Medicinal Fungi in Mexico: Traditions, Myths, and Knowledge

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In spite of the high diversity and the traditions of mushroom use in Mexico, they have not been well studied, especially in regard to their medicinal properties. Several Indian codices from the 13th and 14th centuries described the use of mushrooms in ceremonies, such as “Teonanácatl,” the sacred mushroom of the Aztecs, and some Mayan codices describe the ritual use of Amanita muscaria (L.) Hook. Mayan mushroom stones are silent evidence of the sacred fungi, as is a small Purepecha stone piece that represents a button of A. muscaria. It is probable that Indians used this mushroom before they used the species of Psilocybe. They began to use A. muscaria as an inheritance from the Asiatic tribes from which they came, because those tribes used A. muscaria as a sacred mushroom. The stones from the Maya culture show a standing animal or a human with a mushroom cap on the head. However, others represent a man falling into a dreamlike state, reflecting the strong relationship with the hallucinogenic effects of the sacred mushrooms. The traditions of the use of mushrooms in Mexico in cooking, medicine, and religion are discussed. A short review of the edible species is presented that includes more than 200 species, known by more than 3000 common names, both in Indian languages and Spanish. Some of these species such as Pleurotus, Boletus, Clitocybe, and Lactarius, are consumed not only for functional dietary needs, but also for additional health effects. The Indians’ knowledge of the mushrooms is discussed; they distinguish very well the edible species from the poisonous. One of the most common edible species is the Amanita caesarea (Scop.) Pers. complex, which is a mixture of at least nine species, four of them recently described as new species by the author. The traditional medicinal mushrooms comprise approximately 40 species, including polyopes, agarics, puffballs, and lichens, besides some yeasts and molds that are used to prepare traditional beverages made by fermentation of corn or several fruits. The medicinal mushrooms have more than 30 traditional medicinal uses. They are used to treat asthma, constipation, and diabetes; to reduce cholesterol; for sexual dysfunction; as rejuvenators or purgatives; and for some skin conditions. Calvatia cyathiformis (Bosc) Morgan, for example, is used to stop bleeding and to heal wounds. Pycnoporus sanguineus (L.) Murr. is used to cure dysentery and even as a coloring. Clathrus crispus Turpin is used to control some eye infections through the liquid obtained when the mushroom is squeezed. Moreover, Dictyophora indusiata (Vent.) Desv. is used for magic proposes. A review of the sacred mushrooms belonging to Psilocybe, Elaphomyces, and Cordyceps capitata (Holm.) Link group is presented. The most important are those of Psilocybe, with more than 50 species represented in more than 30% of the world. The interesting and mysterious Indian ceremonies on these mushrooms, which are a mixture of both Indian and Christian rites, are related briefly. This presentation is conducted through the projection of several slides, with a discussion about the available information on the properties and traditional uses of mushrooms in Mexico.