

NOTES ON RECREATIONAL USE OF
HALLUCINOGENIC MUSHROOMS

Por Jonathan Ott*

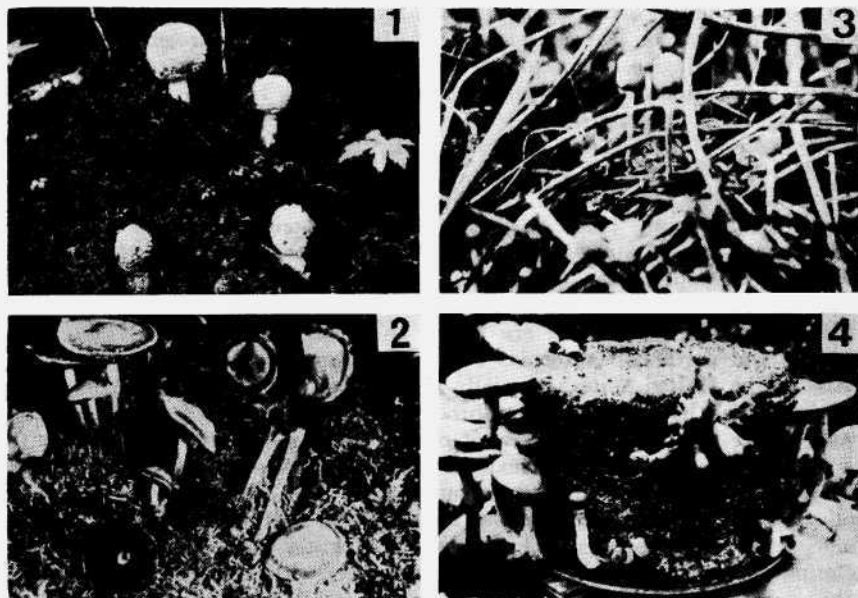
In recent years, the recreational use of hallucinogenic mushrooms has become very popular in the United States. To a lesser extent, this practice has been observed in Mexico. The existence of hallucinogenic mushrooms, and their ritual use in Mexico, came to popular attention in both Mexico and the United States following the publication of books by Heim and the Wassons regarding their research in Huautla de Jiménez (Heim and Wasson, 1958; Wasson and Wasson, 1957; Wasson *et al.* 1974). Several books, with more popular appeal and more widespread distribution, regarding the ritual use of hallucinogenic mushrooms, have appeared in recent years (Castañeda, 1969; Leary, 1968; Wasson, 1968; Allegro, 1970). Some books have even been published in the United States which describe techniques to assist amateurs in the collection and cultivation of hallucinogenic mushrooms, presumably for use as recreational drugs (Enos, 1970; Ghouled, 1972).

Hallucinogenic mushrooms are widely used for recreation in Washington, Oregon, and northern California. This use is also widespread along the Gulf Coast of the United States, especially in Florida, Texas, and Louisiana. It is apparent that hallucinogenic mushrooms are used for recreation in other parts of the United States. Because of the publicity which the research in Huautla has received, many Mexican and foreign youths now travel to this village to purchase hallucinogenic mushrooms from the local residents. Of course, there are many enterprising mestizos who will willingly cater to this trade. It has been observed that mestizos in Huautla will even solicit tourists, offering to arrange a mushroom curing ceremony with María Sabina, or some other curer (Díaz, 1975). The author has observed that some Mexican students will purchase mushrooms in Huautla, and subsequently sell them in the schools in Mexico City for about 50 pesos per dose. Hallucinogenic mushrooms have become a part of the tourist trade in Huautla. Stores sell shirts and huipils embroidered with mushrooms, and postcards with color photographs of the more common hallucinogenic species. Another area in Mexico where recreational use of hallucinogenic mushrooms seems to be common is Pa-

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lenque, near the Maya ruins. The author has observed many foreigners collecting mushrooms in the fields near the ruins, presumably for use as recreational drugs. Guzmán (1975) has information about the sale of *Psilocybe cubensis* in Mexico City, the mushrooms having been purchased in Jalapa, state of Veracruz.

While there are perhaps a dozen species of hallucinogenic mushrooms used recreationally in the United States, the most commonly used species are: *Amanita muscaria* (L. ex Fr.) Hooker, *Amanita pantherina* (DC. ex Fr.) Krombh., *Panaeolus subbalteatus* Berkeley and Broome, *Psilocybe cubensis* (Earle) Singer, and *Psilocybe semilanceata* (Fr.) Kumm. (Enos, 1970; Weil, 1974; Ott, 1976). There is some controversy regarding the existence of *P. semilanceata* in the United States, some mycologists maintaining that this species occurs only in Europe. The author has obtained specimens of a mushroom used



FIGS. 1-4. 1: *Amanita muscaria* (yellow form) from Washington (Photo. W. S. Chilton). 2: *Panaeolus subbalteatus* from Washington (Photo. J. Spurr). 3: *Psilocybe semilanceata* from Oregon (Photo. R. Harris). 4: *Psilocybe cubensis* in artificial culture in San Francisco, California (Photo. J. Bigwood & C. Weaver).

widely for recreation in the Pacific Northwest, which have been deposited in the herbarium of ENCB, and identified as *P. semilanceata* by Dr. Gastón Guzmán.

The hallucinogenic *Amanita* species, which contain ibotenic acid and mus-

cimol (Chilton and Ott, *Lloydia*, in publication), are probably less widely used than the species of *Psilocybe* and *Panaeolus*, which contain psilocybin and psilocin (Heim and Wasson, 1958; Ola'h, 1969; Hofmann and Heim, 1963). The hallucinogenic *Amanita* species are larger and more easily identified, more common, and have received more attention in mushroom manuals than the various psilocybin-containing species. The use of *Amanita* species as recreational drugs has been observed in Washington, Oregon, and California (Weil, 1974; Ott, 1976), and no doubt exists in other parts of the United States as well. Thus far, no recreational use of these mushrooms has been reported from Mexico.

The most widely used psilocybin-containing mushroom in the United States is *Psilocybe cubensis*. Under the name "Golden Tops", this species is used for recreation in Texas, Louisiana, and Florida, where it naturally grows (Weil, 1974; Ott, 1976). Called "San Isidro", *P. cubensis* is one of the species commonly sold by mestizos in Huautla. The author has observed that some students will sell *P. cubensis*, purchased in Huautla, in the schools in Mexico City. This is the species which foreigners commonly seek in Palenque, and it is probably used in other tropical parts of Mexico as well. Another species commonly sold by the mestizos in Huautla, which is occasionally sold in the schools in Mexico City, is *Psilocybe caerulescens* Murrill var. *mazatecorum* Heim (Ott, 1976). Mushrooms of this species are commonly called "derumbes" in Huautla. The author has observed that *Panaeolus subbalteatus* and *Psilocybe semilanceata* are fairly widely used in Washington and Oregon, and it is likely that these species are used as recreational drugs in other parts of the United States as well. The latter species is often called "Liberty Caps", and also appears to be used for recreation in Great Britain and Canada (Enos, 1970; Weil, 1974; Ott, 1976).

The mushroom vendors in Huautla apparently believe that the mushrooms must be eaten in the fresh state to produce hallucinogenic effects. The author has been advised by these vendors and by Mexican students that hallucinogenic mushrooms lose their potency if not eaten within a few days after picking. Accordingly, it appears that these mushrooms are usually eaten in the fresh state by recreational users in Mexico. North American users also eat hallucinogenic mushrooms in the fresh state, but also commonly dry them for future use. They may be stored indefinitely in the dry state, with minimal diminution in potency. When dried mushrooms are eaten, they are usually brewed into a tea, which is drunk, and the rehydrated mushrooms are then eaten. Fresh hallucinogenic mushrooms are sometimes added to soups or other foods in the United States. Some persons in the United States also smoke dried hallucinogenic mushrooms, having apparently derived this practice from information in the Castañeda book (Castañeda, 1969). This practice, however, seems to be less popular than oral ingestion.

Recently home cultivation of hallucinogenic mushrooms has become very popular in the United States. *Psilocybe cubensis* is the species most widely grown, as it is easily cultivated *in vitro*. The *Amanita* species, being mycor-

rhizal, cannot be grown *in vitro*, and it appears that the other species of *Psilocybe* are more difficult to culture than *P. cubensis*. The author has observed successful home cultivation operations in Washington and California, and in every case, *P. cubensis* was the species being grown. This species, therefore, is used recreationally in parts of the United States where it does not naturally grow.

Alleged *Psilocybe* or psilocybin-containing mushrooms are often sold on the illicit drug market in the United States, and are very popular. These are typically sold in a frozen state, in plastic bags, for about 10 dollars per ounce. Usually, these mushrooms are fakes, being *Agaricus bisporus* adulterated with LSD, PCP, or nothing at all (Ratcliffe, 1974; Ratcliffe, 1973). They are probably sold in a frozen state so that, upon thawing, they will not be recognizable. Spores have been isolated from such preparations, substantiating the identification as *A. bisporus* (Stuntz, 1975). During the fall of 1975, the author observed that wild *Psilocybe semilanceata* and cultivated *Psilocybe cubensis* were being sold on the illicit market in California and Oregon.

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SUMMARY

The use of hallucinogenic mushrooms as recreational drugs has become very popular in the United States and Mexico. *Amanita muscaria* and *Psilocybe cubensis* are probably the species most widely used for this purpose in the United States. *In vitro* culture of *P. cubensis* has become very popular in the United States. Edible commercial mushrooms adulterated with LSD are commonly sold as hallucinogenic psilocybin-containing mushrooms on the illicit drug market in the United States.

RESUMEN

El uso de hongos alucinógenos con fines de recreación es muy popular en los Estados Unidos y en México. *Amanita muscaria* y *Psilocybe cubensis* son probablemente las especies más usadas para este fin en los Estados Unidos. El cultivo *in vitro* de *P. cubensis* se ha difundido en los Estados Unidos. Los hongos comestibles en venta se adulteran con LSD y se venden, como alucinógenos que contienen psilocibina, en el mercado ilícito de drogas de los Estados Unidos.