SOME INTERESTING MUSHROOMS OF CHAMPAIGN COUNTY

W. B. McDougall, University of Illinois

Among the mushrooms collected in the vicinity of Urbana, Illinois, during the past two years there are three to which especial interest attaches, for a different reason in each case. The first of these is Russula foetentula Pk. (Fig. 1). This species is easily recognized by its reddish yellow, viscid pileus which is conspicuously striate at the margin, and from its odor, which is that of bitter almonds. Other distinguishing features are the pale yellow color of the spores and reddish brown stains at the base of the stem. R. foetentula was described from New York by Peck in 1906 and seems not to have been found commonly elsewhere. This may be due to the fact that it is rather easily mistaken for R. foetens Fr., to which it is closely related. It is a very distinct species, however, differing from R. foetens in having the odor much less pronounced, in the closer gills and in the reddish stain at the base of the stem, as well as in the color of the spores which in R. foetens are white.

The interesting thing about this mushroom is that it habitually produces mycorrhizas on the white oak (Quercus alba) trees in the "forestry," an artificial woodlot at the University of Illinois. R. foetentula has not previously been reported as a mycorrhiza former. In fact, only one species of this very large genus, and that an undescribed species, has been so reported.[1] R. foetentula occurs quite abundantly during favorable weather among the white oaks of the forestry, from the

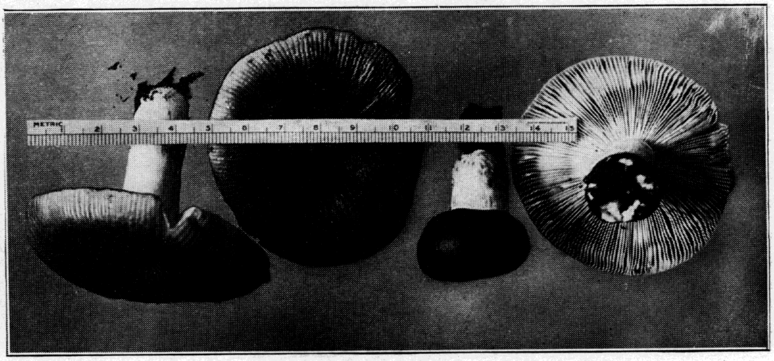

Fig. 1. Russula foetentula Pk.

Fig. 2. Russula foetentula attached to mycorrhizal roots of Quercus alba

middle of June to the end of August, and I have been able to demonstrate repeatedly its attachment to the mycorrhizal roots (Fig. 2).

The second mushroom to which especial interest attaches is Hypholoma lacrymabundum Fr. (Fig. 3). This mushroom is reported in nearly all mushroom books as not common and its edibility unknown. It is reported from the Chicago region by Moffatt, but the frequency of its occurrence there is not noted.

The plant is not difficult to recognize. The cap is light yellowish, but becomes darker with age and may become stained with black, especially when the spores are washed on to it by rains. The surface is more or less covered with silky threads and usually has irregularly radiating wrinkles. The gills are attached to the stem and in the mature specimens are spotted with black and brown due to the irregular maturing of the spores. The appearance of the gills reminds one of some of the dark colored Pholiotas such as P. squarrosa. H. lacrymabundum gets its specific name, meaning weeping or filled with tears, from the fact that in the morning or in damp weather the gills usually have minute drops of water along their edges. The spores are black but with a purple tinge, and the stem is the same color as the cap and usually more or less loose scaly except at the top.

The plant is by no means uncommon in this locality. It was found first under a bridge within the city of Urbana, but was later found in great abundance north of the city. It grows either singly or in clusters, as many as fifteen having been found in a single cluster.

I ate freely of this mushroom during the past summer, and, while I do not consider it among the best of edible species, it is not dangerous and it compares favorably with other species of Hypholoma. It may be looked for from August to October.

The third mushroom to which I wish to call attention is Stropharia epimyces (Peck) Atk. (Figs. 4 and 5.) This is the most interesting of all because it is parasitic on another

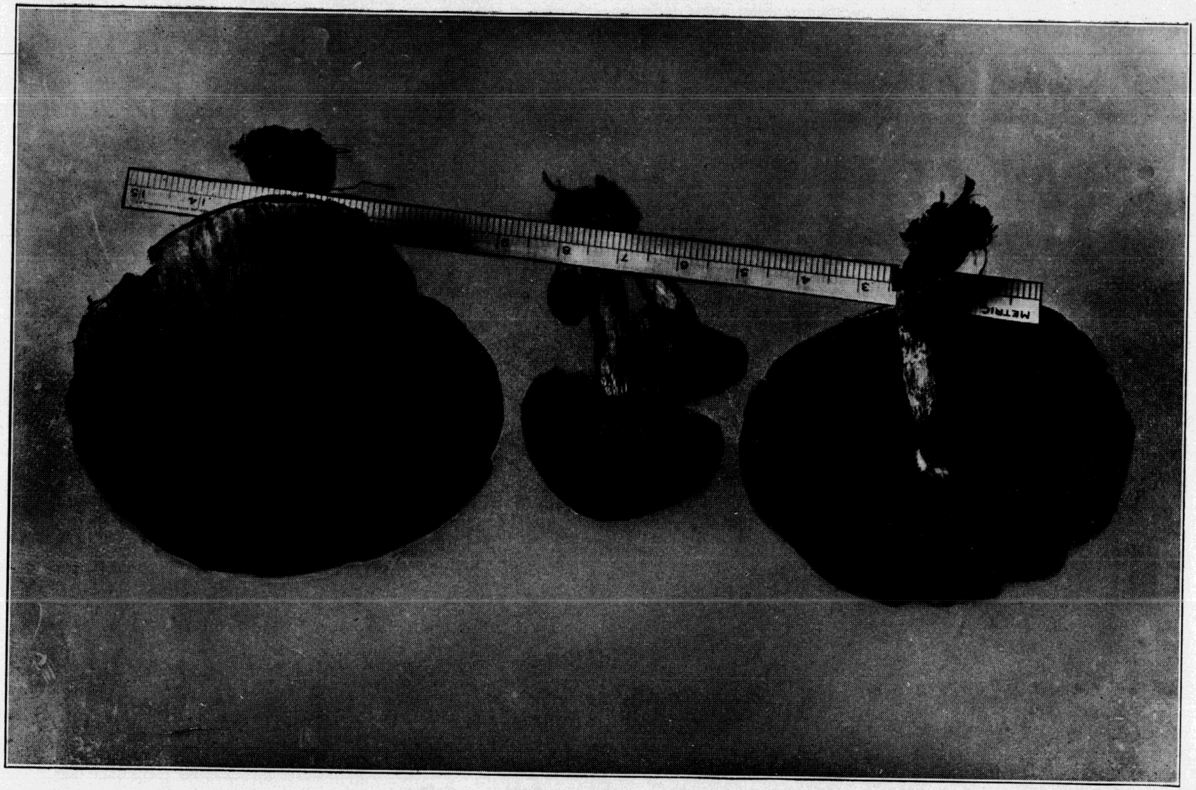

Fig. 3. Hypholoma lacrymabundum Fr.

mushroom. It is considered rare, but it has occurred very abundantly in several localities north of Urbana during the past two seasons.

The plant was first described by Peck in 1884 as Panaeolus epimyces.[2] It was redescribed by Atkinson in 1902[3], and again in 1907,[4] and placed in the genus Stropharia because of the purplish tinge of the spores and the presence of a ring on the stem. Both of these characters are evident in the specimens collected about Urbana and these specimens seem to be nearer to the genus Stropharia than to Panaeolus, although the ring is very slight and is near the base of the stem. It is the same type of ring as that which is formed in the common inky cap mushroom, Coprinus atramentarius. A study of the development of the fruit body, such as I hope to be able to make from material which I now have, will undoubtedly throw considerable light upon the relationships of the plant.

S. epimyces occurs either singly or in clusters. Figure 6 shows an extra large cluster. The plant grows from 3 to 8 cm. high and the cap is from 2 to 6 cm. broad. The cap is dingy white in color and somewhat floccose scaly. The gills are attached to the stem and are dark brown. The spores are nearly black but have a slight purplish tinge. No one would fail to recognize this mushroom after once seeing a picture of it.

The identification of the host plant was first published by Atkinson in 1902,[5] as Coprinus atramentarius. In 1905 a second host, Coprinus comatus, was added by Miss Sherman,[6] All specimens collected at Urbana have been on the shaggy mane mushroom, Coprinus comatus. Fig. 7 shows an interesting series. At the left is an unparasitized specimen of Coprinus comatus. Next to it is a pair of specimens deformed by the parasite which is present but has not developed fruit bodies. The third specimen has two partly developed fruit bodies of the parasite on it, and finally there is shown the fully matured parasite on a host so badly deformed as to be scarcely recognizable.

[1]McDougall, W. B., Am. Journ. Bot. 1:51, 1914.
[2]35th Rept. N. Y. State Mus. Nat. Hist. 133, 1884.
[3]Jour. Myc. 8:118, 1902.
[4]Plant World, 10:121, 1907.
[5]Jour. Mycol. 8:118, 1902.
[6]Jour. Mycol. 11:167, 1905.

Stropharia epimyces is edible and the flavor is the same as that of the host on which it grows. It is, therefore, a boon to those mycophagists who prefer their mushrooms plain fried and at the same time are partial to the flavor of Coprinus comatus, since C. comatus is not firm enough to fry nicely while S. epimyces is.

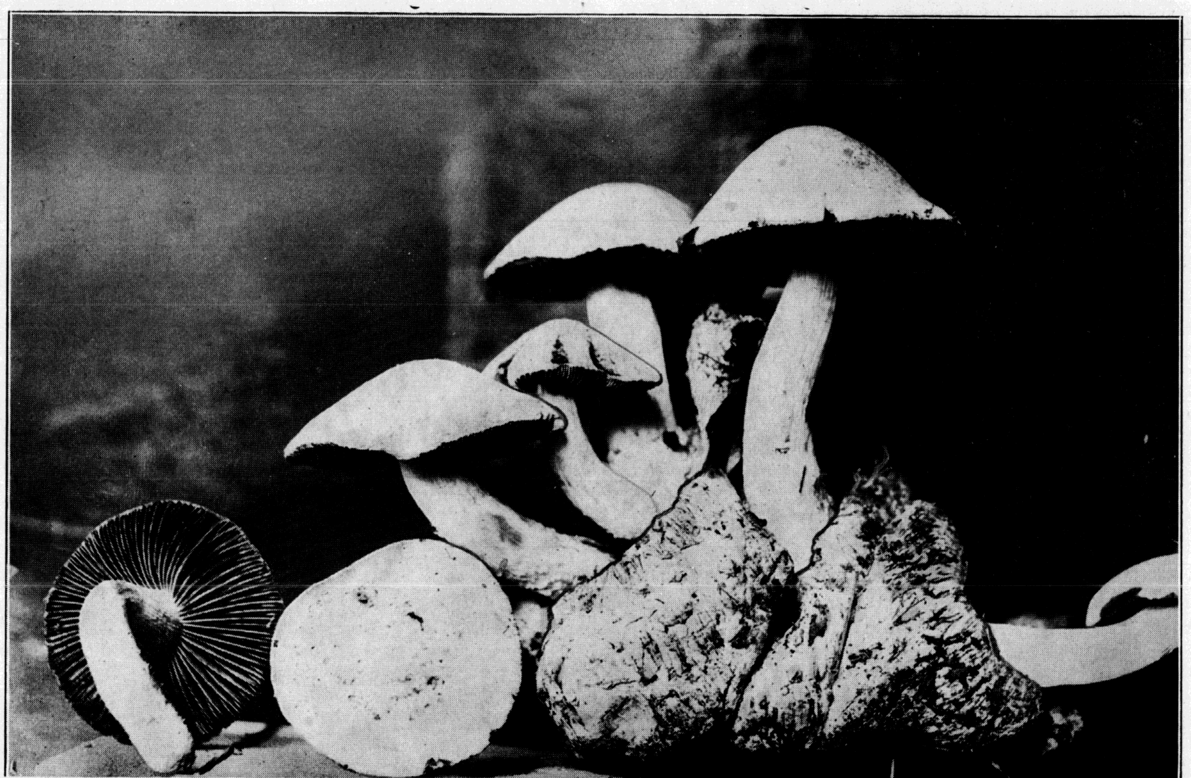

Fig. 4. Stropharia epimyces (Pk.) Atk.