

BOOK REVIEW

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A Review of "The Botany and Chemistry of Hallucinogens"

REFERENCE: Schultes, R. E. and Hofmann, A., *The Botany and Chemistry of Hallucinogens*, Charles C Thomas, Springfield, Ill., 1973, 267 pages, \$14.75.

A book about hallucinogenic plants written by two such authors as these can be expected to be a truly authoritative work and this is. Dr. Schultes, who is a professor of biology at Harvard University, has spent most of his career in ethnobotanical studies and has acquired a uniquely outstanding knowledge of the use of various botanical species for "magic," witchcraft, and religious ritual by primitive tribes in South America. This experience has been acquired through a more than twelve-year residence among these tribes.

The coauthor, Dr. Hofmann, began his chemical investigations of hallucinogens with his now world renowned work on LSD in 1943. In his capacity as head of the Pharmaceutical-Chemical Research Laboratories, Division of Natural Products of Sandoz, Ltd., he has continued his activity in the elucidation of the chemical structures of psychoactive drugs occurring in plant material.

Although the subject matter is not treated exhaustively, the authors state that it is their purpose to present basic information "simply set forth, free from the encumbrances of extraneous discussion and all embracing discourse." In this they succeed.

In the first chapter, they define hallucinogens as agents which are capable of producing, in nontoxic doses, changes in perception, thought, and mood without causing major effects upon the autonomic system, thus setting their own limits for discussion. Chapter 2 presents a brief description of the general botanical distribution of hallucinogens, while Chapter 3 gives a general chemical classification of such agents. These are defined as derivatives of phenylethylamine, indole, tropane, isoxazole, or dibenzpyran.

The fourth chapter gives detailed information about the botanical characteristics of the various sources of hallucinogens. These range from the fungi or mushrooms through various dicotyledonous plants. Included with each discussion is an account of the plant's use and the chemical characterization of the active principle, where known. The fifth, and last, chapter presents, in the same way, information about plants of doubtful hallucino-

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genic properties except that here chemical structures of the plant constituents are not given. In the last two chapters the discussions are accompanied by excellent line drawings of the botanical specimens, as well as many black and white photographs.

One of the most useful sections of the book is the comprehensive bibliography containing some 450 references. This should prove valuable to chemists and botanists interested in pursuing further work in this field.