

Faune de France

30: Cestodes. Par Prof. Ch. Joyeux et Dr. J. G. Baer. (Fédération française des Sociétés de Sciences naturelles: Office central de faunistique.) Pp. iii+613. (Paris: Paul Lechevalier et fils, 1936.) 200 francs.

TAPEWORMS are psychologically nasty animals, but they are relieved by attractive life-histories. The elongated worm with its many segments lives in the gut of vertebrates and breaks off its hind divisions (proglottides), passing them out with the faeces of the host. These are full of ripe eggs which are shed on to the ground or into the water. Then comes along some animal which swallows them. Reaching its stomach, they bore through its wall to rest as rounded bladder worms (cysticerci) in its body, where they may swell up forming cysts of fluid, into which may project one or more heads. They, if eaten by their first host, attach themselves by their heads to its gut wall and bud off segments to form elongated tapeworms, which in turn repeat the life-cycle. Occasionally one host serves for both worm and cysticercus; many have both stages in vertebrates, but probably the majority have their cyst stage in some invertebrate, species being enumerated in jelly-fish, worms, crustaceans, insects and molluscs.

Settled rules as to these and other biological matters will be sought in vain in this catalogue of more than 2,000 species, for the life-histories of many are unknown, and this number probably does not represent half the species found in France. Clearly allied species of vertebrates commonly have the same tapeworms; but this may well be a question of similarity of food, since quite distantly related animals feeding on the same food often have the same worms. We might like to think of the evolution of the worms and of their hosts going on together, but, while encouraged by the unsegmented and presumably primitive *Gyrocotyle* and *Amphilina* being restricted to *Chimaera* and the sturgeon, this does not seem to be the case. *Gyrocotyle*, anyhow, is exceptional, as it is often found in the mud frequented by *Chimaera*.

In any event, this monograph, when studied, suggests all kinds of problems, both physiological and evolutionary, and should be in the reference library of every zoological and medical department. It is illustrated by 569 most useful line illustrations and gives all the necessary data both as to the parasites and their hosts.

Beiträge zur Mineralogie von Japan

Begründet von T. Wada. Neue Folge, 1. Herausgegeben von T. Ito. Pp. vii+xviii+259. (Tokyo: Imperial University, 1935.)

Nor a great deal has been written about the minerals of Japan. The earliest information about them is contained in the treatise written by the late Prof. T. Wada, of which an English translation by T. Ogawa appeared in 1904. A second edition followed, but only in Japanese. Inasmuch as supplements speedily became necessary in order to keep the information

up to date, Prof. Wada began in 1905 a series, under the general title of "Beiträge zur Mineralogie von Japan", which was to consist of original papers on Japanese minerals written in either German or English; the latter language, however, was invariably selected by the contributors. The series came to an end in 1915, and Prof. Wada died in 1920.

The present volume is intended by the author, the director of the Mineralogical Institute of the Imperial University of Tokyo, to be the first of a new series of contributions, which ultimately will be used in the preparation of the third edition of Prof. Wada's treatise. Despite its German title, the text is in Japanese, but there is a good summary in English, and throughout the text ordinary letters and numerals are used to denote the crystal faces, so that the reader need not know Japanese to cull information from the pages. The volume is dedicated to the memory of the late N. Fukuchi, who was lecturer in mineralogy at the Imperial University, and did much work on Japanese minerals; his portrait forms the frontispiece.

The volume comprises seventy-six original contributions, together with an introduction descriptive of the two-circle method of measuring crystals and denoting the positions of their faces. There are two indexes: in Japanese with English equivalent, and vice versa. The summary is provided with its own pagination and index. A map showing the localities mentioned adds greatly to the value of the volume.

Les rites secrets des primitifs de l'Oubangui

Par A.-M. Vergiat. (Bibliothèque scientifique.) Pp. 212+32 plates. (Paris: Libr. Payot, 1936.) 25 francs.

M. VERGIAT, an experienced observer and skilled recorder with the camera of native life and custom in more than one part of Africa, has taken advantage of the opportunity afforded by a botanical excursion to the French Congo to investigate the esoteric beliefs and rites of the tribes of the region. More fortunate than most Europeans who attempt, usually with indifferent success, to penetrate these *arcana*, he won the confidence of a native sorcerer, who accompanied him when he was collecting botanical specimens, and passed on to him much of his knowledge. For this indiscretion, it would seem, the informant paid the penalty with his life. In the meantime, however, the author had not only acquired a detailed knowledge of the religious and spiritual beliefs of the people, but also had secured full particulars of the initiation ceremonies and circumcision rites practised at puberty, as well as of the ceremonial of admission into the principal secret societies. His account of the female ceremony of clitoridectomy, which is illustrated by photographs, is exceptionally full. In recording such matters as these, the author no doubt has good reason for making no explicit statement as to how such valuable detailed information was obtained.

As a botanist, M. Vergiat was much interested in the plants used in native magic and medicine. Of these, he gives detailed lists with identifications.