The use of chemotherapeutic agents in aquaculture in the Philippines

Abstract
Chemotherapeutants are widely used to treat diseases of fish, specifically shrimp and aquarium fishes in the Philippines. The most commonly treated diseases are luminous vibriosis, filamentous bacterial disease, shell disease, larval mycosis and protozoan infections in shrimp and white spot, velvet disease, fin and tail rot, crustacean and monogenean infections, fungal infections and dropsy in finfishes. These chemicals include chloramphenicol, erythromycin, oxytetracycline, nitrofurans, formalin, malachite green, potassium permanganate, copper sulfate and Neguvon. The indiscriminate use may cause mortalities and morphological deformities in the host, development of resistant strains of bacteria and public health hazards. The Philippine government has embarked on regulating the use of these chemicals. Initially, use of chloramphenicol has been banned in food producing animals. In the near future, rules and regulations on the registration and labelling of these chemicals will be implemented. While these are a welcome development, much still needs to be done. It is recommended that medically important drugs be excluded from aquaculture. The campaign on the careful and restricted use of drugs should be intensified in both drug and aquaculture industries. Further research must be done on the screening of other drugs which are effective and environmentally safe. Lastly, funds should be allocated for research, extension and manpower development in fish health management, specifically, in chemotherapy.

URI
http://hdl.handle.net/10862/350

Citation

Publisher
Asian Fisheries Society, Fish Health Section

Subject
Drugs; Fish health; Therapy; Prophylaxis; Literature reviews; Philippines

Type
Conference paper
The Aquaculture Industry. Aquaculture is a growing agribusiness. It has grown more rapidly than either capture fisheries or terrestrial food animal production. Aquaculture is an important component of the world's food supply in both developed and developing countries. In recent years, fish have been widely recognised as a highly nutritious source of protein, essential fatty acids, micronutrients and minerals. During the last few years, there have not only been major increases in the consumption of fish originating from aquaculture but also an increase in the number of species under intensive culture, including several high-value species of shrimp, salmon and bivalves. Global production of various aquatic species (finfish, crustaceans, molluscs and others) has grown significantly. Aquaculture in the Third Millennium. Technical Proceedings of the Conference on Aquaculture in the Third Millennium, Bangkok, Thailand, 20-25 February 2000. pp. 167-191. NACA, Bangkok and FAO, Rome. Although chemicals are often used in aquaculture, their use is coming under increased scrutiny and revised disease management practices. Although there may be limitations in the use of epidemiological studies on aquatic animal pathogens, especially those with low or unknown host-specificity, this approach shows potential for significantly improving health management and disease control, especially for intensive culture operations. Disease surveillance and reporting systems.