series shows a striking similarity in much of the material covered. This Australian book does not treat moving-target indication in any form, but it has an excellent section on microwave propagation, which is more or less neglected in its American counterpart. This is an excellent book, and one which I thoroughly enjoyed reading.

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Handbuch der Pflanzenkrankheiten. vol. II, *Die Virus- und Bakterienkrankheiten,* p. 1, *Viruskrankheiten.* E. Köhler and M. Klinkowski. O. Appel and H. Richter, Eds. Paul Parey, Berlin, ed. 6, 1954. 784 pp. Illus. DM. 150.

In 1888 Paul Sorauer prepared a small plant disease book of 250 pages and without illustrations. Later editions were much enlarged, and for the most part they were edited by Otto Appel. The sixth edition, covering diseases and insect pests, is expected to require 15 volumes. The present publication, dealing with virus diseases, has only 132 pages of general information. The remainder of the volume discusses specific diseases on hosts, arranged in orders according to the Engler and Prantl classification. The listing of the viruses is fairly complete, and the discussions are as detailed as the present literature on the individual virus permits. The numerous bibliographies represent world-wide publications in a surprisingly thorough manner. The illustrations, the type, and the paper are excellent. The volume should be a great help, especially to the plant pathologist who is not already deeply versed in the subject.

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Physiology and Biochemistry of the Skin. Stephen Rothman. Univ. of Chicago Press, Chicago, 1954. xiii + 741 pp. Illus. $19.50.

By those concerned with the scientific basis of dermatology, this volume will be hailed as a welcome indication of the maturity of the field. To those concerned with skin function as an important, but not the dominating, factor in some other field of physiology, it may well come as a revelation. For it not only makes clear the extensiveness, as well as the intensiveness, of studies during the last 20 years but also convincingly demonstrates the degree to which the resultant knowledge has been integrated and systematized in at least one major school of medical science.

"The main purpose of the book is to serve dermatological research." That the author has succeeded in this task none could dispute. In the doing, however, he has set certain boundaries, which are clearly stated in the foreword, and which should be just as clearly understood by the prospective reader. In the first place, the author has concentrated on those functions which could be considered as unique to the skin, or in which the skin plays an important role. Second, he has definitely subjugated the interests of such applied fields as clinical dermatology to those of basic research. This latter restriction will undoubtedly cause some disappointment to those with clinical interests. It is most tantalizing, for instance, to be keyed up by an excellent account of sebaceous secretion and its determinants, only to be deserted just when the elucidation of seborrhea seems close at hand. But this is a small price to pay if these self-imposed restrictions were necessary to the production of a basic textbook. If the unresolved tensions should provoke another to produce as scholarly and as informative a book on clinical applications, then humanity will have been doubly served by the present one.

The only serious criticism that I would make concerns the title, which blithely assumes that "skin" is primarily a human possession. More justice would have been done to the rest of the animal kingdom, and potential readers would have been better informed, if the qualification "human" had been included in the title. Nowhere in the book is the function of nonhuman skin discussed unless it directly contributes to the current discussion on human skin. This oversight both illustrates and perpetuates the unfortunate tendency, so frequently encountered, to regard human physiology as "normal" and that of other forms as "special." In cutaneous function, as in so many other respects, it is man who is peculiar, and human peculiarities may be better understood when viewed against the broad background of evolutionary development. For example, due consideration is given to the apocrine sweat glands, and the impression is given that we should not be satisfied with the two pigeon-hole classification that has served us hitherto; but there is no hint of the current controversy over the role of these glands in the heat regulation of mammals, nor is there a suggestion that their role in human physiology may be but a stylized relic of a wider and more flexible evolutionary past.

In organization the book follows a logical sequence, from fundamental biophysical aspects, through sweat secretion and insensible water loss, to histological chemistry, and finally to certain selected special problems such as pigmentation, hair growth, nutritional influences, and the pathophysiology of blister formation. Seven of the 28 chapters are written by contributing authors: Z. Felsher, G. C. Wells, A. L. Lorincz, A. B. Lerner, H. Pinkus, and P. Flesch. The chapters in the second half are of markedly uneven length, varying from 49 to 4 pages, but this is largely a reflection of the relative state of knowledge on the various topics. The illustrations are numerous, clear, and informative. The photographs are of uniformly good quality. The maintenance of quality in photographs that have appeared in previous publications suggests that care has been taken to secure original prints and to avoid the cumulative fogginess of reproduction which so often mars good textbooks. The references are extensive but cogent. In the area of my acquaintance there are few, if any, important omissions.