

But the trials and tribulations of the jungle were only part of the problem. Those who sold provisions, at highly inflated prices, and bought the rubber the cutters returned with, at very low prices, were ruthless in their exploitation. Basically a variation on the "company store," it was difficult or impossible for most rubber cutters to get out of debt to these providers.

Although not a scientist, the author was an intelligent and keen observer, which, after all, is where science starts. Readers of this journal will find this first hand account fascinating and will appreciate the efforts of a work weary rubber cutter to not only survive the experience but to write about it.

The contemporary photographs and commentary furnished by Editor Ghilleen T. Prance greatly enhance the value of the diary as a scholarly work. It appears that Synergetic Press is rapidly becoming a leader in the publication of books—many of them dealing with natural history—which have a different and unusually interesting approach.

**Where the Gods Reign: Plants and Peoples of the Colombian Amazon.** Richard Evans Schultes. Synergetic Press, POB 689, Oracle, Arizona. 1988. Pp. 304. Paperback only. \$20.00 + 10% postage and handling.

In the novel *This Rough Magic* by Mary Stewart, the heroine's sister explains that the villa on the opposite promontory "had been rented by an Englishman, a Mr. Manning, who had been there since the previous autumn working on a book ('you know the kind . . . all photographs with a thin trickle of text in large type, . . .')." Richard Evans Schultes knew of this type of book and succeeded admirably in his desire to make *Where the Gods Reign* "more than just another picture book" (from the Forward). The numerous photographs are at once spectacular, beautiful, fascinating, and of excellent quality. Each is accompanied by an appropriate quotation from one of the many natural historians, explorers, and scientists who have written about the Amazon region, e.g., Richard Schomburgk, Theodor Koch-Grünberg, Everard F. Imthurn, Enrique Pérez-Arbeláez, Richard Spruce, Algot Lange, Alfred Russel Wallace, Geraldo Reichel-Dolmatoff, Millicent Todd, and many others. In addition each photograph has an extended description, explanation, or account.

Mark Plotkin, a former student of the author who also wrote the Preface, gives the reader insight into the professional career of Richard Evans Schultes. The Forward and a chapter on The Amazonia set the stage for the main part of the book. The photographs and accompanying quotations and text are amazingly diverse. They are of the mountains, rivers, rapids and waterfalls, rock engravings, forest, plants, houses, men and women, children, chieftains and medicine men, legends, drugs, coca, arrow poisons, agriculture, food, rubber, music and dances, artistry, and travel.

It is likely that only Professor Schultes has had or ever will have the resources to produce such a book. These resources include a deep love and knowledge of all aspects of Amazonia, intensive and extensive experience in the area, a long

and deep interaction with the people of the area, an extensive library of Amazonia, and the remarkable collection of photographs which in *Where the Gods Reign* he shares with us.

This is a remarkable book—a must for anyone interested in any aspect of Amazonia.

—W.V.

**Tobacco and Shamanism in South America.** Johannes Wilbert. New Haven, CT: Yale University Press, 1987. Pp. xix, 294. \$30.00.

The title of the series in which this book appears, *Psychoactive Plants of the World* (Richard Evans Schultes and Robert F. Raffaui, General Editors), draws our attention to the often-forgotten pharmacologic properties of the world's most popular recreational drug. Wilbert draws upon his long-term fieldwork with the Warao and a survey of nearly 3,500 sources to produce both a compendium and an original theoretical statement on these very properties and their relationship to shamanism in aboriginal South America. The scope of his survey is comprehensive, with a bibliography running to 78 pp. and thorough treatment of three main topics—methods of tobacco use, pharmacology, and tobacco shamanism.

Wilbert begins with a brief chapter reviewing the phytogeography of *Nicotiana*, a New World genus with 37 indigenous species in South America. Then, focusing on *Nicotiana rustica* L. and *N. tabacum* L., he surveys the several methods traditionally used to consume the plants: chewing (or, more precisely, sucking); drinking; licking; in enema form; as snuff; and the most frequent and widespread method, smoking. Detailed descriptions of each use are illustrated with well-chosen figures and plates, tables, and excellent distribution maps. This 124-page chapter alone constitutes a major contribution to the ethnobotanical and ethnological literature.

Chapter 3 is devoted to the pharmacology of *Nicotiana*, usefully surveying the alkaloids (nicotine, nornicotine, and anabasine) contained in the various species, and giving detailed separate treatment to the consequences for the human body of their gastrointestinal, respiratory, percutaneous, and ocular absorption.

These latter are of critical importance to Wilbert's thesis, presented as the final chapter of the book, that the effects of nicotine, in particular, provide a "natural model" for shamanism. Until the 1700s, tobacco was used in South America primarily for magico-religious and medicinal purposes, and it is Wilbert's contention that, whatever the symbolism involved, the plant became "a faith-confirming, that is, life-ordaining, drug" (p. 202) precisely because of its effects. He provides considerable detail for the Warao and draws on available information for other groups to demonstrate that shamanic behavior and powers commonly attributed to South American shamans correspond to tobacco's pharmacologic properties.