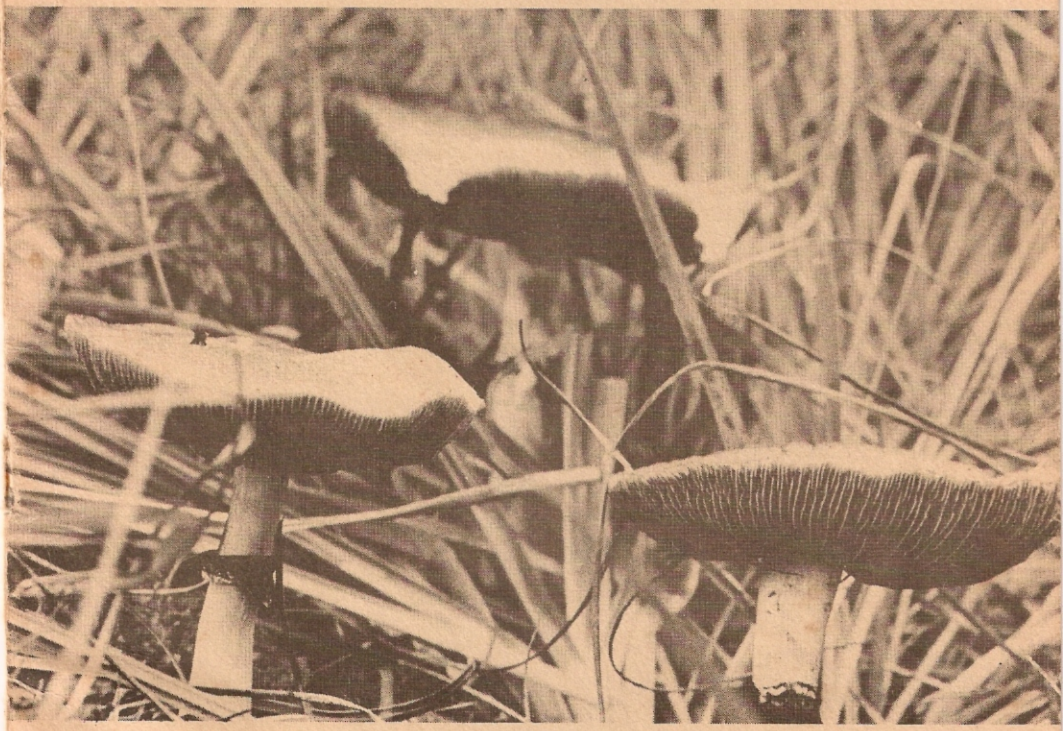
FIELD GUIDE
TO THE

Psilocybin Mushroom

-species common to
North America



Domestic Magic Mushrooms

Psilocybe cubensis
Panaeolus subbalteatus
Psilocybe caerulescens

$1.45

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All psilocybin mushrooms contain the same two desired alkaloids, psilocybin and psilocin, although they do occur in varying amounts with each species. Hence, the experience gained from one species will be essentially the same as an experience gained from another species. Some variation will be noted with usage of some of the rarer varieties, but again, the effects will be essentially the same. Over 16 species of psilocybin mushrooms exist – only a few are common. One would have to spend many hours in study and searching the fields to locate and catalogue them all. Only the most common species need be studied and identified by the person interested in the consumption of the mushroom.

The reader has a simple task to perform in order to locate the most common psilocybin mushroom. He must search cow-pastures after rain storms during those months in which the temperature is between 65° to 85°. Only those specimens which occur on manure, turn blue when damaged and have a hollow stem need be considered. There is no chance for error.

The reader is referred to the article by Wasson listed in the bibliography and to a good library to read about alkaloids. These articles will enhance your cultural and chemical understanding of the mushroom. Good hunting.

CAUTION:

Psilocybin mushrooms are against the law. In Louisiana: possession is a felony. The law-enforcement agencies in some areas are alert to the 'threat' of a plentiful and naturally-occuring (not to mention exotic) psychedelic. Consult the Bureau of Dangerous Drugs in your state to find out whether you are committing a felony or a misdemeanor. Avoid registering the stock-reaction "hippie" in the natives of the areas explored. Probably the old guise of mycology student will no longer serve as some "peace officers" will arrest any suspicious looking folks possessing any field mushrooms regardless of species.

The Three Psilocybin Species Common to the South

Of the fifteen domestic species known to contain psilocybin, at least three are found commonly in the United States in those regions having an annual growing season of at least several months. One of these, the *Ps. cubensis,* is very common. The other two are not uncommon. The *Ps. cubensis* and *Panaeolus subbalteatus* will be found in the same area as they all grow on manure. The *Amanita muscaria* (Mexico's 'magic' mushroom), containing sometimes deadly toxins, is also noted below, because it is sometimes found in the woodland areas of the U.S. South.

Setting Out Mushroom Hunting

Your first trip need not be elaborate. The author has found an ample supply of *Ps. Cubensis* growing within a 50 mile radius of New Orleans. For your first trip, it may be best to select a site close to home. You can increase your range after you have learned to identify them. The psilocybin mushrooms described in this guide, like many mushrooms, may be found in greatest quantity in a well-drained or sloped area.

The *Ps. cubensis* and *Panaeolus subbalteatus* grow only on cow, horse, pig, sheep or even goat manure (all grass or grain fed animals) or soil that has been enriched with manure. They grow most commonly on cow manure. The *Ps. caerulescens* grow on stream or river banks. All species grow at temperatures between 45° and 85° F. They prefer a well-drained site because the immature mycellium is damaged by an excess of water. The mature mycellium, however, demands a large quantity of water for maximum production. The mycellium is the stage of the fungus that produces the mushroom. It is germinated from the spores and grows, permeating the soil or manure. It looks like a moldish web-like growth and may take from 6 to 12 weeks or longer to mature.

The mushroom, the actual fruit, is grown under the soil and with time and proper moisture pops up and appears to grow extremely fast. In the case of the *Ps. cubensis,* the fruit matures in 24 hours. Therefore, check the weather reports for frontal systems bringing cool air and rain. These conditions, especially in late spring and early fall (but not during the hot summer months) are excellent for mushroom growth. Less psilocybin is produced during hot weather. Even if you do get a good rain

during a long hot spell, the poor quality of the few specimens you might find makes them hardly worth taking. Also, an excess of that other vital ingredient, water, will cause the mycellium to rot. The mycellium can handle a few inches of rain on one day and even a few inches a day for several days, but over a prolonged period of time it will die back and become sickly. The warm dry summer promotes the growth of the mycellium, and a cool, moist fall will bring forth the mushrooms in plentiful numbers. The sun quickly causes those mushrooms left growing in the field to age and rot because they are over 90% water.

If picked freshly, however, the mushroom will retain its potency for years, provided they are not sealed in an air-tight container, which causes them to rot in their own residual water content. The air-dried shrivelled mushrooms may be stored for future delectation.

A Warning

It is well known that a few species of the non-psilocybin mushrooms are dangerously poisonous. Ingestion will cause the body to flush itself through the bowels and by vomiting, with extreme cramps varying from mild to severe discomfort to death. For this reason, not even a tiny piece of any mushroom collected by the beginner should be eaten in the field. First compare the fresh mushrooms to the descriptions and photographs herein. The descriptions are calculated to be exhaustive; even so, when you are certain that you have a specimen of one of the described species, refrain from eating or smoking more than a tiny bite.

The person sensitive to other drugs, such as grass or mescaline, will be able to tell whether the desired substance is present; a person not so sensitive will still feel something. You will also be able to determine whether the species you have collected (be it not psilocybin) is poisonous or not. Six of the eight alkaloids present in the chemical structure of the psilocybin mushroom are toxic (the other two are psilocybin and psilocin). From this mild toxicity, a slight queasiness of the stomach may result. Also, even if the beginner has happened on a genuine psilocybin mushroom, the eating of it in the field may result in lack of interest in the further work of collecting, with the consequent loss of many pounds of mushrooms which he might otherwise have collected and dried.

The famed 'magic' mushroom of Mexico, the *Amanita mus-*

caria, causes intense hallucinations and is therefore well sought after, but a word of caution is in order. The *A. muscaria* is a highly toxic mushroom. It contains yet more poisonous alkaloids. It should be avoided as ingestion of more than a few specimens can cause illness and possibly death. The other common species listed in this book are all safe and non-poisonous. The *A. muscaria* is a red ball-shaped mushroom. It is very distinct and bears not the least resemblance to any of the three species catalogued in this text.

Identification Prologue

All of the psilocybin species described herein may be most conclusively identified by an enzyme that occurs with the psilocybin. This enzyme turns blue thru an oxidation process after the flesh of the mushroom is damaged. Crack the stem to check for the reaction, which takes from 20 to 120 minutes to occur. The blue is similar to blue ink, unless the flesh of the mushroom is yellowish, in which case the color will appear blue-green. All psilocybin mushrooms (with the exception of one uncommon species that is not covered in this manual) turn blue in this manner. A few chemicals that will speed up the oxidation process are not readily available. Because these chemicals are unstable and are difficult to work with, to hassle them in the field, for most people, is not worth the trouble.

This natural bluing-reaction noted in the psilocybin species is also noted in one other non-psilocybin genus. To even the least observant person the difference in physical appearance is extremely obvious. The non-psilocybin mushrooms that turn blue are: large, bulbous and usually very smooth. This fat cap cannot be confused with the psilocybin cap. The cap and stem will be yellow or yellow-brownish evenly over the entire surface. With age, the specimens of this genus may be noted to turn blue on parts of the stem. The underside of the cap has pores instead of gills. These pores, appearing as an organic sponge, will be of the same color-range. The stem is proportioned like the cap and is quite solid and fleshy. These species do not occur on dung but may be located in pastures and lawns after rains.

Psilocybe cubensis

The CAP is ½" to 4" wide. For the first few hours cone-shaped, the mushroom quickly becomes convex, then flat and finally the edges uplift, forming a bowl-shaped cap in the mature mushroom (age 24–48 hours after the rain). The bowl-shaped

cap will have an umbo or may become a depression. A sticky protective film will be observed over the entire cap in fresh specimans. The color varies widely, from an almost pure white with a gold center-spot to an overall light-brown still retaining the gold center-spot. This species becomes translucent when it has absorbed excess water. At this time the cap (except for the center spot) will appear a dark-olive which is actually the dark spore color showing through. Both the water-soaked and normal specimens will dry to a yellow-rust color still retaining the orange-to-gold center spot.

The GILLS are rather closely-spaced and are light-brown in the young stages, becoming a deep purple or black with maturity. In early stages the gills will be connected to the stem but may separate with age.

The STEM will be from 1½" to almost 6" tall and up to ½" thick. The stem base (volva) is many times, although not always, thickened. The stem will be hollow, fibrous and generally white or at least a lighter color than the cap. There will usually be a ring of tissue hanging on the upper portion of the stem (the veil) which usually turns blue with age. The inside flesh of the broken stem will usually yield the fastest bluing-reaction.

The FLESH of this species is white, has little odor and tastes like fresh grain. It is usually located on cow-manure (although it is located on the manure of other grain-fed animals as well) or on soil that has been enriched with manure.

Pannaeolus subbalteatus

The CAP in young specimens will appear bluntly cone-shaped with an incurved margin. As maturity is reached the cap will expand but the incurved margin will usually still be observed. The color of the cap is light-cinnamon and is uniform and will be covered by small white flecks in the younger stages. With age the center of the cap will become lighter or darker thus forming a distinctive ring that is the margin coloration. In younger specimens the veil will be off-white, never bluing, and will hang downward from the closed (cone-shaped) cap. The veil will disappear as the cap expands with age.

The GILLS will usually be very closely spaced and in young specimens will be a very light-brown. This color will become black as the specimen matures.

The STEM will be from 1½" to almost 4" high and never over ½" thick. The stem will be very uniform and evenly shaped.

The top of the stem will be vertically grooved and the lower portion of the stem will be covered with a mat of hairlike scales and a fine white powder. The stem color will usually be white but a tint of sepia or light-cinnamon may be noted. The stem is hollow. The bluing-reaction is noted best in the stem of this species.

This species has been collected by our team (on cow-dung) while harvesting the *Ps. cubensis.* These notes have been placed in this book so that you will not throw away this species when it occurs with the *Ps. cubensis.* It is not extremely common (for every 25 *Ps. cubensis* collected you may find as many as 3 of this species) and will be discovered occasionally. This species matures slowly so that it will rarely be seen in the older stages if it is discovered while harvesting the *Ps. cubensis.* The FLESH of this species will be white to yellowish. It has a taste and odor that is like that of fine table-mushrooms purchased at the store.

Young stage of Pn. subbalteatus. Choice and edible.

Note the Pannaeolus subbalteatus on the left. Also note how the Ps. cubensis varies in color.

Note the bluing-reaction on this stem a few hours after picking. Break the stem to notice the first bluing. (Ps. cubensis)

These are the four stages of the Ps. cubensis, placed side by side for the photograph.

A day's collections of over three pounds of Ps. Cubensis which were picked in the author's favorite field.

Psilocybe caerulescens

No color photographs of this species are available as it is not among the most common. A future photographic supplement will be available soon. Please write to request the addition of your name to our mailing-list.

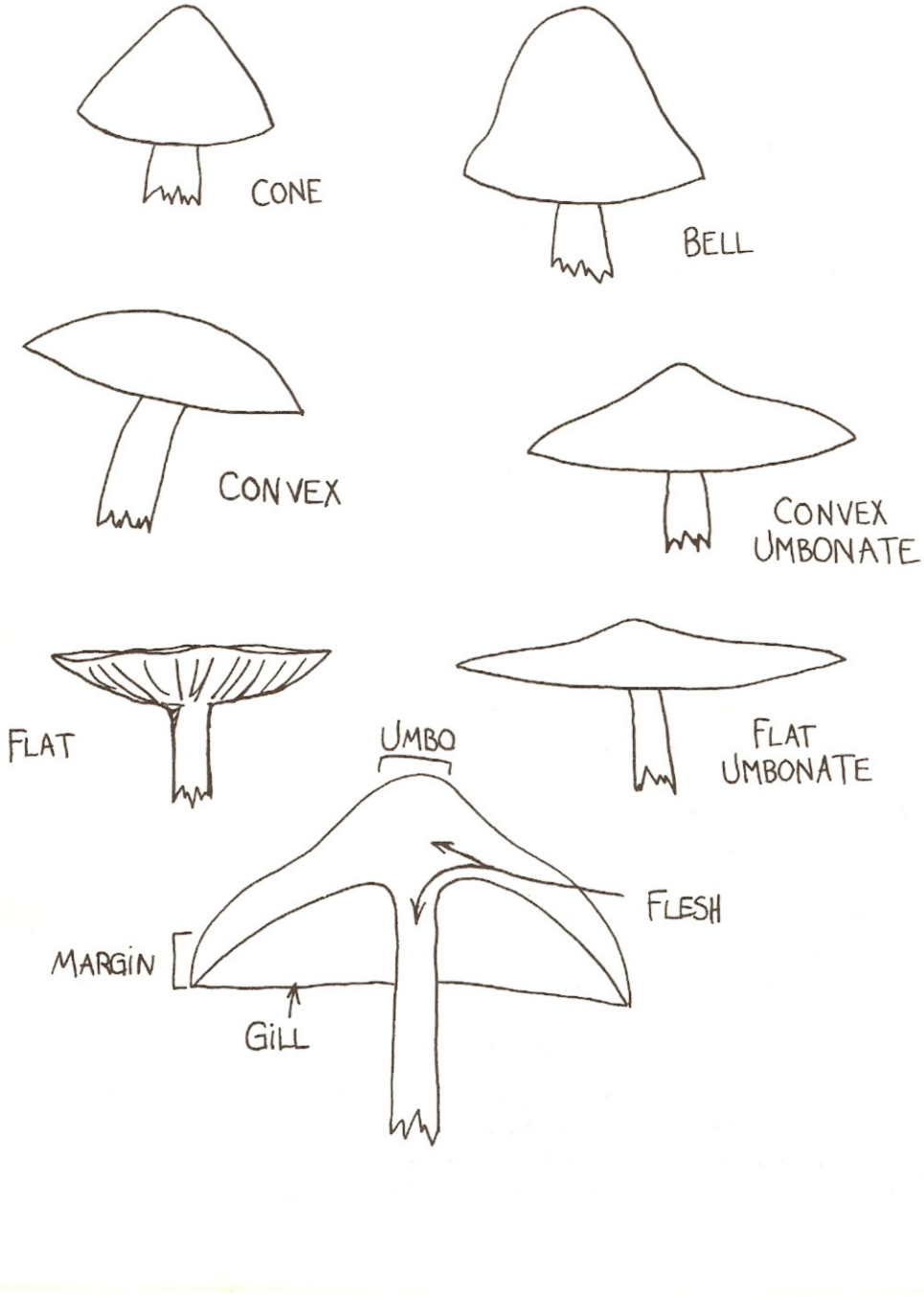
The CAP of this species measures from 1" to over 3" wide and cone-shaped when young, gradually expanding to the traditional convex-to-flat shape of the mature specimen. The margin will always exhibit a downward curve. The surface of the cap is smooth and sticky, particularly in the young specimen. This species is translucent when moist and the dark lines of the gills will be obvious at these times. In mature specimens the margin of the cap will be either lighter or darker than the center of the cap appearing as a ring. In young specimens the color will be a deep green to black that will fade with age. The separation of the center and the opposite colored margin of the cap is irregularly shaped. In mature specimens the faded color may be from a cinnamon to rust but often times it will retain the faded olive-green color.

The GILLS will be closely spaced, wide and light-cinnamon to light-brown color and will become dark brown to black with age. The edges of the gills will be a lighter color.

The STEM of this species will range from 1½" to 4" tall and will be up to ½" thick depending on the size of the specimen. It is usually very even, hollow and smooth at the top with thick fibrous hairs balling up the rest of the way to the even base of the stem. The veil usually falls away very early in the life of the mushroom and the stem is fibrous and tough.

The FLESH of this species is off-white to yellowish occasionally with tints of light brown in the cap. It has a strong grain-like odor and turns blue, particularly after being handled. This species occur on the banks of streams and rivers and has been located throughout the entire southern U.S.

COMMON CAP SHAPES



Taking the Mushroom

The psilocybin can be extracted by drying the specimens collected and grinding them into a powder. They are then soaked in methyl alcohol for several days. The alcohol is then strained off and evaporated in a shallow dish. The residue should be scraped up and stored at a cool temperature. It can be further refined by repeating the same process with the residue obtained from the first process. Pentane, a more specialized solvent, is used for the refining process. Before ingesting this extraction, be sure that all of the solvent has been evaporated off and pay close attention to the potency.

I prefer to consume the cap (without preparation) as an organic creation. The mushroom produces a very comfortable high with extreme dilation of the pupils. Strong light should be avoided. The dried caps are better than the so-called 'organic' pills. The experience ranges from a grass-like high with similar physical feelings to strange electric pulsations and strong to mild body rushes. At its best (with a large enough dosage) intense hallucinations will be experienced. The color photos were taken on a cloudy day near New Orleans. The species have been collected everywhere, from northern California to southern Florida. With the climatic conditions described above, you can be sure the *Ps. cubensis* will be located in quantity following a rainy day. The others will be there as well. They grow everywhere.

Dosage:

4 to 6 mushrooms. The active alkaloids are psilocybin and psilocin. Each dry gram of mushroom will contain about 2mg of the desired alkaloids. The stem will contain the same amount of the drug as the cap. The Indians of Mexico regularly eat 30 to 40 of the *Ps. cubensis* (or in Mexico, also the *Ps. Mexicana*), per ceremony. They extinguish all of the lights and have detailed and colorful visions until dawn. Increasing the dosage will act to intensify the experience rather than prolong it (see bibliography). No realistic figures on the concentration of the desired alkaloids can be stated as this factor varies considerably.

Cultivation

Mushrooms require a special compost. By far the most common is the manure compost manufactured from horse manure, wheat-straw and added chemicals to provide the best growing medium. It is manufactured by piling the materials together,

having soaked the wheat-straw well in water. The ingredients begin to decompose, generating their own heat up to 180° F. and killing any spores, insect or their larva and molds growing in the medium. As it heats up, the straw breaks into short pieces and the manure crumbles. The entire pile then loses its smell and takes on the odor characteristic of the woods in autumn. The compost should ball when squeezed in the hand but no excess water should be observed. It should not be compact-looking as the straw serves to aerate it besides adding valuable minerals and nutrients. Several good books are available on composting (see bibliography). And a book from our company on the culturing of the *Ps. cubensis* in your home for fun and profit is to be started shortly. The *Ps. cubensis* is extremely easy to raise and grows in large quantity. Our upcoming text will enable you to set up a perpetual compost-box that will produce many pounds a month of this species. If you wish to be notified shortly before publication, please write, stating this fact, and we will enter your name on our mailing-list.

The prepared compost must then be inoculated with some stage of the mushroom's life-cycle. This is usually done by composting horse-manure alone that has been enriched with malt-extract agar. When this mixture has been shredded, composted and packed loosely into wide-mouth jars, it is inoculated with parts of a fresh cap of the variety and strain preferred by the experimenter. The mycellium will then be observed to run, growing all through the manure. When it has completely permeated the compost the bulk is removed from the jar and dried. Small chunks of this spawn (as it is called) are inserted into the compost at regular intervals. They will begin to grow, and after a number of weeks will completely dominate the prepared mushroom-bed. The bed is then covered with a 1-inch layer of sterilized soil or acceptable substitute, and watered lightly now and again. The compost MUST NOT be flooded with water. This will kill the mycellium and ruin the compost. The casing will serve to hold all of the moisture that the compost will need and prevent the excess from sinking. The mushrooms will grow through the one-inch casing, gaining support from the top layer. The beds should be made about 12 inches deep in a container small enough to be handled easily. The traditional compost will last for 4 to 6 months with a yield of two or more pounds of mushrooms per-square-foot. Our text will outline a newly-discovered and yet (commercially) unproved method for constructing a perpetual bed that will be self-regenerating. Cultiva-

tion is an alternative to arrest for trespassing or a possession-of-psilocybin charge. The above is not sufficient for successful cultivation and the reader is referred to the bibliography.

Last Words

Because the species in this book are so common, there is little need for cultivation. Collected specimens can be dried at room temperature in a few days. They can be stored for decades with no loss of potency in the least. My favorite method for storage is to construct a drying-rack by stringing thread across the face of a box and taping it taut. The lower section of the stem is then sawed lightly back and forth until the thread has cut half-way through the stem. It is then pulled slightly downward and left to dry for several days.

We welcome correspondence on new ideas, discoveries and new identification. If you feel inclined to share photos of your finds with us and have a friend who is a photographer, please do not hesitate to send them. Have your friend use color slide film and arrange the mushrooms in a manner similar to the upper left photograph on the centerfold of this book. While we are able we will, by return post card, identify specimens in question for you. For the person without a mycological background, all specimens which turn blue should be considered. Please bear in mind that there are over 16 species of psilocybe mushrooms identified. Only a few are common and therefore one will occasionally happen upon a specimen not listed in this text.

Happy Hunting
F. C.

Ps. cubensis in the field.

When the novice has collected a specimen he should always consider the major identification points. This open-format identification sheet may prove helpful. Try reproducing it in your notebook to outline each species' characteristics.

Age and condition of specimen.

Does it turn blue?

CAP:

- Coloration –
- Shape & size –
- Margin (incurved or regular) –

GILLS:

- Coloration –
- Shape & size –
- Spacing –
- Attachment to stem –

STEM:

- Coloration –
- Shape & size –
- Base (volva) present? –
- Hollow or solid? –

FLESH:

- Coloration –
- Texture –
- Thickness –
- Special color traits –

Climate and environment:

Last rain: 24 hrs.? for week?

High and low: by 24 hrs.? for week?

What is the fungi growing on?

Name of species?

Bibliography

Although all of the following references have not received direct usage in this text, they have each contributed to my overall understanding of the subject.

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MUSHROOM SMOOTHIE

Blend the following ingredients together in a Waring blender. Add 3 - 6 mushrooms per person. This recipe will make about 4 cups.

1 cup blueberries
2 bananas
2 oranges
2 cups of ice
Mushrooms
Honey to taste