

## Short Communication

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### Use of a hallucinogenic mushroom, *Copelandia cyanescens*, in Samoa

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*Copelandia cyanescens* Berk. & Br. is a small mushroom in the Coprinaceae found in the tropics and neotropics of both hemispheres (Singer, 1960, 1975). Both psilocybin and psilocin are found in extremely high quantities in the mushroom (Heim, 1967). Recent studies suggest that *C. cyanescens* has a higher concentration of these psychoactive compounds than any other hallucinogenic mushroom (Schultes and Hofmann, 1980). It is reported to be cultivated on the island of Bali in Indonesia, where it is used in some festivals and sold to foreigners.

*C. cyanescens* is widespread in the Samoan islands, but it is difficult to determine if it is indigenous, as it may have been introduced in the last century with cattle. It is called by the Samoans *faleaitu*, meaning "ghost house" or "comedy" and *pulouaitu* meaning "ghost hat". It is well known to many of the older Samoans suggesting that it is not, at any rate, a recent introduction. Although most of the older Samoans are capable of identifying it by name, they appear to be unaware of the psychoactive properties of the mushroom. Since native pharmacognosy and general utilization of plants is so highly developed in Samoa (Cox, 1979, 1980; Uhe, 1974), the unawareness of the hallucinogenic properties of the mushroom by older Samoans is a strong indication that it indeed is an introduction; however, the native names suggest the possibility that its properties were known at one time.

The modern use of *C. cyanescens* in Samoa appears to have commenced in the last five years, and is rapidly growing among younger Samoans, particularly those living near Apia, the capital city of Western Samoa. My informants claim that the psychoactive properties of the mushroom were unknown to the younger generation until 1975 when an unidentified foreigner taught some of the teenagers in Apia about its use. Today, *C. cyanescens* is collected frequently from nearby agricultural pastures where it grows on cow manure, giving it the name among younger Samoans of *taepovi* meaning "cow dung". The caps of the mushrooms are removed and then steeped in boiling water to produce a black juice which is mixed with coffee and then drunk. Alternatively, the caps are chewed raw or mixed together with Coca-cola. Occasionally the caps are dried and smoked. After ingestion of the mushroom, the user feels an onset of euphoria, usually culminating in visual and auditory

hallucinations which can last as long as seven hours. Large doses reportedly result in a loss of voluntary muscle function. I have, however, been unable to find any cases of poisoning due to the mushroom, although I did interview a young woman who experienced extreme and dangerous paranoia while under the influence of the mushroom. Frequent use of the mushroom is said to cause a painful red rash around the neck.

Use of the mushroom is rapidly spreading among people in the Apia area, many ingesting the mushroom four or five times a week. When use of the mushroom began in the mid-1970's, police prosecution of the users was severe, but has now tapered off. Parents of children using the mushroom seem to regard its use as a foolish, but ultimately harmless, pastime of the young.

Voucher specimens of the mushrooms (Cox 397) were collected in March, 1980, at Avele farm above Apia and are on deposit with the Farlow Herbarium of Harvard University.

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