

## Book review

Ectoparasites of animals and control methods. *OIE Scientific and Technical Review*, 13(4); 472 pp. Price FRF250 or US\$46. ISSN 0253-1933, ISBN 92-9044-365-0

The harmful effects of ectoparasites and the diseases which they transmit are generally less spectacular than the damage caused by major epizootic diseases. Nevertheless, ectoparasitism and the resulting disease conditions have a considerable impact on the economics of livestock farming, particularly in tropical and subtropical countries.

For many years, the control of ectoparasites has relied almost exclusively on chemical control, using natural or synthetic insecticides and acaricides. However, the use of these products raises the following problems:

- The chemicals may be toxic for animals and humans.
- Environmental pollution may result, particularly when pesticide sprays are used.
- Chemical residues in animal tissues, milk products and wool may be harmful to consumers, particularly when a pesticide is applied directly to animals.
- Many developing countries lack the necessary foreign exchange to purchase these chemicals.
- Ectoparasites may develop resistance to all groups of pesticides which have been used to date.

The development of resistance requires continuous research to find new compounds with different modes of action. However, such research is becoming more

costly and more complex, particularly because of increasingly stringent regulations requiring information on chronic toxicity and residues. New products are therefore inevitably more expensive than their predecessors. As a result, manufacturers are developing new products only if the research is economically viable or, in other words, only if the market for such products justifies such research. Failing this, research or production is simply abandoned.

The impact of all the problems associated with chemical control has gradually become greater, to the point where the very principle of using chemical pesticides is now being questioned.

Hence, the present trend is towards integrated control, making optimum use of a combination of biological, immunological, mechanical, genetic and chemical procedures. In certain cases, surveillance and control procedures may also be necessary to prevent extension of the geographical range of a given parasite.

This special issue of the *Review* presents the current state of knowledge of the main groups of ectoparasites and the problems they create, and provides animal-health officials with the most recent information on the various methods of control and potential future developments.