Book review — Boekresensie

Risk analysis in aquatic animal health

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Edited by C J Rogers

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Risk analysis is essential for ensuring animal health and forms the basis of import control for prevention of disease introduction. The establishment of the World Trade Organisation and the implementation of the *Agreement on the Application of Sanitary and Phytosanitary Measures* effectively requires risk analysis as the basis for import controls aimed at disease prevention. Import controls that cannot be justified based on scientific evidence and a transparent process of risk analysis are seen as discriminatory restrictions on trade. However, risk analysis in aquatic animal health is a relatively new application and is complicated by an incomplete understanding of most aquatic animal diseases, especially a lack of reliable information on life cycles and survival parameters. Recent editions of the *International Aquatic Animal Health Code* contain a chapter on risk analysis and describe the process as consisting of hazard identification, risk assessment, risk management and risk communication. Clearly, meaningful risk analysis requires both detailed knowledge of diseases and an excellent understanding of statistics.

In view of the problems mentioned above, the Office International des Epizooties held a three-day international conference on *Risk Analysis in Aquatic Animal Health* during February 2000 in Paris, France. The proceedings of this conference were recently published and contain the presentations, reports on session discussions and those by the session rapporteurs as well as useful appendixes. Four sessions were held, on risk analysis and its need, risk analysis methodology, research relevant to risk analysis and a discussion session. Presentations included general papers on the principles and components of risk analysis and these provide a good overview for those unfamiliar with this subject. Talks covered many practical examples from various countries and dealt with fish and shellfish diseases. Most focused on aspects directly relating to risk management, but several were research papers addressing specific concerns such as validation of diagnostic tests and survival parameters of pathogens in processed products. The content of the conference proceedings is impressively broad but without loss of relevant scientific detail.

The discussion sessions of the conference targeted three of the most problematical areas facing risk analysts and regulators. Two of these are technical in nature and concern the lack of knowledge on pathogen survival and infectivity parameters, and the need for validation of new diagnostic methods, especially molecular-based methods. The third discussion issue was that of standardisation of monitoring programmes and competent authorities, as this is essential if trading partners are to establish a relationship of mutual trust. A scarcity of diagnostic capacity and risk analysis skills in many countries, especially developing countries, is recognised by the *Agreement on the Application of Sanitary and Phytosanitary Measures* and provision is made to prevent this from acting as a barrier to trade. However, importing countries cannot logically be expected to take unreasonable risks when faced with products of uncertain health status. Therefore, an exporting country would do well to offer assurances of safety based on scientifically sound diagnostic and surveillance programmes, together with effective regulatory control. This aspect is extremely relevant in the South African context, where aquaculture development is limited by shortcomings in these areas.

In conclusion, *Risk Analysis in Aquatic Animal Health* is highly recommended reading for anyone involved in aquatic animal diagnostics, surveillance, certification and regulation. It is likely to be extremely useful to those dealing with the importation and export of aquatic animals or aquatic animal products. The publication is of the outstanding quality that one has come to expect from the Office International des Epizooties. Appendixes containing the *Agreement on the Application of Sanitary and Phytosanitary Measures,* a list of web sites relevant to risk analysis in aquatic animal health and a list with contact details of conference participants, further add to the value of the proceedings.

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