## BOOK REVIEW

Kava: The Pacific Drug. Vincent Lebot, Mark Merlin and Lamont Lindstrom. New Haven and London: Yale University Press, 1992 (Richard E. Schultes and Robert F. Raffauf, Eds., Psychoactive Plants of the World). Pp. 255. \$45.00 (clothbound). ISBN 0-300-05213-8.

At last, we have here a comprehensive, multi-disciplinary book on the South Pacific inebriating potion kava, prepared from roots of Piper methysticum Forst. f.! Although the pioneering German psychopharmacognosist Louis Lewin published a monograph on kava a century ago (Lewin 1886) and devoted a chapter to the drug in his classic *Phantastica* (Lewin 1924), in which he categorized it under Hypnotica or "sleep agents," kava has until now escaped a full-dress, modern treatment. The last multi-disciplinary review of kava was part of a symposium volume published in 1967, presenting eight papers on kava ethnobotany, chemistry and pharmacology (Efron et al. 1967). In the seven chapters and six appendices of Kava: The Pacific Drug, the authors systematically review the botany, chemistry, pharmacology, ethnobotany, anthropology and economics of the South Pacific inebriant. In their discussion of the botany of P. methysticum, the authors dissect the origin of this cultivar in the wild species *Piper wichmannii* DC., probably from the Vanuatu archipelago. This treatment incorporates considerable field and laboratory research by the first author, who published an important recent monograph on the subject (Lebot and Lévesque 1989) as well as a related chapter in a recent anthology (Lebot 1991). In their chapter on kava chemistry, the authors describe the properties of the kava potions, and the history of chemical study of the source plant. Structures and pharmacological properties of the active kava lactones are given, as well as information on other secondary constituents. A discussion of kava chemotypes (differing with respect to relative concentrations of the various active lactones), backed by an appendix, provides much of the evidence for the origin and distribution scheme aforementioned. The authors show convincingly that clones of P. methysticum (seen here as a cultivar conspecific with P. wichmannii, the only other species of Piper to contain the psychoactive lactones), have been selected for psychoactive properties. This ongoing process is contributing to the steady expansion of kava use throughout the South Pacific, which is now spilling over into worldwide use of the drug in western herbal medicine. This and other evidence leads the authors to take issue with Brunton's recent characterization of kava as The Abandoned Narcotic (Brunton 1989; reviewed in Iournal of Ethnobiology 12[2]:271-272, 1992).

In the ethnobotanical chapter, cultivation of *kava* is detailed, as is the ethnotaxonomy in various island cultures. Different methods of preparation of the potion are discussed, and there is a review of ethnomedicinal use of *kava* in New Guinea, Vanuatu, Fiji, Polynesia and Pohnpei, with an accompanying table. These data complement ethnomedicinal information from Tonga, Samoa, The Cook Islands and Hawai'i in W. A. Whistler's recent *Polynesian Herbal Medicine* (Whistler 1992). "The Cultural Significance and Social Uses of Kava" are the subjects of the next chapter, which analyzes charming myths of the plant's origin, and details the social and sexual context of its use in various island societies. *Kava* as

entheogen is briefly described—divinatory/shamanic use, such as by Hawai'ian *kahunas*. Five "kavettes" or vignettes describing contemporary use of the drug in Vanuatu, Papua New Guinea, Samoa and Pohnpei round out the anthropological chapter. These include urban use in *kava* bars in Pohnpei and Vanuatu, as documented by Merlin and Lindstrom.

A detailed chapter covers "Kava as a Cash Crop" in Vanuatu, Fiji and Tonga, and includes eleven econometric tables (of 16 tables in the book). Kava as crop in Vanuatu is compared with other cash crops cacao, cardamom, coffee, copra, black pepper, garlic, ginger and vanilla. While intermediate with respect to income per hectare/year; kava led the list with regard to income per workday. Trade and revenues from Vanuatu kava crops are also detailed, showing kava a distant third behind copra and cacao. Fijian production is also analyzed; documenting annual earnings for farmers of over \$18 million from 2200 hectares planted to kava. The kava export market is briefly treated, and the growing use of the drug in western medicine is described. The final chapter "Kava: A World Drug?" deals with the purported emergence of kava as a "drug of abuse" among Australian Aborigines, and charts a rosy future for The Pacific Drug. The six appendices detail geographical distribution of kava use; kava names in New Guinea and Vanuatu; morphotypes of P. wichmannii and P. methysticum by island; kava chemotypes and geographical distribution of cultivars in Vanuatu. A solid, complete bibliography of 368 references is followed by a useful 9-page index.

Yale University Press is to be commended for the attractive and utilitarian production, and for launching the much-needed series on Psychoactive Plants of the World, of which this volume is the second contribution (the first being Johannes Wilbert's 1987 Tobacco and Shamanism in South America). The Yale Press is to be chastised also, for failing to use recycled paper to print this book. Despite the multiple authors, the style is even and uniform, readable and not pedantic. Apart from the useful maps and nine botanical illustrations (anonymous, except for Sydney Parkinson's first botanical drawing made in 1769), the book contains a treasure of historical and contemporary black-and-white photographs of the preparation (such as by a Samoan taupou or ceremonial virgin) and ceremonial use of kava in Samoa and Fiji—showing, for example, a pith-helmeted British colonial administrator drinking kava in Fiji ca. 1880. Included also are a wealth of contemporary photographs of kava cultivation and preparation, both in traditional settings and in Wilson's Sakau Bar in Kolonia, Pohnpei. Ancient kava grinding stones and typical drinking bowls (and their modern Waikiki cocktail-bar derivative) are likewise illustrated, and we even see Pope John Paul II grimmacing as he quaffs kava from a coconut shell in the company of the Fijian Prime Minister, during a state visit in 1986! This book is essential for ethnobiologists interested in psychoactive drugs, and fills a conspicuous gap in the literature. It will be a welcome addition to libraries of specialists with an interest in South Pacific ethnomedicine, history and anthropology.

## LITERATURE CITED

BRUNTON, RONALD. 1989. The Abandoned Narcotic: Kava and Cultural Instability in Melanesia. Cambridge University Press, Cambridge.

EFRON, DANIEL H., BO HOLMSTEDT and NATHAN S. KLINE, Eds. Ethnopharmacologic Search for Psychoactive Drugs. (Public Health Service Publication No. 1645). U.S. Government Printing Office, Washington, D.C. pp. 105–181. Papers on kava by Lowell D. Holmes; D. Carleton Gajdusek; Murle W. Klohs; Hans J. Meyer; Joseph P. Buckley et al.; Amedeo S. Marrazzi; Carl C. Pfeiffer et al. and Clellan S. Ford.

LEBOT, VINCENT. 1991. Kava (*Piper meth-ysticum* Forst. f.): The Polynesian Dispersal of an Oceanian Plant. Pp. 169–

201 in Islands, Plants and Polynesians: An Introduction to Polynesian Ethnobotany. Paul Alan Cox and Sandra Anne Banack (Eds). Dioscorides Press, Portland, Oregon.

— and J. LÉVESQUE. 1989. The origin and distribution of kava (*Piper methysticum* Forst. f., Piperaceae): A phytochemical approach. Allertonia 5(2):223–281.

LEWIN, LOUIS. 1886. Über Piper Methysticum (Kawa). A. Hirschwald, Berlin.

— 1924. Phantastica—Die Betäubenden und Erregenden Genußmittel. Für Ärzte und Nichtärzte. Georg Stilke Verlag, Berlin.

WHISTLER, W. ARTHUR. 1992. Polynesian Herbal Medicine. National Tropical Botanical Garden, Lawai, Kauai, Hawaii.

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