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Book review — Boekresensie

Comprehensive reports on technical items presented to the International Committee or to Regional Commissions 1996

1996. *Office International des Épizooties*, 345 pp. Price: FrF 150, US\$ 30. ISBN 92 9044 424 X.

This collection of reports includes chapters on the following subjects of veterinary interest: genetic biotechnology; aspects of health control in the movement of animal product, including the Office International des Épizooties recommendations and procedures for complying with the requirements set by the World Trade Organization (WTO), the role of risk analysis in regionalisation, and the effect of infrastructures on surveillance; the role of carrier animals in the transmission of foot-and-mouth disease; updates on the transmissible spongiform encephalopathies; and surveillance control of fish diseases.

The report on the application of biotechnology for the genetic improvement of livestock provides a useful summary of the available technologies. The author classifies these as reproductive biotechnology, livestock genomics and marker-assisted selection, and transgenics. While techniques such as artificial insemination and embryo transfer are widely used in livestock improvement in both developed and developing countries, the application of the more sophisticated techniques for genetic manipulation is more limited at present. It is evident that certain aspects of genetic selection, for example for resistance to particular diseases or to select for or against other desirable heritable traits, could be very usefully applied at all levels of livestock production.

Several chapters relate to the development of strategies for safe animal and animal product movement under the conditions created by WTO and the General Agreement of Tariffs and Trade (GATT), and the role of the OIE in preventing spread of animal diseases in the absence of restrictive controls. In these reports the Agreement of Sanitary and Phytosanitary Measures under the WTO is clarified, and aspects such as regionalisation and risk assessment and management are addressed. A chapter on the effect of infrastructures on surveillance and monitoring systems emphasises the importance of adequate veterinary structures for accurate surveillance and reporting, and the need for adequate systems for disseminating information.

Two reports provide useful updates on scrapie and bovine spongiform encephalopathy (BSE), respectively. The chapter on scrapie concentrates on the situation in certain countries in the Americas, but provides useful information on recent research on transmission and on diagnostic methods of choice and surveillance. A report on the epidemiology, pathogenesis and research aspects of transmissible spongiform encephalopathies in

animals and humans correlates the information contained in reports from 14 European countries, with particular reference to BSE and Creutzfeldt-Jakob disease (CJD).

A chapter on the role of carrier animals in the transmission of foot-and-mouth disease indicates that shedding of virus by persistently infected (carrier) animals rarely causes outbreaks, and highlights the need for further research in this field.

In the report entitled 'Surveillance and control of marine fish diseases', many of the fish considered are usually classed as freshwater products, e.g. trout and eels. The term 'fish farming' is also used by the author in its broadest sense, to include both farming with captive-bred stock and growing-out of wild-caught juveniles (a sort of aquatic feedlot). The author suggests methods based on disease control in mammals to be applied to both surveillance and disease control in fish. Disease control in fish-farming operations is often of concern to aquatic environmentalists, since most treatments result in large quantities of chemical used for medication entering public water sources. It is encouraging to note that Norway has managed to develop vaccines to control the major salmonid diseases, resulting in a drop in sales of antimicrobial drugs for salmonid farming from 50 000 kg in 1987 to less than 5000 kg in 1995. An article of 11 pages can only touch briefly on such a complex subject, where advances in both management technique and veterinary knowledge are rapid, but further details can be obtained from the excellent list of references, of which no less than 60 of the 66 papers date from 1990 onwards. It is, however, surprising that no mention is made of disease in marine aquarium fish.

This collection of reports contains a considerable amount of information that is of value to veterinarians in a number of fields, but most importantly to those involved in import and export of animal products who need to understand the WTO and GATT approaches and to explain them to their clients.

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