Narrenschwämme: Psychotrope Pilze in Europa. Herausforderung an Forschung und Wertsystem. Jochen Gartz. Editions Heuwinkel, 22 rue de la Filature, CH-1227 Carouge/Geneva, Switzerland. 1993 Pp. 136 [3 Maps, 22 color plates (20 tipped-in), 39 black-and-white illustrations, 17 facsimile illustrations of extracts from mycological literature, 10 tables.] SFr.87.-/DM96.-(clothbound). ISBN 3–9063–24–7.

One of the most prolific phytochemical researchers on psilocybine-containing mushrooms, Jochen Gartz of Leipzig in the former Deutsche Demokratische Republik, has now published a valuable multi-disciplinary book on these fascinating organisms. The book is well bound and beautifully illustrated, except for the cover, which I find quite ugly, and not in keeping with the otherwise high graphic quality (although the paper chosen does not allow optimum reproduction of the black-and-white photographs). Nevertheless, this is a book every ethnobiologist interested in shamanic inebriants will wish to have. The title, Narrenschwämme (literally "fools' mushrooms"), is an old German name for psychoactive mushrooms, testifying to a traditional familiarity with these entheogenic mushrooms in the German-speaking world, and even today in Austria one might comment of the erratic and bizarre behavior of another: "Er hat verrückte Schwammerln gegessen"-"he has eaten crazy mushrooms." In a foreword, Christain Rätsch asks rhetorically: "who was the first fool?", in reference to the established antiquity of the human relationship with entheogenic mushrooms, which we now know to have been universal, its antiquity extremely remote.

After surveying his territory briefly, Gartz commences with a chapter on the "Liberty Cap" or *Psilocybe semilanceata* (Fr.) Kumm., which he rightly characterizes as the "classic" psychotropic European species, since it has been found in Austria, Belgium, Czechoslovakia, Denmark, England, Finland, France, Germany, Hungary, Italy, the Netherlands, Norway, Poland, Romania, Russia, Scotland, Spain, Sweden, Switzerland and Wales, apart from numerous countries in North Africa and Asia, and besides being common in the United States and Canada. Together with a map of its European distribution and color and black-and-white photographs, Gartz presents the mycological history of this species (illuminated by facsimiles of early and modern citations of the mushroom in the scientific literature), and its history of accidental and intentional use. There follow extensive quotations from reports of human experiments with the mushroom, the results of Gartz's chemical analyses of various collections (summarized in useful tables), and observations regarding cultivation, also illustrated with photographs.

There are six chapters with similar detailed treatments of the following species: Psilocybe cyanescens Wakefield; Panaeolus subbalteatus (Berk. et Br.) Sacc. (here curiously spelled subalteatus, in contrast to the spelling common in the mycological and chemical literature, including in two of Gartz's facsimiles); Inocybe aeruginascens Babos; Gymnopilus purpuratus (Cke. et Mass.) Sing.; Conocybe cyanopus (Atk.) Kühn.; and Pluteus salicinus (Pers. ex Fr.) Kumm. These species are presented more or less in the order of their importance, both ecological and ethnomycological, and there are good color plates of all except C. cyanopus which is rare (although there is a color plate of the cultivated sclerotium of this species). In every case, related species are also discussed and there are additional color plates of Panaeolus cyanescens (Berk. et Br.) Sacc., Psilocybe baeocystis Sing. et Sm, Psilocybe bohemica Sebek (which some European mycologists consider conspecific with P. cyanescens, as Gartz notes), Psilocybe cubenis (Earle) Sing. and Psilocybe stuntzii Guzmán et Ott. There is, however, no intent on the author's part to present a comprehensive listing of all known psilocybian species, a job which was adequately covered in a recent paper by Gartz, in collaboration with Mexican mycologist Gastón Guzmán and American ethonomycologist John Allen (Allen et al. 1992). Nonetheless, the species Gartz has chosen to profile in detail cover the most important genera of psilocybian mushrooms.

After a brief chapter warning of the dangers of confusing psilocybian mushrooms with amatoxin-containing *Galerina* species, and a note on the value and limitations of the bluing reaction some psilocybian mushrooms display as a key to their identification, there follows a chapter on cultivation of psilocybian mushrooms. This covers general principles of their cultivation but not step-by-step details (already treated in various publications), although there are 20 color and black-and-white photographs of mushroom cultures, showing seven different species. There are 11 photographs of cultures of the most widely-grown species, *Psilocybe cubensis*, whose cultivation became a cottage industry in the U.S. in the 1970s. Unfortunately, color plates 57 and 66 are switched; each tipped-in above the caption for the other. This is obvious to anyone who knows the mushrooms (*P. cubensis* and *P. semilanceata*) which are very distinct, but could confuse the beginner. Moreover, plate 39 (*Gymnopilus purpuratus*) is tipped-in upside-down, giving a curiously otherworldly character to the illustration. Hopefully the publishers will be able to remedy these deficiencies in future editions.

The remainder of the book deals mainly with ethnomycology, the modern use of these mushrooms by humankind. Although academic anthropologists have, by and large, ignored the contemporary ethnobotany of entheogenic mushrooms and other plants, I agree with Gartz that this phenomenon is every bit as important as their ethnobotany in traditional cultures. There are seven such chapters in all, each detailing a different geographical region. Starting with North America

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and Hawaii, Gartz traces the spread of modern entheogenic mycophagy to Middle and South America, Australia, Europe, Japan, Africa, concluding with Asia and Oceania. The chapter on Africa discusses the now-famous rupestrian art of Tassili, which Samorini recently detailed, and which provides strong evidence for the existence of entheogenic mushroom use in Africa at least nine millennia ago (Samorini 1992).

The book concludes with two chapters on possible modern uses for the psilocybian mushrooms. Gartz proposes their use as aids in the diagnosis of brain damage, and discusses their proven value in psychotherapy. Gartz bemoans the legal restrictions which have slammed the door shut on this promising aid to psychotherapy, and expresses the hope that other countries will follow the lead of Switzerland (where psilocybine was first isolated by Albert Hofmann in the late 1950s and where Hofmann likewise first synthesized LSD 55 years ago), and reclassify these entheogenic drugs as experimental medicines, again allowing their use by psychotherapists. I share Gartz's confidence, that only by reopening the doors to thorough research of these and other entheogenic substances can we guarantee that the entheogenic mushrooms, what the Germans call the "fools' mushrooms," don't end up making fools of us all!

LITERATURE CITED

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