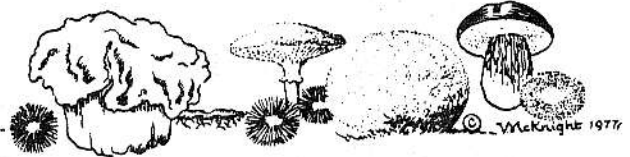
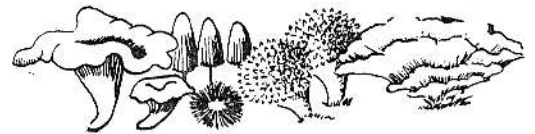




SPORE-ADDICT TIMES

NEWSLETTER

AUGUST 1984



AUGUST MEETING will be held Monday, August 27th at 7:30 p.m. at Rastall Center, Colorado College. I am sure you all remember Tom Flynn from "Stalking the Wild Mushroom" fame; the cookbook for all mycologists, compiled and printed by the Colorado Mycological Society; our program on mushrooms commonly found along the front range; as past president of the Colorado Mycological Society; and in general a nice guy with a lot of information to share that doesn't mind driving from Boulder with wife, Rita, to give our program. Since we do not usually have a program in August (hoping that everyone will attend the Mushroom Fair), we do hope that we will have a good turnout for Tom. Your attendance will prove the necessity of an August meeting.

A Foray was held Saturday, August 4th on Rampart Range. We had about 15 people attend. The forest had been wet, but results were still disappointing. Last year's harvests were so plentiful that we were anticipating more. There were enough Chanterelles found to give most a taste and a close hand chance to identify them. As usual, we all had a marvelous time anyway.

By the time you receive this newsletter the Mushroom Fair, August 19th will be history. We hope you were able to attend. Also the 20th Dr. Harry Thiers will have had the Denver monthly program. This information was in the July Newsletter. I am sure you got your "posters" out and were a part of these happenings.

SPORES AFIELD stated that "over 500 mushroom poisonings were reported to Colorado hospitals last year alone". This is why it is important to bring this number down by education. (Further checking this weekend with the Poison Control informed us that this is "ingestions" not necessarily poisonings - whew!)

POST MUSHROOM FAIR NEWS: We had a lovely foray Saturday the 18th. It took two or three shots at it, but Liz Ras and Lorri Ligon managed to each find a Chanterelle bed. Note their smug looks at the next meeting.

Viola Garrett brought in a Boletus she had gathered in Coledale and it was taken to Dr. Harry Thiers at the Fair. It was tan with bright red on the upper stipe. The pores were also white to tan. Well, we must report that it seemed to make Dr. Thiers' trip to our region worthwhile. It seems that he had named that mushroom previously. It is Boletus rebripes. We are very proud of Viola for her find.

The Fair was a huge success with well over 200 species identified. Dennis took mushrooms up Saturday night, and was ready for the early trip Sunday. We are very grateful to have a president so dedicated. Don Berrigan, Bea Lyons, Liz, Lee Barzee also attended.

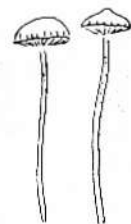
FORAYS: August 25th - Saturday - Craigs. Meet at the Safeway parking lot of Red Rocks shopping center at 8:00.

September 8th is a proposed foray at Michigan Creek to join the Denver club. Since this is a 2½ hour trip, please advise Dennis if you wish to attend. The mushrooms are supposed to be great in that area. Two year ago or so our club went and it was very successful.

Gwen Gustafson had a bout with a ruptured appendix. We give her our best wishes. Glen Roberson is coming along great with his "pinned" leg. He will be beating those mushrooms to death with his crutch. Dorothy Ferrand acknowledged our letter of condolence and informs us she is doing well and thanks the club for our good wishes.

DON'T CONFUSE THE REAL CHANTERELLE WITH THE FALSE THAT HAS DELICATE GILLS INSTEAD OF "FOLDS"  
Dennis Craig -598-9234 Barbara Laura 578-1048 (days)

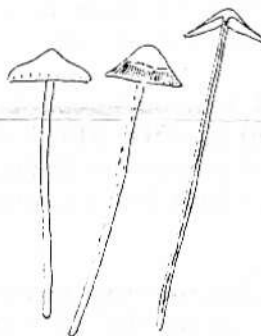
# The Genus *Psilocybe*



Review by G. Lincoff

THE GENUS *PSILOCYBE*. By Gaston Guzman. J. Cramer, Vaduz, 1983. 439 pp. 781 figures (line drawings of mushrooms & microscopic characters, black & white photos of mushrooms, and electron microscope photos of spores) and 60 color photos. \$80. (Members of NAMA get 10% discount - Order from Lubrecht & Cramer Ltd., Booksellers & Publishers, R.D. 1, Box 244, Forestburgh, New York 12777)

Because of the complexity of the issues raised by this work this review will appear in two parts. Part Two will examine species concepts of *Psilocybe* used they agree with or diverge from in the field.



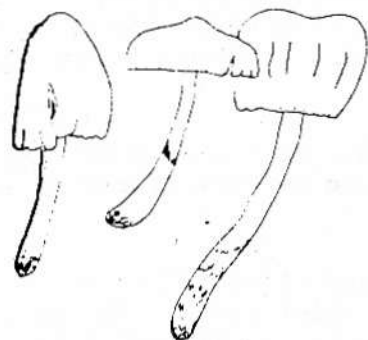
the genus, sectional, & by this author and how those of other workers

The major part of this monograph 144 species and varieties of recognized by the author. In introductory chapters on the of the species and on the hallucinogenic appendix lists over 500 titles

describes and illustrates *Psilocybe* as studied and addition, there are ecology and distribution cinogenic species. An in a bibliography.

When you read about psilocybes that these mushrooms only occur in that can be found in Florida and the Pacific Northwest. In fact, the bulk of the species do seem to occur in Mexico and tropical America. Many of these have local common names. This book gives the common names for many of these mushrooms in Zapotec, Nahuatl, Mazatec, Spanish, and

you get the impression Mexico, plus a few species



and so on. *P. aztecorum*, for example, is called 'dormilon' (sleepy head), and *P. zapotecorum* is called, among other things, 'piule de barda' in Zapotec (mushroom of the Christ crown of spines, whatever that means).

Nevertheless, there are many species that occur in Europe and Asia, even Africa has one, and no fewer than 16 species are recognized in New York. In our area, some of us are familiar with *P. squamosa* var. *thrausta* and *P. caerulipes*. In addition, three species were collected on the grounds of The New York Botanical Garden: *P. latispora*, *P. physaloides*, and *P. pyriformis*. Other local species include: *P. montana*, *P. phyllogena*, *P. rhomboidespora*, *P. semistriata*, *P. bulbosa*, *P. castanella*, *P. subviscida*, *P. atrobrunnea*, and *P. luteonites*. Of these 14 species, only one is known to be hallucinogenic: *P. caerulipes*. Guzman also cites two other hallucinogenic species of *Psilocybe* in our area: *P. graveolens*, which was collected in Hackensack, New Jersey!, and, if it can be believed, *P. semilanceata*, which Guzman discovered in a mislabeled Peck collection from around Albany...more about this in part two of this review.

This book is expensive - but cheap compared with the street price of some of the mushrooms it describes - and this book is legal. This book is for you if you want descriptions of the psilocybes in our area, or if you travel and find yourself someday in the Americas or Japan or New Guinea (at least 4 psychoactive species in New Guinea, 6 in Japan), or if you just enjoy reading any thing having to do with these mushrooms. In this book, as in many parts of the world, the English is atrocious, but you can make sense out of most of it, if you try.

In sum, this book is for you if you've got the blues.



July '84

All of us learned, in the halcyon days of high school that organisms related to each other in one of three ways, or in some combination or modification of the three. There were parasites which nourished themselves on other living creatures, saprophytes which fed on the dead, and symbionts which lived in mutually supportive and non-exploitative harmony. Mycophiles were pleased to note that the paradigm of the idyllic symbiotic relationship was the lichen; a friendly fungus wedded to an amiable alga. The dual nature of the lichen was revealed to the world via the Swiss Naturalists' Club by Simon Schwendener in 1867. The fungus was said to provide water, minerals and protection to the alga, while the alga's waste products of carbohydrates, nitrogen and other nutrients support the fungus.

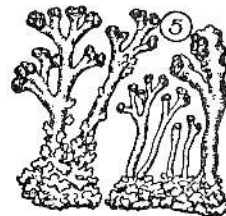


Fig. V-5. *Cladonia cristatella*. Greenish gray. Fruits red.

Before the lichen is formed, the fungus and the alga can and do lead free and independent lives. Not all algae and fungi are compatible. Those which are, however, can appear in a myriad of combinations. Depending on which alga and fungus unite and under what conditions, any of over 20,000 varieties of lichen can appear, each with its own color pattern and shape.

Symbiosis was indeed Eden, but, as in the biblical garden, a serpent was bound to appear. Biologists removed their rose colored glasses, saw what really went on in so-called symbiotic relationships, and redefined symbiosis. It wasn't mutual support, it was mutual parasitism.

The redefinition of symbiosis cost us our model for Utopia, but all was not bleak; it was, after all, mutual. If dog must eat dog, at least we'll have a couple of well fed canines. But what of our model of cooperation, the lichen?

Until recent years, not much was known about the development and life cycle of lichens. The major obstacle to learning more was the inability to reliably and consistently reproduce them under laboratory conditions. In 1979, Vernon Ahmadjian professor of botany and chairman of the Biology Department at Clark University, found the ideal lichen substrate in thin strips of newly cleaved mica (Natural History, Vol. 91, No. 3, March 1982). His studies of lichen development showed that they were not chased from Eden - they were never there.

It is difficult to generalize about the nature, formation and morphology of any type of organism. There are always variations, exceptions, alternatives and modifications. This, of course, is also true of lichen. Research in the field goes on and competent lichenologists disagree, but certain broad outlines of the nature of the beast are becoming clear.

Lichen are an integrated association of algal cells and hyphae. The association usually stimulates the fungus to form a thallus which we call a lichen. It's clear that the algal partner supplies the fungus with sugar alcohols, but what, if anything, it gets in return has yet to be determined.

When an algae/fungi union occurs, the fungus may kill the algae and no lichen will be formed. If however, the algae survive the assault or have a reproduction rate faster than the kill rate, they will stay together and we'll find them as lichen on stone and wood, and moose will continue to use them as emergency survival food. Ahmadjian defines the relationship as "controlled parasitism."

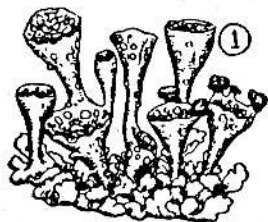


Fig. IV-1. *Cladonia pyxi-data*. Greenish gray. Fruits brown.

Air pollution willing, lichen will continue to inhabit our woods and provide an interesting subject for study. We'll have to look elsewhere, however, for a model of the ideal marriage.

(Ed. Guy Nearing, one of the founders of The New York Mycological Society, wrote a splendid book on the lichens of our area, called THE LICHEN BOOK, from which these illustrations were taken.)