

Traditional Uses and Abuses of Hallucinogenic Fungi: Problems and Solutions*

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ABSTRACT: A review of the diversity and the traditional use of the hallucinogenic or neurotropic fungi is given, as well as discussion of the abuse of these fungi through recreational use by young people around the world. These fungi, especially those belonging to genus *Psilocybe*, have wide distribution in the world, and they are very easy to obtain by culture. As a solution, it is proposed to reduce the recreational use of these fungi through official public programs launched by governments to show how dangerous the continued use of mushrooms is.

KEY WORDS: neurotropic fungi, *Psilocybe*, recreational uses

INTRODUCTION

Fungi have been used by people since long ago as curative agents or for religious purposes. These mushrooms are known by several names: diviner, entheogens, hallucinogenic, healing, magic, medicinal, neurotropic, psychedelic, psychoactive, psychotropic, sacred, and visionary. Among Mexican Indians they received many local names, such as *teotlaquilnanácatl* (Guzmán, 1997), an Aztec word that means the sacred mushroom that describes things. This name is closely related to the word *teonanácatl* (Schultes, 1976; Stamets, 1999), not in use any more, which means the sacred mushroom. *Teonanácatl* was reported by writers of the sixteenth century in relation to the use of hallucinogenic mushrooms by Mexican Indians (Wasson and Wasson, 1957; Heim and Wasson, 1958). Guzmán (2001) recently showed the importance of traditions, myths, and knowledge of these mushrooms in Mexico and Guatemala. In the

present article, problems in the diminution of these traditions and the high recreational use of hallucinogenic mushrooms among youth in several countries are discussed.

TRADITIONS IN THE USE OF HALLUCINOGENIC MUSHROOMS IN MEXICO

Mexican Indians (e.g., Mazatecs and Zapotecs, both in the State of Oaxaca), use hallucinogenic mushrooms in religious ceremonies, looking to health or to talk with God to ask him many things. They follow strict rules to prevent health or mental problems. They only take the mushrooms in a controlled dose of no more than 12 fruit bodies, fresh or dried, exclusively during the night, to avoid noises and distractions. They do not mix the sacred mushrooms with food at any time, nor with alcoholic beverages or medicines, and every

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time they eat mushrooms under the direction of an old or wise person. Following these simple rules, they are in good condition by the next day. However, they do not travel for a week, because they need to rest at home under proper care. It is admirable to talk with old Indians who frequently use hallucinogenic mushrooms, because they do not have any mental or physical problems. The conclusion is that the hallucinogenic mushrooms are not dangerous, if we use them following the rules above, and avoid their use in excess.

Unfortunately, these traditions are disappearing or decreasing with modern civilization. Today it is difficult to find an Indian or teacher who knows the correct use of sacred mushrooms. This fact is promoted mainly by the loss of traditions and the wide dissemination of popular beliefs about these fungi that are erroneous. Since the discovery of the hallucinogenic mushrooms by science (Heim, 1956; Wasson and Wasson, 1957; Heim and Wasson, 1958; Singer and Smith, 1958; Guzmán, 1983), knowledge of these fungi, mainly their hallucinogenic properties, has spread throughout the world, helped by the publication of several articles and popular books (e.g., Allen, 1976; Oss and Oeric, 1976; Ott, 1975, 1976; Schultes, 1976).

PROBLEMS

Psilocybe is the most important genus among hallucinogenic fungi used in the world, and it is found throughout the continents. *Psilocybe semilanceata* (Fr.) P. Kumm. is the most widespread in Europe and North America, while *P. mexicana* R. Heim, *P. caerulescens* Murrill, and *P. cubensis* (Earle) Singer are the most common in Mexico and Guatemala; *P. cubensis* is common in all the tropic regions of the world. Because these fungi are so widespread, anyone can find and use them. Also, not only are they easily found in the wild, all the species are very easy to grow. As a result, in many countries there is now a flourishing though illegal trade in these mushrooms. Cultured fruit bodies and spore prints of *P. cubensis* and *P. tampanensis* Guzmán et Pollock (a species known only from Florida, USA) are the most important in stores of Amsterdam, Tokyo, and other cities, even together with fruit bodies

of *Panaeolus sphinctrinus* (Fr.) Qué. and *Copelandia cyanescens* (Berk. et Br.) Singer.

The recreational use of hallucinogenic mushrooms reached its peak in the 1970s and 1980s, and many governments introduced legislation aimed at preventing their sale and distribution (e.g., Hall, 1973). At the present time, in fact, all countries except the Netherlands consider these mushrooms as drugs. Nevertheless, the recreational use of hallucinogenic mushrooms continues, as does their illicit trade, even with psilocybin. This illegal trade began in Mexico in the 1960s, and it is now common to observe Mexican and foreign youth purchasing hallucinogenic mushrooms from Indians (mainly mestizos, a Spanish-Indian mix), mainly in towns of the State of Oaxaca, and in Palenque, Chiapas. Also, it is not rare to see young people, mainly university students, looking for mushrooms in the field.

SOLUTIONS

To reduce the recreational use of hallucinogenic mushrooms, it is necessary that countries launch official public programs related to the dangerous use of hallucinogenic mushrooms. These programs would use various media, e.g., TV, the Internet, and published bulletins and/or articles, to show how dangerous the continued use of mushrooms is. The author considers, however, that if we follow strictly the traditions of Mexican Indians, it would not be dangerous to the health to eat these mushrooms. Following traditions, it is very important to eat these mushrooms during the night and under direction and absolutely without ingesting meals, alcoholic drinks, or other drugs. Although these mushrooms are really not drugs, combined overdoses can certainly be quite dangerous.

To put the problem of the use and abuse of hallucinogenic mushrooms into perspective, it is necessary to remember Paracelso's principle: "Nothing is poison, only the dose renders a substance to be it" (Molitoris, 1994). Applying this principle to the hallucinogenic fungi, the author changes it to: "Nothing is dangerous, except abuse renders a matter dangerous." This is certainly true of hallucinogenic mushrooms. The abuse is the problem in hallucinogenic mushrooms. If we

try to stop their social or recreational use, we will first have to demonstrate that mental problems are inevitable when these mushrooms are used carelessly and without proper guidance or help.

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