

Ethnomycology and Indigenous Uses of Mushrooms Among the Bini-Speaking People of Nigeria: A Case Study of Aihuobabekun Community Near Benin City, Nigeria

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In order to document the indigenous uses of mushrooms among the Bini-speaking people residing in southern Nigeria, a rural community was used as a case study. Out of the 105 households in the community, background information as well as indigenous uses of mushrooms from 74 households (or 70% of the total) was documented. The study revealed that over ninety percent (90%) of the respondents consume mushrooms as food, while 21.6% use some mushrooms for medicinal purposes.

On the average, each respondent consumes 5.8 ± 0.41 species of mushrooms. Among those that consume mushrooms, 93% do so because of taste, 90.5% use mushrooms as substitute for meat, 79% use them as soup thickener, 21.6% use mushrooms for medicinal purposes, while 20% do so because of their nutritional qualities. Two mushrooms are used in ethnomedicine in the study area: *Daldinia concentrica* (Bolton) Ces et De Not is used for curing stomach upset, skin diseases, stomach ulcer, whooping cough, and prevention of excessive growth of the foetus for easy delivery. *Calvatia* sp. is used for curing barrenness in women. It is also used for stopping chronic hiccups. Also, the sclerotium of *Pleurotus tuberregium* (Rumph.:Fr.) Singer is one of the major ingredients used for making gunpowder, apart from being used as food and medicine.

Out of the nine mushrooms mentioned by the

respondents, three were neither seen nor collected. According to the respondents, they are feared to have gone into extinction due to environmental degradation. The other mushrooms mentioned are *Schizophyllum commune* Fr.:Fr., *Volvariella volvacea* (Bull.) Singer, *Auricularia auricula-judae* (Fr.) Quél., and *Lentinus squarrosulus* Mont.

Although not all the respondents were Bini-speaking, as they constituted 78.38% of the total number of households visited, Bini-speaking respondents were, however, mainly responsible for supplying all the information on the ethnomedicinal uses of mushrooms. While 85.14% of the respondents were interested in learning how to cultivate mushrooms, only 12.16% of them had knowledge of the possibility of cultivating mushrooms prior to our interaction with them. All the age categories interviewed indicated interest in learning how to cultivate mushrooms. In each age group, the number of interested persons was consistently higher than the number of uninterested respondents. The highest number of interested persons was in the age category of ≥ 71 years. Respondents in the age bracket of 36–40 years consume the highest number of mushroom species, with a mean value of 7.01 ± 2.5 . However, there was no significant ($p=0.05$) difference in the mean number of mushrooms consumed among the different age groups in the study area.

This study emphasizes the need to quickly document indigenous knowledge about medicinal mushrooms. This is because it was found that respondents below the age of 46 years had no knowledge of the ethnomedicinal uses of mushrooms. On the other hand, some respondents above 71 years had lost full ethnomedicinal information on the uses of mushrooms for curing some ailments. However, the latter group had the highest number of respondents that gave full information on the ethnomedicinal uses of some mushrooms. Three respondents totally refused to supply information on the medicinal uses of *Daldinia concentrica*, in particular, even though they claimed to use it in curing strokes and coughs.

No other form of mushroom preservation is practiced in the study area apart from the sun-drying of edible and medicinal mushrooms such as *Schizophyllum commune*, *Lentinus squarrosulus*, *Calvatia* sp.,

Daldinia concentrica, and the sclerotium of *Pleurotus tuberregium*. Mushroom hunting and sales appear to be gender and age related in the study area. This is because, despite the respondents' interest (85.14%) in learning mushroom production technology, 90.5% of them regard it as a job for women and children.

The results of this study underscore the need to conduct a nationwide survey on the indigenous uses of mushrooms because it can serve as a basis for intensive studies into the therapeutic effects of many mushrooms of ethnomedicinal importance. Upon further studies and trials, products from such medicinal mushrooms can then be incorporated into orthodox health management programs. Also, it is the opinion of the authors that this kind of study should, of necessity, be a prelude to the use of mushroom production technology as a tool for rural community development projects.