

and finance, he regards the risk as unavoidable given the nature of the foreign menace.

This is a nicely presented, useful book. The scholarship is sound, the subject approached from a realistic perspective. Despite its modest length, the volume contains an impressive amount of factual information. It concludes with an appendix containing a comprehensive roster of the veteran and militia units operational in 1799.

Texas Tech University

ALLAN J. KUETHE

*Actas del Simposium CCL Aniversario Nacimiento de Joseph Celestino Mutis.*

By PAZ MARTÍN FERRERO. Cádiz: Diputación Provincial, 1986. Photographs. Notes. Bibliographies. Tables. Indexes. Maps. Figures. Pp. 455. Paper.

This is a handsome volume of double-columned pages, quality paper, wide margins, and easy-to-read type. It makes available 45 of an even larger number of papers presented at a 1982 Cádiz symposium marking the 250th anniversary of the birth of José Celestino Mutis. This native of Cádiz is chiefly remembered for the scientific work he pioneered in New Granada (1760–1808), where he headed the Royal Botanical Expedition, corresponded with leading European scientists, and formed a generation of Colombian intellectuals and leaders. Symbolic of his effort and of our inability to appreciate totally the magnitude of it is the fact that 42 volumes have been projected to publish the 6,701 water colors of New Granadian flora done under his direction and that only 6 of the volumes have appeared.

The papers in this volume are almost an all-Spanish production in authorship, subject matter, and sources—there are no Colombians or other Latin Americans evident among the presenters—and, even more curiously, only 5 of the 45 papers are on Mutis. Nevertheless, some of Spain's leading historians of science, biology, pharmacology, botany, and physics make contributions. As a result, readers will find, up to the 1982 date of the symposium, the latest thinking, work, and bibliography on the introduction and development of modern science in Spain. For example, Juan Esteva de Sagra suggests that Benito Feijoo's role in the Spanish Enlightenment came not because he represented the most advanced position of that movement—as did the persecuted Diego Mateo Zapata, Mateo Orfila, and Luis José Proust—but because he could be assimilated more easily by the Spanish establishment. The latter felt more comfortable with Feijoo's pronounced Catholicism and anti-Semitism. Other contributors offer crisp papers on the Spanish scientific expeditions of the eighteenth century. Additional subjects are more diverse and even far afield, such as the architecture of Cádiz and current Spanish flora and fauna.

For those interested in the Enlightenment or the history of science in Latin America, this work will be a useful point of departure for the Spanish background

and for the Spanish formation of Mutis and others. But it should be reemphasized that this volume uses Spanish sources almost exclusively and has a distinctly non-American focus. This is in contrast to the volume edited by Enrique Pérez Arbeláez (Bogotá, 1938) on the 200th anniversary of the birth of Mutis, in which both Colombians and Spaniards made contributions.

Loyola University New Orleans

MAURICE P. BRUNGARDT

*El Sabio Mutis: Vida y obra de un gaditano universal.* By PAZ MARTÍN FERRERO. Cádiz: Industrias Gráficas Gaditanas, n.d. Map. Figures. Photographs. Bibliography. Illustrations. Pp. 227. Paper.

As many historians of Spanish America are well aware, José Celestino Mutis is one of the leading figures in the cultural and intellectual history of New Granada. Between his departure from Cádiz in 1760 and his death in Bogotá in 1808, Mutis—physician, scientist, and teacher—prepared a group of scholars in a variety of disciplines while attending to his medical duties and research interests. Many of the leaders of the independence movement came from this same group of men. A particularly noteworthy achievement was the establishment of the Botanical Expedition of New Granada in 1783.

The author of this study makes use of primary and secondary sources to outline the life and work of Mutis. The first three brief chapters on Cádiz of the time, the Mutis family, and Mutis's youth will be of value to anyone interested in this illustrious *sabio*, particularly since they are based almost entirely on archival sources. In contrast, the remaining chapters are drawn largely from published works such as Mutis's *Diario de observaciones* (1957), and, in fact, several chapters are taken verbatim from Mutis's diary or correspondence (*Archivo epistolar*, 1968). These chapters pertain to Mutis's voyage to Cartagena, his teaching and research, educational reform, the Botanical Expedition, the astronomical observatory, and similar endeavors. The work is a worthwhile introduction to the scientific and other intellectual pursuits of Mutis in New Granada.

Middle Tennessee State University

JOHN WILHITE

*The Making of a Strike: Mexican Silver Workers' Struggles in Real del Monte, 1766–1775.* By DORIS LADD. Lincoln: University of Nebraska Press, 1988. Figure. Tables. Appendixes. Notes. Glossary. Bibliography. Index. Pp. x, 205. Cloth. \$21.95.

Doris Ladd's latest book explains how a structured, militant, labor movement developed at the Real del Monte mine briefly in 1766–67 and largely attained its goals in this colonial and preindustrial setting. She argues that labor unions, ide-