

1878

## Report of the Committee on Botany, for 1877

A. E. Johnson

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REPORT OF THE COMMITTEE ON BOTANY,  
FOR 1877.

BY A. E. JOHNSON, M. D.

MR. PRESIDENT :—Since my last report, one year ago, I have collected and identified one hundred and two species of plants. Of the Fungi, I have collected ninety-five species new to our State, and fourteen species new to science, the descriptions of which I have endeavored to give fully. I have also collected quite a number of Algæ, seven of which I have been able to identify with the aid of the elaborate descriptions and fine colored plates of Prof. Wood on the "Fresh Water Algæ of the United States," published in the "Smithsonian Contributions to Knowledge, vol. xix."

The summer of 1877 was noted for extreme heat all over the world, and in our State, as one of extreme drought, there having been scarcely any rain during the whole of July and August. These conditions are very unfavorable to the production of fungi. Agarics of every genus were very scarce, not one was to be seen where thousands existed in previous seasons. Scarcely a *boletus* has been observed this season; only one or two *hydna*; a very few *polypori*; scarcely a *clavaria* or *tremella*; not a *phalloidei*, and but a very few *trichogastres* towards the close of the season; and so with nearly all other orders of fungi. Drought and extreme heat seem to effect the production of fungi more than almost any other plants.

558. AGARICUS (TRICHOLOMA) RUTILANS. *Scheff.*  
"Red-haired Tricholoma."

Our plant is not as large as the book description. Not necessarily on pine stumps. On decayed wood. Oct.

559. AGARICUS (LEPIOTA) HOLOSERICUS. *Fr.*  
 "Silky Lepiota."  
 On the ground. October. Scarce in 1877.
560. AGARICUS (TRICHOLOMA) ALBUS. *Fr.*  
 "White Tricholoma."  
 Stipe, gills and pileus white; gills very broad, thin, and appear as if scooped out from the stem  $\frac{1}{8}$  of an inch in width.  
 On the ground in woods. Ramsey county October.
561. AGARICUS (CLITOCYBE) ELIXUS. *Sow.*  
 "Sodden Clitocybe."  
 On the ground. Nicollet Island. September and October. Very scarce in 1877.
562. AGARICUS (CLITOCYBE) MAXIMUS. *Fr.*  
 "Soweb's Clitocybe."  
 Pileus fleshy, thick, firm, scaly, disk compact; not umbo-nate; stem compact, attenuated downwards; slightly fibrillose; gills largely decurrent, when old nearly blood red.  
 Pileus 7 inches broad, with an ocraceous tinge; stipe 3 inches high, 2 inches thick at top, one inch at base; strong cadaveric odor when old. In thin oak woods.  
 October. Rare.
563. AGARICUS (PLEUROTUS) SALIGNUS. *Fr.*  
 "Willow Pleurotus."  
 On trunks of trees and stumps. October.
564. AGARICUS (COLLYBIA) FAMILIA. *Peck.*  
 Height about 2 inches; breadth of pileus  $\frac{3}{4}$  to  $1\frac{1}{2}$  inches; stipe 1 to 2 lines thick. On decayed wood in woods May and September.

565. AGARICUS (COLLYBIA) COLOREUS. *Peck.*

Stem in our plant is pale, brownish yellow below, and lightish or white above.

On decaying basswood stumps. June and September, and October.

566. AGARICUS (MYCENA) IRIS. *Berk.*

"Blue Mycena."

On bits of decayed wood, beside an old oak stump in oak thickets. October. Rare.

567. AGARICUS (MYCENA) PROLIFOROUS. *Sow.*

"Proliforous Mycena."

When matured, the cuticle of the pileus frequently contracts towards the center, producing a cup shape, and sometimes contracts to a globe shape, showing nothing but the gills turned up over the pileus.

As far as observed our plants are gregarious or solitary, not cæspitose. On rich soil amongst grass in open woods. Nicollet Island. June. Not common.

568. AGARICUS (MYCENA) VITREUS. *Fr.*

"Glassy Mycena."

Our plant is not very fragile. Stem nearly 4 inches long, nearly one line thick, and very brittle.

In woods amongst moss. Often attached by mycelium. October.

569. AGARICUS (MYCENA) TENUIS. *Bolt.*

"Slender Mycena."

Pileus and stem brownish; stem 1 to 2 inches long, not  $\frac{1}{2}$  line thick.

Amongst moss on the ground in damp woods. June. Scarce.

570. AGARICUS (MYCENA) VITILIS. Fr.  
 "Flexile Mycena."  
 Amongst grass in woods. June.
571. AGARICUS (MYCENA) SPEIREUS, Fr.  
 "Opaque Mycena,"  
 Amongst moss on sandy ground. Solitary. May.
572. AGARICUS (MYCENA) VULGARIS. P.  
 "Common Mycena."  
 On the ground and decaying wood. October.
573. AGARICUS (MYCENA) SETOSUS, Sow.  
 "Setose Mycena."  
 White or a whitish gray; stem fine as a hair; under a glass, somewhat pubescent, which distinguishes it from *Agaricus capillaris*. Often beneath leaves. Easily overlooked, because of its excessive minuteness. Pileus 1-20 to 1-16 of an inch broad; stem 1 to 1½ inches high.  
 On and under dead leaves in woods. October.
574. AGARICUS (OMPHALIA) BELLIE. Johnst.  
 "Cup-like Omphalia."  
 In woods, on decaying wood. Sept. and Oct.
575. AGARICUS (PLUTEUS) UMBROSUS. Pers.  
 "Brown Pluteus."  
 On the ground. Sept.
576. AGARICUS (ENTOLOMA) PLACENTA. Batsch.  
 "Brown Entoloma."  
 On the ground in woods. October.

577. AGARICUS (ENTOLOMA) FLAVUS. n. sp.  
Gold-yellow Entoloma.

Pileus, fleshy, conical, expanded, depressed, smooth, bright orange when fresh, flesh white; stem short, solid, slightly attenuated upward, white; gills bright gold color when fresh, broad externally, regular, thin, sharp edged, narrow at the stipe, slightly attached.

Pileus, 2 inches broad; stipe  $\frac{1}{2}$  inch high, 4 lines thick. Spores irregular, large, spherical, papilous and papilate; bright reddish yellow.

In woods on the ground. Last of October. Scarce. The spores lose their reddish cast after long exposure to the air and light.

578. AGARICUS (PHOLIOTA) AURIVELLUS. Batsch.  
"Golden Pholiota."

On fallen basswood trunks in woods. Excelsior. July.

579. AGARICUS (PHOLIOTA) SPECTABILIS, Fr.  
"Orange Pholiota."

Subcæspitose. Pileus firm, brittle, convex rather than plain or depressed, dry, cuticle torn into scales, fibrous or silky, sometimes patchy points turning up and darker, giving the surface a tigrine appearance; stem first solid then hollow, fibrous, striated, equal, rooting, curved; gills adnate, ventricose, entire, divides easily into two parts, and wavy on the free surfaces, crowded, rounded behind, ferruginous.

Pileus, 3 to 4 inches broad, fleshy and bright, rhubarb color; stem 3 inches long,  $\frac{1}{2}$  inch thick, annulated. Taste pleasant, not bitter.

On a decayed spot on a living locust. June. Scarce.

580. AGARICUS (GALERA) OVALIS. *Fr.*  
 "Brick-red Galera."

Stipe, 3 to 5 inches high; pileus 1 inch and more high.  
 On the ground amongst grass in open woods. September to October.

581. AGARICUS (STROPHARIA) SQUAMOSUS. *Fr.*  
 "Scaly Stropharia."

Pileus, ocraceous or reddish, viscid, spotted with yellowish scales, nearly plain, not very thin, quite fleshy; stem slender, stuffed with a whitish pith, more or less squamose below the distant, not well defined annulus; gills purplish brown with whitish edge, very broad, adnate.

Pileus from  $\frac{3}{4}$  to  $1\frac{1}{2}$  inches broad; stipe 2 to 3 inches long, nearly 2 lines thick, hollow when old.

On the ground, attached to decaying wood, in woods. October.

582. AGARICUS (HYPHOLOMA) CAPNOIDES. *Fr.*  
 "Fir Wood Hypholoma."

Pileus usually yellowish, nearly plain, smooth like kid leather, dry, rather fleshy; stem smooth, pale yellow, even, sub-festulose; gills purplish or grayish, dry, not crowded, broad, adnate, very various in size.

Pileus, from 1 to 3 inches or more broad; stem 2 to 3 inches long, 2 to 4 lines thick, equal, sometimes curved.

In Lake Harriet woods. Not necessarily in fir woods. May. Not common. 1877.

583. AGARICUS (HYPHOLOMA) APPENDICULATUS. *Bull.*  
 "Appendiculate Hypholoma."

Pileus  $1\frac{1}{2}$  to 3 inches broad, veil attached to the margin in patches; stem 2 to 3 inches long, 2 to 3 lines thick.

Amongst moss on rotten stumps, in woods. June.

584. AGARICUS (HYPHOLOMA) EGENULUS. *Berk.*  
"White Hypholoma."  
By the road side, amongst grass, May.
585. AGARICUS (PSILOCYBE) AREOLATUS. *Klotsch.*  
"Patchy Psilocybe."  
Nicollet Island, September to October.
586. AGARICUS (PSATHYRA) BIFRONS. *Berk.*  
"Changing Psathyra."  
So called from its many changes of color.  
Nicollet Island. September to October.
587. AGARICUS (PSATHYRA) SEMIVESTITUS. *Berk & Br.*  
"Half-clothed Psathyra."  
Pileus  $\frac{1}{4}$  to  $\frac{1}{2}$  inch broad; stipe 1 to  $1\frac{1}{2}$  inches long.  
Nicollet Island. October.
588. AGARICUS (PSATHYRA) GORDONI. *Berk.*  
"Gordon's Psathyra."  
Amongst grass in woods. September. October.

**COPRINUS.**

589. COPRINUS FLOCCULOSUS. *D. C.*  
"Flocculose Coprinus."  
Nicollet Island. September.
590. CAPRINUS EXTINGTORIUS. *Fr.*  
"Extinguisher Coprinus."  
Stem more or less rooting. Sometimes the root is very long.



On dung heaps and rich, soft loam. June to July.

591. *COPRINUS ARATUS.* *Berk & Br.*  
 "Umber Coprinus."

Our plant is gregarious; pileus 1 to 4 inches broad; stipe 3 to 5 inches high, 2 to 6 lines thick, fibrous.

On the top of a decaying elm stump. Lake Harriet woods. May.

592. *COPRINUS RADIANS.* *Fr.*  
 "Radiating Coprinus."

Pileus 1 to 2 inches broad; stem  $1\frac{1}{2}$  to 2 inches high.

On sandy soil. May. Very scarce. 1877.

593. *COPRINUS MACROCEPHALUS.* *Berk.*  
 "Stunted Coprinus."

Pileus 1 inch or less broad, cylindrico-campanulate; stipe  $\frac{1}{2}$  to 2 inches high, 2 to 3 lines thick.

Solitary or gregarious. On stumps and horse manure. April.

594. *COPRINUS FILIFORMIS.* *Berk & Br.*  
 "Filiform Coprinus."

Stipe  $\frac{1}{2}$  to 1 inch high; pileus 1 to 2 lines high. Conical.

In woods on the ground. September to October.

#### *CORTINARIUS.*

595. *CORTINARIUS (PHLEGMACIUM) DIBAPHUS.* *Fr.*  
 "Spotted Cortinarius."

Stem winding; spores kidney shaped with an apiculus at both ends.

On the ground in woods. October.

596. CORTINARIUS (PHLEGMACIUM) FULGENS. *Fr.*

"Shining Cortinarius."

Very fleshy; flesh white; stipe solid, bulb depressed, marginate. The whole stem wooly, which becomes ferruginous when the spores drop.

In woods. October. Not common.

597. CORTINARIUS (MYXACIUM) ELATIOR. *Fr.*

"Tall Cortinarius."

The gills in our plant are not only venose connected, but strongly costate, every alternate one being dimidate and excessively rugose. The characters seem almost sufficient to base a new species on.

In woods. October. Not common. 1877.

598. CORTINARIUS (MYXACIUM) FACICULARIS. *n. sp.*

Tufted Cortinarius.

Cæspitose, gregarious or solitary; pileus plain, fleshy, viscid or glutinous when moist, smooth when dry, reddish yellow, edge thin and dotted with a few fragments of the veil; gills cinnamon, crowded, broadly attached, sometimes sub-decurrent, easily separating from the hymenophora; stipe white, solid, fibrous, straight or flexurous, attenuated downward. When old the flesh becomes yellowish white, the stem brownish.

Pileus  $\frac{1}{2}$  to 2 inches broad; stipe 1 to 2 inches long, 1 to 3 lines thick.

On the ground in open places. October.

599. CORTINARIUS (MYXACIUM) MACULATUS. *n. sp.*  
 "Egg-yellow Cortinarius."

Pileus thin, membranaceous, soft, thin except the disk which is thick, firm, broadly umbonate, smooth, shining, excessively viscid, bright egg yellow, dotted here and there with iron rust colored spots, cuticle tough, with a kid leather feel when dry; gills attached with a tooth, at first whitish, then yellow, then dark cinnamon brown, sharp, smooth edges; stipe, equal, stout, not annulate or bulbous, whitish, fibrilose, more or less curved.

Breadth of pileus, 2 to 5 inches; stipe 3 to 5 inches high, 2 to 6 lines thick.

In woods on decaying *Acer* stumps. Nicollet Island. October.

Spores large, regular spheres, appearing frequently nucleated.

600. CORTINARIUS (MYXACIUM) RADICIBUS. *n. sp.*

Rooting Cortinarius.

Pileus sub-viscid when moist, polished when dry, shining, fleshy, convex, then expanded; stem solid, fibrous, cylindrical, smooth, straight or crooked, annulated, annulus  $\frac{1}{4}$  inch from top of stipe standing up, upper surface color of the gills, base sending out long, white, fibrous roots; gills broad, sub-decurrent, lightish or gray, then cinnamon.

Pileus  $\frac{3}{4}$  to  $1\frac{1}{2}$  inches broad; stem 2 to 3 inches high, 2 to 3 lines thick.

Spores reddish ochre, or Ferri Carb. color, very small, egg shape.

On the ground in woods. May.

601. CORTINARIUS (DERMOCYBE) OCHROLEUCUS. *Fr.*

"Pallid Cortinarius."

Pileus not very fleshy; stipe sometimes festulose at the top.

In woods. June. Not common. 1877.

602. CORTINARIUS (DERMOCYBE) CINNAMOMEUS. *Fr.*

"Cinnamon Cortinarius."

In thin woods on mucky soil. May.

603. CORTINARIUS (DERMOCYBE) APPENDICULATUS. *n. Sp.*

Bank-loving Cortinarius.

Pileus fleshy, thin, smooth, expanded, border appendiculate with a fugaceous veil, yellowish brown, becoming nearly black when dry; gills adherent, sub-decurrent, crowded, brown, then black; stem equal, smooth, festulose, whitish, becoming brown when dry.

Pileus 1 inch broad; stipe 1 to 2 inches high, about 2 lines thick.

Spores small, smooth, nearly spherical.

On low banks in woods. May.

604. CORTINARIUS (DERMOCYBE) TIGRINUS. *n. sp.*

Tiger Spotted Cortinarius.

Pileus thin but fleshy, convex, spotted with small, brown scales when fresh, rugose and brown when dry; gills numerous, crowded, adnate, pale clay when young, becoming cinnamon, then dark brown; stem whitish, attenuated upwards, sub-bulbose.

Pileus  $\frac{3}{4}$  to 1 inch broad; stipe one inch or more high, one line thick.

On decaying wood in woods. June. Not common. 1877.

605. CORTINARIUS (TELAMONIA) EVERNIUS. *Fr.*

"Tufted Cortinarius."

About stumps in open places. September and October.

606. CORTINARIUS (HYGROCYPHE) VENOSUS. *n. sp.*

Venous-Gilled Cortinarius.

Pileus smooth, thin, yellowish brown, when mature so completely everted that the gill surface only appears; gills cinnamon, sub-ventricose, rather narrow, attached, profusely venosed and venose connected; stipe smooth, equal, fibrous, not bulbous, sometimes split or forked at the top.

Pileus 1 to 2 inches broad; stipe, 3 inches long, 3 lines thick.

On the ground amongst poplar leaves in woods. October. Scarce.

607. HYGROPHORUS UNGUINOSUS. *Fr.*

"Dingy Hygrophorus."

Gills adnate, decurrent, connected by veins.

On the ground in woods. October.

608. HYGROPHORUS LACTUS. *n. sp.*

Grayish-white Hygrophorus.

Pileus hemispherical, irregular, grayish white, cuticle covered more or less with a milk white gluten, flesh thick, white; gills white, arcuate, adnate, decurrent, edges smooth, entire, sharp; stipe smooth, fibrous, white, mealy above, sharply attenuated downward.

Pileus 1 to 1½ inches broad; stipe 2 to 3 inches high, 3 to 5 lines thick.

On wet clay soil amongst dead poplar leaves. October. Rare.

609. GOMPHIDIUS VISCIDUS.

*Fr.*

"Viscid Gomphidius."

On the top of a decaying hickory stump. Meeker woods  
August.

*LACTARIUS, Fr.*

610. LACTARIUS SACCHARIUM.

*n. sp.*

Sweet-milk Lactarius.

Pileus at first convex, papillate, pruinose, brownish, or slate, at length expanded, depressed, infundibuliform, reddish orange; gills largely decurrent, crowded, narrow, sinuate, dimidate or entire, pale orange, becoming brownish when old; stem irregular, compressed, curved or straight, orange.

Pileus and upper part of stipe milky, gills not milky.

Pileus  $\frac{1}{2}$  to  $1\frac{1}{2}$  inches broad, stem 1 to 2 inches high, 1 to 3 lines thick.

Plant gregarious or cæspitose. Milk white. Slightly sweet.

Amongst moss and grass, beneath poplar trees. July and August.

611. MARASMIUS CAULICINALIS.

*Fr.*

"Mealy Stemmed Marasmius."

Scarcely striate. Pileus 1 to 2 inches broad; stipe  $1\frac{1}{2}$  to 2 inches high.

On the ground in woods. October.

612. MARASMIUS SULPHUREUS.

*n. sp.*

Sulphur Colored Marasmius.

Pileus, when matured, reddish brown, expanded, border rugose, umbo darkest; gills numerous, entire, dimidate, adnate, sub-decurrent, venose connected, pale orange; stem sulphur color, tomentose, equal, festulose, curved, base bulbous.

613. *MARASMIUS SEMIHIRTIPES.* *Peck.*  
 "Pale Brown Marasmius."  
 On the ground in woods. June. Not common.

*LENTINUS. Fr.*

614. *LENTINUS MAXIMUS.* *n. sp.*  
 Ringed Lentinus.

Pileus thick, compact, coreaceous, convex, plain, unequal, pale straw-color surface, dotted with dark scaly spots; stem stout, hard, rooting, scaly, annulate; gills  $\frac{3}{4}$  to 1 inch broad, sinuate, decurrent, forming lines on the stem down to the ring, whitish, with torn or tattered borders.

Pileus 3 to 7 inches broad, stem 1 to 2 inches long, an inch and more thick.

On the square end of a tamarack log. Aug.

*LENZITES.**Fr.*

615. *LENZITES FLACCIDA. Fr.*  
 "Flaccid Lenzites."  
 On stumps of nearly all kinds of wood.

*POLYPORUS.**Fr.*

616. *POLYPORUS SQUAMOSUS. Fr.*  
 "Scaly Polyporus."  
 On oak trunks and fallen branches. Oct.  
 A difficult species to determine.
617. *POLYPORUS VARIUS. Fr.*  
 "Variable Polyporus."  
 On fallen trunks and branches. In swamps.

618. *POLYPORUS TOMENTOSO-QUERCINUS. n. sp.*  
 Woolly Oak-Polyporus.

Pileus at first, soft, compact, spongy, tomentose, pulvinate, dimidate, sessile, very thick, divergently fibrous within, broad surface of attachment, dirty grayish white when

young, pale straw or sub-ferruginous when old, hard, coreaceous, woody at maturity; pores large, irregular, toothed or fringed, easily separated, from  $\frac{3}{4}$  to 1 inch long, varying in color from straw to bright orange.

Nearly always on the north side of living oaks. Pileus 1 to 2 inches thick, 2 to 5 inches broad. Spores numerous, white, globose, very small. Drops its spores in May or early June. Plant is persistent, lasting the whole year.

Its characters are decided and unmistakable when once observed. Very scarce, only seen occasionally.

619. *POLYPORUS INTYBACEUS.*

*Fr.*

"Gray-branched polyporus."

Our plant has an anise-like odor, and on the upper surface of some of the pilei there are pores developed in small patches. In all other respects fully answers book descriptions.

On an old oak stump close to the ground. In woods September.

*TREMELLA. Fr.*

620. *TREMELLA EPIGAEA. B. & Br.*

"Ground Tremella."

Effused, white, gelatinous within, externally dusted with the white spores.

On the ground, spreading over leaves, sticks, &c. Lake Harriet woods. June and July.

*DIDERMA. P.*

621. *DIDERMA FLORIFORME. P.*

"Flower-like Diderma."

At first whitish, becoming milk-white, when full grown shining and fading through all shades to a yellowish brown; stem slender, peridium spherical, splitting in all shapes, and sometimes throwing off a complete cap.

Spores yellowish brown, and may be seen under a glass



thrown out with much force so as to fall some distance away.

On decaying trunks of trees. Oct.

**ASPERGILLUS.** *Mich.*

622. **ASPERGILLUS GLAUCUS.** *Lk.*  
"Blue Mould."

On decaying leather and other decomposing substances.  
Sept.—Oct.

623. **ASPERGILLUS VIREUS.** *Lk.*  
"Green-branched aspergillus."

On decaying *Agaricis* and *Boleti* Oct.

**HAPLARIA.** *Link.*

624. **HAPLARIA GRISEA.** *Lk.*  
"Gray Haplaria."

On various decaying plants. Sept.—Oct.

**PILOBOLUS.** *Tode.*

625. **PILOBOLUS CRYSTALLINUS.** *Tate.*  
"Crystalline Pilobolus."

At first appearing like a small, yellow *Sclerotium*, soon forming a stem, which becomes inflated at the apex, which is terminated by a black and somewhat spherical cap; at this period of development the yellow hue disappears.

Densely tufted; very short lived.

On horse dung. July.

**UNCINULA.** *Lev.*

626. **UNCINULA ADUNCA.** *Lev.*  
"Willow Blight."

On leaves of willows. Sept. Very abundant.

**MICROSPHÆRIA.** *Lev.*

627. **MICROSPHÆRA EXTENSA.** *C. & Pl.*  
On upper surface of oak leaves. Sept. Common.

**MORCHELLA.** *Dill.*

628. MORCHELLA CRASSIPES. *Pers.*  
"Gigantic Morel."

Our plant is not so tall as the book descriptions, which make 9 inches or more. Ours is 6 or 7 inches high.

In woods. May. Esculent.

629. MORCHELLA PATULA. *Pers.*  
"Spreading Morel."

Obtusely conic, pits irregular, stem  $1\frac{1}{2}$  to 2 inches high, even, sometimes with an undulated exterior, thick, hollow.

In woods. May. Not common.

**GEOGLOSSUM.** *P.*

630. GEOGLOSSUM ALBUS. *n. sp.*  
White Geoglossum.

Fasciculate or solitary, smooth; clubs cylindrical, confluent with the stem; stem abruptly black, shading to greenish white; hymenium smooth, white; spores white, oblong,  $\frac{3}{80}$  of an inch long.

Plant  $\frac{1}{2}$  to 2 inches high. On ground and decayed wood, in woods. May.

**PEZIZA.** *Linn.*

631. PEZIZA RADULA. *B. & Br.*  
"Black warted Peziza."

Cup depressed, sessile,  $\frac{1}{2}$  to 1 inch in breadth, dark brown or black, covered with small warts on its upper surface, amidst which the asci are seen. Very brittle. Beneath silver maple trees on my lawn. July.

632. PEZIZA ARGILLACEA. *Sow.*  
"Clay Peziza."

Our plant is dusky, or brownish, or slightly yellow within the cup, dirty white externally.

Varies in size from  $\frac{3}{4}$  to 2 inches in breadth. On clay in Marr's woods. May.

633. PEZIZA PULLULUS. *n. sp.*

Blackish-brown Peziza.

Thin, the cup infundibuliform, bright brown or black, not turning pale, smooth, border incurved, crenate, extremely smooth, black; stem costate, flat, festulose; cup 1 to  $1\frac{1}{2}$  inches broad, 1 to  $1\frac{1}{2}$  inches deep; stem 1 to  $1\frac{1}{2}$  inches high; whole plant 2 to 3 inches high.

Solitary or gregarious. On the ground or partly buried sticks.

Spores oblong, about 1-1000 by 1-500 of an inch, smooth, nucleated. In woods. May.

634. PEZIZA SALMONICOLOR. *B. & Br.*

"Salmon-Color Peziza."

One inch broad, gregarious; cups hemispherical, pale salmon-color; asci 4 to 6 times as long as thick; sporidia, nucleate, elliptic, biseriate.

On burnt ground, in woods. Oct.

635. PEZIZA CILIARIS. *Schrad.*

"Fringed white Peziza."

On decayed wood, leaves and bark; in woods. May.

636. PEZIZA NIVEA. *Fr.*

"Snowy Peziza."

On decayed and partly buried wood; in woods. May.

637. PEZIZA VIRGINEA. *Batsch.*

"Virgin White Peziza."

Stipitate; under a glass of 50 diameters glistening white, hemispherical, externally densely covered with patulous hairs. Cup about 8 lines broad under a magnifying glass of 50. Margin ciliated, often covered with little drops of water. Spores fusiform, .0002 of an inch long and half as broad.

On the under side of half-buried rotten logs, in woods  
May.

638. PEZIZA BICOLOR. *Bull.*

"Two-colored Peziza."

Subsessile, nearly spherical, heavily tomentose, externally white; disc little tinged with yellow, very small, with a glass of 50 appears about 6 lines broad; stipe about 8 lines high, attenuated downwards.

On decayed twigs, buried beneath rotten logs, in woods.  
May.

639. PEZIZA DIPLOCARPA. *Curr.*

"Double fruited Peziza."

Our plant is pale orange or brown, not greenish olive; gregarious, perfectly covering, sometimes, large patches of earth.

On recently burned ground, Highland Park. Oct.

CALYCELLA. *Fries.*

640. HELOTIUM TUBA. *Fr.*

"Tube Helotium."

Plant  $\frac{1}{2}$  inch high; on twigs on the ground. July to September.

FRESH-WATER ALGÆ.

GENUS DOLICHOSPERMUM. *Thwaites.*

1. D. SUBRIGIDUM. *Wood.*

This species I have found growing in the scum floating on water in ditches and in the coffer dam on Nicollet Island.

GENUS GLOIOTRICHIA, *J. Ag. 1842.*

2. G. INCRUSTATA. *Wood.*

Found attached to small water plants along the Hennepin Island shore of the east branch of the Mississippi River.

GENUS **ZONOTRICHA.**

3. *Z. MOLLIS.* *Wood.*  
 Found attached to the rocks at Minnehaha Falls.

GENUS **DASYACTIS.** *Ktz.*

4. *D. MOLLIS.* *Wood.*  
 Found in a bog north of Sandy Lake.

GENUS **PALMELLA.**

5. *P. DURA.* *Wood.*  
 This is in form of little blackish balls varying in size from  $\frac{1}{4}$  of a line to 1 inch in diameter, firm and hard, the largest appearing as if they were aggregations of multitudes of small ones. Found in slow moving water in the coffer-dam on Nicollet Island.

GENUS **PENIUM.** *Preb. 1848.*

6. *P. DIGITUS, (Ehrb).* *Preb.*  
 Found in small lakes and ponds.

GENUS **VAUCHERIA.**

7. *V. VELUTINA.* *Ag.*  
 Found growing on mud in shallow ditches, after the subsidence of water from a heavy shower. Sept.