

1963

## Notes on Fleshy Fungi in Iowa

Virgil K. Howe  
*Iowa State University*

Lois H. Tiffany  
*Iowa State University*

Harold S. McNabb Jr.  
*Iowa State University*

Copyright ©1963 Iowa Academy of Science, Inc.

Follow this and additional works at: <https://scholarworks.uni.edu/pias>

---

### Recommended Citation

Howe, Virgil K.; Tiffany, Lois H.; and McNabb, Harold S. Jr. (1963) "Notes on Fleshy Fungi in Iowa," *Proceedings of the Iowa Academy of Science*, 70(1), 87-89.

Available at: <https://scholarworks.uni.edu/pias/vol70/iss1/19>

This Research is brought to you for free and open access by the Iowa Academy of Science at UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact [scholarworks@uni.edu](mailto:scholarworks@uni.edu).

per square meter, or the equivalent of 5,400 metric tons of glucose for the lake as a whole (3480 lbs. of glucose per acre).

#### ACKNOWLEDGEMENTS

I wish to thank Dr. John Dodd and Dr. Kenneth Carlander, Iowa State University, Ames, for many helpful suggestions during the course of this study. Appreciation is also expressed for the cooperation and assistance of Lawrence Small, Jim McCann, and Marvin Buchholz, fellow graduate students at Ames, and Robert Cooper, State Fish Hatchery, Clear Lake. I am especially indebted to Dr. Dodd for presenting this paper at the Academy meetings.

#### Literature Cited

1. Pearcy, W. G., 1953, Iowa State Coll. Jour. Sci. 28:189-207.
2. Aronoff, S. 1956, Techniques of Radiobiochemistry, Iowa State Univ. Press, Ames, Iowa.
3. Steemann Nielsen, E., 1952, Jour. Cons. Internat. Explor. Mer. 18:117-140.
4. Welch, P. S., 1948, Limnological Methods, The Blakiston Company, Philadelphia, Pa.
5. Small, L. F., 1959, Estimates of Standing Crop of Plankton in Clear Lake, Iowa., M.S. Thesis, Iowa State Univ. Library, Ames, Iowa.
6. Riley, G. A., 1941, Bull. Bingham Oceanogr. Coll., 7:1-73.
7. Rabinowitch, E. I., 1951. Photohynthesis and Related Processes. Volume II. Part 1. Interscience Publishers, Inc., New York.
8. Rohde, W., R. A. Vollenweider, and A. Nauwerck, 1958, in Perspectives in Marine Biology, Univ. Calif. Press, Berkeley, Calif.
9. Weber, C. I., 1960, The Measurement of Carbon Fixation in Clear Lake, Iowa, Using Carbon-14., Ph.D. Thesis, Iowa State Univ. Library, Ames, Iowa.
10. Weber, C. I., 1958, Proc. Iowa Acad. Sci. 65:166-173.
11. Gessner, F., 1949, Schweiz. Zeit. Hydrol. 11:378-410.

## Notes on Fleishy Fungi in Iowa<sup>1</sup>

VIRGIL K. HOWE, LOIS H. TIFFANY, and HAROLD S. McNABB, JR.<sup>2</sup>

*Abstract.* Eighty-two sporocarps of fleshy fungi were collected during the summer of 1962. In the collections were seven species. *Peziza sylvestris* (Bond.) Sacc. & Trott., *Cortinarius uraceus* Fr., *Clitopilus subvilis* Pk., *Inocybe radiata* Pk., *Inocybe geophylla* Fr., *Lactarius hygginus* Fr., *Mycena subcaerulea* (Pk.) Sacc., and one genus, *Nolanea* Fr., not previously reported for the state of Iowa.

A number of notes, reports, and lists of fleshy fungi in Iowa have appeared in the past. Gardner (1) published an annotated checklist of the Homobasidiomycetes of Iowa which summarized

<sup>1</sup>Journal Paper No. J-4597 of the Iowa Agricultural and Home Economics Experiment Station, Ames, Iowa. Project No. 1251. In cooperation with the Central States Forest Experiment Station, United States Forest Service.

<sup>2</sup>Department of Botany and Plant Pathology, Iowa State University of Science and Technology.

the reports made prior to that time. Only a few reports have been published since (2, 3, 4, 5, 6).

Eighty-two sporocarps of fleshy fungi were collected during the summer of 1962. Seven species and one genus not previously reported for the state of Iowa were collected. The collections were made in six different sites widely spaced over the eastern half of the state (Table 1). The white oak, *Quercus alba* L., was the dominant tree species in all sites.

Table 1. Specific locations and physiographic descriptions of collection sites

| Site Number | County    | Location                                   | Description                         |
|-------------|-----------|--|-------------------------------------|
| 1           | Boone     | SW $\frac{1}{4}$ Sec. 32;<br>T 83N; R 26W. | Hilltop along the Des Moines River. |
| 2           | Hancock   | NE $\frac{1}{4}$ Sec. 4;<br>T 97N; R 23W.  | Low-lying swampy area.              |
| 3           | Allamakee | S $\frac{1}{2}$ Sec. 36;<br>T 97N; R 4W.   | Ridgetop in rough country.          |
| 4           | Iowa      | N $\frac{1}{2}$ Sec. 2;<br>T 80N; R 9W.    | Hilltop along the Iowa River.       |
| 5           | Lee       | S $\frac{1}{2}$ Sec. 33;<br>T 68N; R 7W.   | Hillside in rolling woodland.       |
| 6           | Lucas     | NE $\frac{1}{4}$ Sec. 33;<br>T 72N; R 23W. | Hillside in heavily eroded country. |

Descriptions published by Kauffman (7) were used to identify the fungi unless otherwise indicated in the following informational notes.

*Peziza sylvestris* (Bond.) Sacc. & Trott. A single clump of three ascocarps was collected at site one on 15 June. The species was identified in Seaver (8).. These specimens differ from most of the other fleshy fungi collected in that they were found in an area swept clear of the usual litter and leaf mold and where the soil appeared firmly packed.

*Cortinarius uraceus* Fr. A solitary specimen was collected 21 July at site four. The hyphae extending into the soil appeared to be in intimate association with the roots of one of the nearby woody plants. When the sporocarp was crushed, a distinct radish-like odor was detected.

*Clitopilus subvilis* Pk. From a number of small mushrooms that were scattered about site four, four specimens were collected on 21 July. Again the subterranean hyphae appeared to be in close association with woody plant roots.

*Inocybe geophylla* Fr. These sporocarps were collected while they were still quite young and the pilei were conical. They were found close to the base of a white oak tree. The separate basidiocarps collected averaged only three inches in distance from the trunk base. The collections were made at site one on 15 June.

*Inocybe radiata* Pk. These gregarious basidiocarps were collected 22 July at site two during a rainstorm which slightly

damaged the specimens. The spores of this species are quite distinctive and conform closely to the description given by Kauffman.

*Lactarius hygginus* Fr. A solitary aging specimen was collected on 10 July at site six. The area immediately around this specimen was quite grassy in contrast to the usually litter-laden forest floor.

*Mycena subcaerulea* (Pk.) Sacc. Identified in Smith (9), these mushrooms were collected at site five on 1 June. They were found scattered around the bases of live white oaks and were possibly associated with the bark or debris that had accumulated. The greenish-blue color of the mycelia is distinctive and is retained when the organism is cultured on Hagem's medium. This medium is suggested by Hacslylo (10) as being favorable for culturing fleshy basidiomycetes.

*Nolanea* Fr. Collections of basidiocarps of fungi belonging to this genus were made at three different sites. On 30 September, a single specimen was collected at site three. On 14 October, several solitary basidiocarps were collected at sites five and six. Pink spore prints were obtained, and all three plants appeared to be the same species. They do not, however, fit any of the species described by Kauffman. Our specimens all have hexagonal, apiculate spores with smooth exteriors, gills that are free, and a similar range of size, shape, and color. They were more closely akin to *N. conica* Pk. and *N. fuscogrisella* Pk. than to other species described by Kauffman (7).

#### Literature Cited

1. Gardner, Phyllis D. 1947. Iowa Acad. Sci. 54:67-97.
2. Garner, Jasper H. B. 1955. Iowa Acad. Sci. 62:216-222.
3. Martin, G. W. 1948. Iowa Acad. Sci. 55:199-204.
4. ———. 1952. Iowa Acad. Sci. 59:111-118.
5. ———. 1954. Iowa Acad. Sci. 61:138-140.
6. ———. 1960. Iowa Acad. Sci. 67:139-144.
7. Kauffman, C. H. 1918. Agaricaceae of Michigan. Wynkoop Hallenbeck Crawford Co., Lansing. 924 p.
8. Seaver, Fred J. 1942. The North American Cup-fungi. Suppl. Ed. Published by the author, New York. 377 p.
9. Smith, A. H. 1947. North American Species of *Mycena*. Univ. of Michigan Press, Ann Arbor. 521 p.
10. Hacslylo, Edward. 1961. Forest Sci. 7:376-379.