## **Book Reviews**

Riedl, R.: Biologie der Erkenntnis. Die stammesgeschichtlichen Grundlagen der Vernunft.

Berlin, Hamburg: Parey 1980. 230 pp, 60 figs. Hard bound DM 29,80

This book is annoying. The intention of the author is to deduce the phylogeny of our rational thinking. The method is explicitly stated to be the methodology of the natural sciences. The reader will consequently expect a careful study of potential evolutionary parameters leading to the development of first a 'ratiomorphic sense' (which the organism is unaware of) and subsequently to the rational intelligence. The author tries to prove that both are necessary consequences of the evolution (in a 'teleomorphic' rather than a 'teleologic' sense).

The text however is burdened with references to almost any intellectual individuum one can think of, from a period covering more than 2000 years. Whether one thinks of Aristoteles, Heraklit, Hegel, Kant, Einstein, Goethe, of Popper or Hume, of Pawlov or Russell — everybody is good enough to contribute arguments for the verification of the logical basis of this 'theory' of the evolution of intelligence.

All fundamental problems of philosophy raised within more than 2000 years are solved by the author. It finally appears not even necessary to stick to the narrow methodological limits of the natural sciences. Personal opinions and evaluations are included to allow an effective conclusion of the book.

The outer framework of the book makes it not easy to handle. It seems that not sufficient time was given to careful preparation at this level. The illustrations are often poorly described and insufficient for readers not familiar with the particular problem. The arrangement of comments in a separate section at the end turns out to be very inconvenient: whenever one follows a cross-reference to this section, expecting an important extension, one frequently finds just another cross-reference to the literature. Footnotes would be much more reasonable.

This strong criticism is raised by the fact that the fascinating topic of this book schould find a good representation: a clear argument in a more readable style is however necessary. This book should be written again.

W. Hennig, Nijmegen

Behrens, H.; Doehner, H.; Scheelje, R.; Wassmuth, R. (eds.): Lehrbuch der Schafzucht. 5. ed.

Berlin, Hamburg: P. Parey 1979. 367 pp., 182 figs., 52 tabs. Soft bound DM 28,—

Four editions totalling 14,000 copies of this book have already been sold. It is reasonable to expect that the fifth edition will also reach a large number of readers, especially as it has been completely revised, brought up to date, and now incorporates a total of 182 informative illustrations. Written in everyday language, the book should be of great value to all those who are interested in sheep keeping. It is concerned with virtually all aspects of sheep production (efficiency, husbandry, breeding, diseases, economic evaluation, regulations, official policy measures, and recommendations

for self-sufficiency), and this complex subject is treated in an easily intelligible way. While the book is designed as a standard work for the formal study of this particular subject, it is aimed not only at students but at other interested readers as well.

Consequently, it is rather difficult for the reviewer to make reasonable proposals for further editions. They reflect the view of a university teacher and should not be taken at the expense of general coverage. A textbook of sheep breeding assumes a knowledge of aspects of general genetics and stock breeding. Therefore, it would be advisable for questions of quantitative and qualitative genetics to be discussed and interpreted in the chapter on animal breeding, and for population genetics measurements and parameters determined for sheep to be included also. Questions of pathogenesis should be separately discussed in Chapter 7. Also, readers interested in the general subject of sheep keeping certainly would welcome a separate chapter covering the development of sheep breeding in Germany and in other countries.

H. Brandsch, Leipzig

Geisler, G.: Pflanzenbau. Ein Lehrbuch. Biologische Grundlagen und Technik der Pflanzenproduktion.

Berlin Hamburg: P. Parey 1979. 474 pp., 177 figs., 270 tabs. Soft bound DM 118.—

Meeting the food needs of a world with an ever increasing population emphasizes more than ever the importance of optimal handling of crop production. The increase of productivity during the last two decades has been tremendous, due to the improvement in crop production techniques. Not to forget the crucial contribution of plant breeding in delivering new races and varieties more productive and more sensitive to fertilizers. This impact of applied genetics is, to our regret, a great deal missed in the textbook in question. We get short information on transcription, evolution, translation, gene activity, gene centra, but the genetics of field crop production techniques and the crucial contribution of plant breeding in delivering new races and varieties more productive and more sensitive to fertilizers. This impact of applied genetics is, to our regret, a great deal missed in the textbook in question. We get little information on transcription, evolution, translation, gene activity, gene centra, but the genetics of field crops is not an integrated part of this otherwise very pleasing and very well edited book. But apparently it is still possible to cover the whole field of plant production in a one authored textbook in an all niques of culture of the crop species of the temperate European agriculture, beginning with wheat and Triticale, going on with oil crops, vegetables, and leguminuous crops, to special cultures such as tobacco, hops, meadow and pasture. To sum up: a complete closed presentation of the whole field of crop production. An admirable performance. The whole is rounded off by indices and tables for units, as well as by a huge amount of statistical information in tables and graphs. The lists for further reading are a little biased to the German market. With a little more integrated information on genetics and breeding it could become a very popular textbook in crop production. H.F. Linskens, Nijmegen