

*A Survey of Macromycete Diversity
at Los Alamos National Laboratory,
Bandelier National Monument, and
Los Alamos County*

A Preliminary Report

RECEIVED
DEC 29 1997
OSTI



Los Alamos
NATIONAL LABORATORY

*Los Alamos National Laboratory is operated by the University of California
for the United States Department of Energy under contract W-7405-ENG-36.*

Edited by Hector Hinojosa, Group CIC-1

Photocomposition by Belinda Gutierrez, Group ESH-20

*Cover: A fire road leading away from the Pajarito Ski Hill area
where high-altitude surveys took place. (Photo by Fran J. Rogers.)*

An Affirmative Action/Equal Opportunity Employer

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither The Regents of the University of California, the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by The Regents of the University of California, the United States Government, or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of The Regents of the University of California, the United States Government, or any agency thereof. Los Alamos National Laboratory strongly supports academic freedom and a researcher's right to publish; as an institution, however, the Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness.

DISCLAIMER

Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.

*A Survey of Macromycete Diversity
at Los Alamos National Laboratory,
Bandelier National Monument, and
Los Alamos County*

A Preliminary Report

*Nelson Jarmie**

*Fran J. Rogers**

MASTER

**Mycology Associates, 116 Sierra Vista Dr., Los Alamos, New Mexico 87544*

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

Los Alamos
NATIONAL LABORATORY

Los Alamos, New Mexico 87545

Contents

	PROLOGUE.....	vii
	DEDICATION.....	vii
	ABSTRACT.....	1
1.0	INTRODUCTION	1
2.0	TAXONOMIC AND ECOLOGICAL INFORMATION.....	3
2.1	Ecology.....	3
2.2	Taxonomy	3
3.0	METHODS	6
3.1	Collection Techniques	6
3.2	Field Protocol and Herbarium Preservation	8
3.3	Identification and Identification Reliability	8
3.4	Species Essays	8
	<i>Coprinus comatus</i>	9
	<i>Chalciporus</i> sp.	11
	<i>Calvatia booniana</i>	13
	<i>Chlorociboria aeruginascens</i>	15
	<i>Xerula americana</i>	17
	<i>Hypomyces lactiflorum</i>	19
	<i>Xeromphalina campanella</i>	21
	<i>Amanita muscaria</i> var. <i>muscaria</i>	23
	<i>Phaeolus schweinitzii</i>	25
	<i>Boletus barrowsii</i>	27
	LBM's and their allies	29
	<i>Fuligo septica</i>	31
4.0	RESULTS	33
4.1	Computer Database	33
4.2	Summary Information from the Complete Database (All Collections) (28FnABC)	33
4.3	Summary Information for Species List (28FnSpList)	33
4.4	Summary Information for Species List Sorted by Order (28FnSpOrder)	33
4.5	Summary Information for Species List with condition of not being on the State Master List (28FnSpNotNM)	34
5.0	DISCUSSION	34
5.1	Importance to Mycological Diversity Mapping	34
5.2	Correlations	35
6.0	SUBSIDIARY INFORMATION	37
7.0	CONCLUSIONS	38
7.1	Future Work	38
8.0	ACKNOWLEDGMENTS	39
9.0	REFERENCES	40

APPENDIX A	Herbarium and Collection Technique for Fleshy Fungi
APPENDIX B1	Field Abbreviations for Los Alamos Fungi Databases
APPENDIX B2	loct: Location and Elevation Code for Los Alamos Fungi Database
APPENDIX B3	grd: Identification Reliability Code for Los Alamos Fungi Database
APPENDIX B4	ref: Reference Code for Los Alamos Fungi Database
APPENDIX B5	host: Mycorrhizal Host and Immediate Habitat Code for Los Alamos Fungi Database
APPENDIX B6	ocr: Occurrence Code for Los Alamos Fungi Database
APPENDIX B7	habi: Habitat Code for Los Alamos Fungi Database
APPENDIX C	Species List (28FnSpList)
APPENDIX D	Species List Sorted by Order (28FnSpOrder)
APPENDIX E	Species List not New Mexico (28FnSpNotNM)
APPENDIX F	Species List, Short Form (28FnABC)

Figures

1.	Weight of sporocarps of <i>Canthrellus cibarus</i> (Chantrelle) supplied to the Saarbrücken, Germany, market between 1956 and 1975 in units of 1000 kg	2
2.	Location of Los Alamos National Laboratory	4
3.	An outline of the higher taxonomic levels of fungi	5
4.	Location map for collection sites, Bandelier/Los Alamos macromycetes survey	7
5.	Number of collections (all five years) vs. month	36

Tables

1.	Common representatives of the taxonomic hierarchy of "Order" for the macroscopic fungi	6
2.	Results of the Surveys and Collections sort in the Complete (Main) Database: 28FnABC	34
3.	Database information sorted by species (e.g., 28FnSpList)	34
4.	A comparison of pertinent characteristics between four different surveys in western mountain forests	35

DEDICATION: BILL ISAACS

Mentor, teacher, gentleman. "When a person of this quality dies, a library burns."



Illustration by John Tenniel

PROLOGUE

All through recorded history, macromycetes, the large visible fruiting bodies of fungi (or more commonly: mushrooms), have influenced our culture in a curious variety of ways. Alice, above, meets a caterpillar who uses a mushroom on which to smoke his hookah. In addition, the mushroom provides Alice a way of growing or shrinking depending on which side of the mushroom she eats. In real life, though not quite as dramatic, mushrooms play a role of ecological importance not readily understood.

**A Survey of Macromycete Diversity at
Los Alamos National Laboratory,
Bandelier National Monument,
and Los Alamos County
A Preliminary Report**

by

Nelson Jarmie and Fran J. Rogers

ABSTRACT

We have completed a 5-year survey (1991–1995) of macromycetes found in Los Alamos County, Los Alamos National Laboratory, and Bandelier National Monument. We have compiled a database of 1048 collections, their characteristics, and identifications. The database represents 123 (98%) genera and 175 (73%) species reliably identified. Issues of habitat loss, species extinction, and ecological relationships are addressed, and comparisons with other surveys are made.

1.0 INTRODUCTION

Few systematic surveys of the diversity of fungi—the third great eukaryotic kingdom of living organisms—had been conducted in North America (and not at all in New Mexico) before 1990. This neglect of fungi is common. “Out of sight-out of mind.” The fungal vegetative form is often microscopic or in thin microscopic filaments (hyphae), hidden in the soil or in its animal or plant host. Indeed, the study of fungal taxonomy and interrelations with other life forms is perhaps many years behind botany and zoology. Since 1990, there has been an increase in surveys of macrofungi in the United States (Murphy 1996 and the references therein). See also Nishida et al. (1992) and Ammirati et al. (1994).

Despite our relative ignorance of their affairs, fungi are extraordinarily widespread, diverse, abundant, and ecologically important. Roughly 70,000 species of fungi have been identified out of the one to two million fungal species conservatively estimated to exist (Raven 1994). The importance of fungi to the ecosystem is well expressed by Arnolds (1992). He says, “Wild mushrooms are fascinating organisms, not only because of their tremendous variations in color and shape, but also in view of their unpredictable time of appearance, the scarcity of so many species, and their enormous ecological differentiation. Fungi are not only decorative, but are also essential components of our environment. Without them, there would be no long-term survival of the forests.”

As indicated by Arnolds' statement, the ecological importance of fungi is being recognized. Macroscopic fungi have been found to be good indicators of environmental change (Deka and Mishra 1981; Kinnes 1982; Wright and Tarrant 1957; Klopatek et al. 1987; Jansen and Dighton 1990; Arnolds 1992). In Europe, researchers have become alarmed at the disappearance of edible species such as the chanterelle (Lizon 1995a, 1995b). Dieback of forests in Europe has been correlated with dieback of certain symbiotic fungi. Researchers such as Cherfas (1991) believe the disappearance is not due to over collecting but

to subtle environmental impacts such as the use of nitrogen fertilizer in farming, as well as a general increase of air pollution. An astonishing example of dieback is given in Figure 1, which shows the decrease of the choice edible Chantrelle (*Cantharellus cibarus*) harvest, in weight of sporocarps (per thousand kg) over a 20-year period in Europe at a certain market in Saarbrücken, Germany (Arnolds 1991 and Derbsch 1987).

To understand environmental change in the environment, we must know what species occur in an area, which habitats they live in, and the conditions of those habitats (Kosztarab 1984). Some types of fungi can be indicative of certain environmental factors and may be indicators of unique or sensitive habitats. In our surveys we encountered the rare Jemez Mountains salamander (*Plethodon neomexicanus*) in an area where we located an uncommon (rare to some) fungal species (*Xerula americana*). It is important to understand the species diversity and species dependence on habitats, particularly those habitats which support species that are threatened, endangered, or of concern. Understanding the fungal component of the ecosystem will help in management decisions related to other trophic levels: plant and animal. It is becoming widely recognized that the effort should not be just to preserve *P. neomexicanus* and *X. americana*, but to preserve the entire habitat they live in, along with the tens of thousands of other living entities residing there.

This survey began in 1991 when Teralene Foxx of the Ecology Group (ESH-20) of the Los Alamos National Laboratory (LANL), in collaboration with Craig Allen of the National Park Service at Bandelier National Monument (BNM), sponsored this study as part of botanical and zoological surveys of Park and Laboratory areas. Most of the inventoried portions of Bandelier are within Los Alamos County, and all of these lands are situated on the Pajarito Plateau on the east flank of the Jemez Mountains in north-central New Mexico. The area within Los Alamos County and BNM offers a unique opportunity to study the fungal species and their diversity. The Laboratory represents a 112-km² (43-mi²) area that is remote but does have the potential for contaminants to enter the environment through various activities. BNM had experienced a large forest fire in 1977, and smaller controlled burns at various times, providing areas to study fire disturbance and succession. A large altitude variation with a variety of volcanic soils provides a number of habitats and biomes.

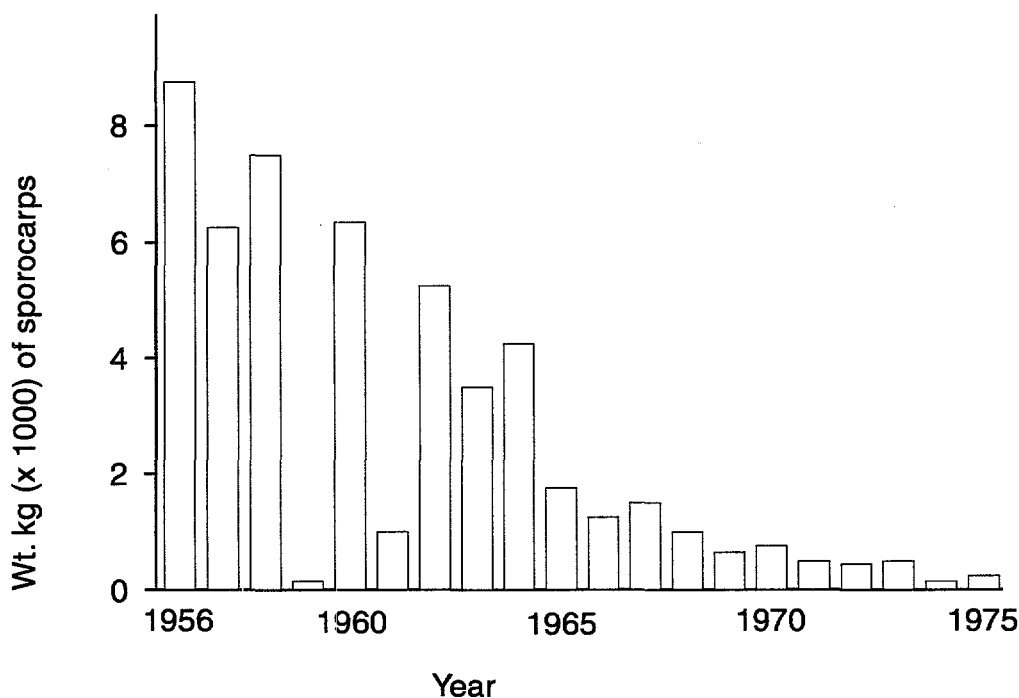


Figure 1. Weight of sporocarps of *Cantharellus cibarus* (Chantrelle) supplied to the Saarbrücken, Germany, market between 1956 and 1975 in units of 1000 kg.

Therefore, in 1991, we began a systematic survey of Los Alamos County and BNM for fungi. Figure 2 shows the location of Los Alamos County and BNM.

The basic goal of this survey has been to collect, identify, and record (at least to genus) as many macroscopic fungi species as possible, and thus, inventory the diversity of such fungi in our area.

Additional goals for a study related to fungi include the following:

- A) to observe species distribution patterns within the County and Bandelier as a function of habitat and time,
- B) to record any rare or unusual species of the area,
- C) to contribute to ESH-20's land cover classification projects,
- D) to begin to understand the ecology of the species within these environments, and
- E) to cooperate with and support other studies mapping the distribution of fungi in North America and throughout the world.

This paper documents the collections made from 1991 to 1995 and the databases developed from these surveys. With this baseline information and modeling of this baseline data, we can begin to understand more about the fungal flora of the area.

An intermediate report of this work has been published (Jarmie and Rogers 1996).

2.0 TAXONOMIC AND ECOLOGICAL INFORMATION

2.1 Ecology

Fungi, plants, and animals comprise the three great eukaryotic kingdoms of living matter. The vegetative form of macromycetes is a thin segmented microscopic filament (hypha), usually hidden in the soil or the host. The visible fruiting body is the "mushroom." Specific characteristics of fungi include the presence of chitin in the cell walls, indeterminate growth form (hyphae), absorbothrophic feeding mode using a wide range of enzymes, and complex genetic systems: reproducing sexually (spores) or asexually.

Based on their functions, macromycetes are divided into three main ecological groups: saprotrophic, parasitic, and ectomycorrhizal.

Approximately one-half of the species are saprotrophic and are involved in the decomposition of dead organic matter, including leaf litter, wood, dung, and dead sporocarps of other fungi. The species of the subdivisions Basidiomycotina and Ascomycotina (of the division Dikaryomycota), which dominate this survey, are the only organisms with effective enzyme systems for the breakdown of lignin and cellulose—the main components of woody plant material. They also can consume chitin and keratin.

The parasitic fungi are few in number, but are very destructive. They feed on living tissues of plants, animals, and other fungi, often killing their hosts, which are mainly weakened trees and other vascular plants.

The ectomycorrhizal fungi, also about one-half of the species, are in a beneficial symbiotic relationship with trees and other plants. This mutualist relationship is an intimate union of fungal hyphae and the feeding rootlets of the tree dominated by the hyphae (Kendrick 1992). Each rootlet is attached to hundreds or thousands of hyphae. It has been estimated that there are roughly 1000 kg (2200 lb) of hyphae per acre of typical forest. A fungus provides large quantities of water and nutrients to the vascular plant in exchange for sugars and other carbohydrates. Co-evolving over the ages, many trees are obligately ectomycorrhizal (Arnolds 1992) including in our area: pines (*Pinus* spp.), spruce (*Picea* spp.), Douglas fir (*Pseudotsuga* spp.), white fir (*Abies* spp.), oak (*Quercus* spp.), birch (*Betula* spp.), juniper (*Juniperus* spp.), cottonwood (*Populus* spp.), and willow (*Salix* spp.). Other types of mycorrhizae exist but are not relevant for this report.

2.2 Taxonomy

The taxonomy of this type of fungi important to our report is straightforward but, typically, ever-changing. An example of the higher taxa for this survey is shown in Figure 3. Some of the common names of frequently found specimens are given in Table 1.

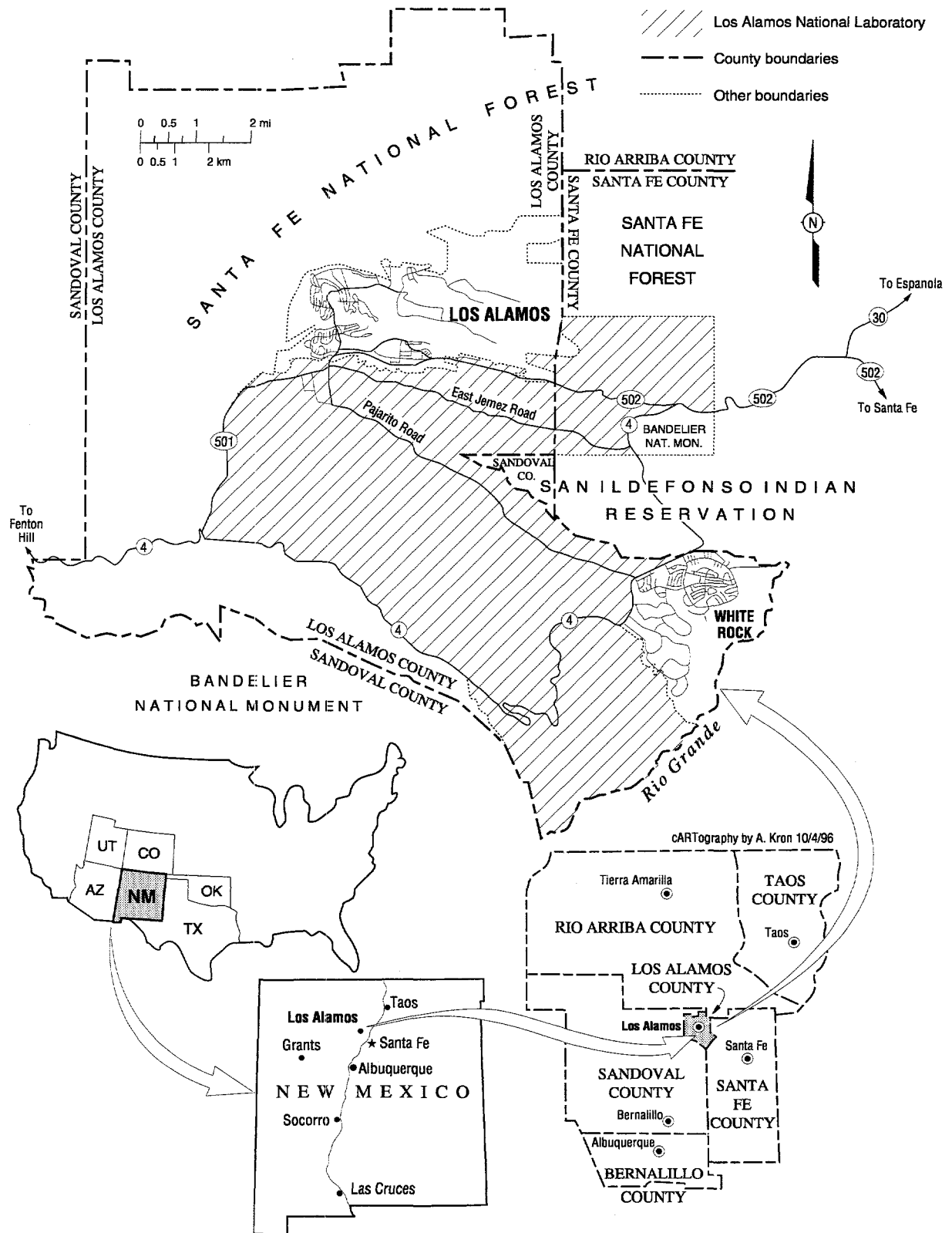


Figure 2. Location of Los Alamos National Laboratory.

Taxon

Kingdom

Division

Subdivision

Class

Order

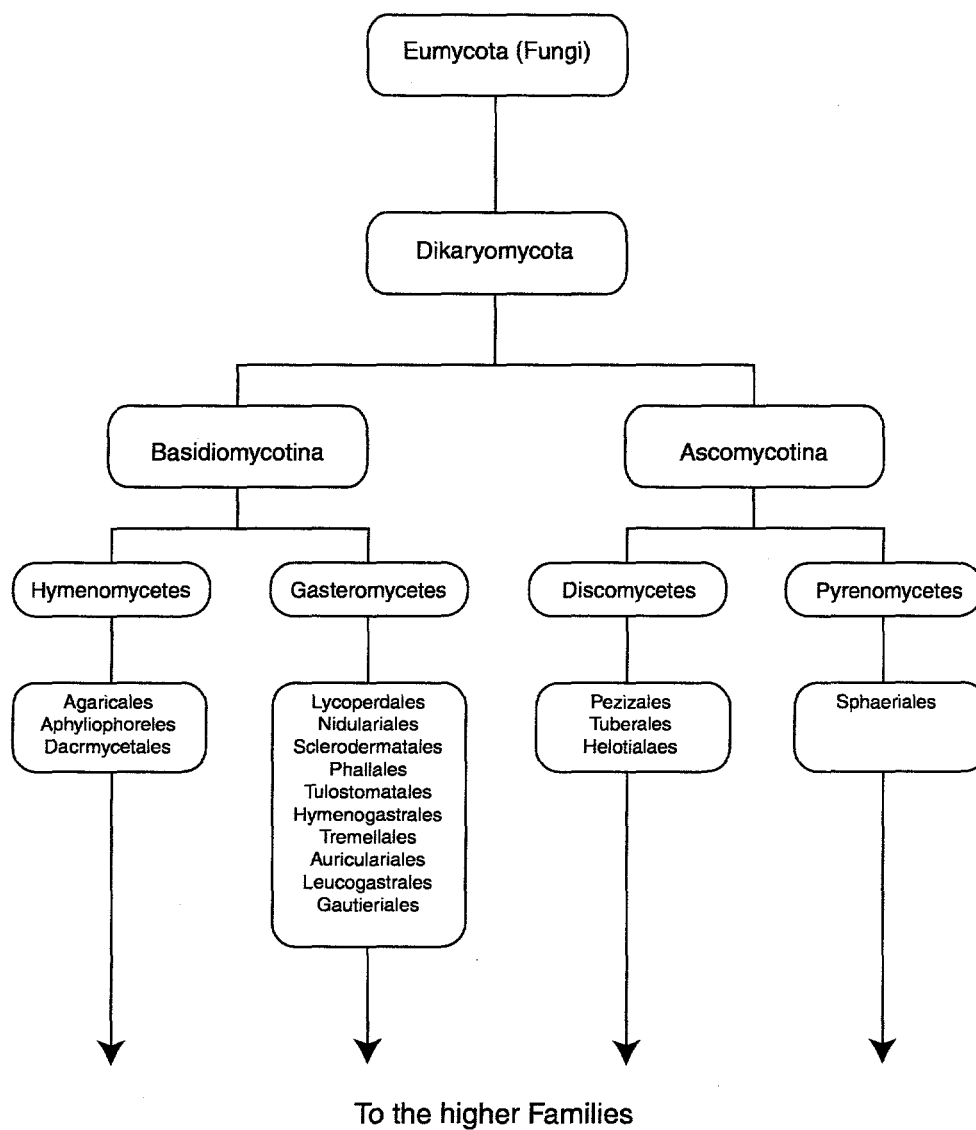


Figure 3. An outline of the higher taxonomic levels of fungi.

Table 1. Common representatives of the taxonomic hierarchy of "Order" for the macroscopic fungi (note that Gasteromycetes is a Class).

Agaricales	Aphyllorphorales	Gasteromycetes	Pezizales
Boletes	Polypores	Puffballs	Morels
Gilled fungi	Corals	Bird's nest	False morels
	Chantrelles	Stinkhorns	Cups
	Spiny fungi	False puffballs	Truffles
		Stalked puffballs	
		False truffles	

3.0 METHODS

3.1 Collection Techniques

Specimens were collected from Los Alamos County in north-central New Mexico and the adjacent Bandelier National Monument. On Laboratory property, emphasis was placed on areas where other botanical surveys were being conducted. BNM was especially interested in forest areas burned by fires, particularly the 1977 La Mesa fire. Fungal fruiting depends heavily on soil moisture and atmospheric humidity, which, in Los Alamos, is dependent on altitude. Thus, habitats varied markedly with altitude. We searched in areas at different elevations and within different vegetative zones from 1700 to 2900 m (5500 to 9500 ft).

The fungal fruiting season runs normally from May through October, with most of the fruiting occurring in the rainy season from July through September. Most of our collections were from July through September.

We established 39 collection locations in three general areas: Bandelier, LANL, and Santa Fe National Forest within Los Alamos County. Collections were made within Laboratory technical areas (TAs) including TA-0, -3, -18, -67. We included burn sites in BNM near the Juniper Campground, Park Headquarters; parts of the 1977 La Mesa fire at Burnt Mesa and the Apache Springs Road area; at controlled burns in Frijoles Canyon; and the Dome Road/Highway 4 intersection area. Santa Fe National Forest sites were mostly off the Pajarito Ski Area road, which provided access to higher altitudes.

A collection site was defined as roughly a 100-meter-diameter circle (unless a definite habitat change took place within). We attempted to informally scan each site several times during the season. The use of the term "collection" or "item" in this report refers to either a single fungus fruit or to a group of identical fruits from a local and gregarious stand of fungi. Universal transverse mercator coordinates were determined for each site, and a code name was assigned (Figure 4).

In the diversity surveys of Nishida et al. (1992) and Ammirati et al. (1994), certain taxa were excluded; this is also true with our report. The objects we collected and cataloged were macroscopic "fleshy" fungi—fungal fruits of the sexual phase (teleomorphs) visible to the naked eye in the field (some hypogeous species were included). Almost all the specimens collected were in the kingdom Eumycota (Fungi). We found several species of "slime molds" now thought to be in the animal kingdom, as well as a common juniper rust, and included them in the list for interest. Most mycorrhizal and many saprophytic fungi put up visible fruits making them easier to find and identify. A study of the many species of microscopic fungi (smuts, rusts, mildews, yeasts, blights, and soil fungi, etc.) was not attempted due to the difficulties associated with their identification and our lack of resources, although these fungi are extremely important in the ecology and management of vascular plants (e.g., forest trees and agricultural crops).

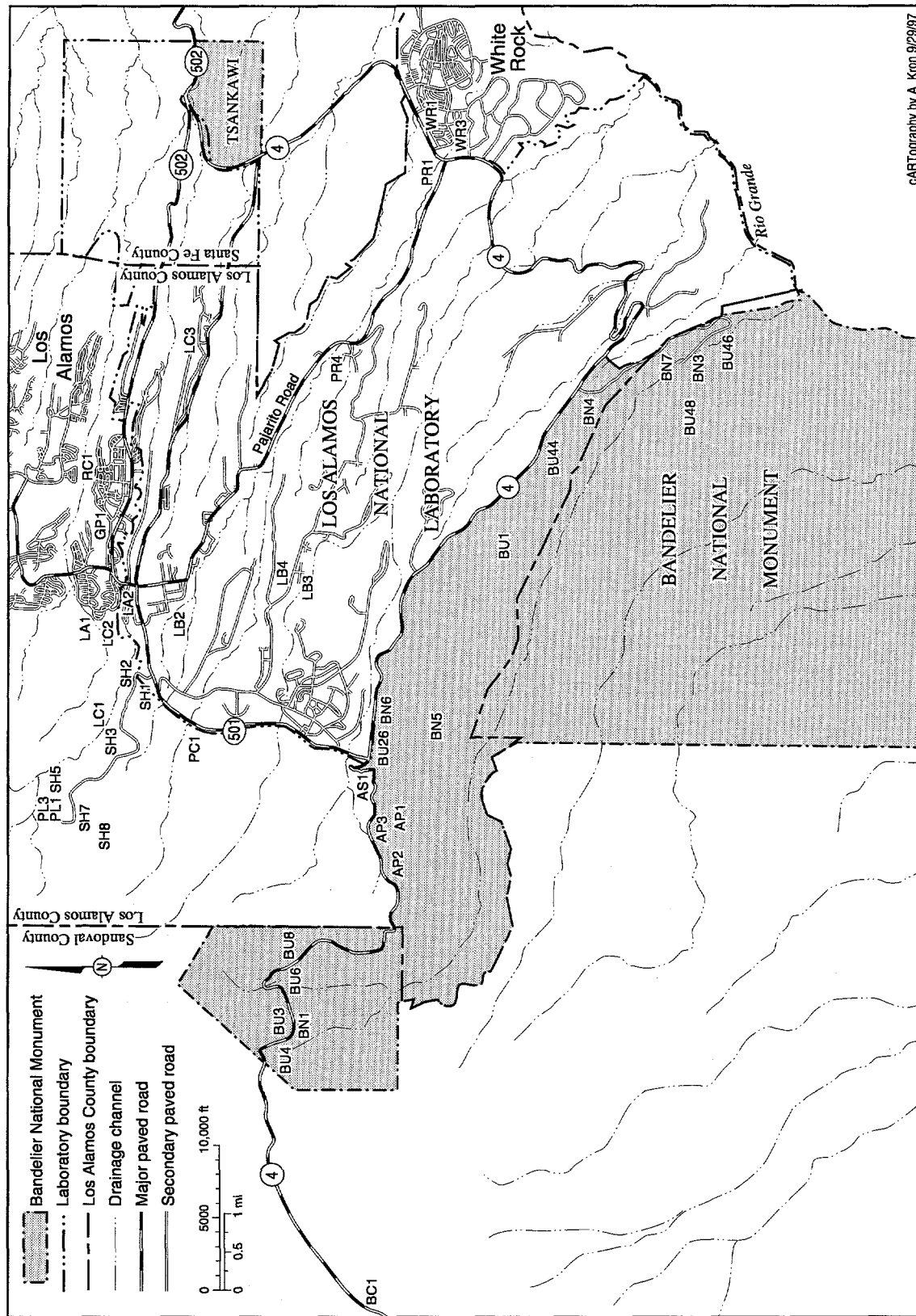


Figure 4. Location map collection sites, Bandelier/Los Alamos macromycetes survey.

Our original goal was to conduct a fruiting density study as is done with vascular plants, using a dedicated plot of ground, such as a botanical transect. However, it soon became clear that a "famous fickle fungi fruiting factor" exists* that results in erratic fruiting of fungi year by year and site by site. Given the limits of available personnel and resources, a meaningful density study proved impossible. In addition, contrary to most plants, the vegetative body of fungi is almost always hidden in the soil, inside living or dead wood or dead animals. Furthermore, many of the fruits perish rapidly, generally within a few days. Thus, our survey is essentially a "presence log" which simply says: "Yes, this species does exist in this habitat in this location, at this time," and includes a subjective statement that it is abundant, common, uncommon, or rare.

3.2 Field Protocol and Herbarium Preservation

We kept field notes and, after identification and assignment of an accession number, dried and preserved many specimens for storage in our fungal herbarium. See Appendix A for our collection and herbarium procedure.

Vouchers for three-fourths of all specimens with at least one voucher for each species are stored.

Several genus specialists have asked for herbarium specimens. Mycologists have visited with us at Bandelier and in Los Alamos County. Others have been available to us at major statewide or national forays to help with identifications. The primary effort was to identify specimens to genus because many of the ecological factors (e.g., mycorrhizae) are common to the genus, or even family.

3.3 Identification and Identification Reliability

A taxonomic identification was made from personal knowledge, reference to various monographs, field guides and texts, microscope work, chemical indicators, and suggestions from experts. Again, the primary effort was to reliably identify specimens to genus. A number of species especially in difficult genera (e.g., *Agaricus*, *Amanita*, *Cortinarius*, and *Russula*) await further expert study by specialists. Ninety-three percent of the 1048 specimens were identified to genus.

Our isolation from mycological academic centers and the lack of a local professional or one available for the 90 field trips we took raises a question of the reliability of the identifications. To help answer this question, we initiated a numerical grade for identification reliability (Appendix B): grade #1 = species taxon sure, no question; grade #2 = fairly sure, e.g., by a mycologist for a species perhaps not in his specialty or region; grade #3 = some hint of species identification, what a field guide might call a "group" or "complex" and placing a "cf." with the species name in the data lists. A grade #4 = genus only, grade #5 = family only and so forth. Within this system we attempted to be very conservative.

3.4 Species Essays

Based on our field notes, and before we get into the nitty-gritty of explaining the particulars of our database, we present a collection of 12 essays, each one focusing on a particular species; each one illustrating unique characteristics of a unique species and of isolated episodes and reminiscings contained within five years of field work.

* This was a private communication from H. Burdsall (USDA Forest Service Forest Products Laboratory, Madison Wisconsin) in 1991. Well, of course, Burdsall did not put it quite this way, but he certainly emphasized that a healthy fungus-tree partnership could live happily without fruiting for maybe 10 to 15 years. This fickle fungi fruiting factor implies that an accurate abundance measurement may require more than collecting by walking around and looking.

Coprinus comatus

accession numbers: 163, 243, 677

The "Shaggy Mane" is a beginner's best friend—easy to learn to identify with hardly anything that could be called a look-alike. It is a choice edible, so delicate that it needs to be steamed or used to make a soup. It is common to find it in its favorite habitats: on the edges of dirt roads or wherever the soil has been disturbed for a year or three and occasionally on a lawn or in a meadow.

Species in the genus *Coprinus* have gills that deliquesce into a black ink as they age; *comatus* in particular. The juice can be used as a writing ink. The fungus is a saprobe and is ubiquitous. We were startled to see a stand of about 2000 fruiting bodies on a large lawn in the Emperor's Gardens in Tokyo, Japan, all self-digesting to an inky black mess. *Coprinus* belongs to the Family Coprinaceae of the Order Agaricales of the Class Hymenomycetes in the Subdivision Basidiomycotina and Division Dikaryomycota then Kingdom Eumycota (Fungi).

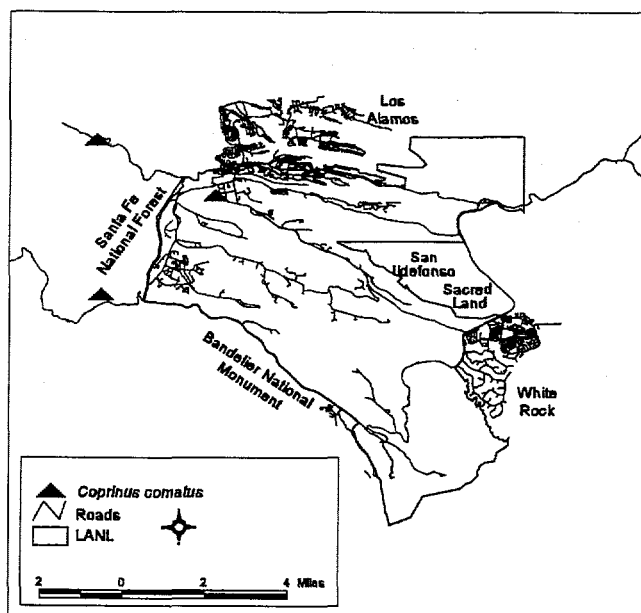
Out in the field, when you see gills of a mushroom black and deliquescing, immediately you know to start an identification search with the genus *Coprinus*, a reward for learning the scientific names.

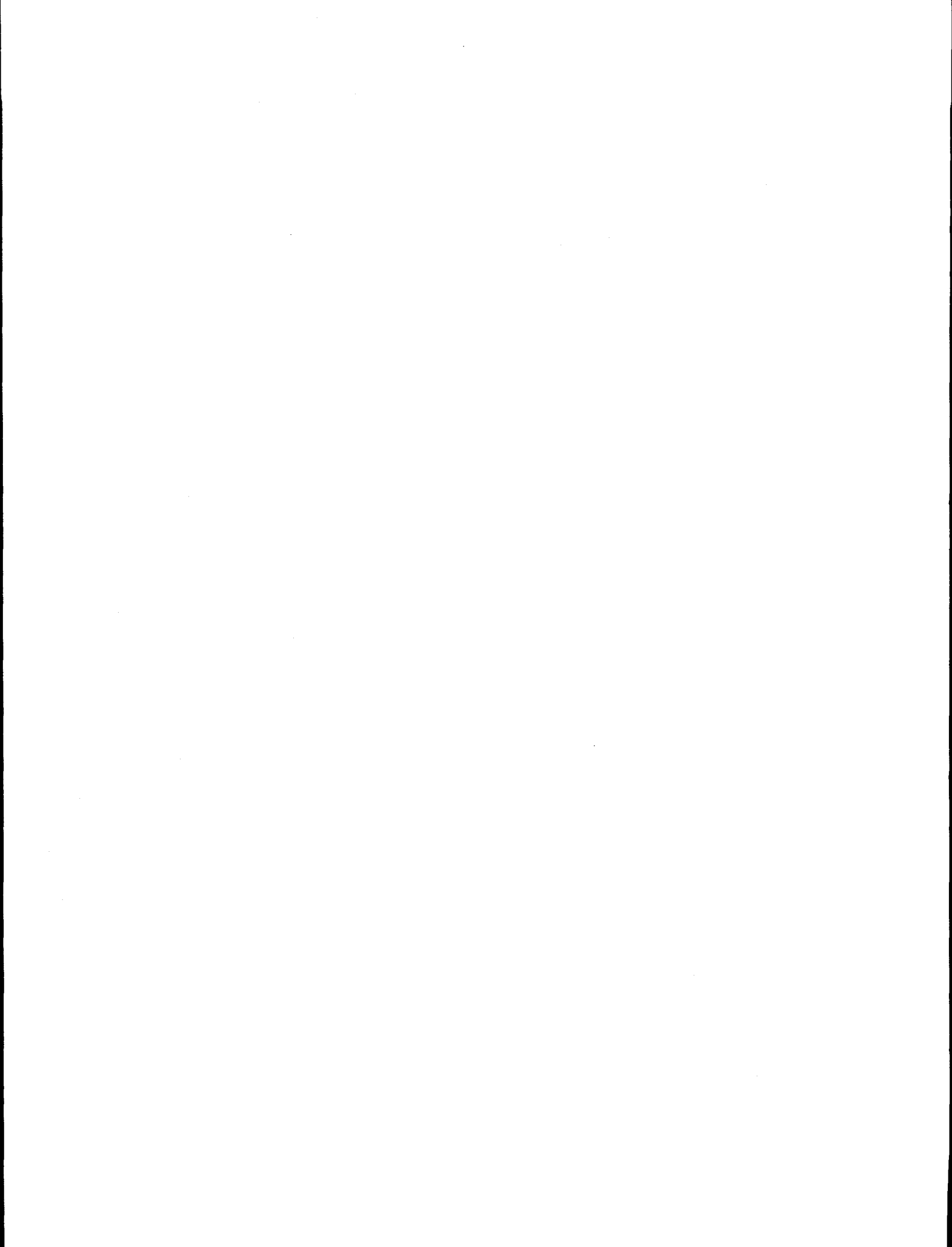
Coprinus comatus



Photo by Fran Rogers

The reason for the common name is obvious.





Chalciporus sp.

accession numbers: 1051, 1123, 114

In 1994, the New Mexico annual foray was held in the thriving metropolis of Weed in the south-central region of the state. A group of us were surveying a piñon/juniper habitat where fungal fruitings are not common without heavy rains. We came upon a small unimposing specimen growing under a piñon pine that immediately reminded us of the genus *Suillus*, a group, also unimposing, of soft-pored fungi that often keep company with ponderosa pine.

Upon investigation, we saw that the pore surface was a bright purple, a color none of us had seen in this type of mushroom. Jack States, an Arizona mycologist, took it home and identified the Genus as *Chalciporus* (Family Boletaceae). Bill Isaacs of Santa Fe agreed, noting he had collected them in the piñon/juniper area north of Santa Fe.

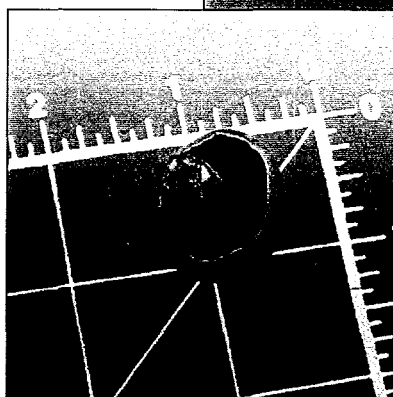
How about our survey? The next week we visited friends in our area who had mentioned mushrooms fruiting under piñon pine. Indeed, the purple-pored *Bolete* was present, and was found there twice more. Now the question, is it rare or common? Rare to the world and common to us? We plan to send the berbarium voucher to a specialist.

Chalciporus is in the Family Boletaceae of the Order Agaricales. A tentative indentification of the species is *amarellus* (cf.).

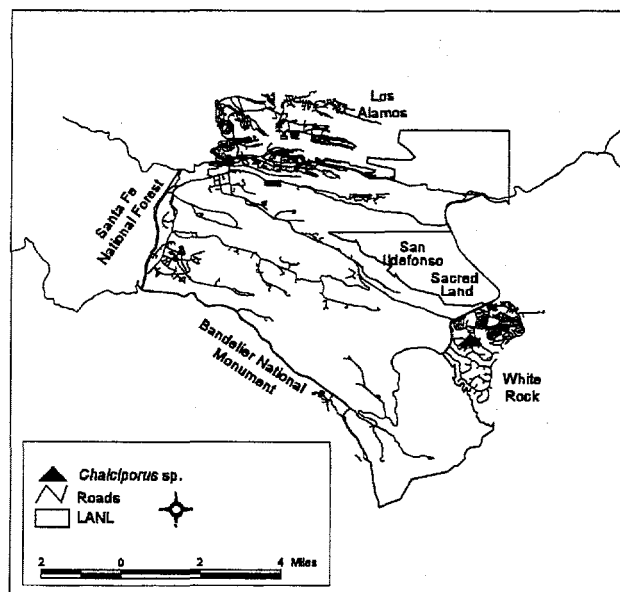
Chalciporus sp.

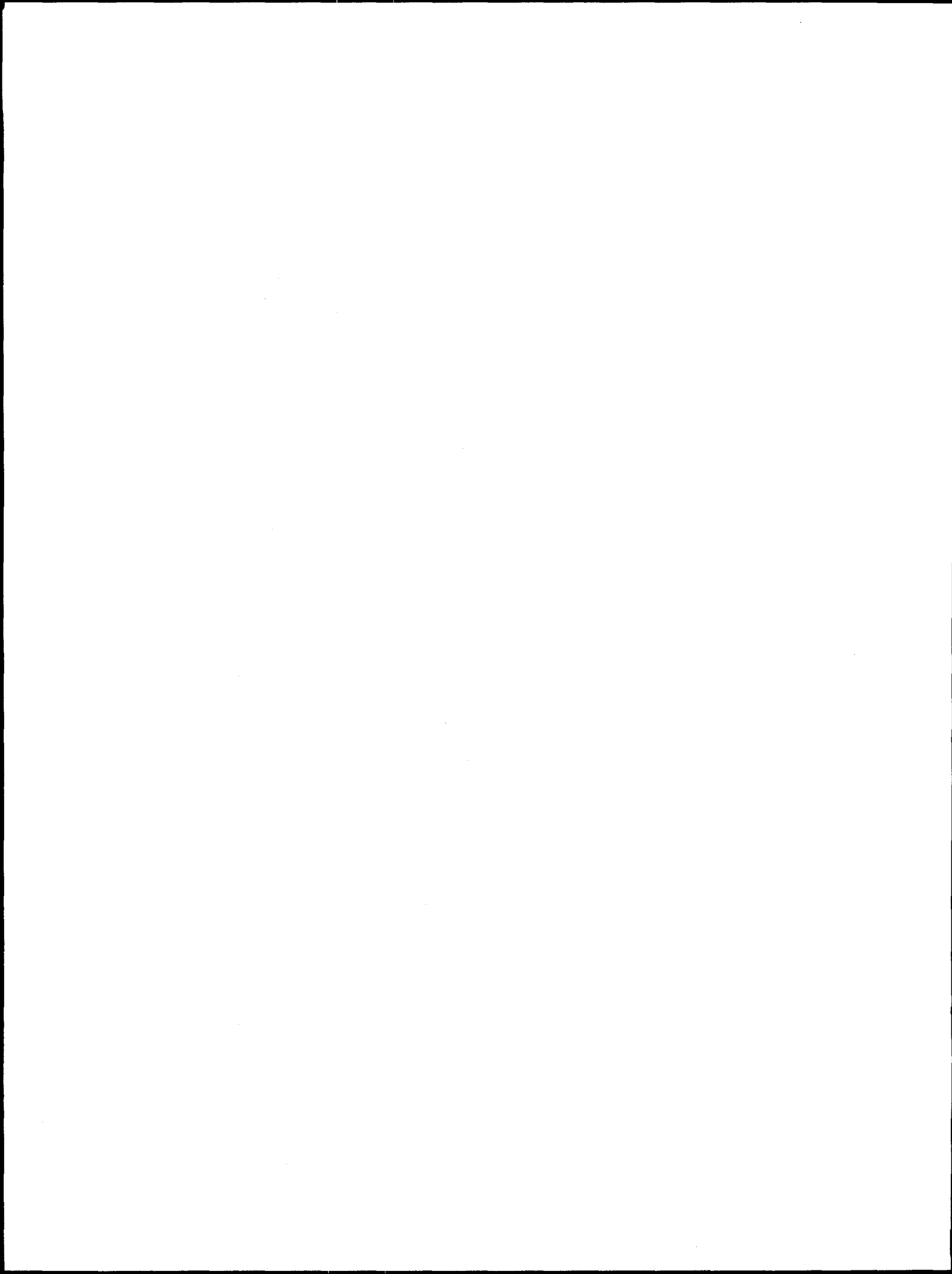


Photos by Fran Rogers



Focused to bring out the color, and to show the pores underneath. The grid lines show inches.





Calvatia booniana

accession number: 1150 (not in the formal survey)

Most of the time surveying, we concentrated on forest habitats and wild meadows where the density of fruits is greatest. We looked a little at football field grass and residential lawns to check on some old favorite LTMs (little tan mushrooms).

There is a danger of including species brought in manure or wood chips that come from distant sources. But we couldn't resist an excited neighbor's call: "There's a monster in our back yard! Is it a mushroom?" We went to see. There, in a domestic lawn in a slight depression, which stayed moist from the lawn watering, were several gorgeous medium-sized *Calvatia booniana*. The photo at right shows co-author, FJR, with a couple examples. Note the polygonal surface pattern.

Unfortunately they were a little past their prime or they would have been good for dinner. We know also the ripe brown powder has been used in times past as a styptic for treatment of wounds and for other medicinal purposes. We had never seen this species in our survey or in our local region. Did the neighbors use packaged manure? Yes, they did. The problem was to include *booniana* or not. We chose not to include it in the survey until a second collection shows that it has taken hold in the regional habitat.

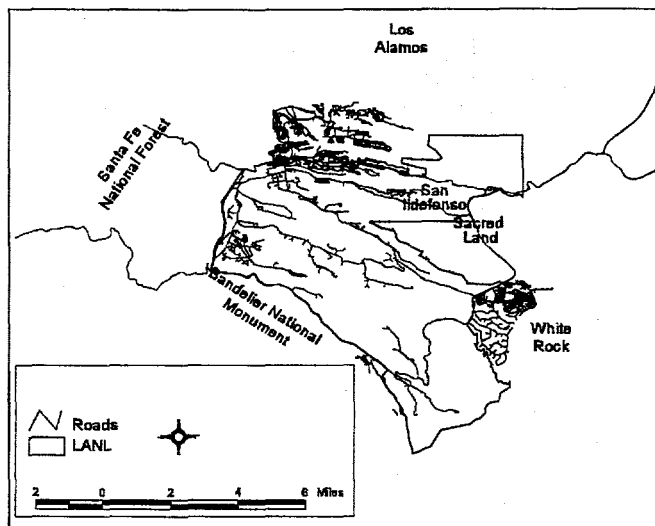
The fungus is a good example of the Class Gastromycetes; where the spores ripen inside an enclosed body. The Order is Lycoperdales.

Calvatia booniana



Photo by Nelson Jarmie

Note that the map does not give away the location of these monsters.





Chlorociboria aeruginascens

accession numbers: 236, 1147

This tiny cup (3 to 5 mm wide) is the fruit of a fungus that is common but not noticed very often. The mushroom is the fruiting body of a fungus whose hyphae stain the inner bark of dead wood, often oak, a distinct blue (to some a green). Some of the field guides call it blue stain and some green stain; a good example of the dangers of common names. The Latin binomial gives clues of the color and nature of the specimen, and can be used to impress your friends when this long name rolls off your tongue.

This hints of a famous conundrum of inductive logic known as the Grue-Bleen paradox. The Bleen hypothesis is that the blue stain of the fungus (or your house, if it is blue) will suddenly change to green at exactly the last second of the twentieth century. Frequent observations inductively support the hypothesis, so that after many observations there can be no doubt of the truth of the hypothesis.

We had only two collections, but would have many more if we had pulled the bark off rotting oak logs. *Aeruginascens* is of the Family Dermatiaceae, of the Order Helotiales (Earth Tongues) of the Class Discomycetes, and thus, is an example of the Subdivision Ascomycotina, whose spores are grown in a small sack of eight. The Asco's are smaller than the Basidiomycetes, I think that is because few members are mycorrhizal with plants.

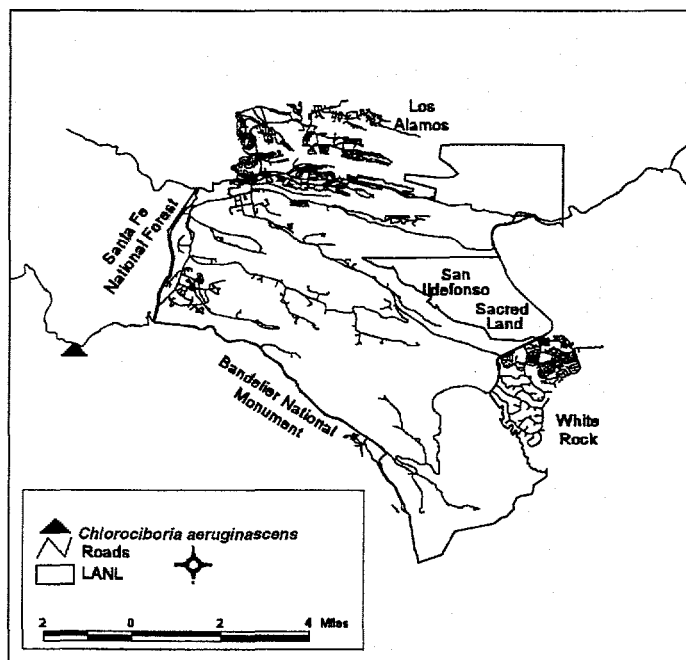
If you see a stained log, look on the bottom surface and you may find a few tiny blue-green (grue?) cups.

Chlorociboria aeruginascens



Photo by Fran Rogers

The cups are too small to see, but the bleen stain on this rotten wood is brilliant.





Xerula americana

accession numbers: 258, 961, 1121

We found three collections of this rare (?) (but see below) member of the Tricholomataceae (Agaricales). We had seen no literature report of one in the western United States. One of ours was under ponderosa pine at 7500 ft (site BN6). The other two were in moist duff of mixed conifer at 9000 ft (site SH5). The latter site was a stones (easy) throw from the lair of a Jemez Mountains salamander (*Plethodon neomexicanus*), truly rare, whose home we found while looking for fungi under a wet, rotting conifer log.

The young *americana* specimens are strikingly beautiful, both stipe (stem) and pileus (cap) are coated with a thick blue-black velvet when young. The cap fades to a medium tan in age. The stipe cover in age splits in a spiral fashion counterclockwise, revealing a white interior. The fungus has a long yellowish root.

Understandably, its edibility has not been tested. We found that its taste was mild.

Also unknown is the type. It seemed to be growing on rotten wood although it could be mycorrhizal since some fungi in the Family Tricholomataceae are. This family is a catch-all for white-spored mushrooms that do not easily separate into groups based on an evident morphology.

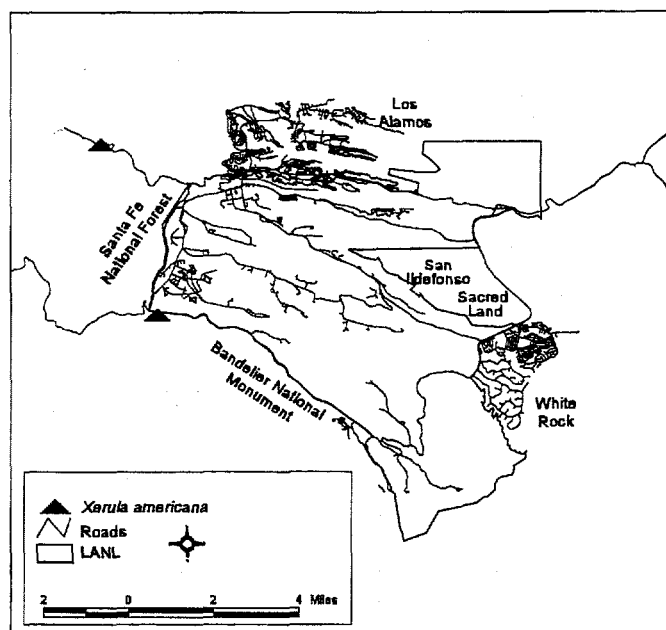
The first expert we showed it to said it was the second sighting in North America. We had a rare one!? We kept finding more local specimens—not all that rare. Then our visits to national conferences made it clear that there were experts who were familiar with the mushroom which, though uncommon, would be expected in our habitats. Our truly rare fungi are probably buried in our list of “unknowns.”

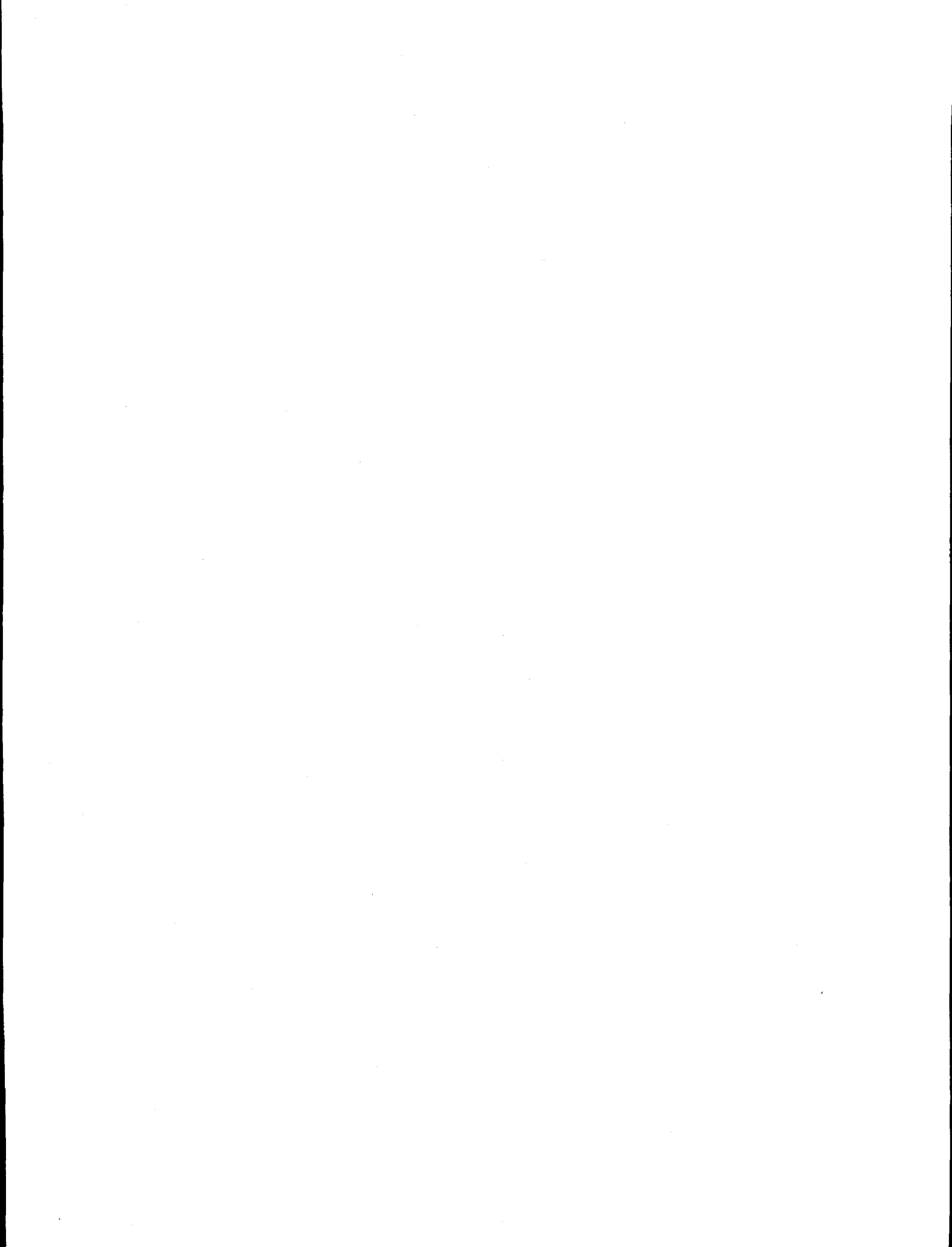
Xerula americana



Photo by Fran Rogers

Look carefully. The smaller fungus is on its side showing the root.





Hypomyces lactiflourum

accession numbers: 101, 189, 264, 287, 312, 387, 496, 617, 788, 1035, 1110

The "Lobster" is an oddity in the woods. You see it almost always in the company of ponderosa pine, in late summer at an elevation of 7000 to 8000 feet. It pokes its nose up through the pine duff and exposes a bright red-orange lobster-colored distorted monster. So! An odd fungus mycorrhizal with *Pinus ponderosa*?

No way, sorry. A little more searching exposes a number of a gilled mushroom, *Russula brevipes*, in the area usually shoving up a load of pine needles and dirt on its cap (pileus), a typical one of many *Russula* with whitish spores and a brittle flesh (context). The short stalk (stipe) and its load of soil and pine needles gives a clue to the species.

The *Hypomyces* infects a *Russula* and turns it into that colorful, rough, ridged, ugly, non-gilled shape. It grows its sacks of spores on the surface of the former *brevipes* in tiny pimples or "flasks" that can be seen with a sharp eye aided by a powerful hand lens.

The *brevipes* is reported to have a poor taste but the Lobster is choice eating. All the field guides warn you that the underlying mushroom might be toxic, but I have never seen an expert hesitate to enjoy the feast.

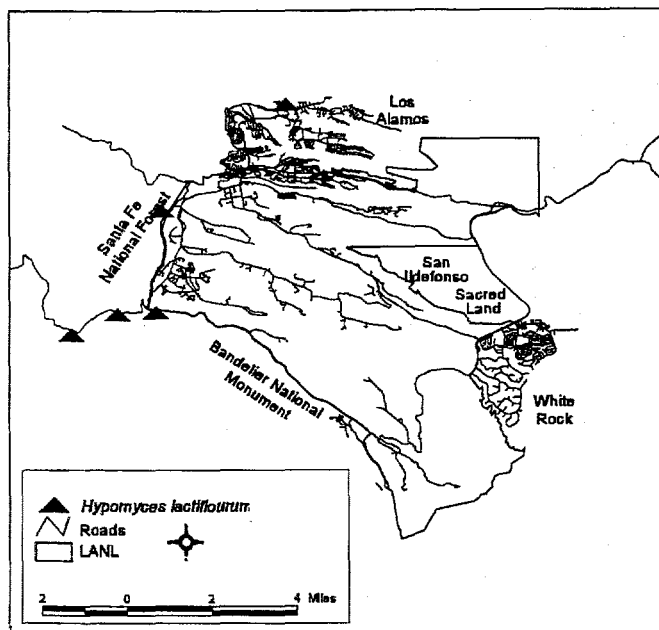
Other species of *Hypomyces* infect Amanitaceae, and Boletaceae, as well as the Russulaceae. *Hypomyces* belongs in the Class Pyrenomycetes in the Subdivision Ascomycotina.

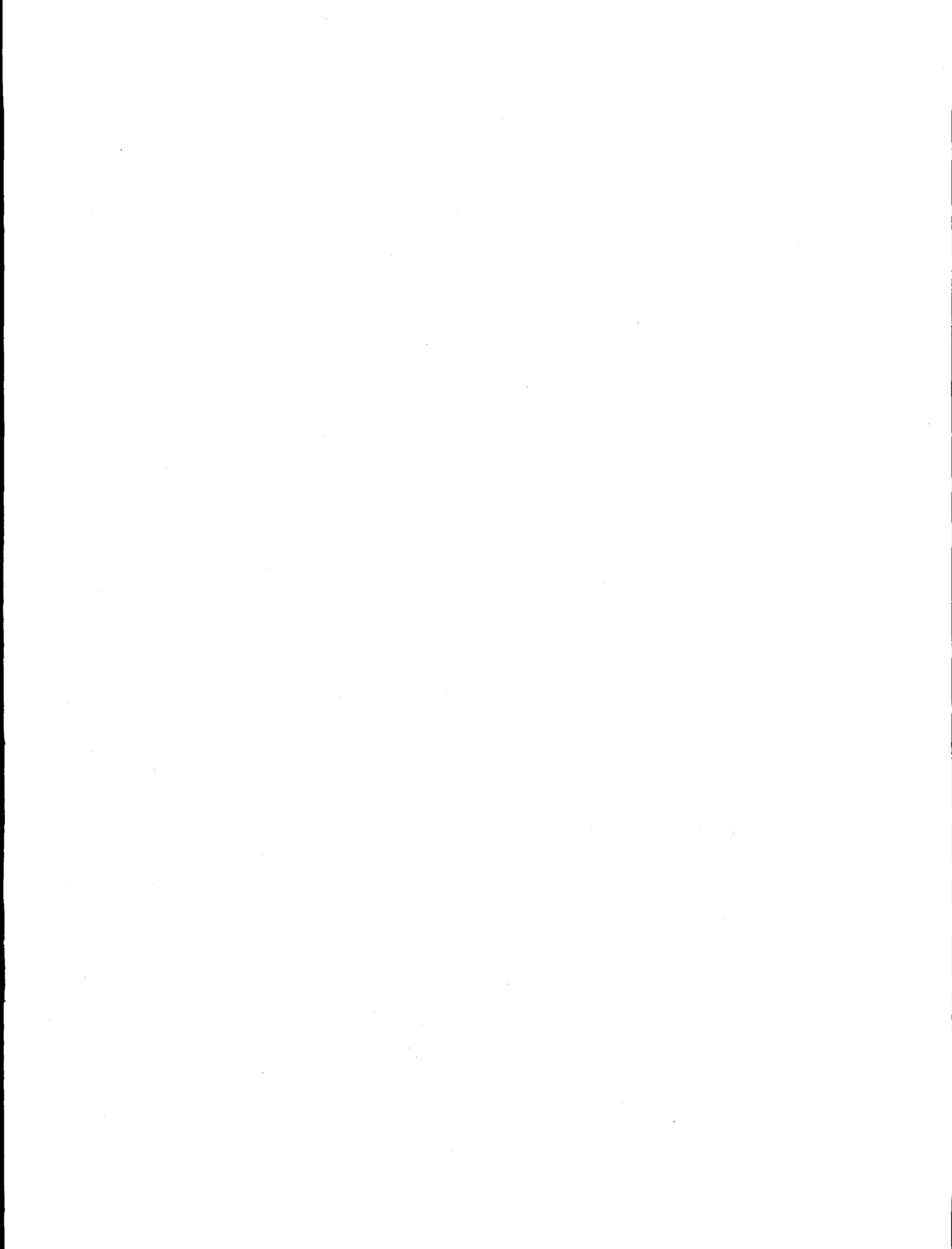
Hypomyces lactiflourum



Photo by Fran Rogers

Some of the host's cap is still visible. The color is often more orange.





Xeromphalina campanella

accession numbers: 219, 423, 447, 457, 479, 510, 533, 548, 584, 595, 627, 638, 702, 759, 809, 974, 990, 1071

We often felt an aesthetic pleasure, a joy, from walking in the woods and discovering fungi new to us. The API site at Apache Springs in Bandelier was a fungi showcase in 1992. In this moist narrow cleft, surrounded by expanses of drier ponderosa pine/mixed conifer forest, is a small riparian habitat that provided a profuse fairyland of mushrooms. There were troops of tiny orange *Xeromphalina campanella* on fallen logs, guarded by flanks of the purpled-pored cups of *Humaria hemisphaerica*, and orange corals (*Clavicornia pyxidata*) amidst red "eye-lash" cups (*Scutellinia scutellata*). We collected 40 different species in all from that one site in August and September 1992.

"Troops" of small mushroom fruits are usually saprobic, exuding enzymes to digest the components of dead wood, standing or as fallen logs. Mycorrhizal fungi are often larger. I surmise that their "standard of living" is higher, the host tree or plant providing the carbohydrates and various complex chemicals (in return for water, minerals, and other basic nutrients).

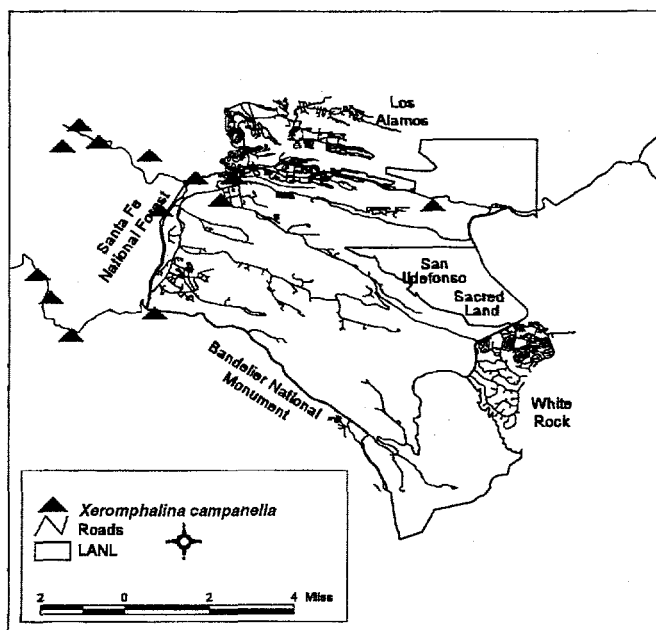
X. campanella is in the catch-all family Tricholomataceae, in the Order Agaricales, Class Hymenomycetes, Subdivision Basidiomycotina, and Division Dikariomycota.

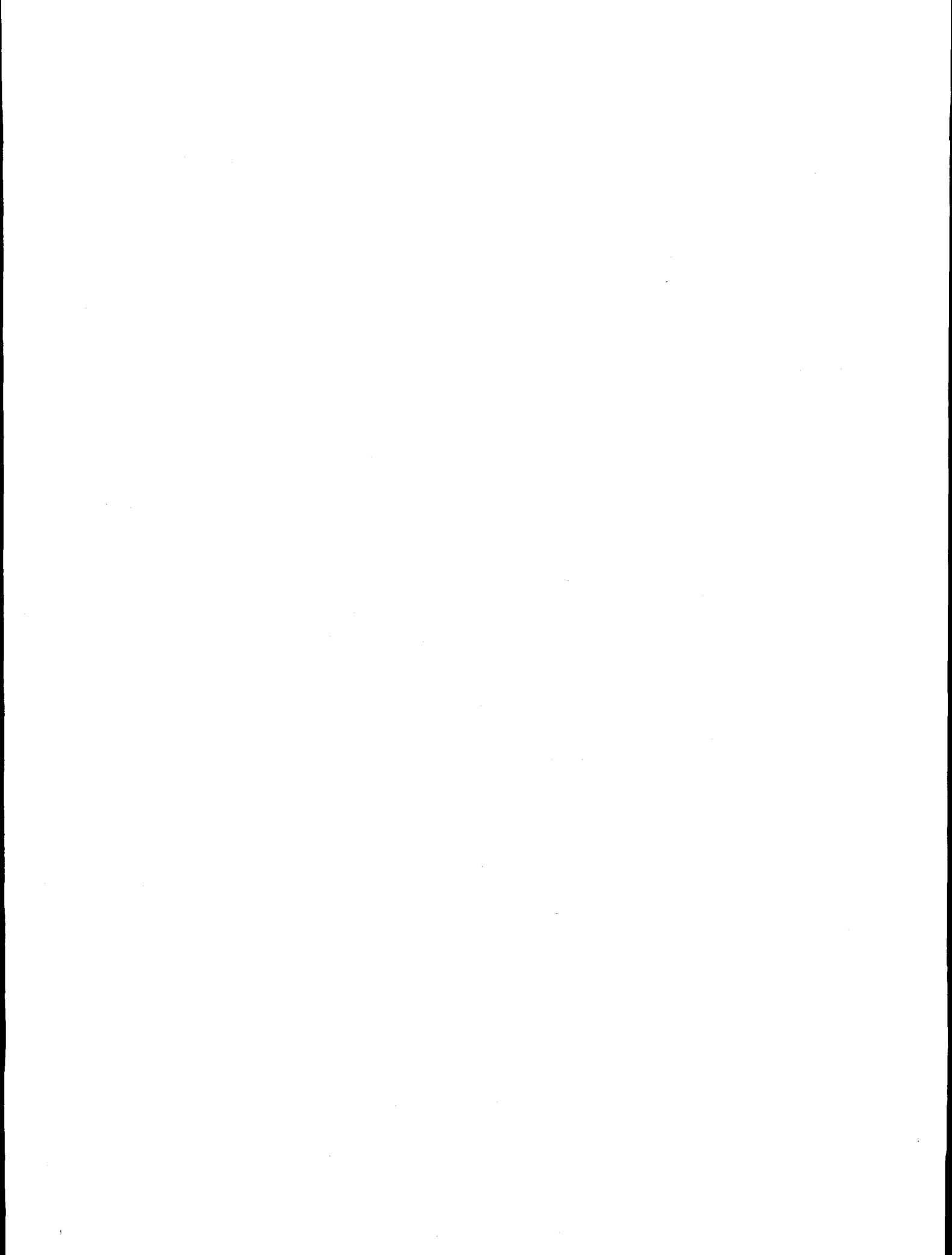
Xeromphalina campanella



Photo by Fran Rogers

As the map below shows, *X. campanella* is widespread as well as abundant.





Amanita muscaria var. *muscaria*

accession numbers: 119, 416, 445, 569, 600, 619, 648, 790, 1037

This famous, beautiful, ubiquitous mushroom fruit is without doubt the most well known mushroom in the opinion of mycologists and non-mycologists alike. It is seen in Egyptian hieroglyphics, sacred Hindu texts, Christmas cards, and has been observed as the seat of a hookah-smoking caterpillar! It is large as gilled mushrooms go, with a bright red cap tufted with white remnants of a universal veil, a floppy snow-white annulus (ring), and a tight volva at the base of the stem.

As might be suspected with a member of the *Amanita* genus, the *muscaria* is poisonous with a collection of gastric irritants, central nervous system toxins, and hallucinogens—not recommended for experimentation!

Like other *Amanitas*, *muscaria* is mycorrhizal. It is "promiscuous" in its choice of symbiotic partners. We have seen it fruit under ponderosa pine, aspen, and mixed conifer, from high mesa to riparian habitat, sometimes in a partial fairy ring. Different color varieties exist, especially var. *formosa*, which has an orange-yellow cap and is found in the eastern United States. The family Amanitaceae is a member of the Order Agaricales of the Class Hymenomycetes.

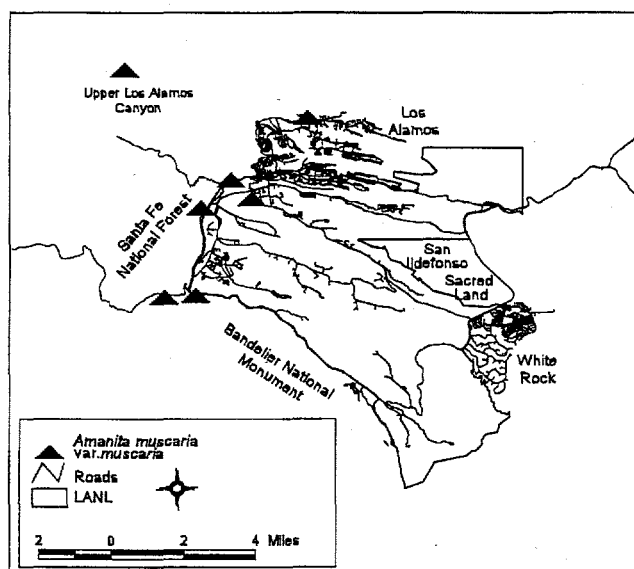
We have also collected specimens of the all-white super-deadly *Amanita*, *Amanita bisporigea*, in a variety of habitats from 7000 to 9000 ft.

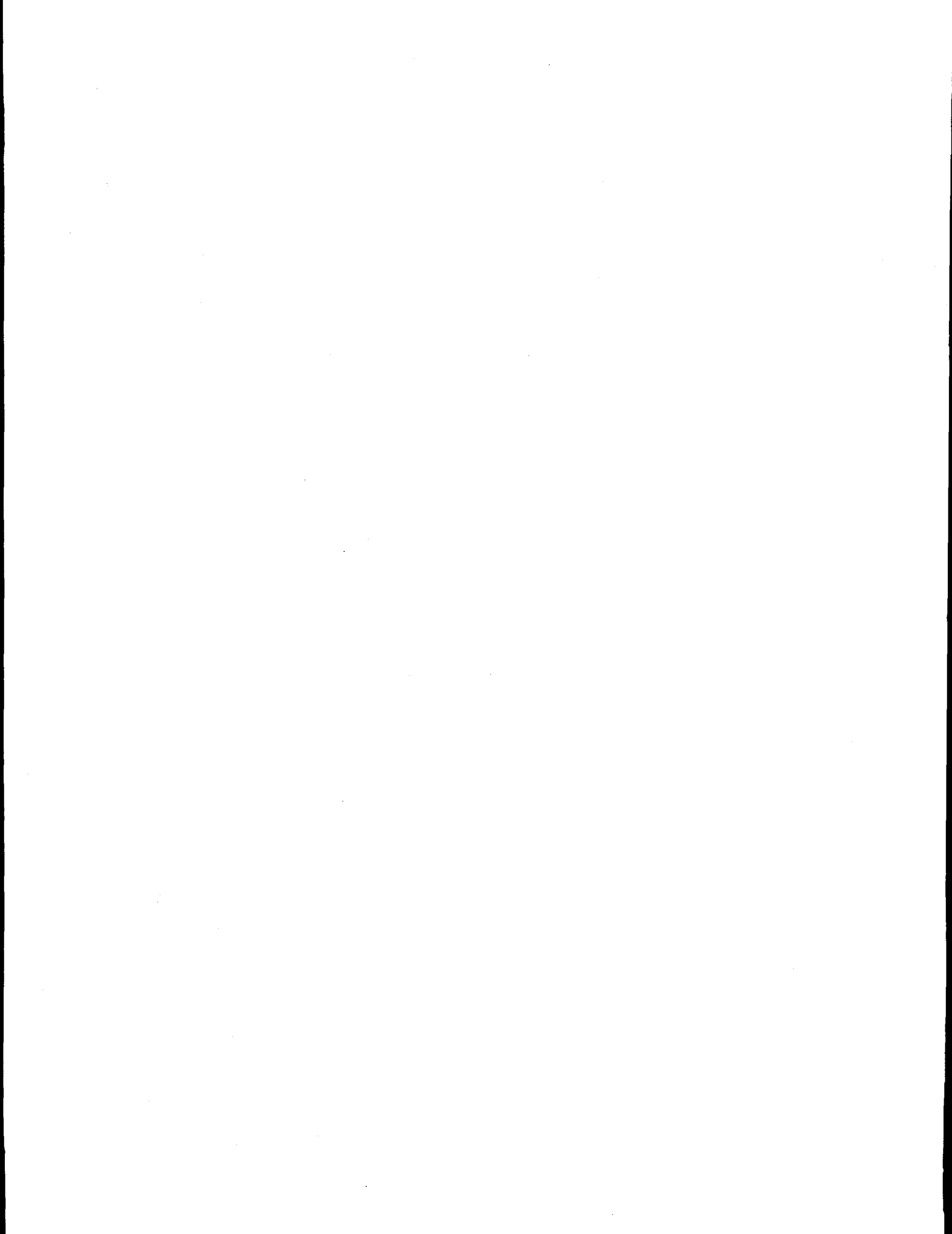
Amanita muscaria var. *muscaria*



Photos by Fran Rogers

Note the flaring skirt (annulus) above and the cup (volva) on the left.





Phaeolus schweinitzii

accession numbers: 434, 482, 508, 643, 714, 943, 963

This large, perennial, tree-eating, multilobed, multicolored polypore is a dangerous parasite, whose hyphae invade a tree, often a conifer, and produce an internal brown rot that weakens the plant so much that it breaks and falls. The major contents of wood are cellulose (whitish) and lignin (brown). So if the fungus eats the cellulose mostly, then the remainder is brown—hence, a brown rot.

The paper-making industry now uses acids and other undesirables to separate the lignin and leave the white cellulose for paper production. The appetite by white-rot fungi for lignin may eventually help do the job without using the chemicals.

The mushroom is sometimes hard to see—almost camouflaged—passing through stages of yellow to green to brown to black, and by growing slowly, engulfing grass, twigs, and debris. Its color properties are prized by artists who dye wool using natural sources. Art papermaking sometimes uses the pulped *schweinitzii* for color, but must add other sources to provide structural strength.

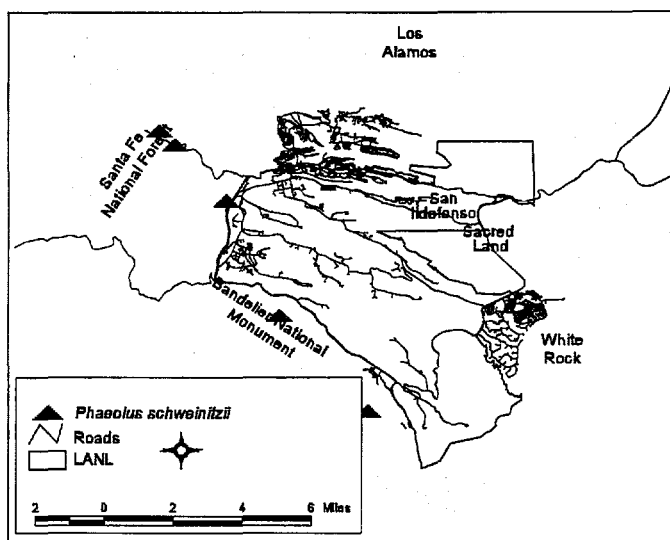
Yes, there was a mycologist named Schweinitz.

Phaeolus schweinitzii



Photo by Joy Spurr

About a foot across.





Boletus barrowsii

accession numbers: 107, 421, 497, 501, 645, 675, 739, 783, 785, 807, 973, 1012, 1036, 1084, 1116

Boletus barrowsii was named for Chuck Barrows, an early fungi hunter in New Mexico who sent a number of new species to a well-known mycologist, Alex H. Smith, in Michigan. Smith sent one of his best students, Bill Isaacs, to New Mexico to assess the situation. Bill came and never left, much to the benefit of New Mexico.

A close cousin, *Boletus edulis*, is famed as a choice edible the world over—called Steinpilz, Cep, Penny Bun, or Porcini, depending on what country you are in. King Bolete is the official American common name, but I have never heard it called that. The main field difference is a whitish-buff color cap on *barrowsii*, while *edulis* has medium to dark red-brown tones.

B. barrowsii is a challenger for the best taste. The problem is getting to it before the maggots do (and other *barrowsii* hunters). They (the maggots) burrow up the stalk, and, if you forget to slice the stalk off right away, will have toured the cap flesh. Not so yummy unless you don't mind the extra protein.

The attendees of the latest New Mexico annual foray came upon a huge fruiting of both *B. edulis* and *Cantharellus cibarius*, the Chanterelle. The nature of the foray changed. There were mushrooms by the hundreds, sliced and drying in dryers, on beds, desks, banisters, and on any flat, warm surface in the cars or hotel.

Boletus barrowsii

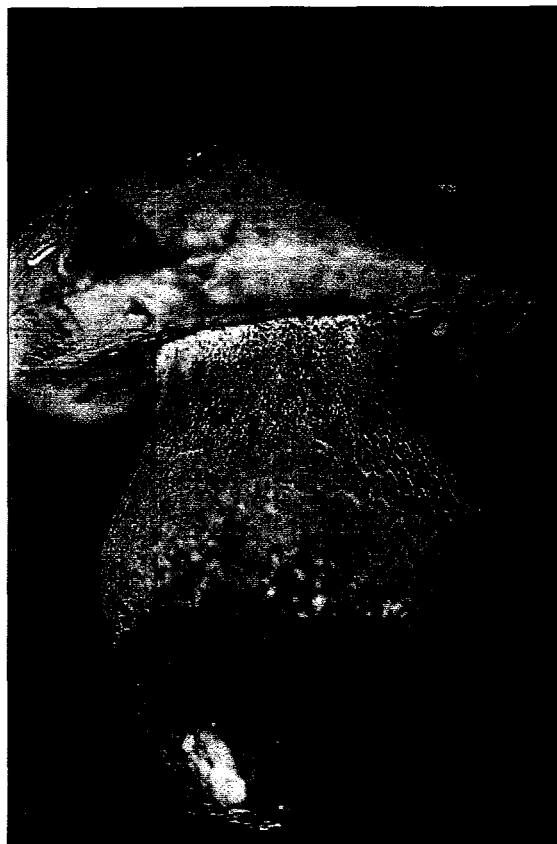
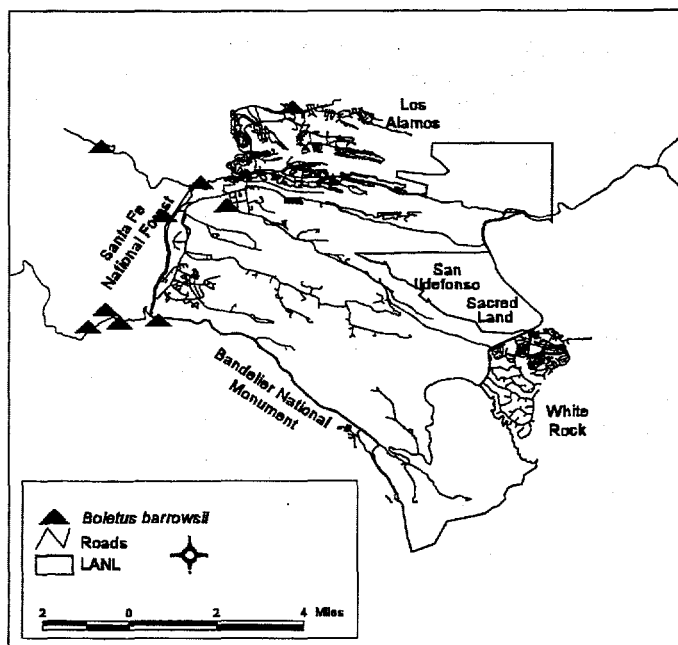
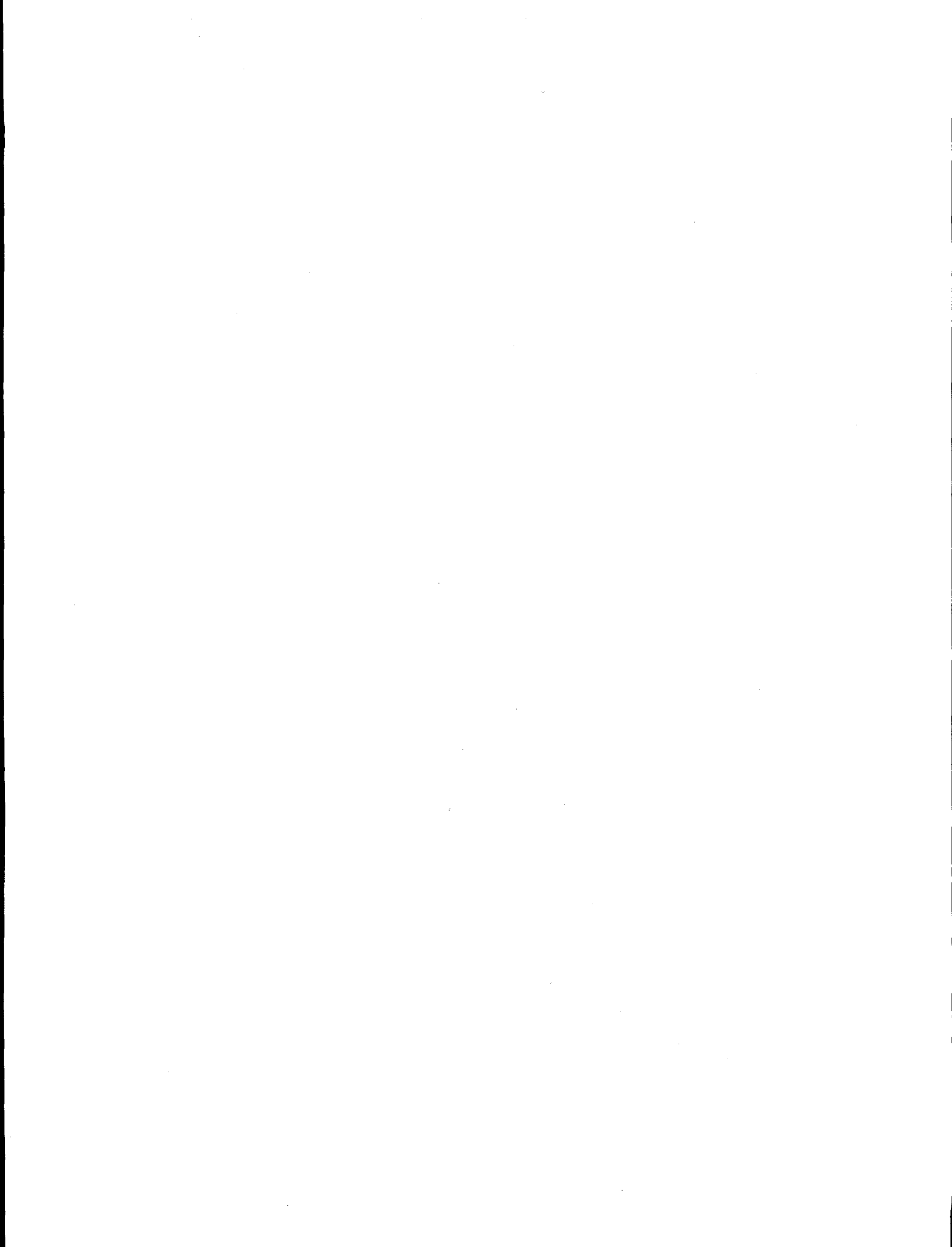


Photo by Fran Rogers

Usually not pink. Note the fine reticulum (webbing) on the stipe (stalk).





LBM and their allies

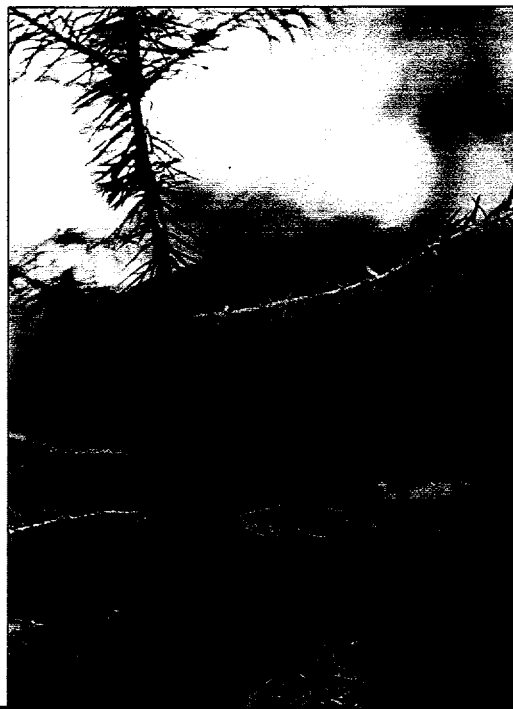
accession numbers: several, 303 for example

A very frustrating section of macromycete taxonomy are the little brown mushrooms (LBMs). Identification characteristics are often hard enough to ascertain with a large mushroom. A spore print for color and to provide spores for microscopic measure, and observation of the attachment of the gills to the stalk are hard to get from a gilled mushroom that is 1 cm tall and 2 mm wide. Oops, it dried up already? Squashed in your basket? Often LBMs have a lack of distinguishing features like a volva or a ring or shaggy cap; they just stare at you from the safety of the clump of moss that is their home.

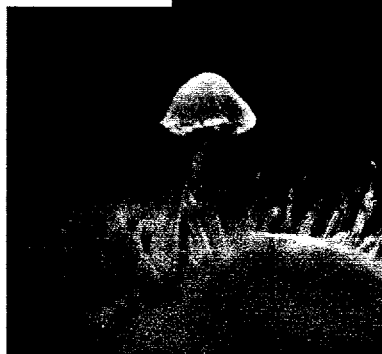
Many families and genera contribute a few species that are small and featureless. Some are not so small, perhaps several cm tall and/or wide. The genus *Cortinarius* has an estimated species number between 800 to 1000. Many of them are featureless, brown, and small enough to be labeled LBM. Other LBMs are found in the genera *Collybia*, *Galerina*, *Marasmius*, *Mycena*, *Pholiota*, *Psathyrella*, and *Tubaria*. Actually, it is tempting to label any mushroom you can't identify as a LBM. Looking for LBM edibles requires caution. Some *Inocybe* species are unpleasantly toxic, and *Galerina autumnalis*, which actually has a wisp of a ring, is deadly.

Also in wide use are: LBJ (little brown job), LTM (little tan mushroom), LWM (little white mushroom), JAC (just another *Cortinarius*), JAR (just another *Russula*), IBBM (itsy bitsy brown mushroom), TWIBBM...

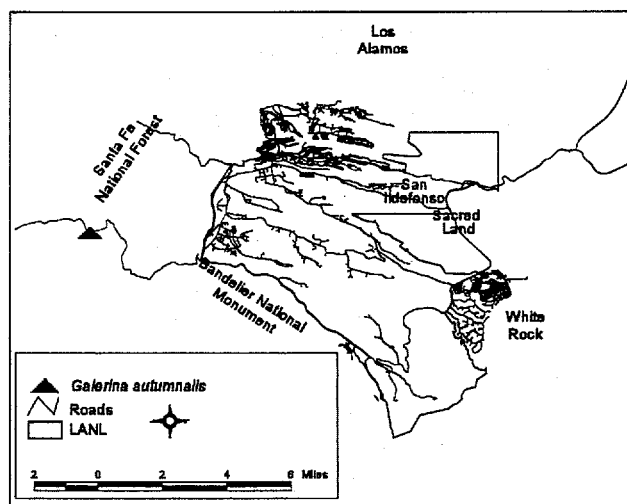
LBM and their allies

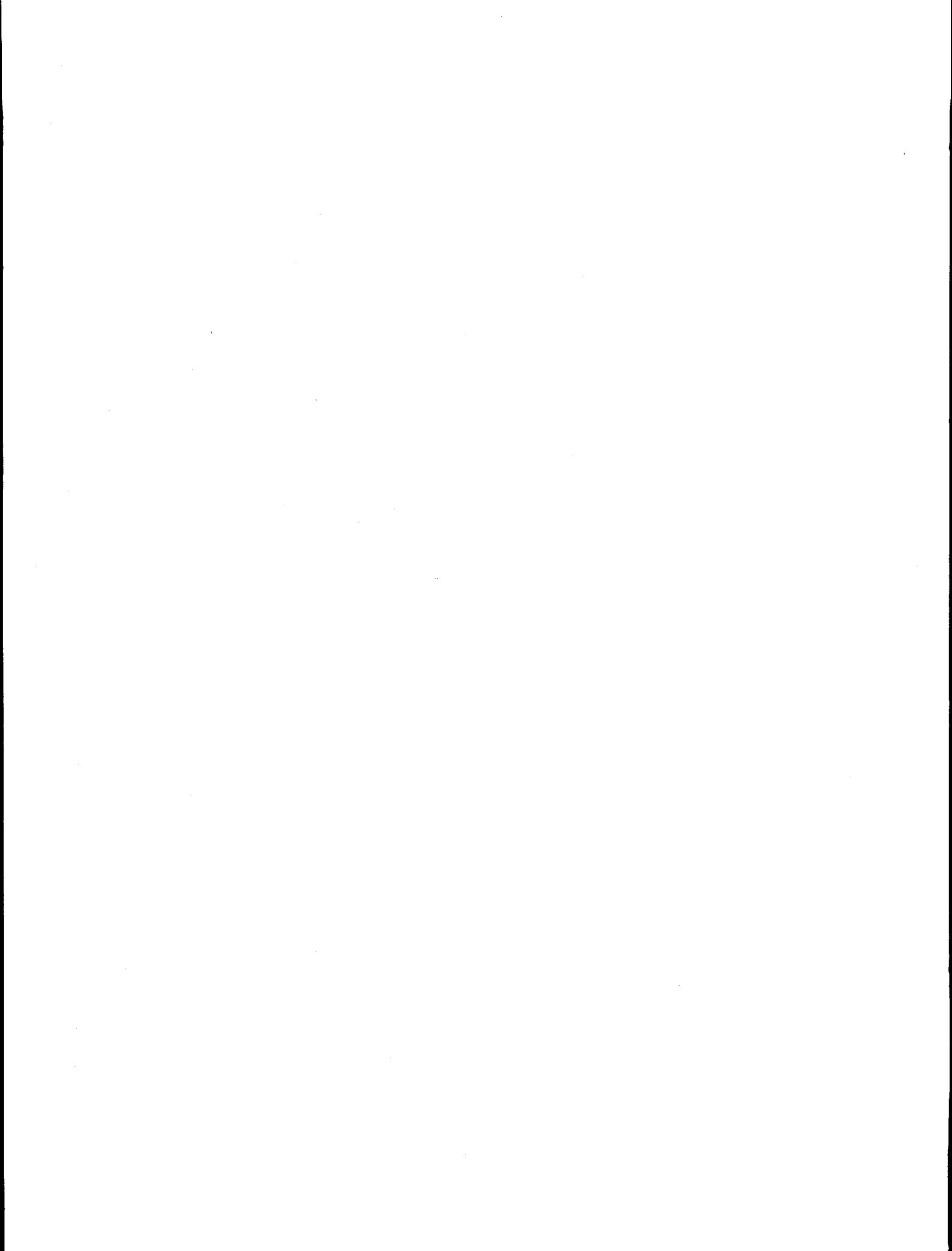


Photos by Fran Rogers



LBMs, LTMs, JACs, JARs? You're never really sure.





Fuligo septica

accession numbers: 415, 608, 808, 848, 1132

When enjoying hiking in the woods looking for fungi to collect, we found a number of "slime molds." The name professional people use is Myxomycetes; which will probably change after it is taken out of the Eumycota Kingdom and put, I don't know where. One of the important differences is that slime molds engulf their food, whereas fungi exude enzymes to digest their food, and then reabsorb the products. In this regard, a slime mold is on the animal branch of taxonomy, splitting off soon after the invention of the nucleated cell that spawned animals, plants, and fungi. The life history of a slime mold is complex, but usually ends up with a group of cells that join together, dissolving their cell walls to form a plasmodia. This amoeba-like creature oozes along, eating bits of plant and debris, and, when the time is ripe, forms a spore-making machine (sporocarp). The residual sporocarp is often very beautiful, and can be seen with a fairly low-power system, a hand lens or dissecting stereoscope.

Fuligo septica isn't beautiful, it settles down to form a blob that sometimes is yellow or orange, crusting to a white blob with a black spore mass inside. Under the right conditions, the fruiting can be enormous. Once, in a Texas town, the molds grew all over the place, frightening the inhabitants who thought they were from outer space.

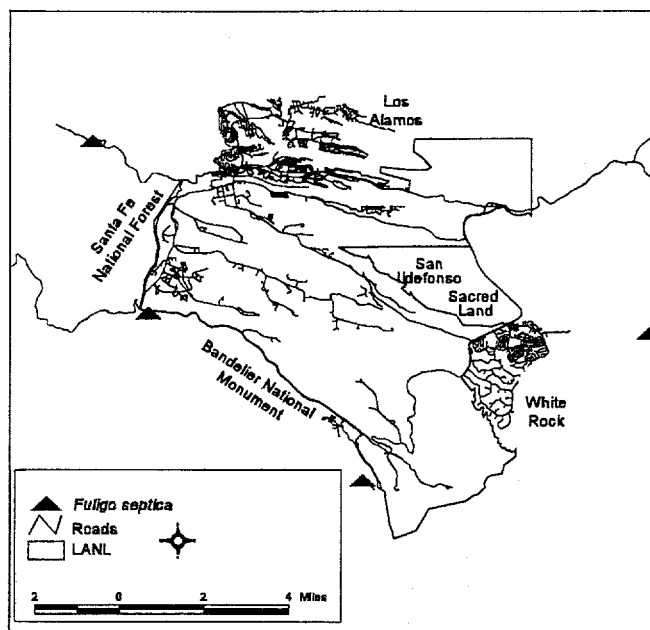
F. septica is in the Family Physacaceae, Order Physariales, Class Myxomycetes, and Division Myxomycota. Maybe.

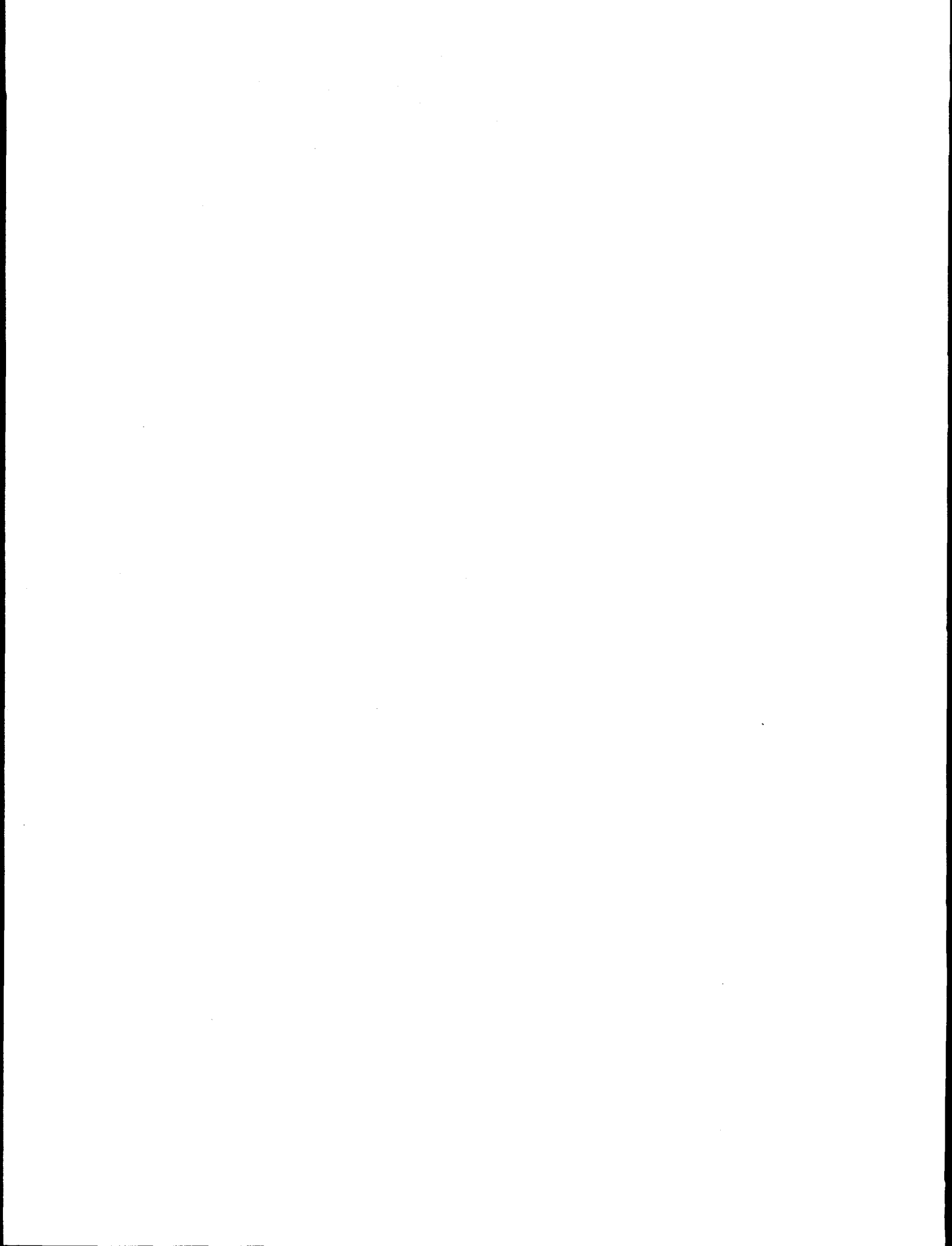
Fuligo septica



Photo by Fran Rogers

Typically enmeshed in a cluster of small twigs.





4.0 RESULTS

The results are given in the Appendices: Appendix C (Species List sorted, genus alphabetic), Appendix D (Species list sort by Order), Appendix E (New to the New Mexico state list), and Appendix F (28FnABC complete Short Form). Information in the long form can be accessed through the database, which will be established as a link to the geographic information system software, ARC INFO, or by request to the authors.

4.1 Computer Database

We entered our findings into a relational database program. FoxBASE+/MAC was chosen for versatility and compatibility with other databases. There is a database record with a unique accession number for every specimen collected. The 34 database field codes are explained in Appendix B. The accession number also identifies a "memo" field that accepts additional comments for a given record.

The master database is labeled 28FnABC; where 28 is the final version number, Fn = fungi, ABC stands for the complete alphabetized list.

This basic database for years 1991 through 1995 has been completed and alphabetically sorted by Genus, Species, Date, and Accession Number. The "short form" stands alone as a concise list of the 11 most useful fields. The "long form" adds 20 additional fields (mostly habitat, location, growth habit, etc.) to form a "complete list" (see field codes in Appendix B).

Here is a summary of the lists given in this report. (The Appendix is shown in parenthesis.)

1. Species list: 28FnSpList. One type record for each species identified plus 6 entries with a known genus, but unknown species. Thus, the species list also acts as a genus list, listed alphabetically by genus. (11 fields) (C)
2. Species list sorted by Order: 28FnSpOrder. (9 fields) (D)
3. Species list sorted as in #1 but new to the state (NM) list: (9 fields) (E)
4. Short form of 28FnABC: concise (11 fields) complete list of specimens. (F)

Also available among the many possible ways of sorting, but not given here, are:

5. Long form of 28FnABC: holds all records and most of the fields. (31 fields)
6. Short form 28FnNum: Sorted by accession number. (ncode) (11 fields)

4.2 Summary Information from the Complete Database (All Collections)

Table 2 shows the results of the information in the complete database 28FnABC.

4.3 Summary Information for Species List (28FnSpList)

We sorted the database by each species being represented once. This meant that specimens of the same species were lumped together for one entry as a "type." 28FnSpList is alphabetized by genus (Appendix C). Table 3 shows the information related to identified species.

4.4 Summary Information for Species List Sorted by Order (28FnSpOrder)

Since this is just a re-sort of 28FnSpList, the summary information is the same. Note the dominance of the Subdivision Basidiomycotina, especially the Order Agaricales (Appendix D). The small number of Ascomycetes is expected here, but remember that the survey only contains specimens seen by eye. There are very large numbers of Ascomycotina fungi involved with lichens, and in many other ecological niches, often of microscopic size.

Table 2. Results of the Surveys and Collections sort in the Complete (Main) Database:
28FnABC (See Appendix F).

Number of Specimens	Item
1048	Total number of records (specimens)
673	Total number of specimens whose species taxon could be identified reliably
34	Total number of unknown families
796	Total number of voucher specimens
11	Microscopic studies
79	Total number of specimens new to the New Mexico Mycological Society List
64%	Percentage of specimens identified to species
93%	Percentage of specimens identified to genus
21	Number of specimens judged rare
169	Number of specimens judged uncommon
649	Number of specimens judged common
39	Number of specimens judged abundant

Table 3. Database information sorted by species. (Appendices C, D, E)

Number of Species or Genera	Comment
241	Total species (all grades of identification reliability)
175 (73%)	Of the species identifications, 175 are considered reliable (Grades 1 and 2)
123 (98%)	Genera identifications are considered reliable
51	Species are new to the New Mexico Mycological Society list
211 (88%)	Species are of the Subdivision Basidiomycotina
25 (10%)	Species are of the Subdivision Ascomycotina
6 (3%)	Species are slime molds

4.5 Summary Information for Species List with condition of not being on the State Master List (28FnSpNotNM)

The new species have since been added to the master list of accessions for New Mexico (Appendix E).

5.0 DISCUSSION

The results are an important contribution to the Ecology Group (ESH-20) for their grid of plant, animal, and geologic information. The results are also of use to BNM for their ongoing ecological studies, especially contributing information about conditions in burned areas.

5.1 Importance to Mycological Diversity Mapping

As mentioned in the introduction, several surveys have been done or are in progress in North America in the last few years. The goal to complete a nationwide mesh of database information about

living entities and their habitats will find our results useful (Pennisi 1993). Survey information is not standardized in content or format. Consider three excellent recent surveys of macromycetes that have sites in the western mountain chain of forests (three diversity surveys: Ammirati et al. 1994, Nishida et al. 1992, and this work and an abundance study, Norvell 1995). Conditions for their surveys are shown in Table 4.

5.2 Correlations

Collections in burn areas sparked an ongoing interest in the taxonomic Class Discomycetes (of the Subdivision Ascomycotina), whose small members appeared to have a greater density in burned areas—more evident, possibly, because of the lack of the usual large mycorrhizal fungi. Typical genera found were *Gyromitra*, *Cudonia*, *Coriolellus*, *Scutellinia*, *Spathularia*, *Helvella*, and *Peziza*. Again, the erratic fruiting times makes correlation studies difficult.

Table 4. A comparison of pertinent characteristics between four different surveys in western mountain forests.

FUNGI SURVEYS				
	Barlow Pass (Ammirati et al. 1994)	Chiricahua (Nishida et al. 1992)	Chantrelle (Norvell 1995)	Los Alamos (This Work)
# Species	~200	362	1	241
# Plots or Sites	1	43	250	~30
Freq. of Visit	Often	Not Often	Often	Often
Type: Diversity or Abundance	Limited Diversity	Diversity	Abundance	Diversity
# Professionals	11	6	14	2?
# Amateurs (Volunteers)	24	0	35	2?
# Other Personnel	0	0	13	0
Area m ² Total	~10 ⁴	(Prob. Large) Unknown	10 ³	~10 ⁴
Span, Years	3	3	10	5
Biome Varied?	No	Yes	No	Yes
Vouchers?	Yes	Yes	Yes	Yes
Correlations	Time Habitat	Habitat	Many	Time Habitat

This table is not definitive, but is an example of the differences possible in surveying and recording. If computer mapping of all biological species (Pennisi 1993) is the long-term goal, (which should produce information to help identify endangered species and point to the need of specific habitat protection), then standardization of surveying technique is badly needed (Arnolds 1992, Murphy 1996).

A simple correlation is shown in Figure 5. Plotted is the number of collections versus month. This shows the narrow fruiting season expected for the short summer period at altitudes surveyed.

The "fickle fungi fruiting factor" certainly operates in the Jemez Mountains. For example, while only 11 taxa were collected at site BN3 in 1991 and 1992 combined, 34 were found there in 1993. In contrast, at Apache Springs (AP1) this pattern was reversed, with 38 species collected in 1991 and 1992 and none in 1993. A fruiting of a given species may happen erratically, with a 10- to 15-year barren interval possible between fruitings. These fluctuations are not well understood. At the least, they are a complex function of rains and rain history, humidity, soil and air contamination, nutrients, length of day, temperature, competition (for nitrogen and other nutrients) with other organisms, and the health of the symbiont partner if there is one. With such variable factors involved, we found it difficult to correlate local fruiting patterns with environmental conditions—the only distinct correlations are with precipitation and moist soil conditions and time of the year. More correlation studies are planned.

In general, more fungi and more taxa were seen at the higher, moister elevations, especially in mixed-conifer habitats. However, we also observed heavy, intermittent fruiting in typically barren piñon-juniper habitats at lower-elevation sites, but usually not until extended rainfall created moist soil conditions for a week or two. Some species, especially in the genera *Agaricus* and *Amanita*, seem to favor piñon-juniper habitats (Klopatek et al. 1987, 1988). Attempts to make meaningful correlations were again frustrating. For example, 29 specimens were collected from piñon-juniper habitats, but 15 of the specimens could not be reliably identified to species. One identified specimen, *Agaricus pinyonensis*, is known only to occur with piñon and juniper in New Mexico. We identified also *Amanita constricta* that favored the piñon-juniper habitat, yet this species is found mostly under oak or like hardwoods in California (Jenkins 1986). *Chalciporus* spp. were collected only in piñon-juniper. *Laccaria laccata* and *Leccinum aurantiacum* were seen only in a mixed-conifer environment—the latter usually seen in aspen groves. In contrast, two species, *Russula brevipes* and *Lycoperdon perlatum*, were collected in all the habitat types. Again, a detailed study of the database is needed. Apparent symbiotic relationships

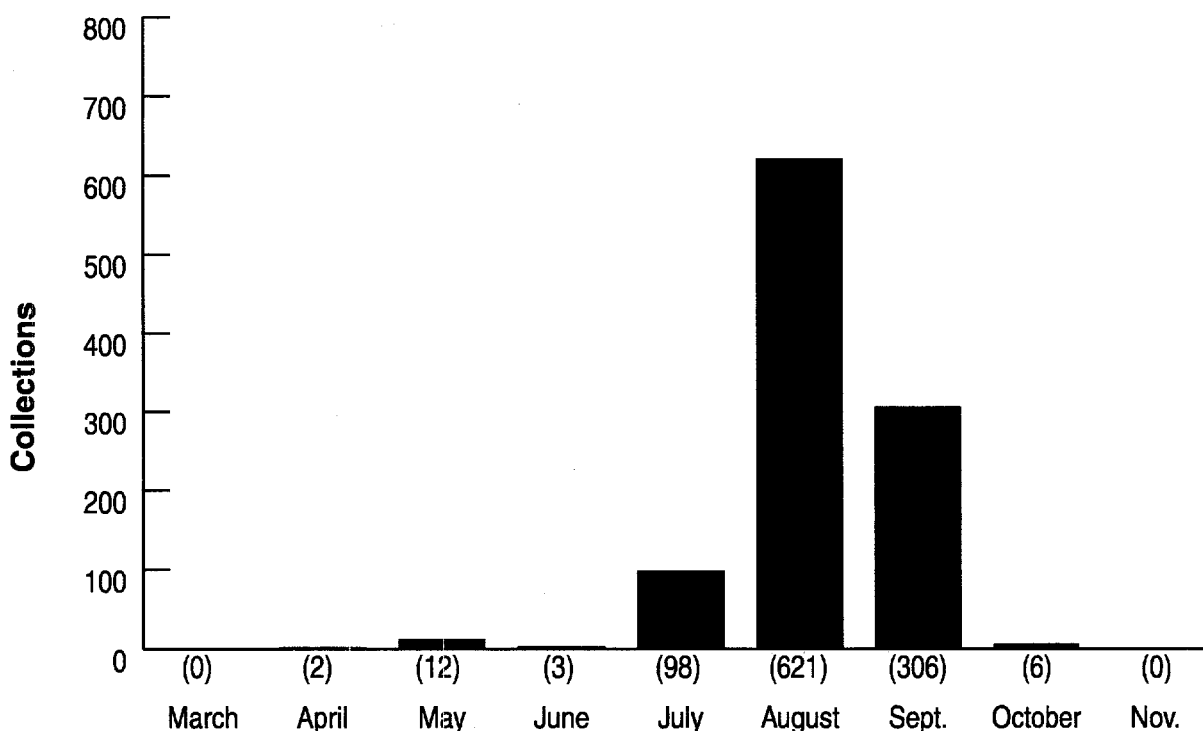


Figure 5. Number of collections (all five years) vs. month.

between trees and fungi were consistently observed. Intensely burned areas where trees did not survive the 1977 La Mesa fire lacked the fruits of mycorrhizal fungi. For example, site BN6, a ponderosa pine grove near the "Backgate," produced expected mycorrhizal genera (*Amanita*, *Russula*, *Lactarius*), whereas the nearby site BU1, burned clear of ponderosa pine trees in the La Mesa fire, produced none of these genera or others known to be mycorrhizal.

Fungi species unique to burn habitats, such as *Coriolellus carbonarius*, were found in recently burned areas. There also seemed to be a higher than normal fruiting density of fungi in the class Discomycetes.

We often felt an aesthetic pleasure, a joy, from walking in the woods and discovering fungi new to us. The AP1 site at Apache Springs in Bandelier (Figure 4) was a fungi showcase in 1992. In this moist, narrow cleft surrounded by expanses of drier ponderosa pine/mixed conifer forest, a small riparian habitat existed providing a profuse fairyland of mushrooms. There were troops of tiny orange *Xeromphalina campanella* on fallen logs, guarded by flanks of the purpled-pored cups of *Humaria hemisphaerica*, and orange corals (*Clavicornia pyxidata*) amidst red "eye-lash" cups (*Scutellinia scutellata*). We collected a total of 40 species from that one site in August and September 1992.

Another favorite walk is the Pipeline Trail site (PL1) near the Los Alamos Ski Hill at an altitude of 2700 to 2850 m (9000 to 9500 ft). Cross-country ski trails provide paths edged with downed aspens and conifers. These logs retain moisture even when seasonal rains are sparse and provide a habitat for many wood-loving fungi. Here can be found the Ascomycetes: Morels and *Helvellas* (elfin saddles), tiny blue-green fruiting cups of *Chlorociboria aeruginascens* on like-colored pieces of wood stained by it, and the tongue fungi of genus *Spathularia*. The Basidiomycetes are here too—*Auricularia auricula* (tree ears), corals of *Ramaria* and *Clavulina*; clubs of *Clavariadelphus truncatus*, *Poria spissa*, and crusts; the crinkled bright orange jelly, *Dacrymyces palmatus*. Myxomycete, *Stemonitis splendens*, lives here, a slime mold first showing a white bubbly structure, next, tiny brown waving stems with even tinier brown caps, with the last stage a pink burgundy spotted "cap." As the walk continues, we see large fruitings of parasitic *Armellaria* at work, with polypores of *Ganoderma applanatum* and *Fomitopsis pinicola* reducing dead and dying trees to forest mulch. The so-called rare mushroom, *Xerula americana*, is also evident, grayish-black felty cap, white gills, spiraling stem, and radicating root. Curiously, what is not seen is also of interest. Where are the common Russulaceae, Amanitaceae, or any of the *Boletus* species? With the aspens all round, why aren't *Leccinums* evident? Mysteries in the forest.

6.0 SUBSIDIARY INFORMATION

Information gained from the literature search and from contact with fungi experts seemed at times as important for the education of the sponsors of the project's funding as the data itself. For example:

1. An obligate mycorrhizal relationship with plants is very common; over 90% of higher plants have fungal symbionts. Major boreal tree families, such as Pinaceae, are thought to be 100% mycorrhizal (Kendrick 1992). This relationship is an important parameter in forest fires (Dhillion et al. 1987, Pilz and Perry 1983). Mycorrhizal relationships apparently help maintain vascular plant diversity (Grime et al. 1987).
2. A variety of studies provide glimpses of the ecological complexity of fungal activity in soils after fires. For example, an increase in soil temperature results in a decrease in the density of higher fungi, but with an associated increase in bacteria and actinomycetes (Wright and Tarrant 1957). It is apparent that complete studies, which include all forms of fungi, bacteria, and other life forms, are necessary to fully understand the ecological interactions of fire and fungi (Moffat 1993, Rose and Hutchins 1988, Wicklow-Howard 1989, Harvey et al. 1976, and the many references therein). Local diversity inventories such as the present effort will support more sophisticated fungi-fire research.
3. Tree seedlings used in reforestation must be inoculated with a mycorrhizal partner for survival past one year (Trappe 1977). There is a succession through time of different symbiotic fungal partners as the trees mature (Visser and Danielson 1990, States 1993).
4. There are subtle factors involved in the choice of fungi in post-fire restorations. For example, in reforestation efforts, attention should be paid to fungal health. Parameters like soil moisture and

temperature—and thus the time of the year—and the amount of shade in the area, will affect the use of clear cutting and other management techniques (States 1993). Soil nitrogen depletion after fire is an important factor for fungi growth and mycorrhizae (Freeman 1984, Kinzig and Socolow 1994).

5. Interesting ecological cycles involving fungi exist, including many that are poorly known. For example, there is a strong relation between ponderosa pine trees, truffles (mycorrhizal Gastromycetes or Discomycetes that are hypogeous [occurring underground]), and Abert squirrels (*Sciurus aberti*). These truffles exude aromas to attract the squirrels, who dig up and eat these fungi. They spread the spores through their feces, which is especially important for nearby ponderosa pine seedlings that need to be inoculated with these mycorrhizal fungi (Trappe 1977, States et al. 1988). This coevolutionary relationship likely developed over a long time. Near Bandelier headquarters in 1993, an Abert squirrel noisily scolded us for digging up its truffle dinner in ponderosa pine needle duff where it had previously been foraging. The squirrels provide food for the local goshawk (*Accipiter gentilis*) who, with the truffle, have evolved to need a certain density of pine tree for optimum survival.
6. In Europe, mycologists have made major fungi diversity surveys for many years, far ahead of American studies, and have charted the changes of fruiting boundaries of various species through time, developing “red lists” compilations of species that are extinct/missing or threatened with extinction (Arnolds 1989, Lizon 1993, 1995a, 1995b). Detrimental changes in the environment, such as acidic rain, have been correlated with major retreats in the geographic distributions of both fungal species and associated forest plants (Arnolds 1992). Which symbiont partner dies first? Again see Figure 1.
7. In Washington state it has been suggested that there is more commercial value in a possible mushroom harvest than from timber (Molina et al. 1993), a remarkable statement given that this is one of the most productive forestry areas in the world.

7.0 CONCLUSIONS

The main conclusion of our survey is simply the database itself. It shows that a broad diversity of macroscopic fungi exists locally in a variety of habitats. The efforts to collect, identify, and develop a database for the macroscopic fungi of Los Alamos County has provided a listing of 1048 collections, 241 species, 123 genera, 52 families, 22 orders, 5 classes, 2 subdivisions, and 1 division of the kingdom Eumycota (Fungi). Fifty-one of the 241 identified species were new to the New Mexico lists and 11 species are considered rare, although this number critically depends on one's definition of rare. The content of our complete database will provide additional details on diversity in the future as correlations in the data are studied. The studies and survey reinforce the importance of habitat in fungal life.

7.1 Future Work

1. Of priority will be improving the identification of unknown and poorly identified collections by using our voucher specimens, making special field trips, and by consultation with experts.
2. Detailed study of correlations in the data should give interesting results. For example, the fungi database we have developed could be used to decipher additional relationships between local fungal distributions and environmental conditions and habitats, such as the associations between intense La Mesa fire burn sites, and the recent large Dome fire in 1996, with certain fungi noted above. It should be useful to compare detailed climatic data (e.g., rainfall patterns) with our fungal fruiting data.
3. Cooperation and collaboration with groups desiring to use the databases and herbarium samples; especially with ESH-20 installing the data into their master database programs and with the ongoing ecological studies at Bandelier National Monument.

Eventually, soil and wood cores will be taken to identify the hyphal vegetative states of fungi using DNA sequence analysis. These new techniques can also help identify single- or few-celled fungi and

bacteria, which are very important components of local soil and forest ecosystems. Such a project is far beyond the scope of the present work. Still, we can achieve a significant advance in the knowledge of local fungi diversity and ecology by improving identifications and studying correlations.

8.0 ACKNOWLEDGMENTS

These surveys were sponsored by the Ecology Group (ESH-20) of the Los Alamos National Laboratory and the Natural Resources Group of Bandelier National Monument. We would like to express our thanks to Craig Allen at Bandelier National Monument and Teralene Foxx at Los Alamos National Laboratory for their long-term support and assistance. In particular, we appreciate the work of Randy Balice interpreting the site distributions of the databases.

We are indebted to many others for their help, including Jody Benson, Ruth Bronson, Hal Burdsall, Michael Castellano, Vera Evenson, Robert Gilbertson, L. Kim Nguyen Gunderson, Belinda Gutierrez, Hector Hinojosa, Pavel Lizon, Florence Nishida, Maggie Rogers, Bill Isaacs, Ted Stampfer, Jack States, Steve Trudell, Rod Tulloss, Nancy S. Weber, and James Worrall. Special thanks to Kathryn Bennett for preparing the maps used in the species essays. We are also grateful to many other members of the New Mexico Mycological Association, the North American Mycological Association, and the Mycological Society of America who have helped with identifications, advice, and consultation. Our work was supported in part by U.S. Department of Energy Contract No. W7405 ENG-36, U.S. Department of Interior, National Park Service Contract No. 1443PX712093083, and in part by the Southwest Parks and Monuments Association.

9.0 REFERENCES

- Ammirati et al. 1994: J. Ammirati, S. Ammirati, L. Norvell, T. O'Dell, M. Puccio, M. Seidl, G. Walker, The Puget Sound Mycological Society, S. Redhead, J. Ginns, H. Burdsall, T. Volk, and K. Nakasone. "A Preliminary Report on the Fungi of Barlow Pass, Washington." *McIlvania*, **11**(2):10-33.
- Arnolds 1992: E. Arnolds. "Mapping and Monitoring of Macromycetes in Relation to Nature Conservation." *McIlvainea*, **10** (2): 4-27, and references therein.
- Arnolds 1991: E. Arnolds. "Decline in the Ectomycorrhizal Fungi in Europe." *Agric. Ecosyst. Environm.*, **35**: 209-244.
- Arnolds 1989: E. Arnolds. "A Preliminary Red Data List of Macrofungi in the Netherlands." *Persoonia*, **14** (1): 77-125.
- Cherfas 1991: J. Cherfas. "Disappearing Mushrooms: Another Mass Extinction?" *Science*, **254**: 1458.
- Deka and Mishra 1981: H. K. Deka and R. R. Mishra. "Vesicular-arbuscular Mycorrhizal Fungi of Certain Weed Species of Burnt Soil." Fortin, J. A. (Ed.). Abstracts of the 5th North American Conference on Mycorrhizae. August 16-21, 1981, Quebec, Canada, p. 66.
- Derbsch 1987: H. Derbsch. Die Blätter und Röhrenpillzflora des Volkinger Kreuzberggebietes. In H. Derbsch and J.A. Schmitt (Editors), *Atlas der Pilz des Saarlandes, Teil 2: Nachweise, Ökologic, Vorkommen und Beschreibungen*: 2-22, Saarbrücken.
- Dhillion 1987: S.S. Dhillion, R.C. Anderson, and A.E. Liberta. "Effect of Fire on the Mycorrhizal Ecology of Little Bluestem (*Schizachyrium scoparium*).". *Canadian Journal of Botany*, **66**: pp. 706-713.
- Freeman 1984: C.E. Freeman. "The Effect of the La Mesa Fire on Total Soil Nitrogen in Bandelier National Monument, New Mexico." in *La Mesa Fire Symposium* T. Foxx (Ed) LA-9236-NERP: 91-96.
- Grime et al. 1987: J. P. Grime, J. M. L. Mackey, S. H. Hillier, and D. J. Read. "Mechanisms of Floristic Diversity: a Key Role for Mycorrhizae." *Proceedings North American Conference on Mycorrhizae, 7th, Mycorrhizae in the Next Decade--Practical Applications and Research Priorities*: p. 151.
- Harvey et al. 1976: A. E. Harvey, M. F. Jurgensen, and M. J. Larsen. "Intensive Fiber Utilization and Prescribed Fire: Effects on the Microbial Ecology of Forests." *USDA Forest Service, Intermountain Forest and Range Experiment Station. Ogden, Utah. General Technical Report INT-28*: 46 pages.
- Jansen and Dighton 1990: A. E. Jansen and J. Dighton. "Effects of Air Pollutants on Ectomycorrhizas." *Air Pollution Research Report 30*. 58 pp. EEC, Brussels.
- Jarmie and Rogers 1996: N. Jarmie and F. J. Rogers. "A Survey of Macromycetes (Fungi) Diversity in Bandelier National Monument 1991-1993." *Proceedings of the Second La Mesa Fire Symposium, March 29-31, 1994, C. Allen Ed. Fire Effects in Southwestern Forests. RM -GTR-286, 1996*, pp. 149-160. See also: N. Jarmie and F. J. Rogers: "A Survey of Los Alamos County and Bandelier National Monument for Macroscopic Fungi." in *Threatened and Endangered Species Habitat Management Plan*. October 16, 1996, Los Alamos report number LA-UR-96-3581.
- Jenkins 1986: "Amanita of North America." Mad River Press, Eureka, CA.
- Kendrick 1992: B. Kendrick. *The Fifth Kingdom*. Focus Information Group. Newburyport, MA.

- Kinnes 1982: S. S. Kinnes. "Effects of Prescribed Burning on Mycorrhizae of Loblolly Pine and their Fungal Associates." Ph.D. Dissertation, Duke University, 178 pp.
- Kinzig and Socolow 1994: A. P. Kinzig and R. H. Socolow. "Human Impacts on the Nitrogen Cycle." *Physics Today* **47** (11): 24-31.
- Klopatek 1988: C. C. Klopatek, L. Debano, and J. Klopatek. "Effects of Fire on Vesicular-Arbuscular Mycorrhizae in Pinyon-Juniper Woodlands." *Plant and Soil* **109**: 245-249.
- Klopatek et al. 1987: C. C. Klopatek, L. Debano, and J. Klopatek. "Effects of Fire on Vesicular-Arbuscular Mycorrhizae in Pinyon-Juniper Woodlands." D. M. Sylvia, L. L. Hung, and J. H. Graham (Eds.). "Mycorrhizae in the Next Decade—Practical Applications and Research Priorities." Proc. 7th North American Conference on Mycorrhizae. May 3-8, 1987. Gainesville, Florida p. 155.
- Kosztarab et al. 1984: M. Kosztarab. Editorial, *Science*, 3 February, **223** 1984 p. 443. See Also: M. Kosztarab, *Science*, 224, p. 1384, 1984.
- Lizon 1995a: P. Lizon. "Preserving the Biodiversity of Fungi." *Inoculum* **46**:1-3.
- Lizon 1995b: P. Lizon. "Threatened Macrofungi in Slovakia." *Biológia(Bratislava)*. **50**: 9-12.
- Lizon 1993: P. Lizon. "Macrofungi reported as Extinct/Missing or Threatened in European Red Data Lists." from: Decline of Macrofungi in Europe: an Overview, *Trans. Mycol. Soc. Rep. China* **8** (3-4): 21-48.
- Moffat 1993: A. S. Moffat. "Clearcutting's Soil Effects." *Science* **261**: 1116.
- Molina et al. 1993: R. Molina, T. O'Dell, D. Luoma, M. Amaranthus, M. Castellano, and K. Russell. "Biology, Ecology, and Social Aspects of Wild Mushrooms in the Forests of the Pacific Northwest; A Preface to Managing Commercial Harvest." USDA Forest Service, Pacific Northwest Research Station. General Technical Report PNW-GTR-309.
- Murphy 1996: J. F. Murphy. "Fungal Inventories—A Status Report and an Exhortation." *McIlvania* **12**: 75-88 and the references therein.
- Nishida et al. 1992: F. H. Nishida, W. J. Sundberg, J. A. Menge, J. S. States, R. E. Tulloss, and J. Cifuentes Blanco. "Studies in the Mycoflora of the Chiricahua Mountains, Cochise County, Arizona, U.S.A. I. Preliminary Report on Species Distribution, Ecology, and Biogeographical Affinities." Chiricahua Mountains Research Symposium, Proceedings. Eds. A. M. Barton and S. A. Sloane. 126 p. Southwest Parks and Monuments Association, Tucson, AZ. December 1992. p. 35-38.
- Norvell 1995: L. L. Norvell. "Loving the Chantelle to Death? The Ten-Year Oregon Chantrelle Project." *McIlvania* **12**(1): 6-25.
- Pennisi 1993: E. Pennisi. "Filling in the Gaps—Computer Mapping Finds Unprotected Species." *Science News* **144**: 248-251.
- Pilz and Perry 1983: D. P. Pilz and D. A. Perry. "Impact of Clear Cutting and Slash Burning on Ectomycorrhizal Associations of Douglas-Fir Seedlings." *Canadian Journal of Forest Research* **14**: 94-100.
- Raven 1994: P. H. Raven. "Redefining Biodiversity." *Nature Conservancy* **44**: 11-12.

Rose and Hutchins 1988: S. L. Rose and A. S. Hutchins. "Soil Microbiological Properties Following Natural Fire Disturbance." *Northwest Science* **62**: 72.

States 1993: J. States. Dept. of Biological Sciences, Northern Arizona University, Flagstaff, AZ. Presentation, New Mexico Mycological Society Annual Foray, Weed, NM.

States et al. 1988: J. S. States, W. S. Gaud, W. S. Allred, and W. J. Austin. "Foraging Patterns of Tassel-Eared Squirrels in Selected Ponderosa Pine Stands." *Management of Amphibians, Reptiles, and Small Mammals in North America*. U.S. Forest Service Publication. General Technical Report RM-166, pp. 425-431.

Trappe 1977: J. M. Trappe. "Selection of Fungi for Ectomycorrhizal Inoculations in Nurseries." *Annual Review of Phytopathology* **15**: 202-222.

Visser and Danielson 1990: S. Visser and R. M. Danielson. "Ectomycorrhizal Succession in Fire-Disturbed Jack-Pine Forests." *Proceedings of 8th North American Conference on Mycorrhizae*, page 295-EOA.

Wicklow-Howard 1989: M. Wicklow-Howard. The Occurrence of Vesicular-Arbuscular Mycorrhizae in Burned Areas of the Snake-River Birds-of-Prey Area, Idaho. *Mycotaxon* **34**: 53-257.

Wright and Tarrant 1957: E. Wright and R. F. Tarrant. "Microbiological Soil Properties after Logging and Slash Burning." USDA PNW Forest Service note PNW-157, pp. 1-5.

APPENDIX A

Herbarium and Collection Technique for Fleshy Fungi

1. Collection, in the field:
 - a. Specimens, hopefully of various ages, include stipe base and piece of host, if possible.
 - b. Spore print started.
 - c. Fresh characteristics noted: colors, textures, odors, size, veils, taste, bruising, gill attachment etc.
 - d. Note habitat, host, location, general conditions.
 - e. Early identification made, if possible.
2. Notation, in the laboratory:
 - a. Write up a "first note" with all available descriptive information. Make the best identification, and assign a reliability "grade" to this.
 - b. Assign an accession number. Enter relevant information into a formal database (we use FoxBASE+/Mac for Macintosh).
3. Preservation:
 - a. Spore print completed or made.
 - b. Shortest possible time to dryer. Dry at low temperatures (105 F or 41 C) till crisp, may take days. Also dry small envelopes, spore print card, and small pasteboard boxes if used in storage.
 - c. When dry, put folded print card in labeled envelope, and specimens, if small or fragile, into small labeled pasteboard box.
 - d. Put a few grains of paradichlorobenzene ("Moth Ice") in the envelope and small box. Mark pint size (or larger) Ziploc heavy-duty freezer storage bag 2.7 mil) with accession number and name of specimen. Put all items in the bag with a few more grains of paradichlorobenzene. Seal bag. Take care! The fumigant is toxic. Work in a ventilated place.
 - e. Put bags in order of accession number into a Rubbermaid "Keepers-Latch Box" 2.6 gal size #2147, 14.5 x 9.25 x 7 inches (with no open gaps). Usually can fit 20-30 bags/plastic latch box (don't overfill).
 - f. A cabinet is needed that accepts the shape of the latch boxes.

Saprobic fungi, insects, and rodents should then be controlled. In four years without further attention, we have not lost a specimen.

All physical supplies were obtained from local hardware, grocery and stationery stores. The plastic bags are transparent to, but not damaged by, the fumigant.

Filled boxes and bags should be handled gently.

APPENDIX B1

Field Abbreviations for Los Alamos Fungi Databases

July 16, 1997

Not all of these fields are given in the Short Form and Species lists in this paper.

ncode	Number code = mcode = our accession and herbarium number.
lcode	Letter code: first two letters of genus and species. Not often used.
genus	Taxonomic Genus of specimen.
species	Species.
family	Family.
order	Order.
commonname	Only given if really universal. Omitted in some versions.
grd	"Grade" Identification Reliability, see Reliability code list and text.
ref	Reference: Book and page number. See Reference code list.
loct	Location. See Location code list.
date	Date of acquisition.
habi	Habitat, compatible with ESH-20 code. See Habitat code list.
bndlr	.T. = Located in Bandelier National Monument.
nmlst	.T. = specimen is on New Mexico list of 10/13/94 +1995 update.
ta	LANL Technical area. "00" means not on LANL land.
(typ)	Type S/M/P/X/U = Saprobe/Mycorrhiza/Parasite/Mixed/Unknown.
vchr	.T. = Voucher sample made. Dried and stored in local herbarium.
pho	Photograph, P/S/N = Print/Slide/None.
(eat)	Edibility (various sources). A guide only, beware! See Edibility code list.
col/id	Collector/identifier. See code list. Single set of initials is both.
alt	Altitude in kilofeet. See Location code list.
zone	"Life zone" See code list.
host	Mycorrhizal and/or immediate habitat. See code list.
grthb	Growth habit (e.g., "scattered") See code list.
ocr	Occurrence code (e.g., "common"). See Occurrence code list
utm	Universal Transverse Mercator coordinates, north. See location code.
utme	Universal Transverse Mercator coordinates, east. See location code.
day	Day of acquisition.
mon	Month of acquisition.
year	Year of acquisition.
micro	.T. = Microscopic work has been done.
(cmnts)	Comment memos written in database. See comments printout.
mcode	= ncode = Jarmie's accession and herbarium number.
version	Version date or number identifies latest date of editing. Not on some versions.

A Field Abbreviation in parentheses denotes an unfinished field.

APPENDIX B2

loct: Location and Elevation Code for Los Alamos Fungi Database

Location site, about ± 100 m

July 15, 1997

Code	Elev. (Feet)	utmn	utme ^a	Location Description
		39xxxx0 (m)	3xxxx0 (m)	
AP1	8444	6526	7424	Apache Springs itself, in little cañon. BNM #UF-23 ^a .
AP2	8500	6556	7480	Apache Springs, Ponderosa grove to the NE. BNM #UF-23.
AP3	8500	6584	7481	Apache Springs, MC between Springs and Hwy 4. BNM #UF-23.
AS1	8200	6650	7550	American Springs Rd. N. of SR 4.
BN1	8949	6773	9158	Bandelier, S of intersection of Dome Rd and Hwy 4. BNM #UF-10.
BN3	6066	5998	8419	Bandelier, Headquarters ± 400 m. BNM #HQ-47.
BN4	6200	6140	8343	Bandelier, Ceremonial Cave area.
BN5	7023	6414	7706	Bandelier, Upper Crossing.
BN6	7600	6606	7742	Bandelier, Back Gate/Ponderosa C.G. BNM #UH-27.
BN7	6689	6187	8439	Bandelier, Juniper C.G.
BU1	7200	6452	8015	Bandelier "Burnt Mesa" Plots BM1, BM 2, BM 3. BNM #UF-35.
BU3	8960	6800	7160	Bandelier NE of Dome Rd/Hwy 4. BNM #UF-3.
BU4	8960	6800	7100	Bandelier W of Dome Rd/Hwy 4. BNM #UF-4.
BU6	9000	6760	7300	Bandelier S of Frijoles Cr. headwater. BNM #UF-6.
BU8	9000	6670	7350	Bandelier E of BU6, BNM #UF-8.
BU26	8100	6600	7600	Bandelier Gully SE of Hwy 4 and Armstead Sp. Rd. BNM #UF-26.
BU44	6300	6180	8260	Ban. Frijoles Cr. 2 mi. up from Ceremonial Cave. BNM #HQ-44.
BU46	6000	5950	8550	Bandelier SE of Rainbow House ruin, BNM #HQ-46.
BU48	6580	5940	8270	S. of HQ betwn Lummis and Alamo Canyon. BNM #BW-48.
GP1	7000	7400	8250	Guaje Pines, in trees.
LA1	7400	7278	8056	Los Alamos, Urban Park, and other mid-Los Alamos.
LA2	7200	7122	8048	Los Alamos, Canyon bottom near Ice Rink.
LB2	7400	7037	8000	LANL TA-3 area.
LB3	7300	6806	8282	TA 67 mid-mesa..
LB4	7100	6823	8276	TA 67 Pajarito Canyon.
LC1	7700	7210	7730	Los Alamos Canyon, 1 mile W. of reservoir.
LC2	7400	7124	7905	Los Alamos Canyon, just W. of "West Road."
LC3	6500	7007	8810	Los Alamos Canyon, about 2 mi. W. of SR 4.
PC1	7900	7020	7750	Pajarito Canyon N. of SR 501.
PL1	9200	7330	7465	Pipeline Road shunt CC trails near Ski Hill.
PL3	9540	7625	7440	Pipeline Road, junction with shunt.
PR1	6540	6500	8900	Pajarito Canyon, N. of Pajarito Rd. (.1 mi to SR 4)
PR4	6700	6646	8611	Pajarito Canyon, near entrance to TA-18 (2.4mi to SR 4)
RC1	6500	7447	8544	Rendija Canyon.
SH1	7500	7072	7880	Ski Hill Road, Ponderosa grove near base.
SH2	8000	7117	7828	Ski Hill Road, So. Ponderosa grove. 1st flat stretch.
SH3	8600	7241	7641	Ski Hill Road, "Install Chains" turnout.
SH5	9200	7263	7538	Ski Hill Road, 1/2 mile below Spruce lift.
SH7	9260	7305	7427	Ski Hill Road, Spring area near Mother lift.
SH8	10000	7250	7400	Ski Hill, Spruce Forest SW of end of road, ridge.
WR1	6500	6466	9025	La Vista subdivision. White Rock area.
WR3	6440	6400	9040	Mid-La Senda (PJ).

^aUniversal Transverse Mercator Coordinates, Zone 13, in meters.

^bBNM# is Bandelier area number code.

APPENDIX B3

grd: Identification Reliability Code for Los Alamos Fungi Database

July 15, 1997

The grade is subjectively determined by the identifier.

grd

- 1 Well known, no doubt, species sure, no close unknown brothers.
- 2 Well identified, but slight possibility of being a species in a close group, that a specialist would be needed to separate.
- 3 Genus sure, species possible, but not sure. Often designated as a "Group" or "Complex" in the literature or in a field guide, "cf." in species field.
- 4 Genus sure only.
- 5 Family sure only.
- 6 Order sure only.
- 7 Unknown.

APPENDIX B4

August 14, 1997

ref: Reference Codes for Los Alamos Fungi Database

A variety of books and monographs were used in the initial identification; but often we chose to put the best field description of the following list in the ref field.

- AMD** Arora, D. 1986. Mushrooms Demystified. 2nd Ed. Ten Speed Press, Berkeley, CA.
- BSF** Breitenbach, J. and E. Kränzlin. Fungi of Switzerland. 4 Volumes. Luzern. Verlag, Mycologia.
- BSM** Bessett, A. and W. J. Sundberg. 1967. Mushrooms, A Quick Reference Guide to Mushrooms of North America. Macmillan Field Guides. Macmillan Pub. Co., New York, NY.
- GLT** Glick P. G. 1979. The Mushroom Trailguide. Henry Holt, New York, NY.
- GAP** Gilbertson R. L. and L. Ryvaarden. 1986. North American Polypores, Vol 1 & 2. Fungiflora, Oslo.
- HMD** Huffman D. M., L. H. Tiffany, and G. Knaphus. 1989. Mushrooms & Other Fungi of the Midcontinental United States. Iowa State University Press, Ames, IA.
- LIG** Largent D. L. and T. J. Baroni. 1988. How to Identify Mushrooms to Genus VI, Modern Genera. Mad River Press, Eureka.
- LAS** Lincoff, G. H. 1981. The Audubon Society Field Guide to North American Mushrooms. A. A. Knopf, Inc., New York, NY.
- MNA** Miller, O. K. 1977. Mushrooms of North America. E. P. Dutton & Co., Dubuque, IA.
- MSM** McKenney, M. and D. N. Stuntz. 1987. The New Savory Wild Mushroom. Revised and Enlarged by Joseph Ammirati. University of Washington Press, Seattle, WA.
- PNA** Phillips, R. 1991. Mushrooms of North America. Little, Brown and Co. Boston, MA.
- SWM** Smith, A. H. 1975. A Field Guide to the Western Mushrooms. University of Michigan Press, Ann Arbor, MI.
- SGM** Smith, A. H., H. V. Smith, and N. S. Weber. 1979. How to Know the Gilled Mushrooms. The Pictured Key Nature Series. Wm. C. Brown Co. Pub., Dubuque, IA.
- SNG** Smith, A. H., H. V. Smith, and N. S. Weber. 1973. How to Know the Non-Gilled Mushrooms. Wm. C. Brown Co. Pub., Dubuque, IA.
- SSW** States, J. S. 1990. Mushrooms and Truffles of the Southwest. University of Arizona Press, Tucson, AZ.

APPENDIX B5

host: Mycorrhizal Host and Immediate Habitat Code for Los Alamos Fungi Database

July 14, 1997

The host, if any, is estimated by the collector on the spot, within the "dripline" or within about 5 m from a large tree. This is a guess at best.

JU	Juniper, One-seed, <i>Juniperus monosperma</i> .
RJ	Rocky Mt. Juniper, <i>Juniperus scopulorum</i> .
PI	Piñon Pine, <i>Pinus Edulis</i> .
PP	Ponderosa Pine, <i>Pinus ponderosa</i> .
LP	Limber Pine, <i>Pinus flexilis</i> .
DF	Douglass Fir, <i>Pseudotsuga menziesii</i> .
WF	White Fir, <i>Abies concolor</i> .
ES	Englemann Spruce, <i>Picea engelmannii</i> .
AS	Aspen, <i>Populus tremuloides</i> .
CO	Cottonwood, <i>Populus fremontii</i> var. <i>wislizenii</i> .
OK	Gambel (Scrub) Oak, <i>Quercus gambelii</i> .
OD	Other Deciduous, see "memo."
OC	Other Conifer, see "memo."
MC	Mixed Conifer. Usually mix of firs and some pine and spruce.
MT	Mixed Trees. Many varieties close.
RW	Rotten unidentified wood.
BW	Burned wood.
DW	Dead deciduous log.
DC	Dead conifer log.
MG	Meadow/grasses. No trees or obvious host.
DU	Dung.
DI	Dirt.
SA	Saprophyte.
HU	Humus.
FU	Fungus.
NA	None of the above, see "memo."
UN	Unknown

APPENDIX B6

ocr: Occurrence Code for Los Alamos Fungi Database

August 15, 1997

Factors other than number of collections sometimes affect the choice.

ABN	Abundant, (Ubiquitous). At least 10 collections.
COM	Common. From 2 to 10 collections.
UNC	Uncommon, (Infrequent). One collection.
RAR	Rare.
UNK	Unknown.

APPENDIX B7

habi: Habitat Codes for Los Alamos Fungi Database

June 14, 1997

JG	Juniper Grassland
PJ	Piñon/Juniper
PJPP	Piñon/Juniper/PonderosaPine
PP	Ponderosa Pine
PJMC	Piñon/Juniper/Mixed Conifer
MC	Mixed Conifer
ES	Engelmann Spruce
SAM	Subalpine Meadow
CB	Canyon Bottom
CBPJ	Canyon Bottom/Piñon/Juniper
CBPP	Canyon Bottom/Ponderosa Pine
CBMC	Cañon Bottom/Mixed Conifer
BQ	Bosque
W	Wetland
MG	Meadow or Grass

APPENDIX C

1991-1995 Los Alamos/Bandelier Fungi Survey: Species List (28FnSpList)

1991-1995 LOS ALAMOS/BANDELIER FUNGI SURVEY

Nelson Jarmie/Fran J. Rogers

genus	species	family	order	grd ref	commonname	loct	ocr	ncode
Agaricus	augustus	Agaricaceae	Agaricales	2	LAS502 The Prince	BN3	UNC	938
Agaricus	barrowsii	Agaricaceae	Agaricales	2	AMD69	WR3	RAR	689
Agaricus	bitorquis	Agaricaceae	Agaricales	2	GLT130	LA1	UNC	159
Agaricus	campestris	Agaricaceae	Agaricales	1	LAS505 Meadow mushroom	LA1	COM	947
Agaricus	haemorrhoidarius	Agaricaceae	Agaricales	2	LAS505	SH5	UNC	160
Agaricus	silvicola	Agaricaceae	Agaricales	2	AMD334	SH7	COM	187
Agaricus	xanthodermus	Agaricaceae	Agaricales	2	AMD329	WR1	UNC	139
Agrocybe	pediata cf.	Bolbitiaceae	Agaricales	3	AMD468	WR1	UNC	1142
Agrocybe	praecox cf.	Bolbitiaceae	Agaricales	3	AMD469	AP1	COM	166
Amanita	bisporigera	Amanitaceae	Agaricales	2	AMD271 Destroying Angel	PL1	UNC	168
Amanita	caesarea	Amanitaceae	Agaricales	2	AMD284 Caesar's Mush.	BN6	COM	1140
Amanita	constricta	Amanitaceae	Agaricales	2	AMD289	WR3	UNC	1048
Amanita	fulva	Amanitaceae	Agaricales	2	LAS536	PC1	COM	662
Amanita	magniverrucata cf.	Amanitaceae	Agaricales	3	AMD274	PC1	RAR	930
Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	AMD282 Fly Agaric	BN6	ABN	1037
Amanita	pantherina	Amanitaceae	Agaricales	2	AMD280	SH5	ABN	1092
Amanita	vaginata	Amanitaceae	Agaricales	2	LAS549 Grisette	SH8	ABN	893
Arcyria	denudata	Trichiaceae	Trichiales	1	FSM63 Slime Mold	PC1	UNC	933
Armillaria	albolaripes	Tricholomataceae	Agaricales	2	AMD194	SH5	UNC	642
Armillaria	mellea cf.	Tricholomataceae	Agaricales	3	LAS736 Honey Mushroom	SH5	ABN	1086
Armillaria	straminea cf.	Tricholomataceae	Agaricales	3	LAS734	PL1	UNC	478
Armillaria	tabescens cf.	Tricholomataceae	Agaricales	3	AMD197	BN3	UNC	919
Astraeus	hygrometricus	Astraeaceae	Sclerodermatales	2	AMD705	LB2	UNC	418
Auricularia	auricula	Auriculariaceae	Auriculariales	1	AMD675 Tree Ear	PC1	COM	658
Auriscalpium	vulgare	Hydnaceae	Aphyllophorales	1	AMD629	BN5	COM	202
Battarrea	phalloides	Tulostomataceae	Tulostomatales	1	SSW156	RC1	UNC	140
Bisporella	citrina	Leotiaceae	Helotiales	2	LAS362	SH5	COM	1075
Bjerkandera	adusta	Polyporaceae	Aphyllophorales	2	PNA270	SH5	ABN	1079
Boletus	barrowsii	Boletaceae	Agaricales	1	AMD529	BU3	ABN	1116
Boletus	calopus	Boletaceae	Agaricales	2	AMD523	PC1	UNC	518
Boletus	chrysenteron cf.	Boletaceae	Agaricales	3	AMD519	LC1	COM	991
Boletus	edulis	Boletaceae	Agaricales	1	AMD530 King, Cep, etc	LA1	COM	925
Boletus	haematinus	Boletaceae	Agaricales	2	AMD528	PC1	UNC	651
Boletus	rubripes	Boletaceae	Agaricales	2	AMD524	BU4	COM	771
Caloporus	dichrous	Polyporaceae	Aphyllophorales	2	LAS449	BN3	UNC	386
Calvatia	gigantea	Lycoperdaceae	Lycoperdales	3	AMD681 Giant puffball	LB2	COM	422
Cantharellus	cibarius	Cantharellaceae	Aphyllophorales	1	LAS387 Chanterelle	SH5	COM	1090
Catathelasma	ventricosa	Tricholomataceae	Agaricales	2	AMD195	SH8	UNC	900
Ceratiomyxa	fruticulosa	Ceratiomyxaceae	Ceratiomyxales	2	FSM30 Slime Mold	AP1	UNC	206
Chalciporus	sp.	Boletaceae	Agaricales	3	UNK000	WR3	RAR	1141
Cheimonophyllum	candidissimus	Tricholomataceae	Agaricales	2	LAS743	SH5	COM	954
Chlorociboria	aeruginascens	Dermatiaceae	Helotiales	1	AMD878 Blue Stain	BU3	COM	1147
Chlorophyllum	molybdites	Lepiotaceae	Agaricales	1	AMD295	WR1	COM	1133
Chroogomphus	tomentosus	Gomphidiaceae	Agaricales	2	LAS650	LC3	COM	582
Chroogomphus	vinicolor	Gomphidiaceae	Agaricales	2	LAS651	BU4	COM	866
Clavariadelphus	lovejoyae cf.	Clavariaceae	Aphyllophorales	3	AMD634	BN3	UNC	864
Clavariadelphus	pistillaris	Clavariaceae	Aphyllophorales	2	LAS403	PL3	COM	580

genus	species	family	order	grd ref	commonname	loct	ocr	ncode
Clavariadelphus	truncatus	Clavariaceae	Aphyllophorales	2	AMD634	SH5	COM	1064
Clavicornia	pyxidata	Clavariaceae	Aphyllophorales	2	LAS401	BU3	COM	1014
Clavulina	cristata cf.	Clavariaceae	Aphyllophorales	3	AMD641	AP3	UNC	226
Clavulina	rugosa cf.	Clavariaceae	Aphyllophorales	3	AMD642	SH5	UNC	152
Clavulinopsis	corniculata	Clavariaceae	Aphyllophorales	2	AMD639	BN1	UNC	314
Clitocybe	dealbata	Tricholomataceae	Agaricales	2	AMD163	BN1	UNC	306
Clitocybe	dilatata	Tricholomataceae	Agaricales	2	LAS746	SH5	COM	1065
Clitocybe	gibba	Tricholomataceae	Agaricales	2	AMD157	AS1	COM	680
Clitocybe	gigantea cf.	Tricholomataceae	Agaricales	3	AMD158	BU44	COM	920
Collybia	dryophila	Tricholomataceae	Agaricales	5	HMD131	AP1	UNK	230
Collybia	lentiginos cf.	Tricholomataceae	Agaricales	3	PNA61	LC2	COM	616
Collybia	spongiosa cf.	Tricholomataceae	Agaricales	3	LAS756	SH5	UNK	957
Coltricia	perennis	Polyporaceae	Aphyllophorales	2	PNA259	LC1	COM	1007
Coniophora	puteana	Coniophoraceae	Aphyllophorales	7	LAS415	BN5	UNK	373
Conocybe	lactea cf.	Bolbitiaceae	Agaricales	3	AMD472	LA1	COM	428
Conocybe	tenera cf.	Bolbitiaceae	Agaricales	4	LAS561	LA1	ABN	946
Coprinus	atramentarius	Coprinaceae	Agaricales	2	LAS596	BU4	COM	803
Coprinus	comatus	Coprinaceae	Agaricales	1	AMD345	AS1	ABN	677
Coprinus	lagopus cf.	Coprinaceae	Agaricales	3	AMD350	BN6	UNK	697
Coprinus	micaceus	Coprinaceae	Agaricales	2	LAS600	BU3	COM	760
Coriellus	carbonarius	Polyporaceae	Aphyllophorales	2	AMD603	BU1	UNK	266
Corioloopsis	gallica	Polyporaceae	Aphyllophorales	1	GPN216	BU48	UNK	822
Cortinarius	albiviolaceus cf.	Cortinariaceae	Agaricales	3	AMD447	PC1	UNK	654
Cortinarius	anomalus	Cortinariaceae	Agaricales	2	AMD447	BU4	UNK	737
Cortinarius	calochrous	Cortinariaceae	Agaricales	2	PNA145	BU4	COM	730
Cortinarius	glauopus cf.	Cortinariaceae	Agaricales	3	AMD437	GP1	UNK	112
Crepidotus	applanatus cf.	Crepidotaceae	Agaricales	3	LAS636	BN3	UNK	443
Crepidotus	herbarum cf.	Crepidotaceae	Agaricales	3	AMD405	LB4	UNK	256
Crepidotus	mollis	Crepidotaceae	Agaricales	1	AMD406	LC1	ABN	993
Crucibulum	laeve	Nidulariaceae	Nidulariales	2	LAS828	LC2	COM	593
Cudonia	circinans	Leotiaceae	Helotiales	2	AMD873	AP1	COM	393
Cyathus	striatus	Nidulariaceae	Nidulariales	1	AMD828	SH2	COM	361
Cyrtotrana	chrysospeplum	Tricholomataceae	Agaricales	1	PNA63	LC1	ABN	994
Cystoderma	amianthinum cf.	Tricholomataceae	Agaricales	3	AMD200	BU46	UNC	855
Cystoderma	granulosum cf.	Tricholomataceae	Agaricales	3	AMD200	BU48	UNC	828
Dacrymyces	palnatus	Dacrymycetaceae	Dacrymycetales	2	PNA300	PC1	ABN	1137
Daedaleopsis	confragosa	Polyporaceae	Aphyllophorales	1	GPN226	PC1	UNK	932
Daldinia	concentrica cf.	Xylariaceae	Sphaeriales	5	LAS374	BU3	UNK	945
Flammulina	velutipes	Tricholomataceae	Agaricales	1	AMD220	BU3	ABN	1009
Fomitopsis	canjanderi	Polyporaceae	Aphyllophorales	2	AMD580	PC1	UNK	1136
Fomitopsis	pinicola	Polyporaceae	Aphyllophorales	2	AMD578	BU3	ABN	1029
Fuligo	septica	Physacaceae	Physarales	2	LAS845	BN6	COM	1132
Galerina	autumnalis cf.	Cortinariaceae	Agaricales	3	LAS620	BN1	RAR	303
Ganoderma	applanatum	Polyporaceae	Aphyllophorales	1	LAS460	BU3	ABN	1024
Gautieria	mexicana	Gautieriaceae	Gautieriales	1	AMD747	PC1	UNK	934
Gastrum	coronatum	Gastraceae	Lycoperdales	2	LAS818	WR3	UNK	686
Gastrum	saccatum	Gastraceae	Lycoperdales	2	LAS818	PL1	COM	492
Gastrum	triplex	Gastraceae	Lycoperdales	1	AMD703	AP1	UNK	227
Globifomes	graveolens cf.	Polyporaceae	Aphyllophorales	3	LAS462	SH5	UNK	411

genus	species	family	order	grd ref	commonname	loct	ocr	ncode
Gloeophyllum	sepiarium	Polyporaceae	Aphyllphorales	1	LAS463	BU3	COM	1018
Gomphidius	glutinosus	Gomphidiaceae	Agaricales	2	AMD482	SH5	ABN	1083
Gomphidius	oregonensis	Gomphidiaceae	Agaricales	2	AMD482	BN5	COM	203
Gomphus	bonari	Cantharellaceae	Aphyllphorales	2	LAS396	SH5	COM	1066
Gomphus	floccosus	Cantharellaceae	Aphyllphorales	2	LAS396	SH5	ABN	953
Guepinopsis	alpinus	Dacrymycetaceae	Dacrymycetales	2	SSW145	PL1	UNC	172
Gymnopolis	sapineus	Cortinariaceae	Agaricales	2	AMD408	BU48	UNC	817
Gymnosporangium	speciosus cf.	Pucciniaceae	Uredinales	3	TextBk	BN4	COM	181
Gyromitra	esculenta	Helvellaceae	Pezizales	2	PNA303	BU3	UNC	1099
Gyromitra	infula	Helvellaceae	Pezizales	2	PNA303	BU3	COM	1125
Hebeloma	crustuliniforme	Cortinariaceae	Agaricales	2	LAS624	SH8	COM	886
Hebeloma	sinapizans cf.	Cortinariaceae	Agaricales	3	AMD465	BU3	COM	1030
Helvella	acetabulum	Helvellaceae	Pezizales	2	AMD807	SH5	UNC	146
Helvella	crispa	Helvellaceae	Pezizales	2	AMD816	BN3	COM	913
Helvella	elastica cf.	Helvellaceae	Pezizales	3	AMD813	LB4	UNC	247
Helvella	lacunosa	Helvellaceae	Pezizales	2	AMD815	SH5	UNC	149
Hemitrichia	clavata cf.	Trichiaceae	Trichiales	5	FSM66	LC2	UNK	603
Hericium	abeitis	Hydnaceae	Aphyllphorales	2	AMD614	BU26	RAR	769
Hohenbuehelia	petaloides cf.	Tricholomataceae	Agaricales	3	AMD136	PC1	UNC	1138
Humaria	hemisphaerica	Pyrenomataceae	Pezizales	2	LAS351	SH5	UNC	408
Hygrophoropsis	aurantiaca	Paxcillaceae	Agaricales	2	AMD479	BN6	COM	1119
Hygrophorus	acutoconica cf.	Hygrophoraceae	Agaricales	3	AMD115	BU48	UNC	831
Hygrophorus	chrysodon	Hygrophoraceae	Agaricales	2	LAS657	BU44	COM	874
Hygrophorus	conicus	Hygrophoraceae	Agaricales	1	LAS658	SH5	ABN	1068
Hygrophorus	marginatus cf.	Hygrophoraceae	Agaricales	3	AMD112	BU1	UNK	713
Hygrophorus	pudorinus	Hygrophoraceae	Agaricales	2	AMD116	SH5	COM	1069
Hygrophorus	speciosus	Hygrophoraceae	Agaricales	2	LAS667	BN6	COM	1089
Hypomyces	chrysospermum	Hypocreaceae	Sphaeriales	1	LAS371	BN6	COM	1038
Hypomyces	hyalinus cf.	Hypocreaceae	Sphaeriales	3	PNA313	BU1	UNC	704
Hypomyces	lactifluorum	Hypocreaceae	Sphaeriales	1	LAS373	BN6	ABN	1035
Hypomyces	luteovirens	Hypocreaceae	Sphaeriales	1	LAS373	SH5	UNC	1056
Inocybe	albodisca cf.	Cortinariaceae	Agaricales	3	AMD459	BN3	UNC	449
Inocybe	fastigiata	Cortinariaceae	Agaricales	2	LAS628	LA2	COM	429
Inocybe	lanuginosa	Cortinariaceae	Agaricales	2	LAS630	BN1	UNC	305
Inocybe	maculata cf.	Cortinariaceae	Agaricales	3	AMD458	LB2	UNC	448
Inocybe	sororia	Cortinariaceae	Agaricales	2	LAS632	BU3	UNC	1103
Inonotus	tomentosus	Polyporaceae	Aphyllphorales	2	AMD569	SH5	UNC	1085
Irpex	lacteus	Polyporaceae	Aphyllphorales	2	LAS467	BU44	COM	1043
Laccaria	amethystina cf.	Tricholomataceae	Agaricales	3	AMD172	BU4	UNC	773
Laccaria	bicolor	Tricholomataceae	Agaricales	2	AMD173	BU3	COM	1027
Laccaria	laccata	Tricholomataceae	Agaricales	2	AMD172	SH8	COM	901
Lactarius	barrowsii	Russulaceae	Agaricales	2	AMD69	WR3	UNC	1053
Lactarius	controversus cf.	Russulaceae	Agaricales	3	AMD70	SH5	UNC	1060
Lactarius	deliciosus	Russulaceae	Agaricales	2	LAS683	BN6	ABN	1113
Lactarius	olivaceoumbinus	Russulaceae	Agaricales	2	AMD70	PC1	UNC	669
Lactarius	rubrilacteus	Russulaceae	Agaricales	1	AMD68	SH5	COM	1094
Lactarius	torminosus	Russulaceae	Agaricales	2	LAS694	AS1	COM	671
Lactarius	uvidus cf.	Russulaceae	Agaricales	3	AMD75	BN6	COM	1098
Leccinum	aurantiacum	Boletaceae	Agaricales	1	LAS577	BU3	COM	1010

genus	species	family	order	grd ref	commonname	loct	ocr	ncode	
Leccinum	insigne	Boletaceae	Agaricales	2	AMD540	AS1	COM	673	
Lentinellus	omphalodes cf.	Tricholomataceae	Agaricales	3	PNA208	LC2	UNC	982	
Lentinellus	ursinus cf.	Tricholomataceae	Agaricales	3	AMD144	SH8	UNC	630	
Lentinus	ponderosus	Tricholomataceae	Agaricales	2	AMD143	BN3	COM	944	
Lenzites	betulina	Polyporaceae	Aphyllophorales	2	AMD589	AP1	COM	400	
Lepiota	clypeolaria	Lepiotaceae	Agaricales	2	PNA31	PC1	UNC	523	
Lepiota	cristata	Lepiotaceae	Agaricales	2	AMD306	SH8	COM	896	
Lepiota	rhacodes	Lepiotaceae	Agaricales	2	AMD297	LA2	UNC	615	
Leucopaxillus	amarus	Tricholomataceae	Agaricales	2	LAS768	BU44	ABN	922	
Leucophleps	spiniispora	Leucogastraceae	Leucogastrales	1	AMD760	PC1	UNC	937	
Lycogala	epidendrum	Reticulariaceae	Liceales	1	SSW206	Wolf's Phart	BU3	ABN	1016
Lycogala	flavofuscum	Reticulariaceae	Liceales	2	FSM55	Slime Mold	SH1	UNC	192
Lycoperdon	americanum	Lycoperdaceae	Lycoperdales	2	AMD694	Puffball	BU1	UNC	358
Lycoperdon	echinatum	Lycoperdaceae	Lycoperdales	2	LAS824	Puffball	BU48	COM	837
Lycoperdon	perlatum	Lycoperdaceae	Lycoperdales	2	LAS825	Puffball	SH8	COM	624
Lycoperdon	pyriforme	Lycoperdaceae	Lycoperdales	2	AMD691	Puffball	BU3	ABN	1013
Marasmius	oreades	Tricholomataceae	Agaricales	1	LAS772	Fairy Ring Mush.	LA1	ABN	948
Melanoleuca	sp.	Tricholomataceae	Agaricales	5	AMD169		LC1	UNC	997
Morchella	augusticeps	Morchellaceae	Pezizales	2	AMD790	Morel	PL1	UNC	176
Morchella	elata	Morchellaceae	Pezizales	2	LAS713	Morel	PL1	UNC	177
Morchella	esculenta	Morchellaceae	Pezizales	2	LAS327	Morel	PL1	UNC	171
Mycena	haemotopus	Tricholomataceae	Agaricales	2	LAS781		LC2	UNC	602
Nidula	candida	Nidulariaceae	Nidulariales	2	AMD780	Birds Nest Mush.	AP2	COM	222
Nolanea	sp.	Entolomataceae	Agaricales	4	AMD245		BU3	UNC	1108
Panaeolus	foeniseccii	Coprinaceae	Agaricales	2	AMD360	Hay-Makers Mush.	LA1	COM	431
Panaeolus	retirugis cf.	Coprinaceae	Agaricales	3	AMD357		AP1	UNC	218
Paxillus	atrotomentosus	Paxillaceae	Agaricales	2	LAS670		BN6	UNC	1046
Peniophora	gigantea	Corticaceae	Aphyllophorales	2	LAS422		BU1	COM	706
Peniophora	rufa	Corticaceae	Aphyllophorales	1	LAS423		BU3	COM	1011
Peziza	repanda	Pezizaceae	Pezizales	2	LAS347		BN6	COM	1146
Peziza	succosa	Pezizaceae	Pezizales	2	PNG304		BN1	UNC	317
Phaeolus	schweinitzii	Polyporaceae	Aphyllophorales	2	LAS473	Dye Polypore	SH5	COM	963
Phallus	impudicus	Phallaceae	Phallales	1	AMD768	Stinkhorn	BN3	UNC	818
Phlebia	sp.	Corticaceae	Aphyllophorales	5	AMD610		LC1	UNC	985
Pholiota	aurivella cf.	Strophariaceae	Agaricales	3	LAS712		BU4	UNC	764
Pholiota	destruens	Strophariaceae	Agaricales	2	LAS714		LC2	COM	980
Pholiota	limonella cf.	Strophariaceae	Agaricales	3	PNA174		LC1	UNC	459
Pholiota	lubrica cf.	Strophariaceae	Agaricales	3	AMD392		BU6	UNC	559
Pholiota	squarrosa	Strophariaceae	Agaricales	2	LAS716		BU3	ABN	752
Phylloporus	rhodoxanthus	Paxillaceae	Agaricales	1	AMD480	Gilled Bolete	SH8	COM	890
Phyllotopsis	nidulans	Tricholomataceae	Agaricales	1	AMD140		BU3	COM	1102
Pleurotus	ostreatus	Tricholomataceae	Agaricales	1	AMD134		LC1	ABN	1006
Pleurotus	sapidus	Tricholomataceae	Agaricales	2	AMD134	Oyster Mushroom	AP1	COM	234
Pluteus	cervinus	Pluteaceae	Agaricales	1	AMD255	Fawn Mushroom	BU3	ABN	1019
Pluteus	cervinus v. alba	Pluteaceae	Agaricales	4	LAS675		LA2	UNC	291
Pluteus	lutescens	Pluteaceae	Agaricales	2	AMD257		BU3	UNC	1022
Polyporus	arcularius	Polyporaceae	Aphyllophorales	1	AMD563		BU44	ABN	971
Polyporus	badius cf.	Polyporaceae	Aphyllophorales	3	AMD562		SH5	UNC	407
Polyporus	elegans	Polyporaceae	Aphyllophorales	2	AMD562		LA2	UNC	360

genus	species	family	order	grd ref	commonname	loct	ocr	ncode
Polyporus	squamosus	Polyporaceae	Aphyllophorales	2	PNA257	BU3	UNC	1105
Polyporus	varius	Polyporaceae	Aphyllophorales	2	AMD563	BU44	COM	949
Poria	corticola cf.	Polyporaceae	Aphyllophorales	3	AMD602	LC1	COM	986
Poria	spissa	Polyporaceae	Aphyllophorales	2	LAS484	BU44	UNC	878
Psathyrella	carbonicola	Coprinaceae	Agaricales	1	AMD366	BN6	RAR	1134
Psathyrella	velutina	Coprinaceae	Agaricales	2	MNA178	BU6	UNC	546
Pseudohydnum	gelatinosum	Tremellaceae	Tremellales	2	AMD671	PC1	UNC	1047
Psilocybe	sp.	Strophariaceae	Agaricales	4	AMD368	BU3	RAR	1144
Pycnoporellus	alboluteus	Polyporaceae	Aphyllophorales	2	AMD571	PL1	COM	1128
Pycnoporus	cinnabarinus	Polyporaceae	Aphyllophorales	2	LAS747	LC2	COM	981
Ramaria	vinosimaculatus cf.	Clavariaceae	Aphyllophorales	3	AMD653	PC1	UNC	652
Rhizopogon	subsalmonius	Rhizopogonaceae	Hymenogastreales	1	SNG290	BU44	UNC	936
Russula	aeruginosa cf.	Russulaceae	Agaricales	3	AMD95	PC1	UNC	653
Russula	brevipes	Russulaceae	Agaricales	2	LAS698	BN6	ABN	1112
Russula	emetica cf.	Russulaceae	Agaricales	3	AMD97	LC1	COM	1005
Russula	maculata cf.	Russulaceae	Agaricales	3	AMD100	BU44	COM	869
Russula	rosacea cf.	Russulaceae	Agaricales	3	LAS705	SH5	COM	1081
Sarcoscypha	coccinea cf.	Sarcoscyphaceae	Pezizales	2	AMD836	LA2	UNC	401
Scutellinia	erinaceus cf.	Pyronemataceae	Pezizales	3	AMD839	PC1	UNC	685
Scutellinia	scutellata	Pyronemataceae	Pezizales	1	LAS353	AP1	COM	205
Sparassis	crispa	Clavariaceae	Aphyllophorales	2	AMD657	PL3	UNC	568
Sparassis	radicata	Clavariaceae	Aphyllophorales	2	AMD657	LC1	UNC	462
Spathularia	flavida	Geoglossaceae	Helotiales	2	LAS360	BN1	COM	301
Spongipellis	pachyodon	Polyporaceae	Aphyllophorales	2	LAS488	LA2	UNC	426
Steccherinum	ochraceum cf.	Hydnaceae	Aphyllophorales	5	LAS437	BN6	UNC	135
Stemonitis	splendens	Stemonitaceae	Stemonitales	1	LAS853	BU44	UNC	968
Stereum	complicatum	Stereaceae	Aphyllophorales	2	LAS497	BN3	UNC	857
Stereum	hirsutum cf.	Stereaceae	Aphyllophorales	3	AMD605	BN3	COM	384
Stereum	striatum	Stereaceae	Aphyllophorales	2	AMD605	BN3	UNC	863
Stropharia	coronilla cf.	Strophariaceae	Agaricales	3	AMD377	AP3	UNC	216
Stropharia	kauffmanii	Strophariaceae	Agaricales	2	AMD380	BU3	UNC	1104
Suillus	granulatus	Boletaceae	Agaricales	2	LAS584	BN6	ABN	1034
Suillus	lakei	Boletaceae	Agaricales	2	LAS585	LC1	ABN	1004
Suillus	sibiricus	Boletaceae	Agaricales	2	AMD498	LC2	COM	972
Tarzetta	cupularis	Pyronemataceae	Pezizales	2	PNA304	SH5	UNC	1076
Thelephora	terrestris	Thelephoraceae	Aphyllophorales	2	LAS413	BU3	COM	1026
Tremella	mesenterica cf.	Tremellaceae	Tremellales	6	AMD669	SH5	UNC	1059
Trichaptum	abietinus	Polyporaceae	Aphyllophorales	2	AMD593	LC1	ABN	995
Trichaptum	subchartaceum	Polyporaceae	Aphyllophorales	1	UNK000	SH5	RAR	964
Trichia	scabra cf.	Trichiaceae	Trichiales	3	FSM68	BU3	UNC	1023
Tricholoma	sp.	Tricholomataceae	Agaricales	4	AMD176	AP1	UNC	389
Tricholomopsis	platyphylla	Tricholomataceae	Agaricales	2	AMD146	LA2	COM	275
Tricholomopsis	rutilans	Tricholomataceae	Agaricales	2	AMD145	PC1	UNC	1135
Truncocolumella	citrina	Rhizopogonaceae	Hymenogastreales	2	LAS813	SH5	UNC	143
Tubifera	sp.	Reticulariaceae	Liceales	6	FSM54	LC1	UNC	466
Tulostoma	brumale cf.	Tulostomataceae	Tulostomatales	3	AMD719	WR3	COM	687
Tulostoma	simulans	Tulostomataceae	Tulostomatales	2	LAS842	BN3	UNC	829
Tyromyces	guttulatus cf.	Polyporaceae	Aphyllophorales	3	AMD599	SH7	UNC	190
Vascellum	lloydianum cf.	Lycoperdaceae	Lycoperdales	5	SNG247	BN7	RAR	1129

genus	species	family	order	grd ref	commonname	loct ocr ncode
Volvariella	bombycina	Pluteaceae	Agaricales	2 LAS677		BU44 RAR 841
Xeromphalina	campanella	Tricholomataceae	Agaricales	1 LAS809		LC2 ABN 974
Xerula	americana	Tricholomataceae	Agaricales	2 UNK000		BN6 RAR 258

APPENDIX D

1991–1995 Los Alamos/Bandelier Fungi Survey: Species List Sorted by Order (28FnSpOrder)

1991-1995 LOS ALAMOS/BANDELIER FUNGI SURVEY

Nelson Jarmie/Fran J. Rogers

order	genus	species	family	ncode	grd	ocr	ref	commonname
Agaricales	Agaricus	augustus	Agaricaceae	938	2	UNC	LAS502	The Prince
Agaricales	Agaricus	barrowsii	Agaricaceae	689	2	RAR	AMD69	
Agaricales	Agaricus	bitorquis	Agaricaceae	159	2	UNC	GLT130	
Agaricales	Agaricus	campestris	Agaricaceae	947	1	COM	LAS505	Meadow mushroom
Agaricales	Agaricus	haemorrhoidarius	Agaricaceae	160	2	UNC	LAS505	
Agaricales	Agaricus	silvicola	Agaricaceae	187	2	COM	AMD334	
Agaricales	Agaricus	xanthodermus	Agaricaceae	139	2	UNC	AMD329	
Agaricales	Agrocybe	pediades cf.	Bolbitiaceae	1142	3	UNC	AMD468	
Agaricales	Agrocybe	praecox cf.	Bolbitiaceae	166	3	COM	AMD469	
Agaricales	Amanita	bisporigera	Amanitaceae	168	2	UNC	AMD271	Destroying Angel
Agaricales	Amanita	caesarea	Amanitaceae	1140	2	COM	AMD284	Caesar's Mush.
Agaricales	Amanita	constricta	Amanitaceae	1048	2	UNC	AMD289	
Agaricales	Amanita	fulva	Amanitaceae	662	2	COM	LAS536	
Agaricales	Amanita	magniverrucata cf.	Amanitaceae	930	3	RAR	AMD274	
Agaricales	Amanita	muscaria v. mus.	Amanitaceae	1037	1	ABN	AMD282	Fly Agaric
Agaricales	Amanita	pantherina	Amanitaceae	1092	2	ABN	AMD280	
Agaricales	Amanita	vaginata	Amanitaceae	893	2	ABN	LAS549	Grisette
Agaricales	Armillaria	albolanaripes	Tricholomataceae	642	2	UNC	AMD194	
Agaricales	Armillaria	mellea cf.	Tricholomataceae	1086	3	ABN	LAS736	Honey Mushroom
Agaricales	Armillaria	straminia cf.	Tricholomataceae	478	3	UNC	LAS734	
Agaricales	Armillaria	tabescens cf.	Tricholomataceae	919	3	UNC	AMD197	
Agaricales	Boletus	barrowsii	Boletaceae	1116	1	ABN	AMD529	
Agaricales	Boletus	calopus	Boletaceae	518	2	UNC	AMD523	
Agaricales	Boletus	chrysenteron cf.	Boletaceae	991	3	COM	AMD519	
Agaricales	Boletus	edulis	Boletaceae	925	1	COM	AMD530	King, Cep, etc
Agaricales	Boletus	haematinus	Boletaceae	651	2	UNC	AMD528	
Agaricales	Boletus	rubripes	Boletaceae	771	2	COM	AMD524	
Agaricales	Boletus	ventricosus	Tricholomataceae	900	2	UNC	AMD195	
Agaricales	Cathelasma	sp.	Boletaceae	1141	3	RAR	UNK000	
Agaricales	Chalciporus		Boletaceae	954	2	COM	LAS743	
Agaricales	Cheimonophyllum	candidissimus	Tricholomataceae	1133	1	COM	AMD295	
Agaricales	Chlorophyllum	molybdites	Lepiotaceae	582	2	COM	LAS650	
Agaricales	Chroogomphus	tomentosus	Gomphidiaceae	866	2	COM	LAS651	
Agaricales	Chroogomphus	vinicolor	Gomphidiaceae	306	2	UNC	AMD163	
Agaricales	Clitocybe	dealbata	Tricholomataceae	1065	2	COM	LAS746	
Agaricales	Clitocybe	dilatata	Tricholomataceae	680	2	COM	AMD157	
Agaricales	Clitocybe	gibba	Tricholomataceae	920	3	COM	AMD158	
Agaricales	Clitocybe	gigantea cf.	Tricholomataceae	230	5	UNC	HMD131	
Agaricales	Collybia	dryophila	Tricholomataceae	616	3	COM	PNA61	
Agaricales	Collybia	lentinoides cf.	Tricholomataceae	957	3	UNC	LAS756	
Agaricales	Collybia	spongiosa cf.	Tricholomataceae	428	3	COM	AMD472	
Agaricales	Conocybe	lactea cf.	Bolbitiaceae	946	4	ABN	LAS561	
Agaricales	Conocybe	tenera cf.	Bolbitiaceae	803	2	COM	LAS596	Inky cap
Agaricales	Coprinus	atramentarius	Coprinaceae	677	1	ABN	AMD345	Shaggy mane
Agaricales	Coprinus	comatus	Coprinaceae	697	3	UNC	AMD350	
Agaricales	Coprinus	lagopus cf.	Coprinaceae	760	2	COM	LAS600	
Agaricales	Coprinus	micaceus	Coprinaceae	654	3	UNC	AMD447	
Agaricales	Cortinarius	alboviolaceus cf.	Cortinariaceae					

order	genus	species	family	ncode	grd	ocr	ref	commonname
Agaricales	Cortinarius	anomalus	Cortinariaceae	737	2	UNC	AMD447	
Agaricales	Cortinarius	calochrous	Cortinariaceae	730	2	COM	PNA145	
Agaricales	Cortinarius	glaucopus cf.	Cortinariaceae	112	3	UNC	AMD437	
Agaricales	Crepidotus	applanatus cf.	Crepidotaceae	443	3	UNC	LAS636	
Agaricales	Crepidotus	herbarum cf.	Crepidotaceae	256	3	UNC	AMD405	
Agaricales	Crepidotus	mollis	Crepidotaceae	993	1	ABN	AMD406	
Agaricales	Cyptotrama	chrysopelplum	Tricholomataceae	994	1	ABN	PNA63	
Agaricales	Cystoderma	amianthinum cf.	Tricholomataceae	855	3	UNC	AMD200	
Agaricales	Cystoderma	granulosum cf.	Tricholomataceae	828	3	UNC	AMD200	
Agaricales	Flammulina	velutipes	Tricholomataceae	1009	1	ABN	AMD220	Velvet Foot
Agaricales	Galerina	autumnalis cf.	Cortinariaceae	303	3	RAR	LAS620	
Agaricales	Gomphidius	glutinosus	Gomphidiaceae	1083	2	ABN	AMD482	
Agaricales	Gomphidius	oregonensis	Gomphidiaceae	203	2	COM	AMD482	Insidious G.
Agaricales	Gymnopolis	sapineus	Cortinariaceae	817	2	UNC	AMD408	
Agaricales	Hebeloma	crustuliniforme	Cortinariaceae	886	2	COM	LAS624	Poison pie
Agaricales	Hebeloma	sinapizans cf.	Cortinariaceae	1030	3	COM	AMD465	
Agaricales	Hohenbuehelia	petaloides cf.	Tricholomataceae	1138	3	UNC	AMD136	
Agaricales	Hygrophoropsis	aurantiaca	Paxillaceae	1119	2	COM	AMD479	False Chanterell
Agaricales	Hygrophorus	autoconica cf.	Hygrophoraceae	831	3	UNC	AMD115	
Agaricales	Hygrophorus	chrysodon	Hygrophoraceae	874	2	COM	LAS657	
Agaricales	Hygrophorus	conicus	Hygrophoraceae	1068	1	ABN	LAS658	Witch's Hat
Agaricales	Hygrophorus	marginatus cf.	Hygrophoraceae	713	3	UNK	AMD112	
Agaricales	Hygrophorus	pudorus	Hygrophoraceae	1069	2	COM	AMD116	
Agaricales	Hygrophorus	speciosus	Hygrophoraceae	1089	2	COM	LAS667	
Agaricales	Inocybe	albodisca cf.	Cortinariaceae	449	3	UNC	AMD459	
Agaricales	Inocybe	fastigiata	Cortinariaceae	429	2	COM	LAS628	
Agaricales	Inocybe	lanuginosa	Cortinariaceae	305	2	UNC	LAS630	
Agaricales	Inocybe	maculata cf.	Cortinariaceae	448	3	UNC	AMD458	
Agaricales	Inocybe	sororia	Cortinariaceae	1103	2	UNC	LAS632	
Agaricales	Laccaria	amethystina cf.	Tricholomataceae	773	3	UNC	AMD172	
Agaricales	Laccaria	bicolor	Tricholomataceae	1027	2	COM	AMD173	
Agaricales	Laccaria	laccata	Tricholomataceae	901	2	COM	AMD172	
Agaricales	Lactarius	barrowsii	Russulaceae	1053	2	UNC	AMD69	
Agaricales	Lactarius	controversus cf.	Russulaceae	1060	3	UNC	AMD70	
Agaricales	Lactarius	deliciosus	Russulaceae	1113	2	ABN	LAS683	
Agaricales	Lactarius	olivaceoumbrinus	Russulaceae	669	2	UNC	AMD70	
Agaricales	Lactarius	rubrilacteus	Russulaceae	1094	1	COM	AMD68	
Agaricales	Lactarius	torminosus	Russulaceae	671	2	COM	LAS694	
Agaricales	Lactarius	uvidus cf.	Russulaceae	1098	3	COM	AMD75	
Agaricales	Leccinum	aurantiacum	Boletaceae	1010	1	COM	LAS577	
Agaricales	Leccinum	insigne	Boletaceae	673	2	COM	AMD540	
Agaricales	Lentinellus	omphalodes cf.	Tricholomataceae	982	3	UNC	PNA208	
Agaricales	Lentinellus	ursinus cf.	Tricholomataceae	630	3	UNC	AMD144	
Agaricales	Lentinus	ponderosus	Tricholomataceae	944	2	COM	AMD143	
Agaricales	Lepiota	clypeolaria	Lepiotaceae	523	2	UNC	PNA31	
Agaricales	Lepiota	cristata	Lepiotaceae	896	2	COM	AMD306	
Agaricales	Lepiota	rhacodes	Lepiotaceae	615	2	UNC	AMD297	
Agaricales	Leucopaxillus	amarus	Tricholomataceae	922	2	ABN	LAS768	
Agaricales	Marasmius	oreades	Tricholomataceae	948	1	ABN	LAS772	Fairy Ring Mush.

order	genus	species	family	ncode	grd	ocr	ref	commonname
Agaricales	Melanoleuca	sp.	Tricholomataceae	997	5	UNK	AMD169	
Agaricales	Myrcena	haemotopus	Tricholomataceae	602	2	UNC	LAS781	
Agaricales	Nolanea	sp.	Entolomataceae	1108	4	UNK	AMD245	
Agaricales	Panaeolus	foenisecii	Coprinaceae	431	2	COM	AMD360	Hay-Makers Mush.
Agaricales	Panaeolus	retirugis cf.	Coprinaceae	218	3	UNC	AMD357	
Agaricales	Paxillus	atroomentosus	Paxillaceae	1046	2	UNC	LAS670	
Agaricales	Pholiota	aureivella cf.	Strophariaceae	764	3	UNC	LAS712	
Agaricales	Pholiota	destruens	Strophariaceae	980	2	COM	LAS714	
Agaricales	Pholiota	limonella cf.	Strophariaceae	459	3	UNC	PNA174	
Agaricales	Pholiota	lubrica cf.	Strophariaceae	559	3	UNC	AMD392	
Agaricales	Pholiota	squarrosa	Strophariaceae	752	2	ABN	LAS716	
Agaricales	Phylloporus	rhodoxanthus	Paxillaceae	890	1	COM	AMD480	Gilled Bolete
Agaricales	Phyllotopsis	nidulans	Tricholomataceae	1102	1	COM	AMD140	
Agaricales	Pleurotus	ostreatus	Tricholomataceae	1006	1	ABN	AMD134	
Agaricales	Pleurotus	sapidus	Tricholomataceae	234	2	COM	AMD134	Oyster Mushroom
Agaricales	Pluteus	cervinus	Pluteaceae	1019	1	ABN	AMD255	Fawn Mushroom
Agaricales	Pluteus	cervinus v. alba	Pluteaceae	291	4	UNC	LAS675	
Agaricales	Pluteus	lutescens	Pluteaceae	1022	2	UNC	AMD257	
Agaricales	Psathyrella	carbonicola	Coprinaceae	1134	1	RAR	AMD366	
Agaricales	Psathyrella	velutina	Coprinaceae	546	2	UNC	MNA178	
Agaricales	Psilocybe	sp.	Strophariaceae	1144	4	RAR	AMD368	
Agaricales	Russula	aeruginea cf.	Russulaceae	653	3	UNC	AMD95	
Agaricales	Russula	brevipes	Russulaceae	1112	2	ABN	LAS698	
Agaricales	Russula	emetica cf.	Russulaceae	1005	3	COM	AMD97	
Agaricales	Russula	maculata cf.	Russulaceae	869	3	COM	AMD100	
Agaricales	Russula	rosacea cf.	Russulaceae	1081	3	COM	LAS705	
Agaricales	Stropharia	coronilla cf.	Strophariaceae	216	3	UNC	AMD377	
Agaricales	Stropharia	kauffmanii	Strophariaceae	1104	2	UNC	AMD380	
Agaricales	Suillus	granulatus	Boletaceae	1034	2	ABN	LAS584	
Agaricales	Suillus	lakei	Boletaceae	1004	2	ABN	LAS585	
Agaricales	Suillus	sibiricus	Boletaceae	972	2	COM	AMD498	
Agaricales	Tricholoma	sp.	Tricholomataceae	389	4	UNK	AMD176	
Agaricales	Tricholomopsis	platyphylla	Tricholomataceae	275	2	COM	AMD146	
Agaricales	Tricholomopsis	rutilans	Tricholomataceae	1135	2	UNC	AMD145	
Agaricales	Volvariella	bombicina	Pluteaceae	841	2	RAR	LAS677	
Agaricales	Xeromphalina	campanella	Tricholomataceae	974	1	ABN	LAS809	
Agaricales	Xerula	americana	Tricholomataceae	258	2	RAR	UNK000	
Aphylllophorales	Auriscalpium	vulgare	Hydnaceae	202	1	COM	AMD629	
Aphylllophorales	Bjerkandera	adusta	Polyporaceae	1079	2	ABN	PNA270	
Aphylllophorales	Caloporus	dichrous	Polyporaceae	386	2	UNC	LAS449	
Aphylllophorales	Cantharellus	cibarius	Cantharellaceae	1090	1	COM	LAS387	Chanterelle
Aphylllophorales	Clavariadelphus	lovejoyae cf.	Clavariaceae	864	3	UNC	AMD634	
Aphylllophorales	Clavariadelphus	pistillaris	Clavariaceae	580	2	COM	LAS403	
Aphylllophorales	Clavariadelphus	truncatus	Clavariaceae	1064	2	COM	AMD634	
Aphylllophorales	Clavicornia	pyxidata	Clavariaceae	1014	2	COM	LAS401	Coral Mushroom
Aphylllophorales	Clavulina	cristata cf.	Clavariaceae	226	3	UNC	AMD641	Coral Mushroom
Aphylllophorales	Clavulina	rugosa cf.	Clavariaceae	152	3	UNC	AMD642	Coral Mushroom
Aphylllophorales	Clavulinopsis	corniculata	Clavariaceae	314	2	UNC	AMD639	
Aphylllophorales	Coltricia	perennis	Polyporaceae	1007	2	COM	PNA259	

order	genus	species	family	ncode	grd	ocr	ref	commonname
Aphylllophorales	Coniophora	puteana	Coniophoraceae	373	7	UNK	LAS415	Wet rot
Aphylllophorales	Coriollus	carbonarius	Polyporaceae	266	2	UNC	AMD603	
Aphylllophorales	Coriopsis	gallica	Polyporaceae	822	1	UNC	GNP216	
Aphylllophorales	Daedaleopsis	confragosa	Polyporaceae	932	1	UNC	GNP226	
Aphylllophorales	Fomitopsis	canjanderi	Polyporaceae	1136	2	UNC	AMD580	
Aphylllophorales	Fomitopsis	pinicola	Polyporaceae	1029	2	ABN	AMD578	
Aphylllophorales	Ganoderma	applanatum	Polyporaceae	1024	1	ABN	LAS460	Artist's Conk
Aphylllophorales	Glabifomes	graveolens cf.	Polyporaceae	411	3	UNC	LAS462	Sweet knot
Aphylllophorales	Gloeophyllum	sepiarium	Polyporaceae	1018	1	COM	LAS463	
Aphylllophorales	Gomphus	bonari	Cantharellaceae	1066	2	COM	LAS396	
Aphylllophorales	Gomphus	floccosus	Cantharellaceae	953	2	ABN	LAS396	
Aphylllophorales	Hericium	abeitis	Hydnaceae	769	2	RAR	AMD614	
Aphylllophorales	Inonotus	tomentosus	Polyporaceae	1085	2	UNC	AMD569	
Aphylllophorales	Irpex	lacteus	Polyporaceae	1043	2	COM	LAS467	
Aphylllophorales	Lenzites	betulina	Polyporaceae	400	2	COM	AMD589	
Aphylllophorales	Peniophora	gigantea	Corticaceae	706	2	COM	LAS422	
Aphylllophorales	Peniophora	rufa	Corticaceae	1011	1	COM	LAS423	
Aphylllophorales	Phaeolus	schweinitzii	Polyporaceae	963	2	COM	LAS473	Dye Polypore
Aphylllophorales	Phlebia	sp.	Corticaceae	985	5	UNK	AMD610	
Aphylllophorales	Polyporus	arcularius	Polyporaceae	971	1	ABN	AMD563	
Aphylllophorales	Polyporus	badius cf.	Polyporaceae	407	3	UNC	AMD562	
Aphylllophorales	Polyporus	elegans	Polyporaceae	360	2	UNC	AMD562	
Aphylllophorales	Polyporus	squamosus	Polyporaceae	1105	2	UNC	PNA257	
Aphylllophorales	Polyporus	varius	Polyporaceae	949	2	COM	AMD563	
Aphylllophorales	Poria	corticola cf.	Polyporaceae	986	3	COM	AMD602	
Aphylllophorales	Poria	spissa	Polyporaceae	878	2	UNC	LAS484	
Aphylllophorales	Pycnoporellus	alboluteus	Polyporaceae	1128	2	COM	AMD571	
Aphylllophorales	Pycnoporus	cinnabarinus	Polyporaceae	981	2	COM	LAS747	
Aphylllophorales	Ramaria	vinosimaculatus cf.	Clavariaceae	652	3	UNC	AMD653	Coral Mushroom
Aphylllophorales	Sparassis	crispa	Clavariaceae	568	2	UNC	AMD657	
Aphylllophorales	Sparassis	radicata	Clavariaceae	462	2	UNC	AMD657	Cauliflower M.
Aphylllophorales	Spongipellis	pachyodon	Polyporaceae	426	2	UNC	LAS488	
Aphylllophorales	Steccherinum	ochraceum cf.	Hydnaceae	135	5	UNC	LAS437	
Aphylllophorales	Stereum	complicatum	Stereaceae	857	2	UNC	LAS497	
Aphylllophorales	Stereum	hirsutum cf.	Stereaceae	384	3	COM	AMD605	Parchment Fungus
Aphylllophorales	Stereum	striatum	Stereaceae	863	2	UNC	AMD605	
Aphylllophorales	Thelephora	terrestris	Thelephoraceae	1026	2	COM	LAS413	
Aphylllophorales	Trichaptum	abietinus	Polyporaceae	995	2	ABN	AMD593	
Aphylllophorales	Trichaptum	subchartaceum	Polyporaceae	964	1	RAR	UNK000	
Aphylllophorales	Tyromyces	guttulatus cf.	Polyporaceae	190	3	UNC	AMD599	
Auriculariales	Auricularia	auricula	Auriculariaceae	658	1	COM	AMD675	Tree Ear
Ceratiomyxales	Ceratiomyxa	fruticulosa	Ceratiomyxaceae	206	2	UNK	FSM30	Slime Mold
Dacrymycetales	Dacrymyces	palmatus	Dacrymycetaceae	1137	2	ABN	PNA300	
Dacrymycetales	Guepinopsis	alpinus	Dacrymycetaceae	172	2	UNC	SSW145	
Gautieriales	Gautieria	mexicana	Gautieriaceae	934	1	UNK	AMD747	
Helotiales	Bisporella	citrina	Leotiaceae	1075	2	COM	LAS362	
Helotiales	Chlorociboria	aeruginascens	Dermatiaceae	1147	1	COM	AMD878	Blue Stain
Helotiales	Cudonia	circinans	Leotiaceae	393	2	COM	AMD873	
Helotiales	Spathularia	flavida	Geoglossaceae	301	2	COM	LAS360	

order	genus	species	family	ncode	grd	ocr	ref	commonname
Hymenogastrales	Rhizopogon	subsalmonius	Rhizopogonaceae	936	1	UNK	SN290	
Hymenogastrales	Truncocolumella	citrina	Rhizopogonaceae	143	2	UNK	LAS813	
Leucogastrales	Leucophleps	spinispora	Leucogastraceae	937	1	UNK	AMD760	
Liceales	Lycogala	epidendrum	Reticulariaceae	1016	1	ABN	SSW206	Wolf's Phart
Liceales	Lycogala	flavofuscum	Reticulariaceae	192	2	UNK	FSM55	Slime Mold
Liceales	Tubifera	sp.	Reticulariaceae	466	6	UNK	FSM54	Slime Mold
Lycoperdales	Calvatia	gigantea	Lycoperdaceae	422	3	COM	AMD681	Giant puffball
Lycoperdales	Geastrum	coronatum	Gaeastraceae	686	2	UNK	LAS818	Earth star
Lycoperdales	Geastrum	saccatum	Gaeastraceae	492	2	COM	LAS818	Earth star
Lycoperdales	Geastrum	triplex	Gaeastraceae	227	1	UNK	AMD703	Earth star
Lycoperdales	Lycoperdon	americanum	Lycoperdaceae	358	2	UNK	AMD694	Puffball
Lycoperdales	Lycoperdon	echinatum	Lycoperdaceae	837	2	COM	LAS824	Puffball
Lycoperdales	Lycoperdon	perlatum	Lycoperdaceae	624	2	COM	LAS825	Puffball
Lycoperdales	Lycoperdon	pyriforme	Lycoperdaceae	1013	2	ABN	AMD691	Puffball
Lycoperdales	Vascellum	lloydianum cf.	Lycoperdaceae	1129	5	RAR	SN247	
Nidulariales	Crucibulum	laeve	Nidulariaceae	593	2	COM	LAS828	Bird's nest
Nidulariales	Cyathus	striatus	Nidulariaceae	361	1	COM	AMD828	
Nidulariales	Nidula	candida	Nidulariaceae	222	2	COM	AMD780	Birds Nest Mush.
Pezizales	Gyromitra	esculenta	Helvellaceae	1099	2	UNK	PNA303	
Pezizales	Gyromitra	infula	Helvellaceae	1125	2	COM	PNA303	
Pezizales	Helvella	acetabulum	Helvellaceae	146	2	UNK	AMD807	Cup Fungus
Pezizales	Helvella	crispa	Helvellaceae	913	2	COM	AMD816	Saddle Mushroom
Pezizales	Helvella	elastica cf.	Helvellaceae	247	3	UNK	AMD813	Saddle Mushroom
Pezizales	Helvella	lacunosa	Helvellaceae	149	2	UNK	AMD815	Saddle Mushroom
Pezizales	Humaria	hemisphaerica	Pyronemataceae	408	2	UNK	LAS351	
Pezizales	Morchella	augusticeps	Morchellaceae	176	2	UNK	AMD790	Morel
Pezizales	Morchella	elata	Morchellaceae	177	2	UNK	LAS713	Morel
Pezizales	Morchella	esculenta	Morchellaceae	171	2	UNK	LAS327	Morel
Pezizales	Peziza	repanda	Pezizaceae	1146	2	COM	LAS347	
Pezizales	Peziza	succosa	Pezizaceae	317	2	UNK	PNG304	
Pezizales	Sarcoscypha	coccinea cf.	Sarcoscyphaceae	401	2	UNK	AMD836	
Pezizales	Scutellinia	erinaceus cf.	Pyronemataceae	685	3	UNK	AMD839	Yellow eye-lash
Pezizales	Scutellinia	scutellata	Pyronemataceae	205	1	COM	LAS353	Eyelash cup
Pezizales	Tarzetta	cupularis	Pyronemataceae	1076	2	UNK	PNA304	
Phallales	Phallus	impudicus	Phallaceae	818	1	UNK	AMD768	Stinkhorn
Physarales	Fuligo	septica	Physacaceae	1132	2	COM	LAS845	Slime mold
Sclerodermatales	Astraeus	hygrometricus	Astraeaceae	418	2	UNK	AMD705	
Sphaeriales	Daldinia	concentrica cf.	Xylariaceae	945	5	UNK	LAS374	
Sphaeriales	Hypomyces	chrysospermum	Hypocreaceae	1038	1	COM	LAS371	
Sphaeriales	Hypomyces	hyalinus cf.	Hypocreaceae	704	3	UNK	PNA313	
Sphaeriales	Hypomyces	lactifluorum	Hypocreaceae	1035	1	ABN	LAS373	Lobster Mushroom
Sphaeriales	Hypomyces	luteovirens	Hypocreaceae	1056	1	UNK	LAS373	
Stemonitales	Stemonitis	splendens	Stemonitaceae	968	1	UNK	LAS853	Slime mold
Tremellales	Pseudohydnum	gelatinosum	Tremellaceae	1047	2	UNK	AMD671	
Tremellales	Tremella	mesenterica cf.	Tremellaceae	1059	6	UNK	AMD669	Jelly Fungus
Trichiales	Arcyria	denudata	Trichiaceae	933	1	UNK	FSM63	Slime Mold
Trichiales	Trichia	clavata cf.	Trichiaceae	603	5	UNK	FSM66	Slime Mold
Trichiales	Trichia	scabra cf.	Trichiaceae	1023	3	UNK	FSM68	Slime Mold
Tulostomatales	Battarrea	phalloides	Tulostomataceae	140	1	UNK	SSW156	

order	genus	species	family	ncode	grd	ocr	ref	commonname
Tulostomatales	Tulostoma	brumale cf.	Tulostomataceae	687	3	COM	AMD719	
Tulostomatales	Tulostoma	simulans	Tulostomataceae	829	2	UNC	LAS842	
Uredinales	Gymnosporangium	speciosus cf.	Pucciniaceae	181	3	COM	TextBk	Juniper Rust

APPENDIX E

1991–1995 Los Alamos/Bandelier Fungi Survey: Species List not New Mexico (28FnSpNotNM)

1991-1995 LOS ALAMOS/BANDELIER FUNGI SURVEY

Nelson Jarmie/Fran J. Rogers

genus	species	family	order	grd	ocr	date	nm1st	ncode
Agaricus	barrowsii	Agaricaceae	Agaricales	2	RAR	08/30/93	.F.	689
Agaricus	haemorrhoidarius	Agaricaceae	Agaricales	2	UNK	09/14/91	.F.	160
Amanita	bisporigera	Amanitaceae	Agaricales	2	UNC	09/20/91	.F.	165
Amanita	bisporigera	Amanitaceae	Agaricales	2	UNC	09/29/91	.F.	168
Amanita	bisporigera	Amanitaceae	Agaricales	2	UNC	09/10/93	.F.	876
Amanita	magniverrucata cf.	Amanitaceae	Agaricales	3	RAR	09/19/93	.F.	930
Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	ABN	08/04/91	.F.	119
Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	ABN	08/07/93	.F.	416
Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	ABN	08/09/93	.F.	445
Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	ABN	08/23/93	.F.	569
Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	ABN	08/23/93	.F.	600
Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	ABN	08/25/93	.F.	619
Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	ABN	08/25/93	.F.	648
Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	ABN	09/04/93	.F.	790
Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	ABN	08/15/94	.F.	1037
Arcyria	denudata	Trichiaceae	Trichiales	1	UNK	10/02/93	.F.	933
Boletus	calopus	Boletaceae	Agaricales	2	UNC	08/16/93	.F.	518
Boletus	haematinus	Boletaceae	Agaricales	2	UNC	08/28/93	.F.	651
Chalciporus	amarellus cf.	Boletaceae	Agaricales	3	RAR	08/20/94	.F.	1051
Chalciporus	amarellus cf..	Boletaceae	Agaricales	3	RAR	09/08/94	.F.	1123
Chalciporus	amarellus cf..	Boletaceae	Agaricales	3	RAR	09/11/95	.F.	1141
Clavariadelphus	lovejoyae cf.	Clavariaceae	Aphylllophorales	3	UNC	09/10/93	.F.	864
Collybia	lentinoides cf.	Tricholomataceae	Agaricales	3	COM	08/23/93	.F.	611
Collybia	lentinoides cf.	Tricholomataceae	Agaricales	3	COM	08/23/93	.F.	616
Collybia	spongiosa cf.	Tricholomataceae	Agaricales	3	UNK	07/30/94	.F.	957
Coniophora	puteana cf.	Coniophoraceae	Aphylllophorales	7	UNK	07/27/92	.F.	373
Coniophora	puteana cf.	Coniophoraceae	Aphylllophorales	5	UNK	07/30/94	.F.	958
Coprinus	lagopus cf.	Coprinaceae	Agaricales	3	UNC	08/31/93	.F.	697
Corioloopsis	gallica	Polyporaceae	Aphylllophorales	1	UNC	08/18/93	.F.	544
Corioloopsis	gallica	Polyporaceae	Aphylllophorales	1	UNC	09/07/93	.F.	822
Cortinarius	anomalous	Cortinariaceae	Agaricales	2	UNC	09/02/93	.F.	737
Gautieria	mexicana	Gautieriaceae	Gautieriales	1	UNK	10/02/93	.F.	934
Globifomes	graveolens cf.	Polyporaceae	Aphylllophorales	3	UNC	08/04/93	.F.	411
Gomphidius	oregonensis	Gomphidiaceae	Agaricales	2	COM	07/27/92	.F.	203
Gomphidius	oregonensis cf.	Gomphidiaceae	Agaricales	3	COM	08/06/92	.F.	257
Gymnosporangium	speciosus cf.	Pucciniaceae	Uredinales	3	COM	04/26/92	.F.	181
Gyromitra	esculenta	Helvellaceae	Pezizales	2	UNC	09/07/94	.F.	1099
Hemitrichia	clavata cf.	Trichiaceae	Trichiales	5	UNK	08/23/93	.F.	603
Herichium	abeitis	Hydnaceae	Aphylllophorales	2	RAR	09/04/93	.F.	769
Hygrophorus	marginatus cf.	Hygrophoraceae	Agaricales	3	UNK	08/31/93	.F.	713
Hygrophorus	marginatus cf.	Hygrophoraceae	Agaricales	3	UNK	09/07/93	.F.	832
Hypomyces	hyalinus cf.	Hypocreaceae	Sphaeriales	3	UNC	08/31/93	.F.	704
Inocybe	albodisca cf.	Cortinariaceae	Agaricales	3	UNC	08/09/93	.F.	449
Laccaria	amethystina cf.	Tricholomataceae	Agaricales	3	UNC	09/04/93	.F.	773
Lactarius	olivaceoumbrianus	Russulaceae	Agaricales	2	UNC	08/28/93	.F.	669
Lepiota	rhacodes	Lepiotaceae	Agaricales	2	UNC	08/24/93	.F.	615
Lycoperdon	echinatum	Lycoperdaceae	Lycoperdales	2	COM	09/07/93	.F.	837
Lycoperdon	echinatum cf.	Lycoperdaceae	Lycoperdales	3	COM	08/31/93	.F.	710

genus	species	family	order	grd	ocr	date	nm1st	ncode
Morchella	augusticeps	Morchellaceae	Pezizales	2	UNC	05/28/92	F.	176
Phlebia	sp.	Corticiaceae	Aphyllophorales	5	UNK	08/07/94	F.	985
Pholiota	lubrica cf.	Strophariaceae	Agaricales	3	UNC	08/18/93	F.	559
Pleurotus	sapidus	Tricholomataceae	Agaricales	2	ABN	08/01/92	F.	234
Pluteus	cervinus v. alba	Pluteaceae	Agaricales	4	UNC	08/26/92	F.	291
Polyporus	squamosus	Polyporaceae	Aphyllophorales	2	UNC	09/07/94	F.	1105
Poria	corticola cf.	Polyporaceae	Aphyllophorales	3	COM	08/07/93	F.	444
Poria	corticola cf.	Polyporaceae	Aphyllophorales	3	COM	08/18/93	F.	816
Poria	corticola cf.	Polyporaceae	Aphyllophorales	3	COM	08/07/94	F.	986
Poria	spissa	Polyporaceae	Aphyllophorales	2	UNC	09/10/93	F.	878
Psathyrella	carbonicola	Coprinaceae	Agaricales	1	RAR	07/23/95	F.	1134
Ramaria	vinosimaculatus cf.	Clavariaceae	Aphyllophorales	3	UNC	08/28/93	F.	652
Russula	emetica cf.	Russulaceae	Agaricales	3	ABN	07/26/91	F.	105
Russula	emetica cf.	Russulaceae	Agaricales	3	COM	08/25/92	F.	365
Russula	emetica cf.	Russulaceae	Agaricales	3	COM	08/12/93	F.	456
Russula	emetica cf.	Russulaceae	Agaricales	4	COM	08/16/93	F.	504
Russula	emetica cf.	Russulaceae	Agaricales	3	COM	08/18/93	F.	534
Russula	emetica cf.	Russulaceae	Agaricales	3	COM	08/18/93	F.	563
Russula	emetica cf.	Russulaceae	Agaricales	3	COM	07/30/94	F.	967
Russula	emetica cf.	Russulaceae	Agaricales	3	COM	08/07/94	F.	1005
Spongipellis	pachyodon	Polyporaceae	Aphyllophorales	2	UNC	08/07/93	F.	426
Steccherinum	ochraceum	Hydnaceae	Aphyllophorales	5	UNK	08/10/91	F.	135
Stemonitis	splendens	Stemonitaceae	Stemonitales	1	UNC	07/30/94	F.	959
Stemonitis	splendens	Stemonitaceae	Stemonitales	1	UNC	07/31/94	F.	968
Stemonitis	splendens cf.	Stemonitaceae	Stemonitales	4	UNC	08/15/94	F.	1041
Stereum	striatum	Stereaceae	Aphyllophorales	2	UNC	09/10/93	F.	863
Tarzetta	cupularis	Pyronemataceae	Pezizales	2	UNC	08/26/94	F.	1076
Trichaptum	subchartaceum	Polyporaceae	Aphyllophorales	1	RAR	07/30/94	F.	964
Trichia	scabra cf.	Trichiaceae	Trichiales	3	UNC	08/15/94	F.	1023
Tulostoma	simulans	Tulostomataceae	Tulostomatales	2	UNC	09/07/93	F.	829
Vascellum	lloydianum cf.	Lycoperdaceae	Lycoperdales	5	RAR	05/02/95	F.	1129

APPENDIX F

1991–1995 Los Alamos/Bandelier Fungi Survey: Species List, Short Form (28FnABC)

1991-1995 LOS ALAMOS/BANDELIER FUNGI SURVEY

Short Form 1

Nelson Jarmie/Fran J. Rogers

ncode	genus	species	family	order	grd	vchr	ref	loct	bndl	ocr	date
938	Agaricus	augustus	Agaricaceae	Agaricales	2	F.	LAS502	BN3	F.	UNC	07/10/94
689	Agaricus	barrowsii	Agaricaceae	Agaricales	2	F.	AMD331	WR3	T.	RAR	08/30/93
159	Agaricus	bitorquis	Agaricaceae	Agaricales	2	T.	GLT130	LA1	F.	UNC	09/13/91
260	Agaricus	campestris	Agaricaceae	Agaricales	1	T.	AMD318	GP1	F.	COM	08/10/92
427	Agaricus	campestris	Agaricaceae	Agaricales	1	T.	LAS505	LA1	F.	COM	08/07/93
442	Agaricus	campestris	Agaricaceae	Agaricales	1	F.	AMD318	BN3	T.	COM	08/09/93
947	Agaricus	campestris	Agaricaceae	Agaricales	1	T.	LAS505	LA1	F.	COM	07/25/94
160	Agaricus	haemorrhoidarius	Agaricaceae	Agaricales	2	T.	LAS505	SH5	F.	UNK	09/14/91
111	Agaricus	silvicola	Agaricaceae	Agaricales	2	T.	AMD334	GP1	F.	COM	08/03/91
148	Agaricus	silvicola	Agaricaceae	Agaricales	2	T.	AMD334	SH5	F.	COM	08/31/91
187	Agaricus	silvicola	Agaricaceae	Agaricales	2	T.	AMD334	SH7	F.	COM	07/19/92
390	Agaricus	silvicola	Agaricaceae	Agaricales	2	T.	AMD334	AP1	T.	COM	09/17/92
108	Agaricus	sp.	Agaricaceae	Agaricales	4	T.	AMD310	WR1	F.	UNK	08/03/91
331	Agaricus	sp.	Agaricaceae	Agaricales	4	T.	AMD310	BN3	T.	UNK	08/31/92
567	Agaricus	sp.	Agaricaceae	Agaricales	4	T.	AMD310	WR3	F.	UNK	08/15/93
525	Agaricus	sp.	Agaricaceae	Agaricales	4	T.	LAS500	PC1	F.	UNK	08/16/93
543	Agaricus	sp.	Agaricaceae	Agaricales	4	T.	LAS500	BU8	T.	UNK	08/18/93
927	Agaricus	sp.	Agaricaceae	Agaricales	4	F.	AMD310	LA1	F.	UNK	08/27/93
696	Agaricus	sp.	Agaricaceae	Agaricales	4	F.	AMD310	BN6	T.	UNK	08/31/93
742	Agaricus	sp.	Agaricaceae	Agaricales	4	F.	LAS500	BU4	T.	UNK	09/02/93
875	Agaricus	sp.	Agaricaceae	Agaricales	4	T.	LAS500	BU44	T.	UNK	09/10/93
858	Agaricus	sp.	Agaricaceae	Agaricales	4	F.	AMD310	BN3	T.	UNK	09/10/93
898	Agaricus	sp.	Agaricaceae	Agaricales	4	T.	LAS500	SH8	F.	UNK	09/12/93
923	Agaricus	sp.	Agaricaceae	Agaricales	4	T.	LAS500	BN3	T.	UNK	09/17/93
1049	Agaricus	sp.	Agaricaceae	Agaricales	4	T.	AMD310	WR3	F.	UNK	08/20/94
139	Agaricus	xanthodermus	Agaricaceae	Agaricales	2	T.	AMD329	WR1	F.	UNC	08/17/91
1142	Agrocybe	pediades cf.	Bolbitiaceae	Agaricales	3	T.	AMD468	WR1	F.	UNC	09/16/95
166	Agrocybe	praecox cf.	Bolbitiaceae	Agaricales	3	T.	AMD469	AP1	T.	COM	09/20/91
165	Amanita	bisporigera	Amanitaceae	Agaricales	2	T.	AMD271	AP3	T.	UNC	09/20/91
168	Amanita	bisporigera	Amanitaceae	Agaricales	2	T.	AMD271	PL1	F.	UNC	09/29/91
876	Amanita	bisporigera	Amanitaceae	Agaricales	2	T.	LAS551	BU44	T.	UNC	09/10/93
455	Amanita	caesarea	Amanitaceae	Agaricales	2	T.	LAS528	BN6	T.	COM	08/12/93
640	Amanita	caesarea	Amanitaceae	Agaricales	2	T.	LAS528	BN6	T.	COM	08/25/93
1061	Amanita	caesarea	Amanitaceae	Agaricales	2	T.	LAS528	BN6	T.	COM	08/26/94
1140	Amanita	caesarea	Amanitaceae	Agaricales	2	T.	AMD284	BN6	T.	COM	09/10/95
151	Amanita	caesarea	Amanitaceae	Agaricales	2	T.	AMD284	SH1	F.	COM	08/31/91
660	Amanita	caesarea	Amanitaceae	Agaricales	2	F.	LAS528	PC1	F.	COM	08/28/93
115	Amanita	constricta	Amanitaceae	Agaricales	2	T.	AMD289	SH1	F.	UNC	08/03/91
141	Amanita	constricta	Amanitaceae	Agaricales	2	T.	AMD289	WR1	F.	UNC	08/16/91
824	Amanita	constricta	Amanitaceae	Agaricales	2	T.	AMD289	BU48	T.	UNC	09/07/93
823	Amanita	constricta	Amanitaceae	Agaricales	2	T.	AMD289	BU48	T.	UNC	09/07/93
1050	Amanita	constricta	Amanitaceae	Agaricales	2	T.	AMD289	PR1	F.	UNC	08/19/94
1048	Amanita	constricta	Amanitaceae	Agaricales	2	T.	AMD289	WR3	F.	UNC	08/20/94
417	Amanita	fulva	Amanitaceae	Agaricales	2	T.	LAS536	BN6	T.	COM	08/07/93
565	Amanita	fulva	Amanitaceae	Agaricales	2	F.	LAS536	LB2	F.	COM	08/18/93
662	Amanita	fulva	Amanitaceae	Agaricales	2	T.	LAS536	PC1	F.	COM	08/28/93
930	Amanita	magniverrucata cf.	Amanitaceae	Agaricales	3	T.	AMD274	PC1	F.	RAR	09/19/93

ncode	genus	species	family	order	grd	vchr	ref	loct	bndlr	ocr	date
119	Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	T.	AMD282	BN6	.T.	ABN	08/04/91
416	Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	T.	AMD282	BN6	.T.	ABN	08/07/93
445	Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	F.	LAS539	LB2	.F.	ABN	08/09/93
600	Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	F.	AMD282	LC2	.F.	ABN	08/23/93
569	Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	F.	AMD282	PL3	.F.	ABN	08/23/93
648	Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	F.	AMD282	GP1	.F.	ABN	08/25/93
619	Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	F.	AMD282	PC1	.F.	ABN	08/25/93
790	Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	F.	AMD282	BU26	.T.	ABN	09/04/93
1037	Amanita	muscaria v. mus.	Amanitaceae	Agaricales	1	F.	AMD282	BN6	.T.	ABN	08/15/94
109	Amanita	pantherina	Amanitaceae	Agaricales	2	T.	AMD280	GP1	.F.	ABN	08/03/91
433	Amanita	pantherina	Amanitaceae	Agaricales	2	T.	AMD280	BN3	.T.	ABN	08/07/93
500	Amanita	pantherina	Amanitaceae	Agaricales	2	T.	LAS541	BN6	.T.	ABN	08/15/93
517	Amanita	pantherina	Amanitaceae	Agaricales	2	T.	AMD280	PC1	.F.	ABN	08/16/93
757	Amanita	pantherina	Amanitaceae	Agaricales	2	T.	AMD280	BU3	.T.	ABN	09/02/93
1052	Amanita	pantherina	Amanitaceae	Agaricales	2	T.	AMD263	PC1	.F.	ABN	08/20/94
1092	Amanita	pantherina	Amanitaceae	Agaricales	2	T.	AMD280	SH5	.F.	ABN	08/26/94
1106	Amanita	pantherina	Amanitaceae	Agaricales	2	T.	AMD280	BU3	.T.	ABN	09/07/94
1139	Amanita	pantherina	Amanitaceae	Agaricales	2	T.	AMD280	PC1	.F.	ABN	09/10/95
605	Amanita	sp.	Amanitaceae	Agaricales	4	T.	AMD263	PR1	.F.	UNK	08/23/93
604	Amanita	sp.	Amanitaceae	Agaricales	4	T.	AMD263	PR1	.F.	UNK	08/23/93
692	Amanita	sp.	Amanitaceae	Agaricales	4	T.	AMD289	WR3	.F.	UNK	08/30/93
1054	Amanita	sp.	Amanitaceae	Agaricales	4	T.	AMD263	SH7	.F.	UNK	08/18/94
893	Amanita	vaginata	Amanitaceae	Agaricales	2	T.	LAS549	SH8	.F.	ABN	09/12/93
273	Amanita	vaginata cf.	Amanitaceae	Agaricales	3	T.	LAS549	SH1	.F.	ABN	08/25/92
272	Amanita	vaginata cf.	Amanitaceae	Agaricales	3	T.	LAS549	SH1	.F.	ABN	08/25/92
332	Amanita	vaginata cf.	Amanitaceae	Agaricales	3	T.	LAS549	BU1	.T.	ABN	09/03/92
484	Amanita	vaginata cf.	Amanitaceae	Agaricales	3	T.	AMD288	PL1	.F.	ABN	08/15/93
632	Amanita	vaginata cf.	Amanitaceae	Agaricales	3	F.	AMD288	BN6	.T.	ABN	08/25/93
661	Amanita	vaginata cf.	Amanitaceae	Agaricales	3	T.	AMD288	PC1	.F.	ABN	08/28/93
668	Amanita	vaginata cf.	Amanitaceae	Agaricales	3	T.	AMD288	BN6	.T.	ABN	09/10/93
910	Amanita	vaginata cf.	Amanitaceae	Agaricales	3	T.	AMD288	BN3	.T.	ABN	09/17/93
1109	Amanita	vaginata cf.	Amanitaceae	Agaricales	3	F.	LAS549	BN6	.T.	ABN	09/07/94
933	Arcyria	denudata	Trichiaceae	Trichiales	1	F.	FSM63	PC1	.F.	UNK	10/02/93
642	Armillaria	albolaripes	Tricholomataceae	Agaricales	2	T.	AMD194	SH5	.F.	UNK	08/25/93
889	Armillaria	albolaripes cf.	Tricholomataceae	Agaricales	3	T.	AMD194	SH8	.F.	UNK	09/12/93
363	Armillaria	mellea cf.	Tricholomataceae	Agaricales	3	T.	LAS736	SH2	.F.	ABN	08/25/92
480	Armillaria	mellea cf.	Tricholomataceae	Agaricales	3	T.	AMD196	PL1	.F.	ABN	08/15/93
537	Armillaria	mellea cf.	Tricholomataceae	Agaricales	3	T.	LAS736	BU8	.T.	ABN	08/18/93
561	Armillaria	mellea cf.	Tricholomataceae	Agaricales	3	T.	LAS736	BU6	.F.	ABN	08/18/93
755	Armillaria	mellea cf.	Tricholomataceae	Agaricales	3	T.	AMD197	BU3	.T.	ABN	09/02/93
729	Armillaria	mellea cf.	Tricholomataceae	Agaricales	3	F.	AMD196	BU4	.T.	ABN	09/02/93
728	Armillaria	mellea cf.	Tricholomataceae	Agaricales	3	T.	AMD197	BU3	.T.	ABN	09/02/93
899	Armillaria	mellea cf.	Tricholomataceae	Agaricales	3	T.	LAS736	SH3	.F.	ABN	09/12/93
914	Armillaria	mellea cf.	Tricholomataceae	Agaricales	3	F.	AMD196	BN3	.T.	ABN	09/17/93
911	Armillaria	mellea cf.	Tricholomataceae	Agaricales	3	T.	AMD196	BU44	.T.	ABN	09/17/93
1086	Armillaria	mellea cf.	Tricholomataceae	Agaricales	3	T.	LAS736	SH5	.F.	ABN	08/26/94
1118	Armillaria	mellea cf.	Tricholomataceae	Agaricales	3	T.	LAS736	BU3	.T.	ABN	09/07/94
478	Armillaria	straminia cf.	Tricholomataceae	Agaricales	3	T.	LAS734	PL1	.F.	UNC	08/15/93
919	Armillaria	tabescens cf.	Tricholomataceae	Agaricales	3	T.	AMD197	BN3	.T.	UNK	09/17/93

ncode	genus	species	family	order	grd	vchr	ref	loct	bndlr	ocr	date
344	Astraeus	hygrometricus	Astraeaceae	Sclerodermatales	2	T.	AMD705	BU1	T.	COM	09/03/92
418	Astraeus	hygrometricus	Astraeaceae	Sclerodermatales	2	T.	AMD705	LB2	F.	COM	08/07/93
830	Astraeus	hygrometricus	Astraeaceae	Sclerodermatales	2	T.	AMD705	BU48	T.	COM	09/07/93
134	Auricularia	auricula	Auriculariaceae	Auriculariales	1	T.	AMD675	AP1	T.	COM	08/10/91
173	Auricularia	auricula	Auriculariaceae	Auriculariales	1	T.	LAS380	PL1	F.	COM	05/27/92
209	Auricularia	auricula	Auriculariaceae	Auriculariales	1	T.	AMD675	AP2	T.	COM	07/28/92
294	Auricularia	auricula	Auriculariaceae	Auriculariales	1	T.	LAS380	LA2	F.	COM	08/26/92
487	Auricularia	auricula	Auriculariaceae	Auriculariales	1	T.	LAS380	PL1	F.	COM	08/15/93
658	Auricularia	auricula	Auriculariaceae	Auriculariales	1	T.	AMD675	PC1	F.	COM	08/28/93
202	Auriscalpium	vulgare	Hydnaceae	Aphyllophorales	1	T.	AMD629	BN5	T.	COM	07/27/92
140	Battarrea	phalloides	Tulostomataceae	Tulostomataceae	2	T.	SSW156	RC1	F.	UNC	08/12/91
376	Bisporella	citrina	Leotiaceae	Helotiales	2	T.	LAS362	SH3	F.	COM	09/13/92
388	Bisporella	citrina	Leotiaceae	Helotiales	2	T.	LAS362	AP1	T.	COM	09/17/92
880	Bisporella	citrina	Leotiaceae	Helotiales	2	T.	PNA310	SH8	F.	COM	09/12/93
1075	Bisporella	citrina	Leotiaceae	Helotiales	2	F.	LAS362	SH5	F.	COM	08/26/94
325	Bjerkandera	adusta	Polyporaceae	Aphyllophorales	2	T.	AMD596	BN1	T.	ABN	08/31/92
378	Bjerkandera	adusta	Polyporaceae	Aphyllophorales	2	T.	PNA270	SH5	F.	ABN	09/13/92
499	Bjerkandera	adusta	Polyporaceae	Aphyllophorales	2	T.	LAS445	PL1	F.	ABN	08/15/93
577	Bjerkandera	adusta	Polyporaceae	Aphyllophorales	2	T.	AMD596	PL3	F.	ABN	08/23/93
625	Bjerkandera	adusta	Polyporaceae	Aphyllophorales	2	F.	LAS445	SH8	F.	ABN	08/25/93
763	Bjerkandera	adusta	Polyporaceae	Aphyllophorales	2	F.	AMD596	BU3	T.	ABN	09/02/93
806	Bjerkandera	adusta	Polyporaceae	Aphyllophorales	2	F.	AMD596	BU4	T.	ABN	09/04/93
767	Bjerkandera	adusta	Polyporaceae	Aphyllophorales	1	T.	LAS445	BU3	T.	ABN	09/04/93
1079	Bjerkandera	adusta	Polyporaceae	Aphyllophorales	2	F.	PNA270	SH5	F.	ABN	08/26/94
107	Boletus	barrowsii	Boletaceae	Agaricales	1	T.	AMD529	BN6	T.	ABN	08/03/91
421	Boletus	barrowsii	Boletaceae	Agaricales	1	T.	AMD529	LB2	F.	ABN	08/07/93
497	Boletus	barrowsii	Boletaceae	Agaricales	1	T.	AMD529	BN6	T.	ABN	08/15/93
501	Boletus	barrowsii	Boletaceae	Agaricales	1	T.	AMD529	PC1	F.	ABN	08/16/93
645	Boletus	barrowsii	Boletaceae	Agaricales	1	F.	AMD529	GP1	F.	ABN	08/25/93
675	Boletus	barrowsii	Boletaceae	Agaricales	1	F.	AMD529	AS1	F.	ABN	08/28/93
739	Boletus	barrowsii	Boletaceae	Agaricales	1	T.	AMD529	BU3	T.	ABN	09/02/93
807	Boletus	barrowsii	Boletaceae	Agaricales	1	F.	AMD529	BU4	T.	ABN	09/04/93
785	Boletus	barrowsii	Boletaceae	Agaricales	1	F.	AMD529	BU26	T.	ABN	09/04/93
783	Boletus	barrowsii	Boletaceae	Agaricales	1	F.	AMD529	AP3	T.	ABN	09/04/93
973	Boletus	barrowsii	Boletaceae	Agaricales	1	F.	AMD529	LC2	F.	ABN	08/07/94
1036	Boletus	barrowsii	Boletaceae	Agaricales	1	F.	AMD529	BN6	T.	ABN	08/15/94
1012	Boletus	barrowsii	Boletaceae	Agaricales	1	F.	AMD529	BU3	T.	ABN	08/15/94
1084	Boletus	barrowsii	Boletaceae	Agaricales	1	F.	AMD529	SH5	F.	ABN	08/26/94
1116	Boletus	barrowsii	Boletaceae	Agaricales	1	F.	AMD529	BU3	T.	ABN	09/07/94
518	Boletus	calopus	Boletaceae	Agaricales	2	T.	AMD523	PC1	F.	UNC	08/16/93
594	Boletus	chrysenteron cf.	Boletaceae	Agaricales	3	F.	AMD519	LC2	F.	COM	08/23/93
740	Boletus	chrysenteron cf.	Boletaceae	Agaricales	3	T.	AMD519	BU3	T.	COM	09/02/93
770	Boletus	chrysenteron cf.	Boletaceae	Agaricales	3	T.	AMD519	BU3	T.	COM	09/04/93
827	Boletus	chrysenteron cf.	Boletaceae	Agaricales	3	F.	AMD519	BU48	T.	COM	09/07/93
854	Boletus	chrysenteron cf.	Boletaceae	Agaricales	3	T.	AMD519	BU46	T.	COM	09/10/93
881	Boletus	chrysenteron cf.	Boletaceae	Agaricales	3	T.	AMD519	SH8	F.	COM	09/12/93
991	Boletus	chrysenteron cf.	Boletaceae	Agaricales	3	T.	AMD519	LC1	F.	COM	08/07/94
975	Boletus	chrysenteron cf.	Boletaceae	Agaricales	3	T.	AMD519	LC2	F.	COM	08/07/94
118	Boletus	edulis	Boletaceae	Agaricales	1	T.	AMD530	BN6	T.	COM	08/04/91

ncode	genus	species	family	order	grd	vchr	ref	loct	bndlr	ocr	date
925	Boletus	edulis	Boletaceae	Agaricales	1	.F.	AMD530	LA1	.F.	COM	08/27/93
674	Boletus	edulis	Boletaceae	Agaricales	1	.F.	AMD530	AS1	.F.	COM	08/28/93
694	Boletus	edulis	Boletaceae	Agaricales	1	.F.	AMD530	BN6	.T.	COM	08/31/93
782	Boletus	edulis	Boletaceae	Agaricales	1	.F.	AMD530	AP3	.T.	COM	09/04/93
651	Boletus	haematinus	Boletaceae	Agaricales	2	.T.	AMD528	PC1	.F.	UNC	08/28/93
771	Boletus	rubripes	Boletaceae	Agaricales	2	.T.	AMD524	BU4	.T.	COM	09/04/93
162	Boletus	sp.	Boletaceae	Agaricales	4	.T.	AMD511	SH5	.F.	UNC	09/14/91
298	Boletus	sp.	Boletaceae	Agaricales	4	.T.	SNG171	BN1	.T.	UNK	08/31/92
929	Boletus	sp.	Boletaceae	Agaricales	4	.T.	AMD528	LA1	.F.	UNK	09/19/93
1020	Boletus	sp.	Boletaceae	Agaricales	4	.T.	AMD511	BN6	.T.	UNK	08/15/94
386	Caloporus	dichrous	Polyporaceae	Aphylllophorales	2	.T.	LAS449	BN3	.T.	UNC	09/15/92
106	Calvatia	gigantea cf.	Lycoperdaceae	Lycoperdadales	3	.T.	AMD682	LA1	.F.	COM	07/26/91
422	Calvatia	gigantea cf.	Lycoperdaceae	Lycoperdadales	3	.T.	AMD681	LB2	.F.	COM	08/07/93
825	Calvatia	sp.	Lycoperdaceae	Lycoperdadales	4	.F.	AMD680	BU48	.T.	UNK	09/07/93
164	Cantharellus	cibarius	Cantharellaceae	Aphylllophorales	1	.T.	LAS387	BN6	.T.	COM	09/27/91
1090	Cantharellus	cibarius	Cantharellaceae	Aphylllophorales	1	.F.	LAS387	SH5	.F.	COM	08/26/94
1145	Cantharellus	cibarius	Cantharellaceae	Aphylllophorales	1	.T.	LAS387	BN6	.T.	COM	09/19/95
900	Catathelasma	ventricosa	Tricholomataceae	Agaricales	2	.T.	AMD195	SH8	.F.	UNC	09/12/93
206	Ceratiomyxa	fruticulosa	Ceratiomyxaceae	Ceratiomyxales	2	.T.	FSM30	AP1	.T.	UNK	07/28/92
1051	Chalciporus	amarellus cf.	Boletaceae	Agaricales	3	.T.	UNK000	WR3	.F.	RAR	08/20/94
1123	Chalciporus	amarellus cf..	Boletaceae	Agaricales	3	.T.	UNK000	WR3	.F.	RAR	09/08/94
1141	Chalciporus	amarellus cf..	Boletaceae	Agaricales	3	.T.	UNK000	WR3	.F.	RAR	09/11/95
409	Cheimonophyllum	candidissimus	Tricholomataceae	Agaricales	2	.T.	LAS743	SH5	.F.	COM	07/17/93
665	Cheimonophyllum	candidissimus	Tricholomataceae	Agaricales	2	.F.	LAS743	PC1	.F.	COM	08/28/93
954	Cheimonophyllum	candidissimus	Tricholomataceae	Agaricales	2	.T.	LAS743	SH5	.F.	COM	07/30/94
236	Chlorociboria	aeruginascens	Dermatiaceae	Helotiales	1	.T.	AMD878	AP1	.T.	COM	08/01/92
1147	Chlorociboria	aeruginascens	Dermatiaceae	Helotiales	1	.F.	AMD878	BU3	.T.	COM	09/19/95
137	Chlorophyllum	molybdites	Lepiotaceae	Agaricales	1	.T.	AMD295	LB2	.F.	COM	08/12/91
942	Chlorophyllum	molybdites	Lepiotaceae	Agaricales	1	.F.	AMD295	BN3	.T.	COM	07/15/94
1133	Chlorophyllum	molybdites	Lepiotaceae	Agaricales	1	.T.	AMD295	WR1	.F.	COM	07/23/95
663	Chroogomphus	sp.	Gomphidiaceae	Agaricales	4	.T.	AMD484	PC1	.F.	UNK	08/28/93
582	Chroogomphus	tomentosus	Gomphidiaceae	Agaricales	2	.T.	LAS650	LC3	.F.	COM	08/23/93
866	Chroogomphus	vinicolor	Gomphidiaceae	Agaricales	2	.T.	LAS651	BU44	.T.	COM	09/10/93
862	Chroogomphus	vinicolor	Gomphidiaceae	Agaricales	2	.F.	LAS651	BN3	.T.	COM	09/10/93
766	Chroogomphus	vinicolor cf.	Gomphidiaceae	Agaricales	3	.T.	LAS219	BU6	.T.	COM	09/04/93
864	Clavariadelphus	lovejoyae cf.	Clavariaceae	Aphylllophorales	3	.T.	AMD634	BN3	.T.	UNC	09/10/93
580	Clavariadelphus	pistillaris	Clavariaceae	Aphylllophorales	2	.T.	LAS403	PL3	.F.	COM	08/23/93
110	Clavariadelphus	truncatus	Clavariaceae	Aphylllophorales	2	.T.	AMD634	GP1	.F.	COM	08/03/91
631	Clavariadelphus	truncatus	Clavariaceae	Aphylllophorales	2	.T.	AMD634	BN6	.T.	COM	08/25/93
683	Clavariadelphus	truncatus	Clavariaceae	Aphylllophorales	2	.T.	AMD634	AS1	.F.	COM	08/28/93
718	Clavariadelphus	truncatus	Clavariaceae	Aphylllophorales	2	.T.	AMD634	BU8	.T.	COM	08/31/93
912	Clavariadelphus	truncatus	Clavariaceae	Aphylllophorales	2	.T.	AMD634	BN3	.T.	COM	09/17/93
1064	Clavariadelphus	truncatus	Clavariaceae	Aphylllophorales	2	.T.	AMD634	SH5	.F.	COM	08/26/94
232	Clavicornia	pyxidata	Clavariaceae	Aphylllophorales	2	.T.	LAS401	AP1	.T.	COM	08/01/92
558	Clavicornia	pyxidata	Clavariaceae	Aphylllophorales	2	.T.	PNA293	BU6	.T.	COM	08/18/93
621	Clavicornia	pyxidata	Clavariaceae	Aphylllophorales	2	.F.	PNA293	SH8	.F.	COM	08/25/93
756	Clavicornia	pyxidata	Clavariaceae	Aphylllophorales	2	.F.	PNA293	BU3	.T.	COM	09/02/93
962	Clavicornia	pyxidata	Clavariaceae	Aphylllophorales	2	.T.	LAS401	SH5	.F.	COM	07/30/94
984	Clavicornia	pyxidata	Clavariaceae	Aphylllophorales	2	.F.	PNA293	LC1	.F.	COM	08/07/94

ncode	genus	species	family	order	grd	vchr	ref	loct	bndlr	ocr	date
1014	Clavicornona	pyxidata	Clavariaceae	Aphyllphorales	2	F.	LAS401	BU3	T.	COM	08/15/94
1078	Clavicornona	pyxidata	Clavariaceae	Aphyllphorales	2	F.	LAS401	SH5	F.	COM	08/26/94
226	Clavulina	cristata cf.	Clavariaceae	Aphyllphorales	3	T.	AMD641	AP3	T.	UNC	07/30/92
152	Clavulina	rugosa cf.	Clavariaceae	Aphyllphorales	3	T.	AMD642	SH5	F.	UNC	08/31/91
314	Clavulinopsis	corniculata	Clavariaceae	Aphyllphorales	2	T.	AMD639	BN1	T.	UNC	08/31/92
214	Clavulinopsis	corniculata cf.	Clavariaceae	Aphyllphorales	3	T.	AMD639	AP1	T.	UNC	07/28/92
306	Clitocybe	dealbata	Tricholomataceae	Agaricales	2	T.	AMD163	BN1	T.	UNC	08/31/92
532	Clitocybe	dilatata	Tricholomataceae	Agaricales	2	T.	AMD159	BU8	T.	COM	08/18/93
1065	Clitocybe	dilatata	Tricholomataceae	Agaricales	2	T.	LAS746	SH5	F.	COM	08/26/94
245	Clitocybe	gibba	Tricholomataceae	Agaricales	2	T.	AMD157	SH5	F.	COM	08/04/92
368	Clitocybe	gibba	Tricholomataceae	Agaricales	2	T.	AMD157	SH2	F.	COM	08/25/92
308	Clitocybe	gibba	Tricholomataceae	Agaricales	2	T.	AMD157	BN1	T.	COM	08/31/92
680	Clitocybe	gibba	Tricholomataceae	Agaricales	2	F.	AMD157	AS1	F.	COM	08/28/93
744	Clitocybe	gigantea cf.	Tricholomataceae	Agaricales	3	T.	LAS748	BU4	T.	COM	09/02/93
920	Clitocybe	gigantea cf.	Tricholomataceae	Agaricales	3	T.	AMD158	BU44	T.	COM	09/17/93
398	Clitocybe	sp.	Tricholomataceae	Agaricales	4	T.	AMD148	AP1	T.	UNK	09/17/92
879	Clitocybe	sp.	Tricholomataceae	Agaricales	4	T.	AMD148	SH8	F.	UNK	09/12/93
230	Collybia	dryophila cf.	Tricholomataceae	Agaricales	5	T.	HMD131	AP1	T.	UNK	08/01/92
616	Collybia	lentinoides cf.	Tricholomataceae	Agaricales	3	F.	PNA61	LC2	F.	COM	08/23/93
611	Collybia	lentinoides cf.	Tricholomataceae	Agaricales	3	T.	PNA61	LC3	F.	COM	08/23/93
957	Collybia	spongiosa cf.	Tricholomataceae	Agaricales	3	T.	LAS756	SH5	F.	UNK	07/30/94
340	Coltricia	perennis	Polyporaceae	Aphyllphorales	2	T.	AMD568	LA2	F.	COM	08/26/92
868	Coltricia	perennis	Polyporaceae	Aphyllphorales	2	T.	AMD568	BU44	T.	COM	09/10/93
908	Coltricia	perennis	Polyporaceae	Aphyllphorales	2	T.	AMD568	LB2	F.	COM	09/16/93
1007	Coltricia	perennis	Polyporaceae	Aphyllphorales	2	T.	PNA259	LC1	F.	COM	08/07/94
373	Coniophora	puteana cf.	Coniophoraceae	Aphyllphorales	7	T.	LAS415	BN5	T.	UNK	07/27/92
958	Coniophora	puteana cf.	Coniophoraceae	Aphyllphorales	5	F.	LAS415	SH5	F.	UNK	07/30/94
1002	Coniophora	sp.	Coniophoraceae	Aphyllphorales	5	F.	AMD611	LC1	F.	UNK	08/07/94
428	Conocybe	lactea cf.	Bolbitiaceae	Agaricales	3	T.	AMD472	LA1	F.	COM	08/07/93
946	Conocybe	tenera cf.	Bolbitiaceae	Agaricales	4	F.	LAS561	LA1	F.	ABN	07/25/94
196	Coprinus	atramentarius	Coprinaceae	Agaricales	2	T.	LAS596	SH7	F.	COM	07/24/92
413	Coprinus	atramentarius	Coprinaceae	Agaricales	2	T.	LAS596	SH7	F.	COM	08/04/93
722	Coprinus	atramentarius	Coprinaceae	Agaricales	2	T.	LAS596	BU4	T.	COM	09/02/93
803	Coprinus	atramentarius	Coprinaceae	Agaricales	2	T.	LAS596	BU4	T.	COM	09/04/93
1008	Coprinus	atramentarius	Coprinaceae	Agaricales	2	F.	LAS596	BU3	T.	COM	08/15/94
163	Coprinus	comatus	Coprinaceae	Agaricales	1	T.	AMD345	LB2	F.	ABN	10/01/91
677	Coprinus	comatus	Coprinaceae	Agaricales	1	F.	AMD345	AS1	F.	ABN	08/28/93
1088	Coprinus	comatus	Coprinaceae	Agaricales	1	F.	AMD345	SH5	F.	ABN	08/26/94
243	Coprinus	comatus cf.	Coprinaceae	Agaricales	3	T.	AMD345	SH7	F.	UNC	08/04/92
697	Coprinus	lagopus cf.	Coprinaceae	Agaricales	3	T.	AMD350	BN6	T.	UNC	08/31/93
120	Coprinus	micaceus	Coprinaceae	Agaricales	1	T.	AMD348	SH5	F.	COM	08/04/91
207	Coprinus	micaceus	Coprinaceae	Agaricales	1	T.	AMD348	AP1	T.	COM	07/28/92
353	Coprinus	micaceus	Coprinaceae	Agaricales	2	F.	AMD348	BU1	T.	COM	09/03/92
477	Coprinus	micaceus	Coprinaceae	Agaricales	2	T.	LAS600	PL1	F.	COM	08/15/93
629	Coprinus	micaceus	Coprinaceae	Agaricales	2	F.	LAS600	SH8	F.	COM	08/25/93
760	Coprinus	micaceus	Coprinaceae	Agaricales	2	F.	LAS600	BU3	T.	COM	09/02/93
723	Coprinus	micaceus	Coprinaceae	Agaricales	2	T.	LAS600	BU4	T.	COM	09/02/93
318	Coprinus	micaceus cf.	Coprinaceae	Agaricales	3	T.	AMD348	BN1	T.	COM	08/31/92
939	Coprinus	sp.	Coprinaceae	Agaricales	4	T.	AMD350	SH5	F.	UNK	07/10/94

accd	genus	species	family	order	grd	vchr	ref	loct	bndlr	ocr	date
1130	Coprinus	sp.	Coprinaceae	Agaricales	4	T.	AMD341	WR1	F.	RAR	06/02/95
266	Corirolellus	carbonarius	Polyporaceae	Aphyllophorales	2	T.	AMD603	BU1	T.	UNC	08/25/92
213	Corirolellus	carbonarius cf.	Polyporaceae	Aphyllophorales	3	T.	AMD602	AP1	T.	UNC	07/28/92
544	Corioloopsis	gallica	Polyporaceae	Aphyllophorales	1	T.	GN216	LA2	F.	UNC	08/18/93
822	Corioloopsis	gallica	Polyporaceae	Aphyllophorales	1	T.	GN216	BU48	T.	UNC	09/07/93
654	Cortinarius	alboviolaceus cf.	Cortinariaceae	Agaricales	3	T.	AMD447	PC1	F.	UNC	08/28/93
737	Cortinarius	anomalous	Cortinariaceae	Agaricales	2	T.	AMD447	BU4	T.	UNC	09/02/93
540	Cortinarius	calochrous	Cortinariaceae	Agaricales	2	T.	PNA145	BU8	T.	COM	08/18/93
601	Cortinarius	calochrous	Cortinariaceae	Agaricales	2	F.	PNA145	LC2	F.	COM	08/23/93
637	Cortinarius	calochrous	Cortinariaceae	Agaricales	2	F.	PNA145	SH5	F.	COM	08/25/93
655	Cortinarius	calochrous	Cortinariaceae	Agaricales	2	T.	PNA145	PC1	F.	COM	08/28/93
730	Cortinarius	calochrous	Cortinariaceae	Agaricales	2	T.	PNA145	BU4	T.	COM	09/02/93
905	Cortinarius	calochrous	Cortinariaceae	Agaricales	2	T.	PNA145	LB2	F.	COM	09/16/93
112	Cortinarius	glaucoopus cf.	Cortinariaceae	Agaricales	3	T.	AMD437	GP1	F.	UNC	08/03/91
330	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD417	BN1	T.	UNK	08/31/92
381	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD417	SH3	F.	UNK	09/13/92
397	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD447	AP1	T.	UNK	09/17/92
424	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD417	BN6	T.	UNK	08/07/93
435	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD417	BN3	T.	UNK	08/09/93
522	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD417	BU1	T.	UNK	08/16/93
516	Cortinarius	sp.	Cortinariaceae	Agaricales	5	T.	AMD417	PC1	F.	UNK	08/16/93
549	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD417	BU6	T.	UNK	08/18/93
614	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD417	LC2	F.	UNK	08/23/93
592	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD417	LC2	F.	UNK	08/23/93
587	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD417	LC3	F.	UNK	08/23/93
576	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD417	PL3	F.	UNK	08/23/93
815	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD417	PC1	F.	UNK	08/28/93
684	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD417	PC1	F.	UNK	08/28/93
708	Cortinarius	sp.	Cortinariaceae	Agaricales	5	T.	AMD417	BU1	T.	UNK	08/31/93
810	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD417	BU4	T.	UNK	09/04/93
800	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD417	BU26	T.	UNK	09/04/93
865	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD417	BN3	T.	UNK	09/10/93
921	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD417	SH8	F.	UNK	09/12/93
915	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD417	BN3	T.	UNK	09/17/93
999	Cortinarius	sp.	Cortinariaceae	Agaricales	5	T.	UNK000	LC1	F.	UNK	08/07/94
1017	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD431	BU3	T.	RAR	08/15/94
1111	Cortinarius	sp.	Cortinariaceae	Agaricales	4	T.	AMD417	BN6	T.	UNK	09/07/94
443	Crepidotus	applanatus cf.	Crepidotaceae	Agaricales	3	T.	LAS636	BN3	T.	UNC	08/09/93
256	Crepidotus	herbarum cf.	Crepidotaceae	Agaricales	3	T.	AMD405	LB4	F.	UNC	08/06/92
199	Crepidotus	mollis	Crepidotaceae	Agaricales	2	T.	AMD406	SH3	F.	ABN	07/24/92
225	Crepidotus	mollis	Crepidotaceae	Agaricales	2	T.	AMD406	AP3	T.	ABN	07/30/92
324	Crepidotus	mollis	Crepidotaceae	Agaricales	2	T.	AMD406	BN1	T.	ABN	08/31/92
315	Crepidotus	mollis	Crepidotaceae	Agaricales	2	T.	LAS637	BN1	T.	ABN	08/31/92
430	Crepidotus	mollis	Crepidotaceae	Agaricales	1	T.	AMD406	SH5	F.	ABN	08/07/93
527	Crepidotus	mollis	Crepidotaceae	Agaricales	1	T.	AMD406	LC1	F.	ABN	08/13/93
463	Crepidotus	mollis	Crepidotaceae	Agaricales	2	T.	AMD406	LC1	F.	ABN	08/13/93
485	Crepidotus	mollis	Crepidotaceae	Agaricales	2	T.	AMD406	PL1	F.	ABN	08/15/93
547	Crepidotus	mollis	Crepidotaceae	Agaricales	2	F.	AMD406	BU6	T.	ABN	08/18/93
539	Crepidotus	mollis	Crepidotaceae	Agaricales	1	T.	AMD406	BU8	T.	ABN	08/18/93

ncode	genus	species	family	order	grd	vchr	ref	loct	bndlr	ocr	date
599	Crepidotus	mollis	Crepidotaceae	Agaricales	2	F.	LAS637	LC2	F.	ABN	08/23/93
571	Crepidotus	mollis	Crepidotaceae	Agaricales	2	F.	LAS637	PL3	F.	ABN	08/23/93
628	Crepidotus	mollis	Crepidotaceae	Agaricales	2	F.	AMD406	SH8	F.	ABN	08/25/93
758	Crepidotus	mollis	Crepidotaceae	Agaricales	2	F.	AMD406	BU3	T.	ABN	09/02/93
727	Crepidotus	mollis	Crepidotaceae	Agaricales	2	F.	AMD406	BU4	T.	ABN	09/02/93
952	Crepidotus	mollis	Crepidotaceae	Agaricales	2	T.	AMD406	SH5	F.	ABN	07/30/94
993	Crepidotus	mollis	Crepidotaceae	Agaricales	1	F.	AMD406	LC1	F.	ABN	08/07/94
1015	Crepidotus	mollis	Crepidotaceae	Agaricales	1	F.	LAS637	BU3	T.	ABN	08/15/94
1080	Crepidotus	mollis	Crepidotaceae	Agaricales	2	F.	AMD406	SH5	F.	ABN	08/26/94
795	Crepidotus	mollis cf.	Crepidotaceae	Agaricales	3	F.	AMD406	BU26	T.	ABN	09/04/93
450	Crucibulum	laeve	Nidulariaceae	Nidulariales	2	T.	LAS828	LB2	F.	COM	08/09/93
531	Crucibulum	laeve	Nidulariaceae	Nidulariales	1	T.	LAS828	BU8	T.	COM	08/18/93
593	Crucibulum	laeve	Nidulariaceae	Nidulariales	2	T.	LAS828	LC2	F.	COM	08/23/93
393	Cudonia	circinans	Leotiaceae	Heotiales	2	T.	AMD873	AP1	T.	COM	09/17/92
170	Cyathus	striatus	Nidulariaceae	Nidulariales	1	T.	LAS828	BN3	T.	COM	04/26/92
361	Cyathus	striatus	Nidulariaceae	Nidulariales	1	T.	AMD828	SH2	F.	COM	08/25/92
284	Cyathus	striatus	Nidulariaceae	Nidulariales	1	T.	LAS828	LA2	F.	COM	08/26/92
371	Cyptotrama	chrysopeplum	Tricholomataceae	Agaricales	2	T.	PNA63	AP1	T.	ABN	08/01/92
296	Cyptotrama	chrysopeplum	Tricholomataceae	Agaricales	2	T.	PNA63	LA2	F.	ABN	08/26/92
458	Cyptotrama	chrysopeplum	Tricholomataceae	Agaricales	2	T.	LAS758	LC1	F.	ABN	08/13/93
552	Cyptotrama	chrysopeplum	Tricholomataceae	Agaricales	2	T.	AMD131	BU6	T.	ABN	08/18/93
591	Cyptotrama	chrysopeplum	Tricholomataceae	Agaricales	2	F.	PNA63	LC2	F.	ABN	08/23/93
667	Cyptotrama	chrysopeplum	Tricholomataceae	Agaricales	2	F.	AMD131	PC1	F.	ABN	08/28/93
812	Cyptotrama	chrysopeplum	Tricholomataceae	Agaricales	2	T.	PNA63	BU3	T.	ABN	09/02/93
805	Cyptotrama	chrysopeplum	Tricholomataceae	Agaricales	2	F.	LAS758	BU4	T.	ABN	09/04/93
969	Cyptotrama	chrysopeplum	Tricholomataceae	Agaricales	1	F.	LAS758	SH5	F.	ABN	07/30/94
994	Cyptotrama	chrysopeplum	Tricholomataceae	Agaricales	1	F.	PNA63	LC1	F.	ABN	08/07/94
350	Cystoderma	amianthinum cf.	Tricholomataceae	Agaricales	3	T.	AMD200	BU1	T.	UNC	09/03/92
855	Cystoderma	amianthinum cf.	Tricholomataceae	Agaricales	3	T.	AMD200	BU46	T.	UNC	09/10/93
828	Cystoderma	granulosum cf.	Tricholomataceae	Agaricales	3	T.	AMD200	BU48	T.	UNC	09/07/93
693	Cystoderma	sp.	Tricholomataceae	Agaricales	6	T.	AMD198	WR3	F.	UNK	08/30/93
116	Dacrymyces	palmatius	Dacrymycetaceae	Dacrymycetales	2	T.	AMD674	SH2	F.	ABN	07/26/91
228	Dacrymyces	palmatius	Dacrymycetaceae	Dacrymycetales	2	T.	LAS381	AP3	T.	ABN	08/01/92
237	Dacrymyces	palmatius	Dacrymycetaceae	Dacrymycetales	2	T.	LAS381	SH5	F.	ABN	08/04/92
276	Dacrymyces	palmatius	Dacrymycetaceae	Dacrymycetales	2	T.	AMD673	LA2	F.	ABN	08/26/92
391	Dacrymyces	palmatius	Dacrymycetaceae	Dacrymycetales	2	T.	LAS381	AP1	T.	ABN	09/17/92
486	Dacrymyces	palmatius	Dacrymycetaceae	Dacrymycetales	2	T.	LAS385	PL1	F.	ABN	08/15/93
618	Dacrymyces	palmatius	Dacrymycetaceae	Dacrymycetales	2	F.	LAS385	PC1	F.	ABN	08/25/93
950	Dacrymyces	palmatius	Dacrymycetaceae	Dacrymycetales	2	F.	LAS381	SH5	F.	ABN	07/30/94
1137	Dacrymyces	palmatius	Dacrymycetaceae	Dacrymycetales	2	T.	PNA300	PC1	F.	ABN	09/10/95
932	Daedaleopsis	confragosa	Polyporaceae	Agaricales	1	T.	GNP226	PC1	F.	UNC	09/19/93
931	Daedaleopsis	confragosa	Polyporaceae	Agaricales	1	T.	GNP226	PC1	F.	UNC	09/19/93
945	Daldinia	concentrica cf.	Xylariaceae	Sphaeriales	5	T.	LAS374	BU3	T.	UNK	07/20/94
121	Flammulina	velutipes	Tricholomataceae	Agaricales	1	T.	AMD220	SH5	F.	ABN	08/04/91
185	Flammulina	velutipes	Tricholomataceae	Agaricales	1	T.	AMD220	SH7	F.	ABN	07/19/92
211	Flammulina	velutipes	Tricholomataceae	Agaricales	1	T.	LAS759	AP3	T.	ABN	07/28/92
217	Flammulina	velutipes	Tricholomataceae	Agaricales	1	T.	AMD220	AP1	T.	ABN	07/30/92
244	Flammulina	velutipes	Tricholomataceae	Agaricales	2	T.	AMD220	LB4	F.	ABN	08/06/92
404	Flammulina	velutipes	Tricholomataceae	Agaricales	2	T.	AMD220	SH5	F.	ABN	08/02/93

ncode	genus	species	family	order	grd	vchr	ref	loct	bndlr	ocr	date
483	Flammulina	velutipes	Tricholomataceae	Agaricales	2	T.	LAS759	PL1	F.	ABN	08/15/93
545	Flammulina	velutipes	Tricholomataceae	Agaricales	2	F.	AMD220	BU6	T.	ABN	08/18/93
529	Flammulina	velutipes	Tricholomataceae	Agaricales	1	F.	LAS759	BU8	T.	ABN	08/18/93
754	Flammulina	velutipes	Tricholomataceae	Agaricales	2	F.	AMD200	BU3	T.	ABN	09/02/93
735	Flammulina	velutipes	Tricholomataceae	Agaricales	2	F.	AMD220	BU4	T.	ABN	09/02/93
887	Flammulina	velutipes	Tricholomataceae	Agaricales	1	F.	AMD220	SH8	F.	ABN	09/12/93
951	Flammulina	velutipes	Tricholomataceae	Agaricales	1	F.	AMD220	SH5	F.	ABN	07/30/94
1009	Flammulina	velutipes	Tricholomataceae	Agaricales	1	F.	AMD220	BU3	T.	ABN	08/15/94
1072	Flammulina	velutipes	Tricholomataceae	Agaricales	1	F.	AMD220	SH5	F.	ABN	08/26/94
1115	Flammulina	velutipes	Tricholomataceae	Agaricales	2	F.	AMD220	BU3	T.	ABN	09/07/94
341	Fomitopsis	canjanderi	Polyporaceae	Aphyllophorales	2	T.	AMD580	LA2	F.	UNC	08/26/92
1136	Fomitopsis	canjanderi	Polyporaceae	Aphyllophorales	2	T.	AMD580	PC1	F.	UNC	09/10/95
178	Fomitopsis	pinicola	Polyporaceae	Aphyllophorales	2	T.	AMD578	SH5	F.	ABN	05/02/92
394	Fomitopsis	pinicola	Polyporaceae	Aphyllophorales	2	T.	AMD578	AP1	T.	ABN	09/17/92
467	Fomitopsis	pinicola	Polyporaceae	Aphyllophorales	2	T.	AMD459	LC1	F.	ABN	08/13/93
491	Fomitopsis	pinicola	Polyporaceae	Aphyllophorales	2	T.	LAS459	PL1	F.	ABN	08/15/93
509	Fomitopsis	pinicola	Polyporaceae	Aphyllophorales	2	T.	LAS459	PC1	F.	ABN	08/16/93
557	Fomitopsis	pinicola	Polyporaceae	Aphyllophorales	2	F.	AMD578	BU6	T.	ABN	08/18/93
542	Fomitopsis	pinicola	Polyporaceae	Aphyllophorales	2	T.	AMD578	BU8	T.	ABN	08/18/93
596	Fomitopsis	pinicola	Polyporaceae	Aphyllophorales	2	F.	AMD578	LC2	F.	ABN	08/23/93
620	Fomitopsis	pinicola	Polyporaceae	Aphyllophorales	2	F.	LAS459	SH8	F.	ABN	08/25/93
726	Fomitopsis	pinicola	Polyporaceae	Aphyllophorales	2	F.	LAS459	BU4	T.	ABN	09/02/93
970	Fomitopsis	pinicola	Polyporaceae	Aphyllophorales	2	T.	AMD578	SH5	F.	ABN	07/30/94
992	Fomitopsis	pinicola	Polyporaceae	Aphyllophorales	1	F.	AMD578	LC1	F.	ABN	08/07/94
1029	Fomitopsis	pinicola	Polyporaceae	Aphyllophorales	2	F.	AMD578	BU3	T.	ABN	08/15/94
415	Fuligo	septica	Physaraceae	Physarales	2	T.	FSM70	SH5	F.	COM	08/04/93
608	Fuligo	septica	Physaraceae	Physarales	2	F.	FSM70	PR1	F.	COM	08/23/93
808	Fuligo	septica	Physaraceae	Physarales	2	F.	FSM70	BU4	T.	COM	09/04/93
848	Fuligo	septica	Physaraceae	Physarales	2	F.	FSM70	BU46	T.	COM	09/10/93
1132	Fuligo	septica	Physaraceae	Physarales	1	T.	LAS845	BN6	T.	COM	07/23/95
303	Galerina	autumnalis cf.	Cortinariaceae	Agaricales	3	T.	LAS620	BN1	T.	RAR	08/31/92
167	Ganoderma	applanatum	Polyporaceae	Aphyllophorales	2	T.	LAS460	PL1	F.	ABN	09/29/91
194	Ganoderma	applanatum	Polyporaceae	Aphyllophorales	2	F.	AMD576	AP1	T.	ABN	07/05/92
193	Ganoderma	applanatum	Polyporaceae	Aphyllophorales	2	T.	AMD576	SH5	F.	ABN	07/19/92
380	Ganoderma	applanatum	Polyporaceae	Aphyllophorales	1	T.	LAS460	SH3	F.	ABN	09/13/92
403	Ganoderma	applanatum	Polyporaceae	Aphyllophorales	1	T.	AMD576	BU1	T.	ABN	08/02/93
490	Ganoderma	applanatum	Polyporaceae	Aphyllophorales	1	T.	LAS460	PL1	F.	ABN	08/15/93
720	Ganoderma	applanatum	Polyporaceae	Aphyllophorales	1	T.	LAS460	BU4	T.	ABN	09/02/93
1024	Ganoderma	applanatum	Polyporaceae	Aphyllophorales	1	F.	LAS460	BU3	T.	ABN	08/15/94
1074	Ganoderma	applanatum	Polyporaceae	Aphyllophorales	1	F.	LAS460	SH5	F.	ABN	08/26/94
934	Gautieria	mexicana	Gautieriaceae	Gautieriales	1	T.	AMD747	PC1	F.	UNK	10/02/93
686	Geastrum	coronatum	Geastraceae	Lycoperdales	2	T.	LAS818	WR3	F.	UNC	08/30/93
156	Geastrum	saccatum	Geastraceae	Lycoperdales	1	T.	AMD703	SH5	F.	COM	09/01/91
238	Geastrum	saccatum	Geastraceae	Lycoperdales	2	T.	AMD703	LB3	F.	COM	08/06/92
492	Geastrum	saccatum	Geastraceae	Lycoperdales	2	T.	LAS818	PL1	F.	COM	08/15/93
227	Geastrum	triplex	Geastraceae	Lycoperdales	1	T.	AMD703	AP1	T.	UNC	08/01/92
411	Globifomes	graveolens cf.	Polyporaceae	Aphyllophorales	3	T.	LAS462	SH5	F.	UNC	08/04/93
212	Gloeophyllum	sepiarium	Polyporaceae	Aphyllophorales	1	T.	PNA268	AP3	T.	COM	07/28/92
776	Gloeophyllum	sepiarium	Polyporaceae	Aphyllophorales	1	T.	AMD590	BU26	T.	COM	09/04/93

ncode	genus	species	family	order	grd	vchr	ref	loct	bndlr	ocr	date
775	Gloeophyllum	sepiarium	Polyporaceae	Aphyllporales	1	T.	PNA268	BU3	T.	COM	09/04/93
883	Gloeophyllum	sepiarium	Polyporaceae	Aphyllporales	1	T.	PNA268	SH8	F.	COM	09/12/93
1000	Gloeophyllum	sepiarium	Polyporaceae	Aphyllporales	1	T.	PNA268	LC1	F.	COM	08/07/94
1018	Gloeophyllum	sepiarium	Polyporaceae	Aphyllporales	1	T.	LAS463	BU3	T.	COM	08/15/94
1117	Gloeophyllum	sepiarium	Polyporaceae	Aphyllporales	1	F.	AMD590	BU3	T.	COM	09/07/94
147	Gomphidius	glutinosus	Gomphidiaceae	Agaricales	2	T.	LAS652	SH5	F.	ABN	08/31/91
281	Gomphidius	glutinosus	Gomphidiaceae	Agaricales	2	T.	AMD68	LA2	F.	ABN	08/26/92
309	Gomphidius	glutinosus	Gomphidiaceae	Agaricales	2	T.	AMD482	BN1	T.	ABN	08/31/92
512	Gomphidius	glutinosus	Gomphidiaceae	Agaricales	2	T.	LAS652	PC1	F.	ABN	08/16/93
551	Gomphidius	glutinosus	Gomphidiaceae	Agaricales	2	F.	AMD482	BU6	T.	ABN	08/18/93
528	Gomphidius	glutinosus	Gomphidiaceae	Agaricales	2	F.	LAS218	BU8	T.	ABN	08/18/93
613	Gomphidius	glutinosus	Gomphidiaceae	Agaricales	2	T.	LAS652	LC2	F.	ABN	08/23/93
572	Gomphidius	glutinosus	Gomphidiaceae	Agaricales	2	T.	AMD483	PL3	F.	ABN	08/23/93
636	Gomphidius	glutinosus	Gomphidiaceae	Agaricales	2	F.	LAS652	SH5	F.	ABN	08/25/93
623	Gomphidius	glutinosus	Gomphidiaceae	Agaricales	2	F.	LAS652	SH8	F.	ABN	08/25/93
672	Gomphidius	glutinosus	Gomphidiaceae	Agaricales	2	F.	LAS652	AS1	F.	ABN	08/28/93
751	Gomphidius	glutinosus	Gomphidiaceae	Agaricales	2	F.	AMD652	BU3	T.	ABN	09/02/93
734	Gomphidius	glutinosus	Gomphidiaceae	Agaricales	2	F.	LAS652	BU4	T.	ABN	09/02/93
1083	Gomphidius	glutinosus	Gomphidiaceae	Agaricales	2	F.	AMD482	SH5	F.	ABN	08/26/94
203	Gomphidius	oregonensis	Gomphidiaceae	Agaricales	2	T.	AMD482	BN5	T.	COM	07/27/92
257	Gomphidius	oregonensis cf.	Gomphidiaceae	Agaricales	3	T.	AMD482	LB4	F.	COM	08/06/92
1003	Gomphidius	sp.	Gomphidiaceae	Agaricales	4	F.	LAS652	LC1	F.	UNK	08/07/94
339	Gomphus	bonari	Cantharellaceae	Aphyllporales	2	T.	AMD662	LB2	F.	COM	08/25/92
316	Gomphus	bonari	Cantharellaceae	Aphyllporales	2	T.	AMD662	BN1	T.	COM	08/31/92
1066	Gomphus	bonari	Cantharellaceae	Aphyllporales	2	F.	LAS396	SH5	F.	COM	08/26/94
1127	Gomphus	bonari	Cantharellaceae	Aphyllporales	2	F.	LAS397	BU3	T.	COM	09/24/94
290	Gomphus	bonari cf.	Cantharellaceae	Aphyllporales	3	T.	SNG104	LB2	F.	UNK	08/27/92
102	Gomphus	floccosus	Cantharellaceae	Aphyllporales	2	T.	AMD334	SH2	F.	ABN	07/25/91
229	Gomphus	floccosus	Cantharellaceae	Aphyllporales	2	T.	LAS396	AP1	T.	ABN	08/01/92
248	Gomphus	floccosus	Cantharellaceae	Aphyllporales	2	T.	LAS396	SH5	F.	ABN	08/04/92
573	Gomphus	floccosus	Cantharellaceae	Aphyllporales	2	F.	LAS396	PL3	F.	ABN	08/12/93
472	Gomphus	floccosus	Cantharellaceae	Aphyllporales	2	T.	LAS396	SH5	F.	ABN	08/15/93
502	Gomphus	floccosus	Cantharellaceae	Aphyllporales	2	T.	LAS396	PC1	F.	ABN	08/16/93
536	Gomphus	floccosus	Cantharellaceae	Aphyllporales	2	T.	AMD334	BU8	T.	ABN	08/18/93
804	Gomphus	floccosus	Cantharellaceae	Aphyllporales	2	F.	LAS396	BU4	T.	ABN	09/04/93
787	Gomphus	floccosus	Cantharellaceae	Aphyllporales	2	F.	LAS396	BU26	T.	ABN	09/04/93
953	Gomphus	floccosus	Cantharellaceae	Aphyllporales	2	T.	LAS396	SH5	F.	ABN	07/30/94
748	Gomphus	floccosus cf.	Cantharellaceae	Aphyllporales	3	F.	LAS396	BU3	T.	UNK	09/02/93
172	Guepinopsis	alpinus	Dacrymycetaceae	Dacrymycetales	2	T.	SSW145	PL1	F.	UNK	05/27/92
366	Gymnopilus	sp.	Cortinariaceae	Agaricales	4	T.	AMD407	BU1	T.	UNK	09/03/92
814	Gymnopilus	sp.	Cortinariaceae	Agaricales	4	T.	AMD407	BU4	T.	UNK	09/04/93
1025	Gymnopilus	sp.	Cortinariaceae	Agaricales	4	T.	AMD407	BU3	T.	UNK	08/15/94
817	Gymnopilis	sapineus	Cortinariaceae	Agaricales	2	T.	AMD408	BU48	T.	UNK	09/07/93
918	Gymnopilis	sapineus cf.	Cortinariaceae	Agaricales	3	T.	AMD408	BU44	T.	UNK	09/17/93
181	Gymnosporangium	speciosus cf.	Pucciniaceae	Uredinales	3	T.	TextBk	BN4	T.	COM	04/26/92
1099	Gyromitra	esculenta	Helvellaceae	Pezizales	2	T.	PNA303	BU3	T.	UNK	09/07/94
778	Gyromitra	infula	Helvellaceae	Pezizales	2	T.	AMD802	BU3	T.	COM	09/04/93
1125	Gyromitra	infula	Helvellaceae	Pezizales	2	F.	PNA303	BU3	T.	COM	09/24/94
150	Gyromitra	infula cf.	Helvellaceae	Pezizales	3	T.	AMD802	SH5	F.	COM	08/31/91

ncode	genus	species	family	order	grd	vchr	ref	loct	bndlr	ocr	date
221	Gyromitra	infula cf.	Helvellaceae	Pezizales	3	T.	AMD802	AP1	T.	COM	07/30/92
1055	Gyromitra	infula cf.	Helvellaceae	Pezizales	4	T.	AMD802	SH5	F.	COM	08/26/94
579	Hebeloma	crustuliniforme	Cortinariaceae	Agaricales	2	F.	AMD464	PL3	F.	COM	08/23/93
465	Hebeloma	crustuliniforme	Cortinariaceae	Agaricales	2	T.	AMD464	LC1	F.	COM	08/13/93
511	Hebeloma	crustuliniforme	Cortinariaceae	Agaricales	2	T.	LAS624	PC1	F.	COM	08/16/93
747	Hebeloma	crustuliniforme	Cortinariaceae	Agaricales	2	T.	AMD464	BU3	T.	COM	09/02/93
725	Hebeloma	crustuliniforme	Cortinariaceae	Agaricales	2	F.	AMD464	BU4	T.	COM	09/02/93
886	Hebeloma	crustuliniforme	Cortinariaceae	Agaricales	2	F.	LAS624	SH8	F.	COM	09/12/93
784	Hebeloma	sinapizans cf.	Cortinariaceae	Agaricales	3	F.	AMD465	AP3	T.	COM	09/04/93
780	Hebeloma	sinapizans cf.	Cortinariaceae	Agaricales	3	T.	AMD465	BU4	T.	COM	09/04/93
779	Hebeloma	sinapizans cf.	Cortinariaceae	Agaricales	3	T.	AMD465	BU3	T.	COM	09/04/93
861	Hebeloma	sinapizans cf.	Cortinariaceae	Agaricales	2	F.	AMD465	BN3	T.	COM	09/10/93
904	Hebeloma	sinapizans cf.	Cortinariaceae	Agaricales	3	T.	AMD465	LB2	F.	COM	09/16/93
917	Hebeloma	sinapizans cf.	Cortinariaceae	Agaricales	3	F.	AMD465	BU44	T.	COM	09/17/93
1030	Hebeloma	sinapizans cf.	Cortinariaceae	Agaricales	3	F.	AMD465	BU3	T.	COM	08/15/94
146	Helvella	acetabulum	Helvellaceae	Pezizales	2	T.	AMD807	SH5	F.	UNC	08/31/91
161	Helvella	crispa	Helvellaceae	Pezizales	1	T.	AMD816	SH5	F.	COM	09/14/91
843	Helvella	crispa	Helvellaceae	Pezizales	2	T.	AMD816	BU46	T.	COM	09/10/93
633	Helvella	crispa	Helvellaceae	Pezizales	2	F.	LAS333	BN6	T.	COM	09/10/93
913	Helvella	crispa	Helvellaceae	Pezizales	2	F.	AMD816	BN3	T.	COM	09/17/93
247	Helvella	elastica cf.	Helvellaceae	Pezizales	3	T.	AMD813	LB4	F.	UNC	08/06/92
149	Helvella	lacunosa	Helvellaceae	Pezizales	2	T.	AMD815	SH5	F.	UNC	08/31/91
603	Hemitrichia	clavata cf.	Trichiaceae	Trichiales	5	T.	FSM66	LC2	F.	UNC	08/23/93
659	Hemitrichia	sp.	Trichiaceae	Trichiales	5	T.	FSM66	PC1	F.	UNC	08/28/93
769	Heridium	abeitis	Hydnaceae	Aphyllophorales	2	T.	AMD614	BU26	T.	RAR	09/04/93
670	Hohenbuehelia	petalooides cf.	Tricholomataceae	Agaricales	4	T.	AMD136	AS1	F.	UNC	08/28/93
1138	Hohenbuehelia	petalooides cf.	Tricholomataceae	Agaricales	3	T.	AMD136	PC1	F.	UNC	09/10/95
408	Humaria	hemispherica	Pyrenomataceae	Pezizales	2	T.	LAS351	SH5	F.	UNC	07/25/93
231	Humaria	hemispherica cf.	Pyrenomataceae	Pezizales	3	T.	LAS351	AP1	T.	UNC	08/01/92
283	Hygrophoropsis	aurantiaca	Paxillaceae	Agaricales	2	T.	LAS669	LA2	F.	COM	08/26/92
610	Hygrophoropsis	aurantiaca	Paxillaceae	Agaricales	2	T.	AMD479	LC2	F.	COM	08/23/93
609	Hygrophoropsis	aurantiaca	Paxillaceae	Agaricales	2	T.	LAS669	LC2	F.	COM	08/23/93
664	Hygrophoropsis	aurantiaca	Paxillaceae	Agaricales	2	T.	LAS669	PC1	F.	COM	08/28/93
1119	Hygrophoropsis	aurantiaca	Paxillaceae	Agaricales	2	T.	AMD479	BN6	T.	COM	09/07/94
831	Hygrophorus	autoconica cf.	Hygrophoraceae	Agaricales	3	T.	AMD115	BU48	T.	UNC	09/07/93
928	Hygrophorus	chrysodon	Hygrophoraceae	Agaricales	2	F.	LAS657	LA1	F.	COM	08/27/93
698	Hygrophorus	chrysodon	Hygrophoraceae	Agaricales	2	F.	AMD119	BN6	T.	COM	08/31/93
789	Hygrophorus	chrysodon	Hygrophoraceae	Agaricales	2	F.	LAS657	BU26	T.	COM	09/04/93
836	Hygrophorus	chrysodon	Hygrophoraceae	Agaricales	2	F.	LAS657	BU48	T.	COM	09/07/93
874	Hygrophorus	chrysodon	Hygrophoraceae	Agaricales	2	T.	LAS657	BU44	T.	COM	09/10/93
157	Hygrophorus	chrysodon cf.	Hygrophoraceae	Agaricales	3	T.	LAS657	WR3	F.	COM	09/01/91
711	Hygrophorus	chrysodon cf.	Hygrophoraceae	Agaricales	3	T.	LAS657	BU1	T.	COM	08/31/93
126	Hygrophorus	conicus	Hygrophoraceae	Agaricales	1	T.	LAS658	RC1	F.	ABN	08/05/91
175	Hygrophorus	conicus	Hygrophoraceae	Agaricales	1	T.	LAS658	BN6	T.	ABN	06/01/92
223	Hygrophorus	conicus	Hygrophoraceae	Agaricales	2	T.	LAS658	AP2	T.	ABN	07/30/92
282	Hygrophorus	conicus	Hygrophoraceae	Agaricales	1	T.	LAS658	BU1	T.	ABN	08/25/92
321	Hygrophorus	conicus	Hygrophoraceae	Agaricales	1	T.	AMD117	BU1	T.	ABN	09/03/92
519	Hygrophorus	conicus	Hygrophoraceae	Agaricales	1	F.	LAS658	BU1	T.	ABN	08/16/93
791	Hygrophorus	conicus	Hygrophoraceae	Agaricales	2	F.	LAS658	BU26	T.	ABN	09/04/93

ncode	genus	species	family	order	grd	vchr	ref	loct	bndl	ocr	date
838	Hygrophorus	conicus	Hygrophoraceae	Agaricales	1	F.	LAS658	BU48	T.	ABN	09/07/93
872	Hygrophorus	conicus	Hygrophoraceae	Agaricales	1	F.	AMD117	BU44	T.	ABN	09/10/93
894	Hygrophorus	conicus	Hygrophoraceae	Agaricales	1	F.	AMD117	SH8	F.	ABN	09/12/93
1068	Hygrophorus	conicus	Hygrophoraceae	Agaricales	1	F.	LAS658	SH5	F.	ABN	08/26/94
713	Hygrophorus	marginatus cf.	Hygrophoraceae	Agaricales	3	T.	AMD112	BU1	T.	UNK	08/31/93
832	Hygrophorus	marginatus cf.	Hygrophoraceae	Agaricales	3	F.	AMD112	BU48	T.	UNK	09/07/93
128	Hygrophorus	pudorinus	Hygrophoraceae	Agaricales	2	T.	LAS666	SH5	F.	COM	08/05/91
235	Hygrophorus	pudorinus	Hygrophoraceae	Agaricales	2	T.	LAS666	AP2	T.	COM	08/01/92
343	Hygrophorus	pudorinus	Hygrophoraceae	Agaricales	2	T.	LAS666	BN6	T.	COM	08/25/92
326	Hygrophorus	pudorinus	Hygrophoraceae	Agaricales	2	T.	LAS666	BN1	T.	COM	08/31/92
498	Hygrophorus	pudorinus	Hygrophoraceae	Agaricales	2	T.	LAS666	BN6	T.	COM	08/15/93
666	Hygrophorus	pudorinus	Hygrophoraceae	Agaricales	2	F.	LAS666	PC1	F.	COM	08/28/93
1069	Hygrophorus	pudorinus	Hygrophoraceae	Agaricales	2	F.	AMD116	SH5	F.	COM	08/26/94
114	Hygrophorus	sp.	Hygrophoraceae	Agaricales	4	T.	AMD103	SH1	F.	UNK	08/03/91
142	Hygrophorus	sp.	Hygrophoraceae	Agaricales	4	T.	AMD103	LA2	F.	UNK	08/18/91
588	Hygrophorus	sp.	Hygrophoraceae	Agaricales	4	T.	AMD103	LC3	F.	UNK	08/23/93
691	Hygrophorus	sp.	Hygrophoraceae	Agaricales	4	T.	AMD103	WR3	F.	UNK	08/30/93
762	Hygrophorus	sp.	Hygrophoraceae	Agaricales	4	T.	AMD103	BN6	T.	UNK	09/10/93
902	Hygrophorus	sp.	Hygrophoraceae	Agaricales	4	T.	AMD103	SH8	F.	UNK	09/12/93
265	Hygrophorus	speciosus	Hygrophoraceae	Agaricales	2	T.	LAS667	SH1	F.	COM	08/25/92
495	Hygrophorus	speciosus	Hygrophoraceae	Agaricales	2	T.	LAS667	BN6	T.	COM	08/15/93
676	Hygrophorus	speciosus	Hygrophoraceae	Agaricales	2	F.	LAS667	AS1	F.	COM	08/28/93
884	Hygrophorus	speciosus	Hygrophoraceae	Agaricales	2	F.	LAS667	SH8	F.	COM	09/12/93
909	Hygrophorus	speciosus	Hygrophoraceae	Agaricales	2	F.	LAS667	LB2	F.	COM	09/16/93
1089	Hygrophorus	speciosus	Hygrophoraceae	Agaricales	2	F.	LAS667	BN6	T.	COM	08/26/94
354	Hygrophorus	speciosus cf.	Hygrophoraceae	Agaricales	3	T.	LAS667	BN6	T.	COM	08/25/92
452	Hypomyces	chrysospermum	Hypocreaceae	Sphaeriales	1	T.	LAS371	SH1	F.	COM	08/12/93
1038	Hypomyces	chrysospermum	Hypocreaceae	Sphaeriales	1	F.	LAS371	BN6	T.	COM	08/15/94
853	Hypomyces	chrysospermum cf.	Hypocreaceae	Sphaeriales	3	T.	LAS853	BU46	T.	COM	09/10/93
704	Hypomyces	hyalinus cf.	Hypocreaceae	Sphaeriales	3	T.	PNA313	BU1	T.	UNC	08/31/93
101	Hypomyces	lactifluorum	Hypocreaceae	Sphaeriales	1	T.	LAS373	BN6	T.	ABN	07/26/91
189	Hypomyces	lactifluorum	Hypocreaceae	Sphaeriales	1	T.	LAS373	BN6	T.	ABN	07/19/92
264	Hypomyces	lactifluorum	Hypocreaceae	Sphaeriales	1	T.	LAS373	GP1	F.	ABN	08/10/92
287	Hypomyces	lactifluorum	Hypocreaceae	Sphaeriales	1	T.	LAS373	BN6	T.	ABN	08/25/92
312	Hypomyces	lactifluorum	Hypocreaceae	Sphaeriales	1	T.	LAS373	BN1	T.	ABN	08/31/92
387	Hypomyces	lactifluorum	Hypocreaceae	Sphaeriales	1	T.	LAS373	AP1	T.	ABN	09/17/92
496	Hypomyces	lactifluorum	Hypocreaceae	Sphaeriales	1	T.	LAS373	BN6	T.	ABN	08/15/93
617	Hypomyces	lactifluorum	Hypocreaceae	Sphaeriales	1	F.	LAS373	PC1	F.	ABN	08/25/93
788	Hypomyces	lactifluorum	Hypocreaceae	Sphaeriales	1	F.	LAS373	BU26	T.	ABN	09/04/93
1035	Hypomyces	lactifluorum	Hypocreaceae	Sphaeriales	1	F.	LAS373	BN6	T.	ABN	08/15/94
1110	Hypomyces	lactifluorum	Hypocreaceae	Sphaeriales	1	F.	LAS373	BN6	T.	ABN	09/07/94
1056	Hypomyces	luteovirens	Hypocreaceae	Sphaeriales	1	T.	LAS373	SH5	F.	UNC	08/26/94
449	Inocybe	albodisca cf.	Cortinariaceae	Agaricales	3	T.	AMD459	BN3	T.	UNC	08/09/93
429	Inocybe	fastigiata	Cortinariaceae	Agaricales	2	T.	LAS628	LA2	F.	COM	08/07/93
515	Inocybe	fastigiata cf.	Cortinariaceae	Agaricales	3	T.	LAS628	PC1	F.	COM	08/16/93
305	Inocybe	lanuginosa	Cortinariaceae	Agaricales	2	T.	LAS630	BN1	T.	UNC	08/31/92
448	Inocybe	maculata cf.	Cortinariaceae	Agaricales	3	T.	AMD458	LB2	F.	UNC	08/09/93
774	Inocybe	sororia	Cortinariaceae	Agaricales	2	T.	AMD457	BU4	T.	UNC	09/04/93
1103	Inocybe	sororia	Cortinariaceae	Agaricales	2	T.	LAS632	BU3	T.	UNC	09/07/94

ncode	genus	species	family	order	grd	vchr	ref	loct	bndlr	ocr	date
127	Inocybe	sp.	Cortinariaceae	Agaricales	4	T.	AMD455	RC1	F.	UNK	08/05/91
345	Inocybe	sp.	Cortinariaceae	Agaricales	4	T.	LAS628	LA2	F.	UNK	08/26/92
295	Inocybe	sp.	Cortinariaceae	Agaricales	4	T.	LAS380	BN6	T.	UNK	08/27/92
356	Inocybe	sp.	Cortinariaceae	Agaricales	4	T.	AMD455	BU1	T.	UNK	09/03/92
607	Inocybe	sp.	Cortinariaceae	Agaricales	4	T.	LAS628	PR1	F.	UNK	08/23/93
597	Inocybe	sp.	Cortinariaceae	Agaricales	4	F.	AMD455	LC2	F.	UNK	08/23/93
712	Inocybe	sp.	Cortinariaceae	Agaricales	4	T.	LAS628	BU1	T.	UNK	08/31/93
709	Inocybe	sp.	Cortinariaceae	Agaricales	5	T.	AMD455	BU1	T.	UNK	08/31/93
840	Inocybe	sp.	Cortinariaceae	Agaricales	4	T.	AMD455	BU48	T.	UNK	09/07/93
845	Inocybe	sp.	Cortinariaceae	Agaricales	4	T.	AMD455	BU46	T.	UNK	09/10/93
1063	Inocybe	sp.	Cortinariaceae	Agaricales	4	T.	PNA180	SH5	F.	UNK	08/26/94
1093	Inonotus	sp.	Polyporaceae	Aphylllophorales	5	T.	AMD566	SH5	F.	UNK	08/26/94
1085	Inonotus	tomentosus	Polyporaceae	Aphylllophorales	2	T.	AMD569	SH5	F.	UNC	08/26/94
966	Irpex	lacteus	Polyporaceae	Aphylllophorales	2	T.	LAS467	SH5	F.	COM	07/30/94
988	Irpex	lacteus	Polyporaceae	Aphylllophorales	2	T.	LAS467	LC1	F.	COM	08/07/94
1043	Irpex	lacteus	Polyporaceae	Aphylllophorales	2	F.	LAS467	BU44	T.	COM	08/15/94
773	Laccaria	amethystina cf.	Tricholomataceae	Agaricales	3	T.	AMD172	BU4	T.	UNC	09/04/93
1027	Laccaria	bicolor	Tricholomataceae	Agaricales	2	T.	AMD173	BU3	T.	COM	08/15/94
1143	Laccaria	bicolor cf.	Tricholomataceae	Agaricales	3	T.	AMD173	BU3	T.	COM	09/19/95
555	Laccaria	laccata	Tricholomataceae	Agaricales	2	F.	AMD171	BU6	T.	COM	08/18/93
901	Laccaria	laccata	Tricholomataceae	Agaricales	2	T.	AMD172	SH8	F.	COM	09/12/93
359	Laccaria	laccata cf.	Tricholomataceae	Agaricales	3	T.	AMD171	BN1	T.	COM	08/31/92
310	Laccaria	laccata cf.	Tricholomataceae	Agaricales	3	T.	AMD172	BN1	T.	COM	08/31/92
1120	Laccaria	laccata cf.	Tricholomataceae	Agaricales	3	T.	AMD171	BU3	T.	COM	09/07/94
1053	Lactarius	barrowsii	Russulaceae	Agaricales	2	T.	AMD69	WR3	F.	UNC	08/20/94
1095	Lactarius	barrowsii	Russulaceae	Agaricales	2	T.	AMD69	WR3	F.	UNC	09/06/94
1060	Lactarius	controversus cf.	Russulaceae	Agaricales	3	T.	AMD70	SH5	F.	UNC	08/26/94
131	Lactarius	deliciosus	Russulaceae	Agaricales	1	T.	SSW73	SH5	F.	ABN	08/06/91
138	Lactarius	deliciosus	Russulaceae	Agaricales	1	T.	AMD68	WR1	F.	ABN	08/16/91
154	Lactarius	deliciosus	Russulaceae	Agaricales	2	T.	LAS683	SH8	F.	ABN	08/31/91
250	Lactarius	deliciosus	Russulaceae	Agaricales	1	T.	AMD68	LB4	F.	ABN	08/06/92
564	Lactarius	deliciosus	Russulaceae	Agaricales	2	T.	AMD68	LB2	F.	ABN	08/18/93
699	Lactarius	deliciosus	Russulaceae	Agaricales	2	F.	AMD68	BN6	T.	ABN	08/31/93
721	Lactarius	deliciosus	Russulaceae	Agaricales	2	T.	AMD68	BU4	T.	ABN	09/02/93
798	Lactarius	deliciosus	Russulaceae	Agaricales	2	T.	AMD68	BU26	T.	ABN	09/04/93
873	Lactarius	deliciosus	Russulaceae	Agaricales	2	F.	AMD68	BU44	T.	ABN	09/10/93
859	Lactarius	deliciosus	Russulaceae	Agaricales	2	F.	AMD68	BN3	T.	ABN	09/10/93
1113	Lactarius	deliciosus	Russulaceae	Agaricales	2	F.	LAS683	BN6	T.	ABN	09/07/94
346	Lactarius	deliciosus cf.	Russulaceae	Agaricales	3	T.	LAS683	BU1	T.	ABN	08/25/92
820	Lactarius	deliciosus cf.	Russulaceae	Agaricales	3	T.	AMD68	BU48	T.	ABN	09/07/93
819	Lactarius	deliciosus cf.	Russulaceae	Agaricales	3	T.	AMD68	BU48	T.	ABN	09/07/93
892	Lactarius	deliciosus cf.	Russulaceae	Agaricales	3	F.	AMD68	SH8	F.	ABN	09/12/93
669	Lactarius	olivaceoumbinus	Russulaceae	Agaricales	2	T.	AMD70	PC1	F.	UNC	08/28/93
124	Lactarius	rubrilacteus	Russulaceae	Agaricales	1	T.	AMD68	SH5	F.	COM	08/04/91
355	Lactarius	rubrilacteus	Russulaceae	Agaricales	1	T.	AMD68	SH2	F.	COM	08/25/92
280	Lactarius	rubrilacteus	Russulaceae	Agaricales	2	T.	AMD68	LA2	F.	COM	08/26/92
352	Lactarius	rubrilacteus	Russulaceae	Agaricales	1	T.	AMD68	BU1	T.	COM	09/03/92
538	Lactarius	rubrilacteus	Russulaceae	Agaricales	2	T.	AMD68	BU8	T.	COM	08/18/93
641	Lactarius	rubrilacteus	Russulaceae	Agaricales	2	F.	AMD68	SH5	F.	COM	08/25/93

ncode	genus	species	family	order	grd	vchr	ref	loct	bndl	ocr	date
700	Lactarius	rubrilacteus	Russulaceae	Agaricales	2	F.	AMD68	BN6	T.	COM	08/31/93
1094	Lactarius	rubrilacteus	Russulaceae	Agaricales	1	T.	AMD68	SH5	F.	COM	08/26/94
130	Lactarius	sp.	Russulaceae	Agaricales	4	T.	AMD64	BN6	T.	UNK	08/06/91
903	Lactarius	sp.	Russulaceae	Agaricales	4	T.	AMD64	SH8	F.	UNK	09/12/93
907	Lactarius	sp.	Russulaceae	Agaricales	4	T.	AMD64	LB2	F.	UNK	09/16/93
1096	Lactarius	sp.	Russulaceae	Agaricales	4	T.	AMD69	BN6	T.	RAR	09/06/94
1097	Lactarius	sp.	Russulaceae	Agaricales	4	T.	AMD64	BN6	T.	RAR	09/07/94
671	Lactarius	torminosus	Russulaceae	Agaricales	2	F.	LAS694	AS1	F.	COM	08/28/93
634	Lactarius	torminosus cf.	Russulaceae	Agaricales	3	T.	LAS694	BN6	T.	COM	08/25/93
302	Lactarius	uvidus cf.	Russulaceae	Agaricales	3	T.	LAS695	BN1	T.	COM	08/31/92
1058	Lactarius	uvidus cf.	Russulaceae	Agaricales	3	T.	AMD75	SH5	F.	COM	08/26/94
1098	Lactarius	uvidus cf.	Russulaceae	Agaricales	3	T.	AMD75	BN6	T.	COM	09/07/94
1148	Lactarius	uvidus cf.	Russulaceae	Agaricales	3	T.	AMD75	BU3	T.	COM	09/19/95
153	Leccinum	aurantiacum	Boletaceae	Agaricales	1	T.	AMD540	SH5	F.	COM	08/31/91
311	Leccinum	aurantiacum	Boletaceae	Agaricales	1	T.	LAS577	BN1	T.	COM	08/31/92
738	Leccinum	aurantiacum	Boletaceae	Agaricales	2	T.	AMD540	BU3	T.	COM	09/02/93
1010	Leccinum	aurantiacum	Boletaceae	Agaricales	1	F.	LAS577	BU3	T.	COM	08/15/94
1126	Leccinum	aurantiacum	Boletaceae	Agaricales	1	F.	LAS577	BU3	T.	COM	09/24/94
123	Leccinum	insigne	Boletaceae	Agaricales	2	T.	AMD540	SH8	F.	COM	08/04/91
122	Leccinum	insigne	Boletaceae	Agaricales	2	T.	AMD540	SH8	F.	COM	08/04/91
673	Leccinum	insigne	Boletaceae	Agaricales	2	F.	AMD540	AS1	F.	COM	08/28/93
103	Leccinum	sp.	Boletaceae	Agaricales	4	T.	AMD536	SH3	F.	UNK	07/26/91
781	Lentinellus	omphalodes cf.	Tricholomataceae	Agaricales	3	T.	PNA208	BU3	T.	UNC	09/04/93
982	Lentinellus	omphalodes cf.	Tricholomataceae	Agaricales	4	T.	PNA208	LC2	F.	UNC	08/07/94
566	Lentinellus	sp.	Tricholomataceae	Agaricales	4	T.	LAS765	LC1	F.	UNK	08/13/93
1044	Lentinellus	sp.	Tricholomataceae	Agaricales	5	T.	UNK000	BU44	T.	UNK	08/15/94
630	Lentinellus	ursinus cf.	Tricholomataceae	Agaricales	3	T.	AMD144	SH8	F.	UNC	08/25/93
188	Lentinus	ponderosus	Tricholomataceae	Agaricales	2	T.	AMD143	SH3	F.	COM	07/19/92
926	Lentinus	ponderosus	Tricholomataceae	Agaricales	2	F.	AMD143	LA1	F.	COM	08/27/93
944	Lentinus	ponderosus	Tricholomataceae	Agaricales	2	T.	AMD143	BN3	T.	COM	07/15/94
369	Lenzites	betulina	Polyporaceae	Aphyllophorales	2	T.	LAS469	BN7	T.	COM	08/25/92
400	Lenzites	betulina	Polyporaceae	Aphyllophorales	2	T.	AMD589	AP1	T.	COM	09/17/92
523	Lepiota	clypeolaria	Lepiotaceae	Agaricales	2	T.	PNA31	PC1	F.	UNC	08/16/93
524	Lepiota	cristata	Lepiotaceae	Agaricales	2	T.	LAS517	PC1	F.	COM	08/16/93
896	Lepiota	cristata	Lepiotaceae	Agaricales	2	T.	AMD307	SH8	F.	COM	09/12/93
1057	Lepiota	cristata cf.	Lepiotaceae	Agaricales	3	T.	LAS517	SH5	F.	COM	08/26/94
615	Lepiota	rhacodes	Lepiotaceae	Agaricales	2	T.	AMD297	LA2	F.	UNC	08/24/93
347	Lepiota	sp.	Lepiotaceae	Agaricales	4	T.	AMD298	LB2	F.	UNK	08/25/92
826	Lepiota	sp.	Lepiotaceae	Agaricales	4	T.	AMD301	BU48	T.	UNK	09/07/93
333	Leucopaxillus	amarus	Tricholomataceae	Agaricales	2	T.	LAS768	LA2	F.	ABN	08/26/92
481	Leucopaxillus	amarus	Tricholomataceae	Agaricales	2	T.	AMD168	PL1	F.	ABN	08/15/93
656	Leucopaxillus	amarus	Tricholomataceae	Agaricales	2	F.	AMD168	PC1	F.	ABN	08/28/93
716	Leucopaxillus	amarus	Tricholomataceae	Agaricales	2	T.	AMD168	BU8	T.	ABN	08/31/93
731	Leucopaxillus	amarus	Tricholomataceae	Agaricales	2	T.	AMD168	BU4	T.	ABN	09/02/93
796	Leucopaxillus	amarus	Tricholomataceae	Agaricales	2	T.	LAS768	BU26	T.	ABN	09/04/93
922	Leucopaxillus	amarus	Tricholomataceae	Agaricales	2	T.	LAS768	BU44	T.	ABN	09/17/93
262	Leucopaxillus	amarus cf.	Tricholomataceae	Agaricales	3	T.	LAS768	SH5	F.	ABN	08/10/92
299	Leucopaxillus	amarus cf.	Tricholomataceae	Agaricales	3	T.	AMD168	BN1	T.	ABN	08/31/92
937	Leucophleps	spinispora	Leucogastraceae	Leucogastrales	1	T.	AMD760	PC1	F.	UNC	10/02/93

ncode	genus	species	family	order	grd	vchr	ref	loct	bndlr	ocr	date
198	Lycogala	epidendrum	Reticulariaceae	Liceales	1	T.	SSW206	SH5	F.	ABN	07/24/92
246	Lycogala	epidendrum	Reticulariaceae	Liceales	1	F.	FSM56	BN6	T.	ABN	07/28/92
208	Lycogala	epidendrum	Reticulariaceae	Liceales	1	T.	FSM56	AP2	T.	ABN	07/28/92
242	Lycogala	epidendrum	Reticulariaceae	Liceales	2	T.	FSM56	SH7	F.	ABN	08/04/92
241	Lycogala	epidendrum	Reticulariaceae	Liceales	2	T.	FSM56	LB3	F.	ABN	08/06/92
300	Lycogala	epidendrum	Reticulariaceae	Liceales	1	T.	FSM56	BN1	T.	ABN	08/31/92
385	Lycogala	epidendrum	Reticulariaceae	Liceales	1	T.	FSM56	BN3	T.	ABN	09/15/92
406	Lycogala	epidendrum	Reticulariaceae	Liceales	1	F.	FSM56	SH5	F.	ABN	07/17/93
560	Lycogala	epidendrum	Reticulariaceae	Liceales	1	T.	FSM56	BU6	T.	ABN	08/18/93
575	Lycogala	epidendrum	Reticulariaceae	Liceales	2	F.	FSM56	PL3	F.	ABN	08/23/93
753	Lycogala	epidendrum	Reticulariaceae	Liceales	2	F.	FSM56	BU3	T.	ABN	09/02/93
965	Lycogala	epidendrum	Reticulariaceae	Liceales	1	F.	LAS848	SH5	F.	ABN	07/30/94
1016	Lycogala	epidendrum	Reticulariaceae	Liceales	1	F.	SSW206	BU3	T.	ABN	08/15/94
192	Lycogala	flavofuscum	Reticulariaceae	Liceales	2	T.	FSM55	SH1	F.	UNC	07/19/92
191	Lycogala	flavofuscum	Reticulariaceae	Liceales	2	T.	FSM55	BN6	T.	UNC	07/19/92
297	Lycoperdon	americanum	Lycoperdaceae	Lycoperdales	2	T.	AMD694	BN6	T.	UNC	08/31/92
358	Lycoperdon	americanum	Lycoperdaceae	Lycoperdales	2	T.	AMD694	BU1	T.	UNC	09/03/92
837	Lycoperdon	echinatum	Lycoperdaceae	Lycoperdales	2	F.	LAS824	BU48	T.	COM	09/07/93
710	Lycoperdon	echinatum cf.	Lycoperdaceae	Lycoperdales	3	T.	LAS649	BU1	T.	COM	08/31/93
104	Lycoperdon	perlutum	Lycoperdaceae	Lycoperdales	1	T.	AMD693	PR4	F.	ABN	07/26/91
210	Lycoperdon	perlutum	Lycoperdaceae	Lycoperdales	1	T.	LAS825	AP2	T.	ABN	07/28/92
224	Lycoperdon	perlutum	Lycoperdaceae	Lycoperdales	2	T.	LAS825	AP2	T.	ABN	07/30/92
259	Lycoperdon	perlutum	Lycoperdaceae	Lycoperdales	1	T.	AMD693	SH3	F.	ABN	08/10/92
293	Lycoperdon	perlutum	Lycoperdaceae	Lycoperdales	1	T.	PNA282	LA2	F.	ABN	08/26/92
489	Lycoperdon	perlutum	Lycoperdaceae	Lycoperdales	2	T.	LAS825	PL1	F.	ABN	08/15/93
506	Lycoperdon	perlutum	Lycoperdaceae	Lycoperdales	2	T.	AMD693	PC1	F.	ABN	08/16/93
585	Lycoperdon	perlutum	Lycoperdaceae	Lycoperdales	2	T.	LAS825	LC3	F.	ABN	08/23/93
646	Lycoperdon	perlutum	Lycoperdaceae	Lycoperdales	2	F.	LAS825	GP1	F.	ABN	08/25/93
624	Lycoperdon	perlutum	Lycoperdaceae	Lycoperdales	2	F.	LAS825	SH8	F.	ABN	08/25/93
581	Lycoperdon	perlutum cf.	Lycoperdaceae	Lycoperdales	3	T.	LAS825	PL3	F.	ABN	08/23/93
304	Lycoperdon	pyriforme	Lycoperdaceae	Lycoperdales	2	T.	LAS826	BN1	T.	COM	08/31/92
451	Lycoperdon	pyriforme	Lycoperdaceae	Lycoperdales	2	T.	AMD691	BN3	T.	COM	08/09/93
749	Lycoperdon	pyriforme	Lycoperdaceae	Lycoperdales	2	F.	AMD691	BU3	T.	COM	09/02/93
768	Lycoperdon	pyriforme	Lycoperdaceae	Lycoperdales	2	F.	AMD691	BU3	T.	COM	09/04/93
1013	Lycoperdon	pyriforme	Lycoperdaceae	Lycoperdales	2	T.	AMD691	BU3	T.	COM	08/15/94
772	Lycoperdon	sp.	Lycoperdaceae	Lycoperdales	4	T.	AMD690	BU4	T.	UNK	09/04/93
132	Marasmius	oreades	Tricholomataceae	Agaricales	1	T.	LAS772	LA1	F.	ABN	08/07/91
269	Marasmius	oreades	Tricholomataceae	Agaricales	1	T.	AMD208	LB2	F.	ABN	08/25/92
425	Marasmius	oreades	Tricholomataceae	Agaricales	1	T.	LAS772	LA1	F.	ABN	08/07/93
948	Marasmius	oreades	Tricholomataceae	Agaricales	1	T.	LAS772	LA1	F.	ABN	07/25/94
367	Melanoleuca	sp.	Tricholomataceae	Agaricales	6	T.	AMD169	BN1	T.	UNK	08/31/92
997	Melanoleuca	sp.	Tricholomataceae	Agaricales	5	T.	AMD169	LC1	F.	UNK	08/07/94
176	Morchella	augusticeps	Morchellaceae	Pezizales	2	T.	AMD790	PL1	F.	UNK	05/28/92
177	Morchella	elata	Morchellaceae	Pezizales	2	T.	LAS713	PL1	F.	UNK	05/27/92
171	Morchella	esculenta	Morchellaceae	Pezizales	2	T.	LAS327	PL1	F.	UNK	05/27/92
602	Mycena	haemotopus	Tricholomataceae	Agaricales	2	T.	LAS781	LC2	F.	UNK	08/23/93
129	Mycena	sp.	Tricholomataceae	Agaricales	4	T.	AMD224	RC1	F.	UNK	08/05/91
222	Nidula	candida	Nidulariaceae	Nidulariales	2	T.	AMD780	AP2	T.	COM	07/30/92
133	Nidula	candida cf.	Nidulariaceae	Nidulariales	3	F.	LAS829	AP3	T.	COM	08/10/91

ncode	genus	species	family	order	grd	vchr	ref	loct	bndlr	ocr	date
1108	Nolanea	sp.	Entolomataceae	Agaricales	4	T.	AMD245	BU3	T.	UNK	09/07/94
183	Panaeolus	foeniseicii	Coprinaceae	Agaricales	2	T.	AMD360	LB3	F.	COM	07/15/92
431	Panaeolus	foeniseicii	Coprinaceae	Agaricales	2	T.	AMD360	LA1	F.	COM	08/07/93
218	Panaeolus	retirugis cf.	Coprinaceae	Agaricales	3	T.	AMD357	AP1	T.	UNC	07/30/92
813	Panaeolus	sp.	Coprinaceae	Agaricales	4	T.	AMD353	BU4	T.	UNK	09/02/93
1046	Paxillus	atrotomentosus	Paxillaceae	Agaricales	2	T.	LAS670	BN6	T.	UNC	08/19/94
351	Peniophora	gigantea	Corticaceae	Aphylllophorales	2	T.	LAS422	BU1	T.	COM	09/03/92
706	Peniophora	gigantea	Corticaceae	Aphylllophorales	2	F.	LAS422	BU1	T.	COM	08/31/93
1011	Peniophora	rufa	Corticaceae	Aphylllophorales	1	T.	LAS423	BU3	T.	COM	08/15/94
470	Peniophora	rufa cf.	Corticaceae	Aphylllophorales	3	T.	LAS423	LC1	F.	COM	08/13/93
777	Peziza	repanda	Pezizaceae	Pezizales	2	T.	LAS347	BU3	T.	COM	09/04/93
891	Peziza	repanda	Pezizaceae	Pezizales	2	F.	LAS347	SH8	F.	COM	09/12/93
1146	Peziza	repanda	Pezizaceae	Pezizales	2	T.	LAS347	BN6	T.	COM	09/19/95
1031	Peziza	repanda cf.	Pezizaceae	Pezizales	3	T.	AMD821	BU3	T.	COM	08/15/94
1131	Peziza	repanda cf.	Pezizaceae	Pezizales	3	T.	LAS347	BU3	T.	COM	07/23/95
488	Peziza	sp.	Pezizaceae	Pezizales	5	T.	LAS347	PL1	F.	UNK	08/15/93
811	Peziza	sp.	Pezizaceae	Pezizales	4	T.	AMD818	BU4	T.	UNK	09/04/93
1032	Peziza	sp.	Pezizaceae	Pezizales	4	T.	AMD821	BU3	T.	UNK	08/15/94
317	Peziza	succosa	Pezizaceae	Pezizales	2	T.	PNG304	BN1	T.	COM	08/31/92
434	Phaeolus	schweinitzii	Polyporaceae	Aphylllophorales	2	T.	LAS473	BN3	T.	COM	08/09/93
482	Phaeolus	schweinitzii	Polyporaceae	Aphylllophorales	1	T.	AMD570	PL1	F.	COM	08/15/93
508	Phaeolus	schweinitzii	Polyporaceae	Aphylllophorales	2	T.	LAS473	PC1	F.	COM	08/16/93
643	Phaeolus	schweinitzii	Polyporaceae	Aphylllophorales	2	F.	AMD570	SH5	F.	COM	08/25/93
714	Phaeolus	schweinitzii	Polyporaceae	Aphylllophorales	2	F.	AMD570	BU1	T.	COM	08/31/93
943	Phaeolus	schweinitzii	Polyporaceae	Aphylllophorales	1	T.	AMD570	BN3	T.	COM	07/15/94
963	Phaeolus	schweinitzii	Polyporaceae	Aphylllophorales	2	T.	LAS473	SH5	F.	COM	07/30/94
818	Phallus	impudicus	Phallaceae	Phallales	1	T.	AMD768	BN3	T.	COM	09/07/93
985	Phlebia	sp.	Corticaceae	Aphylllophorales	5	T.	AMD610	LC1	F.	UNK	08/07/94
764	Pholiota	aurivella cf.	Strophariaceae	Agaricales	3	T.	LAS712	BU4	T.	UNC	09/02/93
277	Pholiota	destruens	Strophariaceae	Agaricales	2	T.	LAS714	LA2	F.	COM	08/26/92
383	Pholiota	destruens	Strophariaceae	Agaricales	2	T.	LAS714	BN3	T.	COM	09/15/92
526	Pholiota	destruens	Strophariaceae	Agaricales	2	T.	LAS714	LA2	F.	COM	08/13/93
821	Pholiota	destruens	Strophariaceae	Agaricales	1	T.	LAS714	BU48	T.	COM	09/07/93
870	Pholiota	destruens	Strophariaceae	Agaricales	2	F.	LAS714	BU44	T.	COM	09/10/93
842	Pholiota	destruens	Strophariaceae	Agaricales	2	T.	LAS714	BU46	T.	COM	09/10/93
980	Pholiota	destruens	Strophariaceae	Agaricales	2	F.	LAS714	LC2	F.	COM	08/07/94
1039	Pholiota	destruens	Strophariaceae	Agaricales	1	F.	LAS714	BN3	T.	COM	08/15/94
459	Pholiota	limonella cf.	Strophariaceae	Agaricales	3	T.	PNA174	LC1	F.	UNC	08/13/93
559	Pholiota	lubrica cf.	Strophariaceae	Agaricales	3	T.	AMD392	BU6	T.	UNC	08/18/93
460	Pholiota	sp.	Strophariaceae	Agaricales	4	T.	AMD391	LC1	F.	UNK	08/13/93
535	Pholiota	sp.	Strophariaceae	Agaricales	4	T.	AMD392	BU8	T.	UNK	08/18/93
799	Pholiota	sp.	Strophariaceae	Agaricales	4	T.	AMD391	BU26	T.	UNK	09/04/93
844	Pholiota	sp.	Strophariaceae	Agaricales	4	T.	AMD392	BU46	T.	UNK	09/10/93
471	Pholiota	squarrosa	Strophariaceae	Agaricales	2	T.	LAS716	SH5	F.	ABN	08/15/93
541	Pholiota	squarrosa	Strophariaceae	Agaricales	2	T.	LAS716	BU8	T.	ABN	08/18/93
752	Pholiota	squarrosa	Strophariaceae	Agaricales	2	F.	LAS716	BU3	T.	ABN	09/02/93
155	Pholiota	squarrosa cf.	Strophariaceae	Agaricales	3	T.	LAS716	SH8	F.	ABN	08/31/91
392	Pholiota	squarrosa cf.	Strophariaceae	Agaricales	3	T.	LAS716	AP1	T.	ABN	09/17/92
412	Pholiota	squarrosa cf.	Strophariaceae	Agaricales	3	T.	AMD389	SH7	F.	ABN	08/04/93

ncode	genus	species	family	order	grd	vchr	ref	loct	bndlr	ocr	date
626	Pholiota	squarrosa cf.	Strophariaceae	Agaricales	3	F.	AMD389	SH8	F.	ABN	08/25/93
955	Pholiota	squarrosa cf.	Strophariaceae	Agaricales	3	T.	LAS716	SH5	F.	ABN	07/30/94
1087	Pholiota	squarrosa cf.	Strophariaceae	Agaricales	3	F.	LAS716	SH5	F.	ABN	08/26/94
1101	Pholiota	squarrosa cf.	Strophariaceae	Agaricales	3	T.	LAS716	BU3	T.	ABN	09/07/94
144	Phylloporus	rhodoxanthus	Paxillaceae	Agaricales	1	T.	LAS672	SH5	F.	COM	08/31/91
249	Phylloporus	rhodoxanthus	Paxillaceae	Agaricales	2	T.	AMD480	SH5	F.	COM	08/04/92
890	Phylloporus	rhodoxanthus	Paxillaceae	Agaricales	1	T.	AMD480	SH8	F.	COM	09/12/93
307	Phyllotopsis	nidulans	Tricholomataceae	Agaricales	1	T.	AMD140	BN1	T.	COM	08/31/92
679	Phyllotopsis	nidulans	Tricholomataceae	Agaricales	2	T.	PNA211	AS1	F.	COM	08/28/93
703	Phyllotopsis	nidulans	Tricholomataceae	Agaricales	2	T.	PNA211	BN6	T.	COM	08/31/93
695	Phyllotopsis	nidulans	Tricholomataceae	Agaricales	2	F.	AMD140	BN6	T.	COM	08/31/93
860	Phyllotopsis	nidulans	Tricholomataceae	Agaricales	2	F.	AMD140	BN3	T.	COM	09/10/93
885	Phyllotopsis	nidulans	Tricholomataceae	Agaricales	2	F.	AMD140	SH8	F.	COM	09/12/93
1102	Phyllotopsis	nidulans	Tricholomataceae	Agaricales	1	T.	AMD140	BU3	T.	COM	09/07/94
136	Pleurotus	ostreatus	Tricholomataceae	Agaricales	2	T.	LAS793	AP3	T.	ABN	08/12/91
186	Pleurotus	ostreatus	Tricholomataceae	Agaricales	2	T.	LAS793	SH7	F.	ABN	07/19/92
195	Pleurotus	ostreatus	Tricholomataceae	Agaricales	2	T.	AMD134	SH5	F.	ABN	07/24/92
268	Pleurotus	ostreatus	Tricholomataceae	Agaricales	1	T.	AMD134	BN3	T.	ABN	08/25/92
402	Pleurotus	ostreatus	Tricholomataceae	Agaricales	2	T.	AMD134	SH5	F.	ABN	08/02/93
469	Pleurotus	ostreatus	Tricholomataceae	Agaricales	2	T.	AMD134	LC1	F.	ABN	08/13/93
503	Pleurotus	ostreatus	Tricholomataceae	Agaricales	2	T.	LAS793	PC1	F.	ABN	08/16/93
1006	Pleurotus	ostreatus	Tricholomataceae	Agaricales	1	T.	AMD134	LC1	F.	ABN	08/07/94
979	Pleurotus	ostreatus	Tricholomataceae	Agaricales	2	T.	LAS793	LC2	F.	ABN	08/07/94
724	Pleurotus	ostreatus cf.	Tricholomataceae	Agaricales	3	T.	LAS793	BU4	T.	ABN	09/02/93
983	Pleurotus	ostreatus cf.	Tricholomataceae	Agaricales	3	T.	AMD134	LC2	F.	ABN	08/07/94
234	Pleurotus	sapidus	Tricholomataceae	Agaricales	2	T.	AMD134	AP1	T.	ABN	08/01/92
342	Pluteus	cervinus	Pluteaceae	Agaricales	2	T.	LAS675	SH2	F.	ABN	08/25/92
271	Pluteus	cervinus	Pluteaceae	Agaricales	2	T.	LAS675	BN3	T.	ABN	08/25/92
292	Pluteus	cervinus	Pluteaceae	Agaricales	2	T.	AMD255	LA2	F.	ABN	08/26/92
313	Pluteus	cervinus	Pluteaceae	Agaricales	2	T.	LAS675	BN1	T.	ABN	08/31/92
432	Pluteus	cervinus	Pluteaceae	Agaricales	2	T.	AMD255	SH5	F.	ABN	08/07/93
440	Pluteus	cervinus	Pluteaceae	Agaricales	2	T.	AMD255	BN6	T.	ABN	08/09/93
476	Pluteus	cervinus	Pluteaceae	Agaricales	2	T.	LAS675	PL1	F.	ABN	08/15/93
574	Pluteus	cervinus	Pluteaceae	Agaricales	2	F.	LAS675	PL3	F.	ABN	08/23/93
717	Pluteus	cervinus	Pluteaceae	Agaricales	2	T.	LAS675	BU8	T.	ABN	08/31/93
895	Pluteus	cervinus	Pluteaceae	Agaricales	2	F.	AMD255	SH8	F.	ABN	09/12/93
978	Pluteus	cervinus	Pluteaceae	Agaricales	2	F.	AMD255	LC2	F.	ABN	08/07/94
1019	Pluteus	cervinus	Pluteaceae	Agaricales	1	T.	AMD255	BU3	T.	ABN	08/15/94
204	Pluteus	cervinus cf.	Pluteaceae	Agaricales	3	T.	AMD255	AP1	T.	ABN	07/28/92
255	Pluteus	cervinus cf.	Pluteaceae	Agaricales	3	T.	AMD255	LB4	F.	ABN	08/06/92
291	Pluteus	cervinus v. alba	Pluteaceae	Agaricales	4	T.	LAS675	LA2	F.	UNC	08/26/92
1022	Pluteus	lutescens	Pluteaceae	Agaricales	2	T.	AMD257	BU3	T.	UNC	08/15/94
1091	Pluteus	lutescens	Pluteaceae	Agaricales	2	T.	AMD257	SH5	F.	ABN	08/26/94
125	Polyporus	arcularius	Polyporaceae	Aphylllophorales	2	T.	AMD563	PR4	F.	ABN	08/04/91
184	Polyporus	arcularius	Polyporaceae	Aphylllophorales	1	T.	LAS478	LA2	F.	ABN	07/19/92
372	Polyporus	arcularius	Polyporaceae	Aphylllophorales	1	T.	LAS478	BN5	T.	ABN	07/27/92
220	Polyporus	arcularius	Polyporaceae	Aphylllophorales	2	T.	LAS478	AP2	T.	ABN	07/30/92
240	Polyporus	arcularius	Polyporaceae	Aphylllophorales	2	T.	AMD563	LB3	F.	ABN	08/06/92
357	Polyporus	arcularius	Polyporaceae	Aphylllophorales	1	T.	LAS478	BN6	T.	ABN	08/25/92

ncode	genus	species	family	order	grd	vchr	ref	loct	bndlr	ocr	date
336	Polyporus	arcularius	Polyporaceae	Aphyllophorales	1	T.	AMD563	LB2	F.	ABN	08/25/92
289	Polyporus	arcularius	Polyporaceae	Aphyllophorales	1	T.	AMD563	LA2	F.	ABN	08/26/92
410	Polyporus	arcularius	Polyporaceae	Aphyllophorales	1	T.	AMD563	LA2	F.	ABN	07/17/93
437	Polyporus	arcularius	Polyporaceae	Aphyllophorales	1	F.	AMD563	EN3	T.	ABN	08/09/93
520	Polyporus	arcularius	Polyporaceae	Aphyllophorales	1	F.	AMD563	BU1	T.	ABN	08/16/93
647	Polyporus	arcularius	Polyporaceae	Aphyllophorales	1	F.	AMD563	GP1	F.	ABN	08/25/93
971	Polyporus	arcularius	Polyporaceae	Aphyllophorales	1	F.	AMD563	BU44	T.	ABN	07/31/94
1042	Polyporus	arcularius	Polyporaceae	Aphyllophorales	1	F.	LAS478	BU44	T.	ABN	08/15/94
407	Polyporus	badius cf.	Polyporaceae	Aphyllophorales	3	T.	AMD562	SH5	F.	UNC	08/02/93
360	Polyporus	elegans	Polyporaceae	Aphyllophorales	2	T.	AMD562	LA2	F.	UNC	08/26/92
1062	Polyporus	elegans	Polyporaceae	Aphyllophorales	2	T.	AMD562	SH5	F.	UNC	08/26/94
182	Polyporus	sp.	Polyporaceae	Aphyllophorales	5	T.	AMD554	EN3	T.	UNK	05/28/92
251	Polyporus	sp.	Polyporaceae	Aphyllophorales	4	T.	AMD554	LB3	F.	UNK	08/06/92
851	Polyporus	sp.	Polyporaceae	Aphyllophorales	5	T.	AMD549	BU46	T.	UNK	09/10/93
1105	Polyporus	squamosus	Polyporaceae	Aphyllophorales	2	T.	PNA257	BU3	T.	UNC	09/07/94
639	Polyporus	varius	Polyporaceae	Aphyllophorales	2	T.	LAS483	SH5	F.	COM	08/25/93
682	Polyporus	varius	Polyporaceae	Aphyllophorales	2	T.	LAS483	AS1	F.	COM	08/28/93
949	Polyporus	varius	Polyporaceae	Aphyllophorales	2	T.	AMD563	BU44	T.	COM	07/31/94
987	Polyporus	varius	Polyporaceae	Aphyllophorales	1	T.	LAS483	LC1	F.	COM	08/07/94
941	Polyporus	varius cf.	Polyporaceae	Aphyllophorales	4	T.	AMD563	SH5	F.	COM	07/10/94
444	Poria	corticola cf.	Polyporaceae	Aphyllophorales	3	T.	AMD603	LA2	F.	COM	08/07/93
816	Poria	corticola cf.	Polyporaceae	Aphyllophorales	3	T.	AMD603	BU8	T.	COM	08/18/93
986	Poria	corticola cf.	Polyporaceae	Aphyllophorales	3	T.	AMD602	LC1	F.	COM	08/07/94
374	Poria	sp.	Polyporaceae	Aphyllophorales	4	T.	LAS484	EN5	T.	UNK	07/27/92
319	Poria	sp.	Polyporaceae	Aphyllophorales	4	T.	LAS484	BN1	T.	UNK	08/31/92
468	Poria	sp.	Polyporaceae	Aphyllophorales	4	T.	AMD603	LC1	F.	UNK	08/13/93
878	Poria	spissa	Polyporaceae	Aphyllophorales	2	T.	LAS484	BU44	T.	UNC	09/10/93
1134	Psathyrella	carbonicola	Coprinaceae	Agaricales	1	T.	AMD366	EN6	T.	RAR	07/23/95
1021	Psathyrella	sp.	Coprinaceae	Agaricales	6	T.	MNA178	BU3	T.	UNK	08/15/94
546	Psathyrella	velutina	Coprinaceae	Agaricales	2	T.	MNA178	BU6	T.	UNK	08/18/93
1047	Pseudohydnum	gelatinosum	Tremellaceae	Tremellales	2	T.	AMD671	PC1	F.	UNC	08/19/94
1107	Psilocybe	sp.	Strophariaceae	Agaricales	4	T.	AMD368	BU3	T.	RAR	09/07/94
1144	Psilocybe	sp.	Strophariaceae	Agaricales	4	T.	AMD368	BU3	T.	RAR	09/19/95
174	Pycnoporellus	alboluteus	Polyporaceae	Aphyllophorales	1	T.	LAS486	PL1	F.	COM	05/27/92
556	Pycnoporellus	alboluteus	Polyporaceae	Aphyllophorales	2	T.	PNA260	BU6	T.	COM	08/18/93
1128	Pycnoporellus	alboluteus	Polyporaceae	Aphyllophorales	2	T.	AMD571	PL1	F.	COM	05/26/95
335	Pycnoporus	cinnabarinus	Polyporaceae	Aphyllophorales	1	T.	AMD597	EN3	T.	COM	08/25/92
334	Pycnoporus	cinnabarinus	Polyporaceae	Aphyllophorales	1	T.	LAS486	LA2	F.	COM	08/26/92
441	Pycnoporus	cinnabarinus	Polyporaceae	Aphyllophorales	2	T.	LAS486	EN3	T.	COM	08/09/93
513	Pycnoporus	cinnabarinus	Polyporaceae	Aphyllophorales	2	T.	LAS486	PC1	F.	COM	08/16/93
678	Pycnoporus	cinnabarinus	Polyporaceae	Aphyllophorales	1	F.	LAS486	AS1	F.	COM	08/28/93
850	Pycnoporus	cinnabarinus	Polyporaceae	Aphyllophorales	1	T.	LAS398	BU46	T.	COM	09/10/93
981	Pycnoporus	cinnabarinus	Polyporaceae	Aphyllophorales	2	F.	LAS747	LC2	F.	COM	08/07/94
494	Ramaria	sp.	Clavariaceae	Aphyllophorales	5	T.	LAS398	PL1	F.	UNK	08/15/93
493	Ramaria	sp.	Clavariaceae	Aphyllophorales	5	T.	LAS398	PL1	F.	UNK	08/15/93
793	Ramaria	sp.	Clavariaceae	Aphyllophorales	4	T.	LAS398	BU26	T.	UNK	09/04/93
1077	Ramaria	sp.	Clavariaceae	Aphyllophorales	5	F.	AMD645	SH5	F.	UNK	08/26/94
652	Ramaria	vinosimaculus cf.	Clavariaceae	Aphyllophorales	3	T.	AMD653	PC1	F.	UNK	08/28/93
936	Rhizopogon	subsalmonius	Rhizopogonaceae	Hymenogasterales	1	T.	SNG290	BU44	T.	UNK	10/02/93

ncode	genus	species	family	order	grd	vchr	ref	loct	bndlr	ocr	date
653	Russula	aeruginea cf.	Russulaceae	Agaricales	3	T.	AMD95	PC1	F.	UNC	08/28/93
117	Russula	brevipes	Russulaceae	Agaricales	2	T.	AMD87	BN6	T.	ABN	08/03/91
338	Russula	brevipes	Russulaceae	Agaricales	2	T.	LAS698	BU44	T.	ABN	08/25/92
285	Russula	brevipes	Russulaceae	Agaricales	2	T.	LAS698	BN7	T.	ABN	08/25/92
322	Russula	brevipes	Russulaceae	Agaricales	2	T.	AMD87	BU1	T.	ABN	09/03/92
377	Russula	brevipes	Russulaceae	Agaricales	2	T.	LAS698	SH1	F.	ABN	09/13/92
454	Russula	brevipes	Russulaceae	Agaricales	2	T.	LAS698	BN6	T.	ABN	08/12/93
586	Russula	brevipes	Russulaceae	Agaricales	2	F.	LAS698	LC3	F.	ABN	08/23/93
688	Russula	brevipes	Russulaceae	Agaricales	2	F.	AMD87	WR3	F.	ABN	08/30/93
715	Russula	brevipes	Russulaceae	Agaricales	2	F.	LAS698	BU1	T.	ABN	08/31/93
743	Russula	brevipes	Russulaceae	Agaricales	2	F.	LAS698	BU4	T.	ABN	09/02/93
871	Russula	brevipes	Russulaceae	Agaricales	2	T.	AMD87	BU44	T.	ABN	09/10/93
856	Russula	brevipes	Russulaceae	Agaricales	2	F.	AMD87	BU46	T.	ABN	09/10/93
847	Russula	brevipes	Russulaceae	Agaricales	2	F.	AMD87	BU46	T.	ABN	09/10/93
888	Russula	brevipes	Russulaceae	Agaricales	2	F.	LAS698	SH8	F.	ABN	09/12/93
935	Russula	brevipes	Russulaceae	Agaricales	2	F.	AMD87	BU44	T.	ABN	10/02/93
956	Russula	brevipes	Russulaceae	Agaricales	1	F.	AMD87	SH5	F.	ABN	07/30/94
1112	Russula	brevipes	Russulaceae	Agaricales	2	F.	LAS698	BN6	T.	ABN	09/07/94
105	Russula	emetica cf.	Russulaceae	Agaricales	3	T.	AMD97	SH8	F.	ABN	07/26/91
365	Russula	emetica cf.	Russulaceae	Agaricales	3	T.	AMD97	SH2	F.	COM	08/25/92
456	Russula	emetica cf.	Russulaceae	Agaricales	3	T.	AMD97	SH1	F.	COM	08/12/93
504	Russula	emetica cf.	Russulaceae	Agaricales	4	T.	AMD97	PC1	F.	COM	08/16/93
563	Russula	emetica cf.	Russulaceae	Agaricales	3	T.	AMD97	LB2	F.	COM	08/18/93
534	Russula	emetica cf.	Russulaceae	Agaricales	3	T.	AMD97	BU8	T.	COM	08/18/93
967	Russula	emetica cf.	Russulaceae	Agaricales	3	T.	AMD97	SH5	F.	COM	07/30/94
1005	Russula	emetica cf.	Russulaceae	Agaricales	3	F.	AMD97	LC1	F.	COM	08/07/94
690	Russula	maculata cf.	Russulaceae	Agaricales	3	T.	AMD100	WR3	F.	COM	08/30/93
719	Russula	maculata cf.	Russulaceae	Agaricales	3	T.	AMD100	BU8	T.	COM	08/31/93
707	Russula	maculata cf.	Russulaceae	Agaricales	3	T.	AMD100	BU1	T.	COM	08/31/93
701	Russula	maculata cf.	Russulaceae	Agaricales	3	F.	AMD100	BN6	T.	COM	08/31/93
761	Russula	maculata cf.	Russulaceae	Agaricales	3	T.	AMD100	BU3	T.	COM	09/02/93
732	Russula	maculata cf.	Russulaceae	Agaricales	3	F.	AMD100	BU4	T.	COM	09/02/93
869	Russula	maculata cf.	Russulaceae	Agaricales	3	T.	AMD100	BU44	T.	COM	09/10/93
286	Russula	rosacea cf.	Russulaceae	Agaricales	3	T.	LAS705	LA2	F.	COM	08/26/92
475	Russula	rosacea cf.	Russulaceae	Agaricales	3	T.	AMD85	PL1	F.	COM	08/15/93
505	Russula	rosacea cf.	Russulaceae	Agaricales	4	T.	LAS344	PC1	F.	COM	08/16/93
554	Russula	rosacea cf.	Russulaceae	Agaricales	3	F.	LAS705	BU6	T.	COM	08/18/93
1081	Russula	rosacea cf.	Russulaceae	Agaricales	3	F.	LAS705	SH5	F.	COM	08/26/94
158	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	WR3	F.	UNK	09/01/91
252	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	LB4	F.	UNK	08/06/92
328	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	BN1	T.	UNK	08/31/92
327	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	BN1	T.	UNK	08/31/92
323	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	BN1	T.	UNK	08/31/92
320	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	BU1	T.	UNK	09/03/92
379	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	SH5	F.	UNK	09/13/92
396	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	AP1	T.	UNK	09/17/92
395	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	AP1	T.	UNK	09/17/92
473	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD85	SH5	F.	UNK	08/15/93
550	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	BU6	T.	UNK	08/18/93

ncode	genus	species	family	order	grd	vchr	ref	loct	bndl	ocr	date
530	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	BU8	T.	UNK	08/18/93
606	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	PR1	F.	UNK	08/23/93
578	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	PL3	F.	UNK	08/23/93
650	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	GP1	F.	UNK	08/25/93
745	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	BU4	T.	UNK	09/02/93
802	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	BU26	T.	UNK	09/04/93
801	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	BU26	T.	UNK	09/04/93
839	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	BU48	T.	UNK	09/07/93
833	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	BU48	T.	UNK	09/07/93
852	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	BU46	T.	UNK	09/10/93
1033	Russula	sp.	Russulaceae	Agaricales	4	F.	AMD83	BU3	T.	UNK	08/15/94
1073	Russula	sp.	Russulaceae	Agaricales	4	F.	AMD83	SH5	F.	UNK	08/26/94
1067	Russula	sp.	Russulaceae	Agaricales	4	F.	AMD84	SH5	F.	UNK	08/26/94
1114	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	BN6	T.	UNK	09/07/94
1100	Russula	sp.	Russulaceae	Agaricales	4	T.	AMD83	BU3	T.	UNK	09/07/94
401	Sarcoscypha	coccinea	Sarcoscyphaceae	Pezizales	2	T.	AMD836	LA2	F.	UNC	09/13/92
685	Scutellinia	erinaceus cf.	Pyronemataceae	Pezizales	3	T.	AMD839	PC1	F.	UNC	08/28/93
205	Scutellinia	scutellata	Pyronemataceae	Pezizales	1	T.	LAS353	AP1	T.	COM	07/28/92
568	Sparassis	crispa	Clavariaceae	Aphyllophorales	2	T.	AMD657	PL3	F.	UNC	08/23/93
462	Sparassis	radicata	Clavariaceae	Aphyllophorales	2	T.	AMD657	LC1	F.	UNC	08/13/93
261	Spathularia	flavida	Geoglossaceae	Helotiales	2	T.	LAS360	SH5	F.	COM	08/10/92
288	Spathularia	flavida	Geoglossaceae	Helotiales	2	T.	LAS360	LA2	F.	COM	08/26/92
301	Spathularia	flavida	Geoglossaceae	Helotiales	2	T.	LAS360	BN1	T.	COM	08/31/92
426	Spongipellis	pachyodon	Polyporaceae	Aphyllophorales	2	T.	LAS488	LA2	F.	UNC	08/07/93
135	Steccherinum	ochraceum	Hydnaceae	Aphyllophorales	5	T.	LAS437	BN6	T.	UNK	08/10/91
959	Stemonitis	splendens	Stemonitaceae	Stemonitales	1	T.	LAS853	SH5	F.	UNC	07/30/94
968	Stemonitis	splendens	Stemonitaceae	Stemonitales	1	T.	LAS853	BU44	T.	UNC	07/31/94
1041	Stemonitis	splendens cf.	Stemonitaceae	Stemonitales	4	F.	LAS853	BU44	T.	UNC	08/15/94
857	Stereum	complicatum	Stereaceae	Aphyllophorales	2	T.	LAS497	BN3	T.	UNC	09/10/93
382	Stereum	hirsutum cf.	Stereaceae	Aphyllophorales	3	T.	AMD605	LB2	F.	COM	09/13/92
384	Stereum	hirsutum cf.	Stereaceae	Aphyllophorales	3	T.	AMD605	BN3	T.	COM	09/15/92
863	Stereum	striatum	Stereaceae	Aphyllophorales	2	T.	AMD605	BN3	T.	UNC	09/10/93
216	Stropharia	coronilla cf.	Strophariaceae	Agaricales	3	T.	AMD377	AP3	T.	UNC	07/28/92
1104	Stropharia	kauffmanii	Strophariaceae	Agaricales	2	T.	AMD380	BU3	T.	UNC	09/07/94
233	Stropharia	sp.	Strophariaceae	Agaricales	4	T.	AMD374	AP1	T.	UNK	08/01/92
239	Suillus	granulatus	Boletaceae	Agaricales	2	T.	LAS584	LB4	F.	ABN	08/06/92
362	Suillus	granulatus	Boletaceae	Agaricales	2	T.	LAS584	BN6	T.	ABN	08/25/92
270	Suillus	granulatus	Boletaceae	Agaricales	2	T.	LAS584	BU1	T.	ABN	08/25/92
329	Suillus	granulatus	Boletaceae	Agaricales	2	T.	AMD502	BU1	T.	ABN	09/03/92
446	Suillus	granulatus	Boletaceae	Agaricales	2	F.	AMD502	LA2	F.	ABN	08/09/93
439	Suillus	granulatus	Boletaceae	Agaricales	2	F.	LAS594	BN3	T.	ABN	08/09/93
453	Suillus	granulatus	Boletaceae	Agaricales	2	F.	MAD502	LB2	F.	ABN	08/12/93
464	Suillus	granulatus	Boletaceae	Agaricales	2	T.	AMD502	LC1	F.	ABN	08/13/93
521	Suillus	granulatus	Boletaceae	Agaricales	2	F.	AMD502	BU1	T.	ABN	08/16/93
583	Suillus	granulatus	Boletaceae	Agaricales	2	F.	LAS594	LC3	F.	ABN	08/23/93
644	Suillus	granulatus	Boletaceae	Agaricales	2	F.	LAS594	GP1	F.	ABN	08/25/93
746	Suillus	granulatus	Boletaceae	Agaricales	2	F.	LAS594	BU3	T.	ABN	09/02/93
741	Suillus	granulatus	Boletaceae	Agaricales	2	F.	AMD502	BU4	T.	ABN	09/02/93
786	Suillus	granulatus	Boletaceae	Agaricales	2	F.	LAS594	BU26	T.	ABN	09/04/93

ncode	genus	species	family	order	grd	vchr	ref	loct	bndlr	ocr	date
835	Suillus	granulatus	Boletaceae	Agaricales	2	F.	LAS594	BU48	T.	ABN	09/07/93
867	Suillus	granulatus	Boletaceae	Agaricales	2	F.	AMD502	BU44	T.	ABN	09/10/93
849	Suillus	granulatus	Boletaceae	Agaricales	2	F.	AMD502	BU46	T.	ABN	09/10/93
1034	Suillus	granulatus	Boletaceae	Agaricales	2	F.	LAS584	BN6	T.	ABN	08/15/94
180	Suillus	granulatus cf.	Boletaceae	Agaricales	3	F.	LAS594	LA1	F.	ABN	06/03/92
279	Suillus	granulatus cf.	Boletaceae	Agaricales	3	T.	AMD502	LA2	F.	ABN	08/26/92
419	Suillus	granulatus cf.	Boletaceae	Agaricales	3	T.	LAS594	BN6	T.	ABN	08/07/93
438	Suillus	granulatus cf.	Boletaceae	Agaricales	3	T.	LAS594	BN3	T.	ABN	08/09/93
145	Suillus	lakei	Boletaceae	Agaricales	2	T.	LAS585	SH5	F.	ABN	08/31/91
274	Suillus	lakei	Boletaceae	Agaricales	2	T.	AMD495	LB2	F.	ABN	08/25/92
278	Suillus	lakei	Boletaceae	Agaricales	2	T.	AMD495	LA2	F.	ABN	08/26/92
474	Suillus	lakei	Boletaceae	Agaricales	2	T.	LAS585	PL1	F.	ABN	08/15/93
507	Suillus	lakei	Boletaceae	Agaricales	2	T.	LAS585	PC1	F.	ABN	08/16/93
553	Suillus	lakei	Boletaceae	Agaricales	2	T.	LAS585	BU6	T.	ABN	08/18/93
598	Suillus	lakei	Boletaceae	Agaricales	2	F.	LAS585	LC2	F.	ABN	08/23/93
570	Suillus	lakei	Boletaceae	Agaricales	2	F.	LAS585	PL3	F.	ABN	08/23/93
635	Suillus	lakei	Boletaceae	Agaricales	2	F.	LAS585	SH5	F.	ABN	08/25/93
622	Suillus	lakei	Boletaceae	Agaricales	2	F.	LAS585	SH8	F.	ABN	08/25/93
750	Suillus	lakei	Boletaceae	Agaricales	2	F.	AMD495	BU3	T.	ABN	09/02/93
733	Suillus	lakei	Boletaceae	Agaricales	2	F.	LAS585	BU4	T.	ABN	09/02/93
792	Suillus	lakei	Boletaceae	Agaricales	2	F.	LAS585	BU26	T.	ABN	09/04/93
1004	Suillus	lakei	Boletaceae	Agaricales	2	F.	LAS585	LC1	F.	ABN	08/07/94
1082	Suillus	lakei	Boletaceae	Agaricales	2	F.	AMD495	SH5	F.	ABN	08/26/94
514	Suillus	sibiricus	Boletaceae	Agaricales	2	T.	AMD498	PC1	F.	COM	08/16/93
972	Suillus	sibiricus	Boletaceae	Agaricales	2	T.	AMD498	LC2	F.	COM	08/07/94
113	Suillus	sp.	Boletaceae	Agaricales	4	T.	AMD491	GP1	F.	UNK	08/03/91
405	Suillus	sp.	Boletaceae	Agaricales	4	T.	UNK000	LB2	F.	UNK	07/14/93
612	Suillus	sp.	Boletaceae	Agaricales	4	T.	UNK000	LC3	F.	UNK	08/23/93
1076	Tarsetta	cupularis	Pyrenomataceae	Pezizales	2	T.	PNA304	SH5	F.	UNK	08/26/94
1026	Thelephora	terrestris	Thelephoraceae	Aphyllophorales	2	T.	LAS413	BU3	T.	COM	08/15/94
794	Thelephora	terrestris cf.	Thelephoraceae	Aphyllophorales	3	T.	PNA298	BU26	T.	COM	09/04/93
1059	Tremella	mesenterica cf.	Tremellaceae	Tremellales	6	T.	AMD669	SH5	F.	UNK	08/26/94
399	Trichaptum	abietinus	Polyporaceae	Aphyllophorales	2	T.	AMD593	AP1	T.	ABN	09/17/92
414	Trichaptum	abietinus	Polyporaceae	Aphyllophorales	2	T.	AMD593	SH5	F.	ABN	08/04/93
461	Trichaptum	abietinus	Polyporaceae	Aphyllophorales	2	T.	AMD593	LC1	F.	ABN	08/13/93
657	Trichaptum	abietinus	Polyporaceae	Aphyllophorales	2	T.	AMD593	PC1	F.	ABN	08/28/93
846	Trichaptum	abietinus	Polyporaceae	Aphyllophorales	2	T.	LAS490	BU46	T.	ABN	09/10/93
897	Trichaptum	abietinus	Polyporaceae	Aphyllophorales	2	T.	AMD593	SH8	F.	ABN	09/12/93
940	Trichaptum	abietinus	Polyporaceae	Aphyllophorales	2	F.	LAS490	SH5	F.	ABN	07/10/94
995	Trichaptum	abietinus	Polyporaceae	Aphyllophorales	2	F.	AMD593	LC1	F.	ABN	08/07/94
1070	Trichaptum	abietinus	Polyporaceae	Aphyllophorales	2	F.	AMD593	SH5	F.	ABN	08/26/94
964	Trichaptum	subchartaceum	Polyporaceae	Aphyllophorales	2	T.	UNK000	SH5	F.	ABN	07/30/94
1023	Trichia	scabra cf.	Trichiaceae	Trichiales	3	T.	FSM68	BU3	T.	UNK	08/15/94
389	Tricholoma	sp.	Tricholomataceae	Agaricales	4	T.	AMD176	AP1	T.	UNK	09/17/92
267	Tricholomopsis	platyphylla	Tricholomataceae	Agaricales	2	T.	AMD146	LB2	F.	COM	08/25/92
275	Tricholomopsis	platyphylla	Tricholomataceae	Agaricales	2	T.	AMD146	LA2	F.	COM	08/26/92
1135	Tricholomopsis	rutilans	Tricholomataceae	Agaricales	2	T.	AMD145	PC1	F.	UNC	09/10/95
143	Truncocolumella	citrina	Rhizopogonaceae	Hymenogasterales	2	T.	LAS813	SH5	F.	UNK	08/31/91
466	Tubifera	sp.	Reticulariaceae	Liceales	6	T.	FSM54	LC1	F.	UNK	08/13/93

ncode	genus	species	family	order	grd	vchr	ref	loct	bndlr	ocr	date
687	Tulostoma	brumale cf.	Tulostomataceae	Tulostomatales	3	T.	AMD719	WR3	F.	UNC	08/30/93
829	Tulostoma	simulans	Tulostomataceae	Tulostomatales	2	T.	LAS842	BN3	T.	UNC	09/07/93
190	Tyromyces	guttulatus cf.	Polyporaceae	Aphyllophorales	3	T.	AMD599	SH7	F.	UNC	07/19/92
169	Unknown	sp.	Unknown	Pezizales	6	T.	LAS343	LA2	F.	UNK	05/12/92
179	Unknown	sp.	Unknown	Agaricales	6	T.	AMD58	BN3	T.	UNK	05/31/92
201	Unknown	sp.	Polyporaceae	Aphyllophorales	5	T.	AMD549	BN5	T.	UNK	07/24/92
200	Unknown	sp.	Unknown	Agaricales	6	T.	AMD58	SH3	F.	UNK	07/24/92
197	Unknown	sp.	Unknown	Agaricales	6	T.	AMD58	SH7	F.	UNK	07/24/92
215	Unknown	sp.	Hygrophoraceae	Agaricales	5	T.	AMD58	AP1	T.	UNK	07/28/92
375	Unknown	sp.	Unknown	Aphyllophorales	6	T.	LAS467	AP1	T.	UNK	08/01/92
254	Unknown	sp.	Unknown	Agaricales	6	T.	AMD58	AP1	T.	UNK	08/01/92
253	Unknown	sp.	Unknown	Agaricales	6	T.	AMD58	AP1	T.	UNK	08/01/92
263	Unknown	sp.	Unknown	Agaricales	6	T.	AMD58	SH3	F.	UNK	08/10/92
370	Unknown	sp.	Unknown	Agaricales	6	T.	AMD58	BN7	T.	UNK	08/25/92
364	Unknown	sp.	Unknown	Agaricales	6	T.	AMD58	BN3	T.	UNK	08/25/92
348	Unknown	sp.	Unknown	Agaricales	5	T.	AMD58	BN7	T.	UNK	08/25/92
337	Unknown	sp.	Unknown	Agaricales	6	T.	AMD58	LB2	F.	UNK	08/25/92
349	Unknown	sp.	Tricholomataceae	Agaricales	5	T.	AMD129	BU1	T.	UNK	09/03/92
420	Unknown	sp.	Stereaceae	Aphyllophorales	5	T.	LAS604	LA2	F.	UNK	08/07/93
436	Unknown	sp.	Unknown	Agaricales	6	T.	AMD58	BN3	T.	UNK	08/09/93
562	Unknown	sp.	Unknown	Agaricales	6	T.	UNK000	PL1	F.	UNK	08/15/93
590	Unknown	sp.	Polyporaceae	Aphyllophorales	5	T.	AMD555	LC2	F.	UNK	08/23/93
589	Unknown	sp.	Polyporaceae	Aphyllophorales	5	T.	UNK000	LC3	F.	UNK	08/23/93
649	Unknown	sp.	Tricholomataceae	Agaricales	5	T.	UNK000	GP1	F.	UNK	08/25/93
681	Unknown	sp.	Unknown	Agaricales	6	T.	UNK000	PC1	F.	UNK	08/28/93
705	Unknown	sp.	Boletaceae	Agaricales	5	T.	AMD488	BN6	T.	UNK	08/31/93
765	Unknown	sp.	Entolomataceae	Agaricales	5	T.	AMD238	BU3	T.	UNK	09/02/93
736	Unknown	sp.	Unknown	Agaricales	6	T.	AMD58	BU4	T.	UNK	09/02/93
797	Unknown	sp.	Unknown	Pezizales	6	T.	MTM328	BU26	T.	UNK	09/04/93
834	Unknown	sp.	Unknown	Hymenomycetes	5	T.	UNK000	BU48	T.	UNK	09/07/93
924	Unknown	sp.	Unknown	Agaricales	6	T.	AMD58	BU48	T.	UNK	09/10/93
877	Unknown	sp.	Unknown	Agaricales	6	T.	AMD58	BN3	T.	UNK	09/10/93
882	Unknown	sp.	Unknown	Hymenomycetes	7	T.	UNK000	SH8	F.	UNK	09/12/93
916	Unknown	sp.	Unknown	Gastromycetes	7	T.	LAS374	BU44	T.	UNK	09/17/93
906	Unknown	sp.	Entolomataceae	Agaricales	5	T.	AMD238	BU44	T.	UNK	09/17/93
960	Unknown	sp.	Tricholomataceae	Agaricales	5	T.	UNK000	SH5	F.	UNK	07/30/94
1001	Unknown	sp.	Tricholomataceae	Agaricales	5	T.	UNK000	LC1	F.	UNK	08/07/94
998	Unknown	sp.	Tricholomataceae	Agaricales	6	T.	UNK000	LC1	F.	UNK	08/07/94
996	Unknown	sp.	Unknown	Hymenomycetes	7	T.	UNK000	LC1	F.	UNK	08/07/94
989	Unknown	sp.	Unknown	Hymenomycetes	7	T.	UNK000	LC1	F.	UNK	08/07/94
977	Unknown	sp.	Unknown	Hymenomycetes	7	T.	UNK000	LC2	F.	UNK	08/07/94
976	Unknown	sp.	Tricholomataceae	Agaricales	5	T.	UNK000	LC2	F.	UNK	08/07/94
1045	Unknown	sp.	Tricholomataceae	Agaricales	6	T.	UNK000	BN3	T.	RAR	08/15/94
1040	Unknown	sp.	Polyporaceae	Aphyllophorales	5	T.	UNK000	BN3	T.	RAR	08/15/94
1028	Unknown	sp.	Unknown	Agaricales	6	T.	AMD58	BU3	T.	UNK	08/15/94
1122	Unknown	sp.	Unknown	Aphyllophorales	6	T.	UNK000	SH5	F.	UNK	08/26/94
1124	Unknown	sp.	Unknown	Agaricales	6	T.	UNK000	BU8	T.	UNK	09/07/94
1129	Vascellum	lloydianum cf.	Lycoperdaceae	Lycoperdales	5	T.	SNZ47	BN7	T.	RAR	05/02/95
841	Volvariella	bombycina	Pluteaceae	Agaricales	2	T.	LAS677	BU44	T.	RAR	09/10/93

ncode	genus	species	family	order	grd	vchr	ref	loct	bndlr	ocr	date
219	Xeromphalina	campanella	Tricholomataceae	Agaricales	2	.T.	LAS209	AP1	.T.	ABN	07/30/92
423	Xeromphalina	campanella	Tricholomataceae	Agaricales	2	.T.	LAS809	LA2	.F.	ABN	08/07/93
447	Xeromphalina	campanella	Tricholomataceae	Agaricales	2	.F.	LAS809	LB2	.F.	ABN	08/09/93
457	Xeromphalina	campanella	Tricholomataceae	Agaricales	1	.F.	LAS809	LC1	.F.	ABN	08/13/93
479	Xeromphalina	campanella	Tricholomataceae	Agaricales	2	.T.	AMD222	PL1	.F.	ABN	08/15/93
510	Xeromphalina	campanella	Tricholomataceae	Agaricales	2	.T.	LAS809	PC1	.F.	ABN	08/16/93
548	Xeromphalina	campanella	Tricholomataceae	Agaricales	2	.F.	LAS809	BU6	.T.	ABN	08/18/93
533	Xeromphalina	campanella	Tricholomataceae	Agaricales	1	.F.	LAS809	BU8	.T.	ABN	08/18/93
595	Xeromphalina	campanella	Tricholomataceae	Agaricales	2	.F.	AMD222	LC2	.F.	ABN	08/23/93
584	Xeromphalina	campanella	Tricholomataceae	Agaricales	2	.F.	AMD222	LC3	.F.	ABN	08/23/93
638	Xeromphalina	campanella	Tricholomataceae	Agaricales	1	.F.	AMD222	SH5	.F.	ABN	08/25/93
627	Xeromphalina	campanella	Tricholomataceae	Agaricales	2	.F.	LAS809	SH8	.F.	ABN	08/25/93
702	Xeromphalina	campanella	Tricholomataceae	Agaricales	1	.F.	AMD222	BN6	.T.	ABN	08/31/93
759	Xeromphalina	campanella	Tricholomataceae	Agaricales	2	.F.	AMD222	BU3	.T.	ABN	09/02/93
809	Xeromphalina	campanella	Tricholomataceae	Agaricales	2	.F.	AMD222	BU4	.T.	ABN	09/04/93
990	Xeromphalina	campanella	Tricholomataceae	Agaricales	1	.F.	AMD222	LC1	.F.	ABN	08/07/94
974	Xeromphalina	campanella	Tricholomataceae	Agaricales	1	.F.	LAS809	LC2	.F.	ABN	08/07/94
1071	Xeromphalina	campanella	Tricholomataceae	Agaricales	1	.F.	LAS809	SH5	.F.	ABN	08/26/94
258	Xerula	americana	Tricholomataceae	Agaricales	2	.T.	UNK000	BN6	.T.	RAR	08/10/92
961	Xerula	americana	Tricholomataceae	Agaricales	2	.T.	UNK000	SH5	.F.	RAR	07/30/94
1121	Xerula	americana cf.	Tricholomataceae	Agaricales	3	.T.	UNK000	SH5	.F.	RAR	08/26/94