- Book reviews

Haring, Fr.: Schafzucht. Tierzuchtbücherei. Stuttgart: Ulmer 1984. 370 pp., 187 figs., 119 tabs. Hard bound DM 58,–.

The sheep in Europe may not be the most important agricultural animal but it holds its place amongst the domestic animals as one that is particularly adaptable to widely differing and extreme environments and also as an animal able to provide a diversity of products. Furthermore, although sheep numbers have declined over a long period, this trend has been clearly reversed in more recent times. The book "Schafzucht" has a very broad approach to the consideration of sheep breeding. Not only are aspects of breeding and selection covered but several chapters are also devoted to sheep management, from stall construction to diseases. Directed mainly towards sheep breeding in Europe, the book nevertheless, refers frequently, and in detail, to other areas of the world. Beginning, as it does, with an attempt to classify the various and multivaried breeds of sheep found in Europe, the book has taken on a complex task. The complexity is apparent from the observation that each small district has its own special sheep breeds and, frequently, its own goals in breeding. From the classification we are taken through aspects of sheep breeding and selection, sheep propagation and lambing to the assessment of wool and meat quality. The final third of the book is devoted to somewhat peripheral aspects such as sheep management and diseases. The detailed text is supported by abundant photographs, diagrams and tables.

Although the authors have approached the whole gamut of sheep breeding and production, they have frequently made too much use of detailed data when short descriptions would have been adequate. The tables are sometimes repeated, in somewhat altered forms in other parts of the book, in some cases the data have not been sufficiently standardised (for example, milk yield is described in litres or kilograms making the comparisons proposed by the authors difficult to follow) and on occasions detailed data are presented that appear contradictory but are not explained in the text. The book does, in places, give the impression of collected data with little care having been given to their selection, coordination or discussion. In a book of this type one expects an assessment and simplification of material to allow a clear overview. This is neither the case from the selection and presentation of data nor from the difficult and tedious writing style of the authors. The large amount of data and the detailed lists of references to

original data would make this book valuable to both specialists and students in the field. However, the very brief index will reduce the reference value of the book.

U. Langridge, Glen Osmond

Senger, H.: The Blue Light Syndrome. Proceedings in Life Sciences, 1st edn. Berlin, Heidelberg, New York: Springer 1980. 665 pp., 432 figs., 85 tabs. Hard bound DM 98,-.

In an attempt to summarize the present knowledge of the blue-light-induced phenomena in plants and microorganisms, an international symposium was organized at Marburg University in July 1979. Sixty contributions were published under the title "Blue Light Syndrome", a number which underlines the heterogeneity of the matter.

The first section includes 11 articles on various fields of blue light action, particularly some speculations about the evolution of photosensory systems and the interaction between the "blue light receptor" and the phytochrome system.

A second section (12 articles) reviews the up-to-now controversial hypotheses about the nature of the blue light receptor – a carotenoid or a flavoprotein – as well as aspects of primary reactions, appendixed by a small section on caroteno-genesis.

Section 4 with 10 articles discusses the influence of blue light on gas exchange (particularly respiration) and enzymatic activities in Chlorophyceae.

The next section (5 articles) summarizes experimental data on the interaction of blue light and ammonia and their influence on nitrate reductase activity.

The sixth section embraces 8 contributions on chloroplast development effected by either blue or red and strong or weak light, respectively.

A last section includes 11 rather heterogenous articles on physiological responses to blue light reception of fungi and algae as well as of higher plants, including stomatal aperture and growth curvature.

This book provides an excellent survey on the manifold aspects of blue light action and cannot be neglected by anyone interested in this field.

E.-M. Wiedenroth, Berlin