

of different polyphenolics in amla (*Phyllanthus emblica* Linn). *Leather Sci.* 12: 327-328

Theresa, Y. M., Rajadurai, S., Sastry, K. N. S., Nayudamma, Y. (1967) Studies on biosynthesis of tannins in indigenous plants. Part XIII. Occurrence of a new gallotannin amlaic acid in amla leaves (*Phyllanthus emblica*). *Leather Sci.* 14: 16-17

Winter, C. A., Risley, E. A., Nuss, G. W. (1962) Carrageenan-induced edema in hind paw of the rat as an assay for antiinflammatory drugs. *Proc. Soc. Exp. Biol. Med.* 111: 544-547

J. Pharm. Pharmacol 1993, 45: 584

© 1993 J. Pharm. Pharmacol.

Book Review

Murder, Magic and Medicine

J. Mann

Published 1992 Oxford University Press, Oxford

240 pages

ISBN 0 19 855561 X £16.95

Murder, magic and mystery! Three subjects that have arguably exercised the imagination from the time of Cain, if not from Adam. This book reveals how Man has taken the things around him and improved, adapted or formulated them to make himself more murderous, more magical, and more immortal; that is, it is a book about the chemistry and pharmacology of natural products.

The book begins with the incantation of the three witches in the opening scene of 'Macbeth' and the author's own opening words are: 'This is probably the best-known potion in the English language. But did it work?' This opening beautifully epitomizes the book and its contents and the author's approach; a description of the weirdest collection of active concoctions imaginable, a healthy scepticism over their various claims, but a willingness to investigate the possibility that they did indeed work for sound scientific reasons.

The murder section deals with poisons. At least there is plenty of evidence that these worked. Indeed, given the plethora of available material, the lethality of quite easily obtained constituents and the propensity of Man throughout the ages to harbour grudges and pursue murderous feuds, it is a miracle that there are any of us left around to read about such things. Not all Professor Mann's poisons are used for murder—for example, the calamitous interaction of alcohol with the otherwise harmless ink-cap mushroom—although it is not hard to see them featuring in whodunits, fact or fiction.

The magic section is partly about the type of potion that Macbeth's witches brewed, probably highly poisonous concoctions with the power to raise spirits, foresee the future and bestow special powers. The incantations and atmospherics conspire to impress the victim rather than actually change anything. The main part of the section, however, is on the effect

and mechanisms of mood-altering drugs, from the coca of the South American Indians to the flower power drugs of the 1960s and the Ecstasy of today. These drugs do not give men the power to fly, but they may make him think he can (with disastrous consequences) or they may simulate the experiences of flying.

The final chapter on medicine is the major part of the book with an emphasis on the discovery and development of drugs from natural sources. Unexpectedly, this I found was the least riveting part of the book, possibly because much of the anecdotal material on the discovery of today's drugs tends to be well-known in pharmaceutical circles and there was less of the 'fancy that' surprise in this section. Nevertheless, the author has written it in such a way that the reader may well be stimulated to follow up some of these stories, although the lack of modern references would make this difficult if he relied on this book as his only source.

The author makes a brave attempt to take the mystery out of chemical structures by representing compounds as 'three-dimensional' ball-and-stick models. However, this is not entirely successful; I found that I was mentally reconverting such structures to the conventional representation before I could make the comparisons suggested. I thought at first that the lay reader would not have this educational handicap, but on reflection I am inclined to think that anyone insufficiently versed in chemistry to be incapable of interpreting a chemical structure would be unlikely to be able to see the ball-and-stick models as solid objects and would be none the wiser.

As he began, the author finishes with a quote from a great English word-magician, W. S. Gilbert, while musing on the future and Man's ability to destroy the entire planet—"Man is Nature's sole mistake". Gilbert's character was talking about man rather than Man but it is a neat quote to end on.

It is a reviewer's prerogative to draw the author's attention to trivial mistakes and I would like to add mine. It was Gregory, not George, Pincus who did the pioneering endocrinology on the Pill, and the Gilbert quote above is from Princess Ida, not Ruddigore.

JOSEPH CHAMBERLAIN