duction by Professor Eckardt, are in French, with English summaries. Each paper is supplemented by a transcript of the discussion by participants in the symposium and by a bibliography which ranges from 2 to 120 titles, with a median of 20 titles.

"Eco-physiology" is defined broadly as the study of "all relationships existing between living beings and their physical and biotic environments." It comprehends studies of structural and functional features that link the organism to its specific environment as well as studies of all aspects of energy transformation and transfers of energy and mass concerned in ecosystem dynamics. The breadth of this definition is reflected by the variety of topics covered in papers included in the volume. Emphasis is placed on the description and comparison of techniques of analysis and instrumentation, although details of hardware are sparse. Some papers are strictly reviews of research approaches to measurements of well-defined physiological or environmental parameters; others are reports on specific research projects and contain original data.

The papers are grouped in three sections. In the section on environmental factors (21 titles, 187 pages), radiation, wind, atmospheric and soil water, dew, interception of precipitation (which seems more appropriate to the third section of the volume), and lysimetry are considered. Measurement of precipitation is considered only incidentally in papers on interception.

Topics covered in the longest section, "Physiology of Plants Considered Individually" (26 titles, 225 pages), include leaf temperatures, transpiration, internal water dynamics, drought resistance, dew utilization, carbon dioxide exchange, stomatal characteristics, heat resistance, and plant chamber techniques. The third section, the shortest, "Physiology of the Plant Cover" (10 titles, 97 pages), is devoted to methods of determining evapotranspiration losses, dry matter production, and to the heat, water, and the carbon dioxide budgets of vegetated areas.

The book is well printed and typographical errors appear to be minimal. Occasionally, in the discussions, homonyms seem to have been transcribed, but these are not likely to mislead a reader familiar with English. In general, the discussions are well edited and, in many cases, add to the comprehension of the original papers.

Many papers in this volume presume too much background to serve as introductions to their subjects, and most do not treat their subjects intensively enough to be of great or lasting value to one involved in research. However, as a collection they complement one another and thus can be of value both to the novice and the researcher. The price of the volume probably will restrict its purchase by individuals.

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Fifth International Thyroid Conference

This symposium volume represents an attempt to bring together the diverse fields of thyroid research ranging from the most basic to the clinical. **Current Topics in Thyroid Research** (Academic Press, New York, 1965. 1247 pp., $42), edited by C. Cassaro and M. Andreoli, present a massive number of short communications of varying quality, rather than critical reviews by a few experts. A number of the papers represent the presentation of little more than one experiment, and in some instances this is only a single statement in the text.

Another feature that must be criticized is the fact that the organization of the various subsections is rather arbitrary. Calcitonin has little in common with iodine metabolism in the hyperplastic hamster thyroid, but they are treated together.

The most useful parts of the book are the closing remarks at the end of each session in which a designated individual attempts to critically review the proceeding contributions. These vary in detail and orientation, but in general each one provides enlightenment as well as a few critical and thoughtful remarks.

This compendium is certainly not intended for the uninitiated, but for interested research workers who are seeking a critical evaluation of current trends in thyroid research. It may be of some value to those who are working in the field in keeping them abreast of what others are doing. But even these individuals will find it difficult to assess much of the information presented. The volume does not live up to the expectations expressed by Cassano in his opening address, for he hoped it would indicate that the study of the thyroid gland is in the forefront of modern endocrinology.

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Entomology

A Handbook for the Identification of Insects of Medical Importance [British Museum (Natural History), London, ed. 4, 1965. 340 pp., £3] by John Smart, with chapters by Karl Jordan and R. J. Whittick, is the fourth edition of a very useful work that was published in 1943 and considerably revised in 1948. When it first appeared there was a need for a volume that would aid in the identification of insects capable of transmitting disease in the war theaters. The military needs greatly stimulated the study of insects of medical importance—the result has been a continued interest in the organisms involved. It was quite evident that the book must be revised if it was to be republished, and because it was one of the best textbooks on the subject, a new edition was highly desirable. It is unfortunate that it was not possible to completely rewrite the work, incorporating the large quantity of new information gathered during the last 15 years, but that was evidently too costly a procedure. Instead we have a photolithographic reproduction of the second edition (1948) with changes made without altering the format or typeface, plus three pages of addenda and corrigenda provided by the author, and four pages (in two parts) on mosquitoes by Dr. Mattingly. That a considerable amount of time lapsed between the preparation of the addenda and the publication of this edition is shown by the statement that the third volume of Oldroyd's *Horseflies of the Ethiopian Region* was in press. As that work was published on 6 March 1957, and the present edition of Smart's *Handbook* appeared December 1965, it seems that more than 8 years passed while the volume was awaiting publication. Much has happened in the field of taxonomic medical entomology during that time, not the least of which