

Short Communication

Liberty Caps: recreational hallucinogenic mushrooms

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Classic ethnomycological field studies in Mexico by the Wassons and collaborators from 1953 to 1958 uncovered the magico-religious use of no less than a dozen hallucinogenic mushroom species [1]. The majority of Mexican sacred mushrooms belong to the genus *Psilocybe* [1, 2] and many *Psilocybe* species have been demonstrated to contain the hallucinogenic indole principles psilocybin (4-phosphoryloxy-N,N-dimethyltryptamine) and/or psilocin (4-hydroxy-N,N-dimethyltryptamine) [1, 3 - 7].

Psilocybe semilanceata (Fries) Kummer, the type species of the genus, is a small, delicate light-brown mushroom found in pastures, meadows and occasionally lawns in certain temperate parts of the world. In 1963 psilocybin was reported from specimens of *P. semilanceata* collected in France [8] and afterwards from Scotland [9] and Czechoslovakia [10]. The existence of *P. semilanceata* in North America was doubted [11, 12], but in 1965 forensic characterization of psilocybin containing mushrooms seized from college students in British Columbia by police strongly implicated this species [13]. In Canada hallucinogenic mushroom ingestion has been presumed to be limited to "only a few exceptional experimenters" [14]. Use of Liberty Caps, a vernacular name employed for *P. semilanceata* in both Europe and North America, however, became well integrated into the fabric of British Columbian culture. The season is said to be from the autumn equinox to the winter solstice [15], but heavy rains occasionally produce abundant fruitings out of season and persons from diverse echelons of society employ the mushrooms recreationally or in some cases for spiritual purposes.

Psychomycological field studies in the fall of 1975 indicate that Liberty Caps are the most frequently encountered psilocybian species in use in British Columbia [16] and they are widely utilized in Oregon and Washington in the United States. Furthermore, the designation Liberty Cap is also applied to *Psilocybe pelliculosa* (Smith) Singer and Smith, another psilocybin containing species [17], by recreational users in North America [18]. Liberty Cap use undoubtedly occurs in Europe since *P. semilanceata* is known from the British Isles, France, Germany, Denmark, Sweden, the

U.S.S.R. and Czechoslovakia. In the southern hemisphere this species is reported from Chile.

Since recreational use of psychoactive mushrooms has become a worldwide transcultural phenomenon [19], it is of great interest to learn more about fungal pharmacology. Clinical studies with psilocybin in both Europe [20] and the United States [21] strongly suggest that it is more efficacious than LSD or mescaline for psychotherapeutic purposes. The potential usefulness of psilocybin or a short acting congener in the psychiatric management of patients with alcohol and other drug dependencies certainly warrants investigation.

References

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