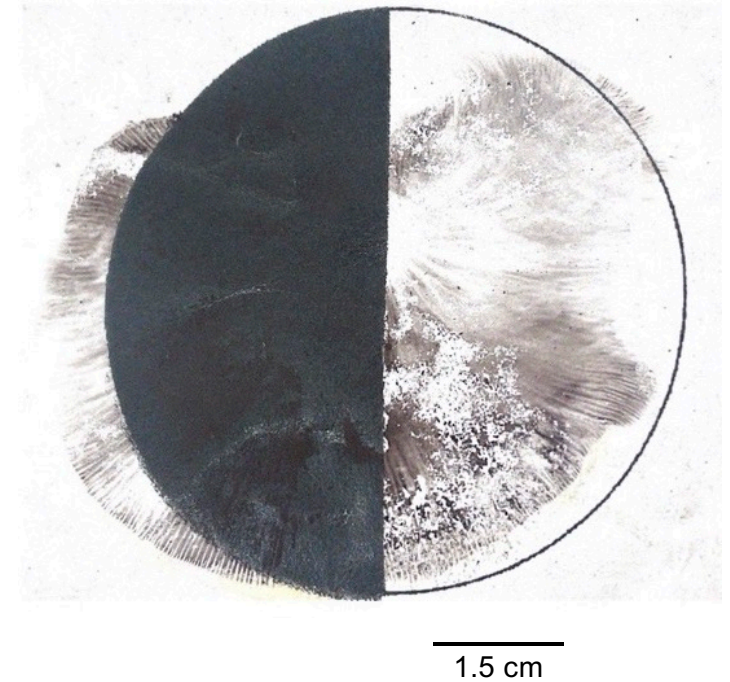
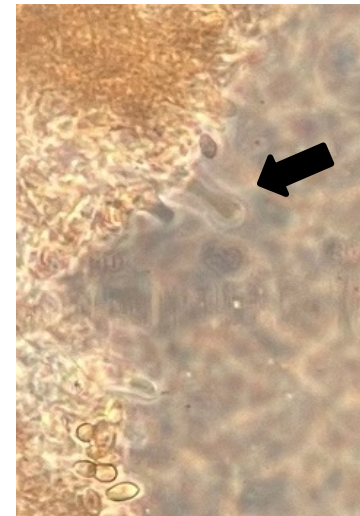


Fig 3. A purple spore print is produced.



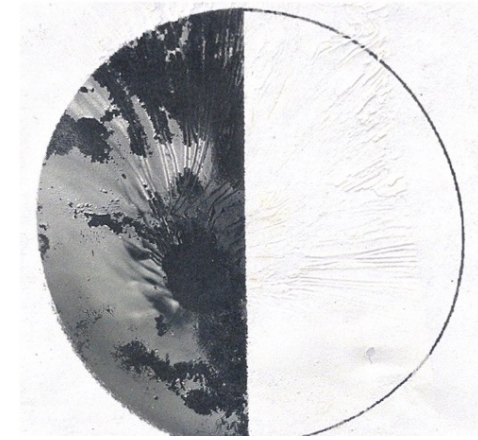
Fig 2 (left). Grows in clusters on decaying hardwood.

Fig 4 (right). Larger arrow shows the basidium on the hymenium. Smaller arrow shows the spores. 6-7 x 3-4 μ ; ellipsoid; smooth; thin-walled; with an obscure pore; yellowish in KOH Magnified at 100x. Scale bar = 2 μ M



Armillaria mellea

Bootlace Fungus



1.5 cm

Fig 3 (above). A white spore print is produced.

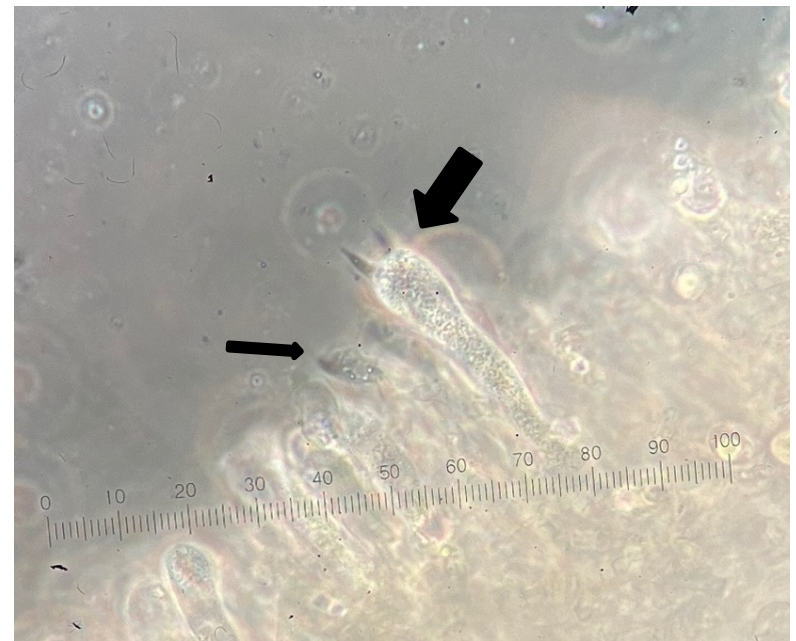
Fig 1B (left). Gills attached and beginning to run down, close Whitish, discoloring to pinkish yellow. White atrial veil

Fig 1A. Cap is 3-12cm, squarish edges and convex to maturing to flat. Yellow fading to brown with yellow scales radially arranged in the center. Stipe 7-20cm long. Tapering base, white ring with a yellowish edge.



Fig 2 (left). Pathogenic and parasitic on hardwoods. Appears in large clusters after heavy fall rain.

Fig 4 (right). Larger arrow shows the basidium on the hymenium. Smaller arrow shows the spores. Spores are 6.5-9 μ and globose. Magnified at 100x. Scale bar = 2 μ M



Tricholoma myomyces

Grey Knight



Fig 1A. Cap 1-4cm, convex to bell-shaped and dry. Woolly margin when young, becoming finely scale pale grey. Stipe 2-4cm, whiteish and finely silky.



Fig 1B. Gills attached by a notch. Short gills frequent, white.



Fig 2 (left). Mycorrhizal with eastern white pines. Grows gregariously in November.

Fig 4 (right). Larger arrow shows the basidium on the hymenium. Smaller arrow shows the spores. Spores 5–8 x 3.5–4.5 μm ; long-ellipsoid; Magnified at 100x. Scale bar = 2 μm

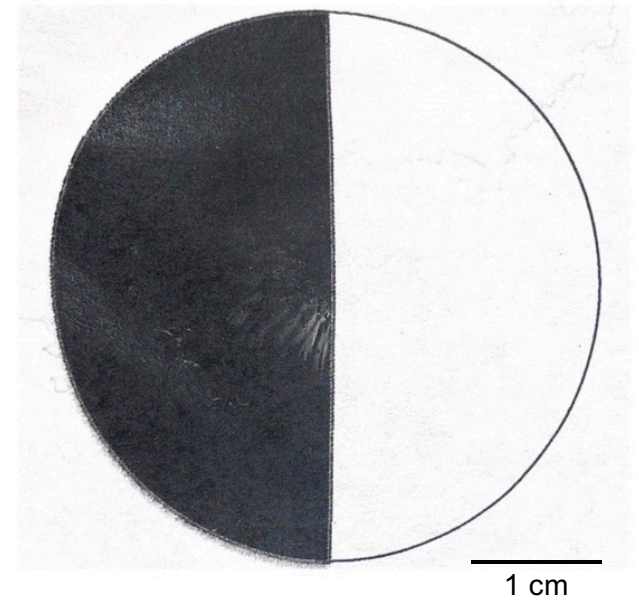
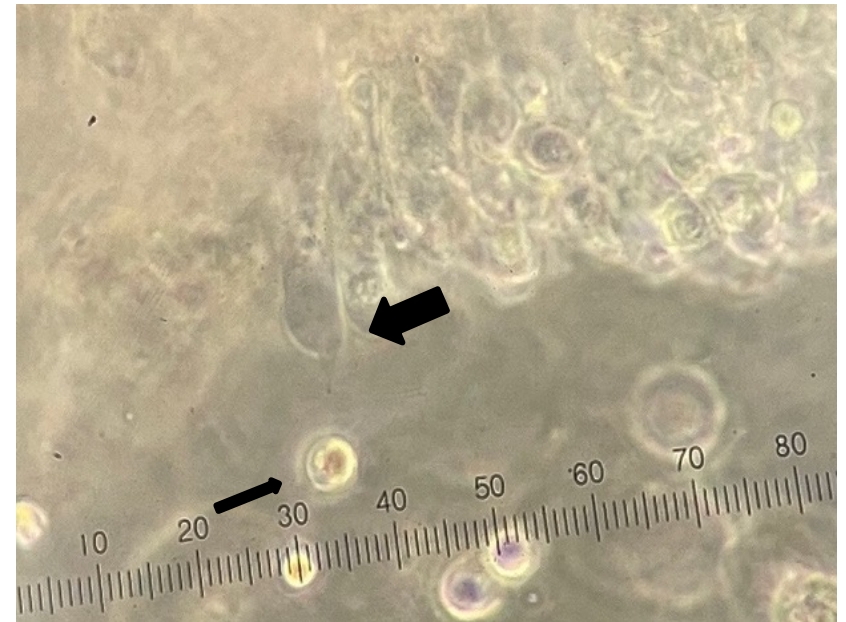


Fig 3. A white spore print is produced.



Pleurotus ostreatus Oyster Mushroom



Fig 1A. Cap 3-15cm, broadly convex. Pale to dark brown, fading to buff. Margins somewhat in rolled when young. Stipe is lateral.



Fig 1B. Gills are running down the stipe. Close, short gills present. White with a yellow tinge with age.

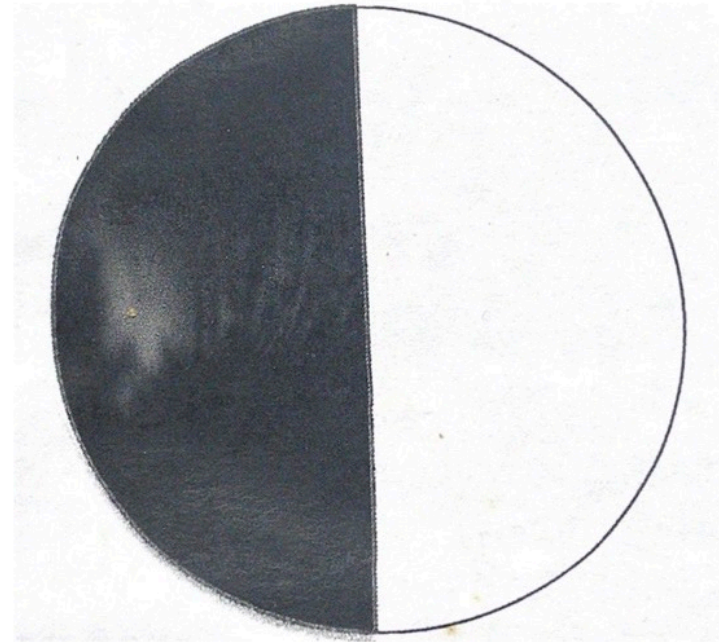
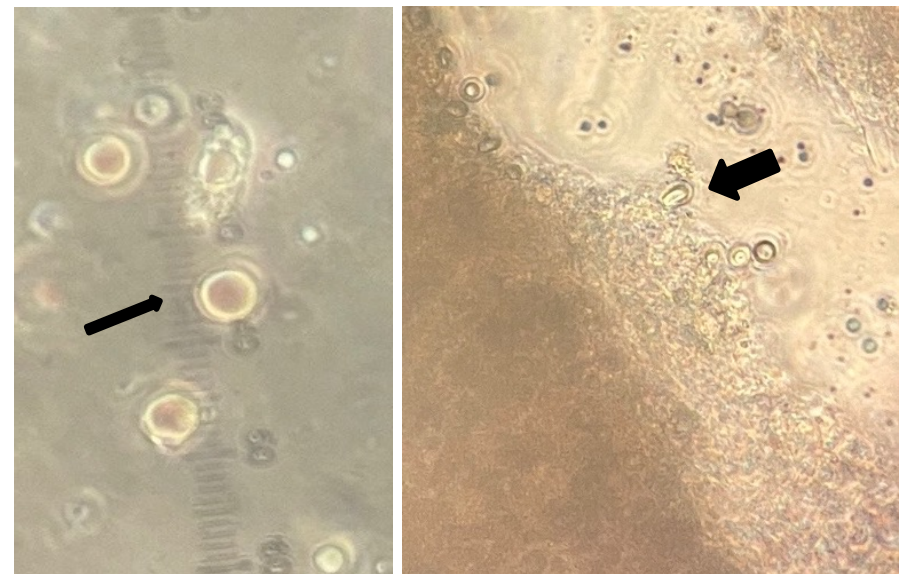


Fig 3. A white, faintly lilac spore print is produced.



Fig 2 (left). Saprobic, growing in shelf-like clusters. Dead and living trees, primarily hardwoods. Late fall to early spring.

Fig 4 (right). Larger arrow shows the basidium on the hymenium. Smaller arrow shows the spores. Spores are Spores 7-11 x 2-4 μm and smooth. Magnified at 100x. Scale bar = 2 μm



Lepista nuda

Blewit



Fig 1A. Cap 4-20cm, convex with in rolled margins becoming flat and wavy with age. Dull purple. Stipe 3-10 cm, 1-3 cm thick. Dry and finely hairy.



Fig 1B. Gills are attached, sometimes notched. Pale lavender, close to crowded.

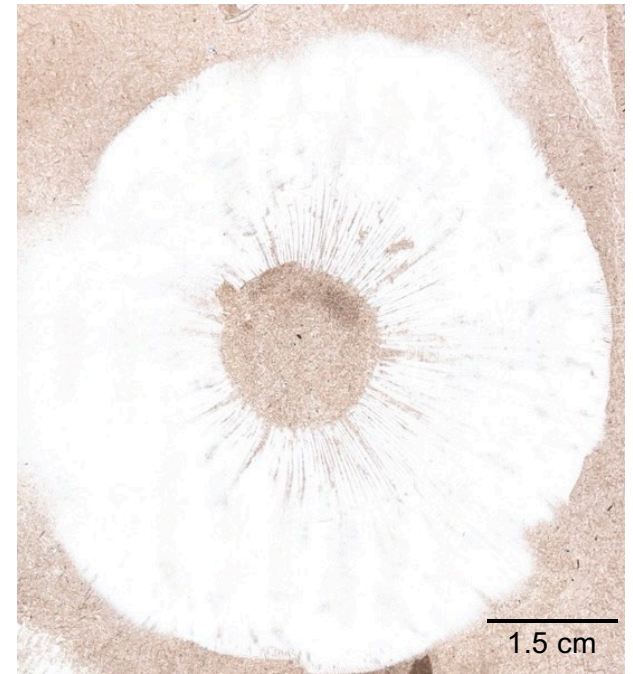
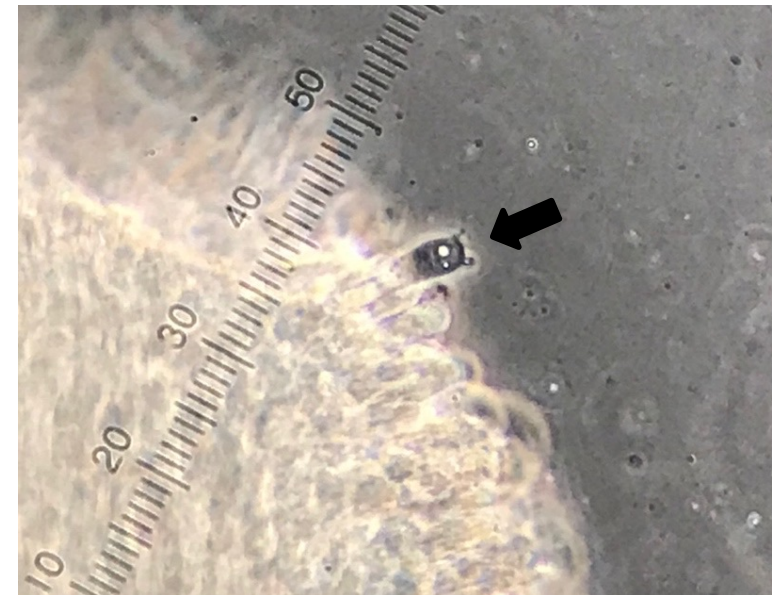


Fig 3. A white to pinkish spore print is produced.



Fig 2 (left). Saprobic, grows alone, scattered, and gregariously in organic debris. Late summer to fall.

Fig 4 (right). Larger arrow shows the basidium on the hymenium. Spores 5.5-8 x 3.5-5 μ ; ellipsoid; roughened or sometimes smooth. Magnified at 100x. Scale bar = 2 μ M



Tyromyces chioneus

White Cheese Polypore



Fig 1A. Cap can be 12 cm across and 8 cm deep. Convex, kidney shaped. Velvety to bald with age. Crusty surface develops with age.



Fig 1B. Pores are 8mm deep and 3-5 per mm. White becoming yellow with age. A white spore print is produced



Fig 2 (left). Saprobic on dead hardwoods. Usually causing white rot. Grows alone, summer to fall.

Fig 4 (right). Image from https://mushroomobserver.org/observer/show_observation/158132. Spores are 4-5 x 1.5-2 μ ; smooth; cylindrical to slightly allantoid. Magnified at 100x. Scale bar =10uM



Coprinellus micaceus

Mica Cap



Fig 1A. Cap is 2-5cm, oval then expanding broadly convex with age. Margins are often curled or tattered. Honey brown to amber.



Fig 1B. Stipe 2-8cm long, 2-6cm thick. Very finely fibrous, white and hollow. Gills are attached or free. Ranging from pale brown to brown then to black. Deliquescing.

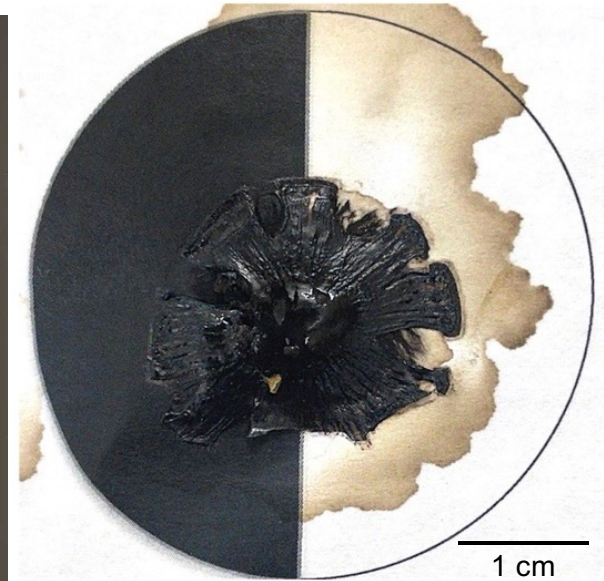


Fig 3. A black spore print is produced.



Fig 2 (left). Mycorrhizal with hardwoods and conifers. Grows alone and scattered.

Fig 4 (right). Image by Michael Kuo. Cheilocystidia is elliptical. Not pictured is the basidia which is 4 spored. Surrounded by 3-6 branchybasidia. Spores 7-11 x 4-7 μ ; subelliptical. Magnified at 100x. Scale bar = 2 μ M

