

BOOK REVIEWS

GEOLOGY.

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APISIT AIUM-NOH

Thai Watana Panich, Bangkok, 1973, in Thai, pp. 278, 47 baht.

This book is being reviewed from the standpoint of its potential usefulness to geologists, scientists, university students and secondary school students. First of all, the author is to be congratulated for producing the first geology text-book in Thai language with a nation-wide circulation despite the fact that numerous publications of the Department of Mineral Resources have long been circulated in a relatively limited scale.

This book embraces 20 chapters and covers 278 pages. Format of the book is single-column print, measuring 17 x 24 cm. The table of contents appears to be reasonably extensive, but necessary appendix and glossary have unfortunately been neglected. There are 165 illustrations of which 18 are photographs and the rest are line-drawing figures. Many of the figures are oversimplified and some are incorrect particularly those related to crystallography (Fig. 3.1 to 3.7)

The author has attempted to use Thai vocabulary for almost all the geological terms. Indeed, it is admirable to introduce Thai vocabulary but these terms are quite ambiguous and misleading, for example, mantle, oceanic or basaltic crust, regional metamorphism, dynamometamorphism, etc.

Although the book has appeared since 1973, all references cited are 21 pre-1965, 12 post-1965 and only one is post-1970. Among these 4 are in Thai and other 30 are in English. One cannot help wondering if current important developments in the field of geology have been omitted. Apparently, the concepts of sea-floor spreading, plate-tectonics, evolution of continents and oceans, etc. have not been mentioned at all. The reader might, perhaps, be frustrated with many of the descriptive parts of the book which have been presented in a relatively less attractive manner. Besides there are too many obvious mistakes on both concepts and illustrations, for example on turbidity current, metamorphism, classification and nomenclature of igneous and sedimentary rocks.

The aims and objectives of the fundamental Earth Sciences text-book, as far as the present outlook of the society is concerned, should not only be to produce a more

geologically educated citizens but also to enable them to comprehend and evaluate the environmental and resource problems facing to-day society. In this book, no real attempt has been made to demonstrate the extent to which new approaches and concepts of how to understand the Earth have been changed particularly after the last decade of revolution in the Earth Sciences. It is only right that the book should depart from the traditional format and fully share in the new exciting era of integrated sciences. Anyhow, it is more difficult to write the first book in a new field rather than "to pen off a review". Unfortunately, the latter task has come to me.

Ch. Khantaprab.

PHARMACOLOGY

CHINESE HERBAL MEDICINE.

C.P. LI

U.S. Public Health Service—NIH, 1974, pp. iv+120

A universal view held among amateurs who are interested in Chinese medicine is that great benefits will be derived from integrating Chinese and Western medicines. This layman's view is inevitably and understandably vague. It is therefore a great surprise to find that the author has singled this out as the main Chinese medical research effort today without any qualification. It is evident from the first 8 pages that the author does not intend to give an objective analysis of the science of Chinese herbal medicine, but that he intends to give a journalistic survey of recent research in the People's Republic of China.

The "monograph" which the author hoped would prepare Western scientists to consider "new ideas" from China, is actually confined to the beginning eight pages. The "new ideas" are presented in Part II. An Appendix of pharmacognosy of 44 plants was included for an unclear reason. The most obvious reason may be to familiarize readers with these herbs; but true familiarity can never be achieved by reading the brief, irrelevant and incomplete descriptions of the herb and seeing the drawings which take up most of the space. A large number of the plants described in the Appendix have been studied in such great detail that it hardly justifies trading scientific information for pictures.

To most scientists outside China, the book represents no more than the author's own account of what Chinese scientists have been doing. Close to 80% of the references cited are published in the Chinese language. These books are available in most Chinese bookstores in Hong Kong but the fact remains that they are inaccessible to non-Chinese speaking readers. Since "nearly every province has published its own---" and "a number have been published in Hong Kong", these books are no more than the same whisky in

different bottles. The small number of scientific journals cited are not easily accessible especially in Thailand. This is likely to be a source of agony for scientists who want to learn objectively the "new ideas" from China.

The general appearance of the book is very similar to most of the others on the subject published in the Chinese language. Consequently, it is a great help to scientists who cannot read Chinese. Even the beginning 8 pages which were supposed to "prepare" Western readers for the rest of the book do not contain anything significant absent from the Chinese versions.

It is rather doubtful whether knowledgeable Western scientists will accept the author's explanation concerning past mistakes in the approach to research in herbal medicine. The approach of studying the chemistry of a plant and giving up at the stage of biological testing, cited as the chief mistake, is no worse than studying the latter first only to give up at the stage of chemistry. Likewise, the author's suggestion that one should not study a single herb simply because herbal medicines are usually combinations of herbs seems to put the aim of proving the efficacy of herbal therapy as being the key to advance. Whether this aim is justifiable and the approach practical must be judged bearing in mind that the use of each herb was as empirical as each combination. For any particular disease, identified by the "ancient Chinese ideograph" system of medicine, which applies to diagnosis, therapeutic principles and the choice of herbs, there are always many times more combinations of herbs than the number of herbs in each combination. In fact, after thousands of years of trial and error, there are more combinations for each disease than all the herbs in the pharmacopia. Putting aside opinions on the correct, general approach to take, one cannot but agree with the author that progress in the science requires an interdisciplinary effort.

I found the explanation of the ideographic nature of Chinese medicine on page 6 particularly disturbing. It is true that Chinese medicine is replete both with theories that, despite their ideographic nature, are frequently consistent with modern principles and with quite a few other which cannot yet be interpreted in the modern sense. But it is hardly justifiable to twist the real facts in order to illustrate. The author has created the impression that to realize that the "spleen" is the ideographic meaning of the gastrointestinal tract, modern Chinese doctors had to fail to find any spleen illness in patients treated with ancient drugs for "spleen" illness and then had to test and by chance observe that these drugs had beneficial effects for diarrhoea. In fact, any Chinese child realizes the meaning after the first few visits in life to a practitioner.

The most specific statement that the author made concerning the interpretation of "integrating traditional and Western medicines" by Chinese medical scientists is that "it is the long, slow process of understanding an ancient art in the light of modern science, rather than with getting Chinese and Western doctors together to share knowledge". The application of the principles of Western medicine in this attempt is inevitable. The value and justification of these efforts is up to the reader to decide after an objective perusal of samples of the researches presented in Part II. The value of Part II lies in the enlighten-

ing information concealed between the lines, an inherent quality of journalistic reports lacking in scientific summaries, and the heuristic nature regarding political influences on progress in sciences.

Scientific readers should be prepared to tolerate the typical journalistic flounders and blunders such as the constant failure to justify or elaborate on important conclusions or points of view and some mysterious omissions such as non-existent references to the Appendix. A more informative title of the book might be "Samples of Recent Studies of Herbal Medicine in China".

Chiravat Sadavongvivad

AGRICULTURE

MINT GROWING AND MINT OIL EXTRACTION

NARONG CHOMCHALOW

Kurusapa Ladprao Press, Bangkok, 1975, in Thai, pp 284, 40 baht

This is a book which is much needed for the expansion of the newly developed mint growing industry in Thailand. Dr. Narong Chomchalow has gathered a great deal of information on all aspects of the mint growing industry and has described his findings in such a way that not only the layman can utilize it profitably but even the expert will find it a good reference work, written in Thai, on the mint growing industry.

The first part is a historical and geographical introduction to mint growing throughout the world which includes a brief survey of mint growing in Thailand. The second part is a compilation of information on varieties of mint with emphasis on some valuable characteristics of the plant. The improvement of quality and yield through breeding are also discussed. Several methods of propagation, cropping and harvesting are included in this part. Growers are provided here with a broad picture which will enable them to choose the method most applicable to their own locations. This part also includes a discussion of sources of trouble the grower may encounter when growing mint on a large scale. The main problems are connected with pests, diseases, soil conditions, fertilizers and water. The last part provides information on how mint is transformed from an organism to a chemical and finally into money.

Even if this work presents an optimistic view of the mint growing industry the author does not forget to warn of the dangers which need to be guarded against.

There are only two points I would like to raise in connection with this book. First the length could be reduced by selecting and rewriting some quotations rather than

including all of them. And secondly the author uses the Thai name for a variety of mint introduced from Japan (Ryokubi) and later this may complicate the identification of this particular clone. At present, there is difficulty in keeping track of rose varieties grown here. This mistake should not be made with mint as well.

Except for these minor points, I recommend this book to any one who wants to do any business in mint growing—whether he is a grower, an industrialist or a merchant. Also the book would undoubtedly be a useful addition to many libraries.

Thavorn Vajarabhaya

Correction

In the article "Roles of Monoamines on Central Regulation of the Pituitary Luteotrophic Complex in the Golden Hamster", by P. Varavudhi, which appeared in *J. Sci. Soc. Thailand* 1 (1975), 120-129, the author has requested the following change: Ref. 27 should be deleted, ref. 28 should become ref. 27 and the correct ref. 28 should be

28. Scheridan, M.R., Reiter, R.J. and Jacobs, J.J. (1969). *J. Endocrinology* 45, 131-132.