

section on U.S.S.R. fauna, which comprises 126 species of Catantopinae; the remaining 107 species dealt with in the book are from adjoining countries.

The initiative of the Israel Program for Scientific Translations is very welcome, but much greater care is essential in translating and editing highly specialized books than has been shown in this case. To begin with, the author's name is transliterated by himself in a paper published abroad (reference on page 50) as Mistshenko, not Mishchenko. When the English text is compared with the original, serious mistranslations can be found, such as "exoskeleton" instead of "armature" (page 10); tribe Podismini is "divided" into several genera, when the original says that it was considered to consist of a single genus *Podisma* (page 32). In the original it is said that there are no endemic forms in western Siberia, while there are many in the eastern, but the translation reads "In Siberia endemic forms are conspicuously absent" (page 35). In some cases the translator has invented new words, like "xerothermation" and "multiformity". Most ludicrous are his attempts to translate, instead of transliterating, popular Russian names for the insects. The Russian name for grasshopper is *Kobylka* which literally means "filly", in allusion to the resemblance of the head profile to that of a horse; the translator, following the dictionary, renders the name *polyarnaya kobylka* as "polar young mare grasshopper"; what is, in Russian, a "tree grasshopper" becomes "wooden young mare grasshopper". For some of these faults the responsibility falls on the editor who, although a specialist taxonomist, apparently had no knowledge of the original language; bilingual specialists in this group exist in Israel.

A very strange feature of the book is that the indexes at the end give references to the pages in the Russian edition (inserted on the margins of pages of the translation); this is mentioned, but in very small type, in a footnote, so that readers are likely to suffer annoyance before they discover the secret. The price of the book, even at present rates, is very high. BORIS UVAROV

REGULATION OF ADRENAL FUNCTION

The Neuroendocrine Control of Adaptation

By K. Lissák and E. Endrőczy. (International Series of Monographs in Pure and Applied Biology. Division: Modern Trends in Physiological Sciences, Vol. 25.) Pp. xii + 180. (London and New York: Pergamon Press, Ltd., 1965.) 70s. net.

THE main aim of *The Neuroendocrine Control of Adaptation* is to provide an account of the way in which the central nervous system controls the endocrine organs, and in particular the adrenal glands, concerned with the adaptation of the animal to its environment. The subject-matter may be divided into two main sections. The first half of the book deals with the regulation of the secretion of adrenocortical hormones by the pituitary, and in the second part the control of the production of adrenocorticotrophic hormone by the hypothalamus is discussed. Sections are also included on adrenocortical regulation during development and in relation to gonadal function.

This book was originally published in 1960 under the title *Die neuroendokrine Steuerung der Adaptationstätigkeit* by Verlag der Ungarischen Akademie der Wissenschaften, Budapest. The present edition, which is in English, represents a slightly revised version of the original work. However, the literature survey has not been brought up to date and the majority of the references quoted were published before 1960. For this reason, no account can be taken of the recent work in the general area of neuroendocrinology, much of which is germane to the subject-

matter considered. Thus, recent studies involving the corticotrophin releasing factor, the use of synthetic adrenocorticotrophic hormone preparations, and new techniques for the estimation of adrenocorticotrophic hormone and of corticosteroids and their metabolites are not discussed. The book is therefore of little value in providing an up-to-date account of neuroendocrinology to workers in this field. However, a proportion of the references quoted are taken from journals such as the *Acta Physiologica* of the Hungarian Academy of Science and the *Bulletin* of the U.S.S.R. Academy of Science. Because of this, the international coverage of literature published between 1950 and 1960 which is presented is likely to be of value to investigators who do not normally have access to Eastern European and Russian journals.

In their survey of published work, the authors have in many instances presented conflicting results. Unfortunately, an assessment of the relative merits of the data described is not always given. It is therefore likely that a reader who has only a general knowledge of endocrinology may find this book rather indecisive. Summaries of the contents of each chapter are not provided and, particularly in the latter half of the book, subheadings in individual chapters have not been used. This means that, in order to use the book as a reference work, extensive use must be made of the subject index. However, this is unduly short, comprising only 2 per cent of the length of the book, while the index of authors represents 7 per cent. Two of the main omissions in the subject index are the absence of any reference to steroid hormones, such as hydrocortisone and corticosterone, referred to in Chapters 2 and 3, and to various animal species used in the experiments described in the second half of the book.

In spite of its limitations, this book is likely to be a useful addition to departmental rather than to general libraries. The main aims are certainly achieved and in particular a fairly readable account of some of the historical aspects of the subject is provided. Experiments in various animal species, as well as in humans, are described and care is taken to indicate the species differences which may occur in the study of the inter-relationship between the hypothalamus, pituitary and adrenal glands. The book, which is printed on paper of high quality, is well laid out and the tables and diagrams are generally clearly presented. E. TREVOR BELL

ZONE ELECTROPHORESIS

Methods in Zone Electrophoresis

By John R. Sargent. Pp. 107. (Poole, Dorset: The British Drug Houses, Ltd., 1965.) 8s. 6d.

ZONE electrophoresis is a method extensively used for the investigation of substances of biological importance, but the worker is frequently faced with the problem of knowing the forms and conditions available and of evaluating which of them is the most suited for his particular problem. This book is therefore greatly to be welcomed, as it provides us with a much needed and up-to-date book covering with full working details the whole range of materials and conditions available for zone electrophoresis.

The book opens with a short chapter on general theoretical considerations and this is followed by chapters on electrophoresis on paper (low and high voltage), cellulose acetate, starch gel, agar gel and polyacrylamide. There is a chapter on block electrophoresis and the book closes with a useful section on the choice of media. The great merit of the book is that the abundance of information given is presented in an extremely concise manner and is divided into appropriate sections enabling details to be found at a glance. For example, for each medium discussed there is a description of the procedure, the types of apparatus which may be used, a selection of suitable