

Therapeutic Agents

BMP No. 11



Definition

Infectious diseases are common in catfish culture, and antibiotics may be added to feed (medicated feed) or certain drugs or chemicals may be applied to pond waters for disease treatment. Because antibiotics, drugs, or other compounds applied for disease control could occur in effluents, guidelines for use of therapeutic agents are necessary.

Explanation

Infectious diseases in catfish culture are more common and severe when fish are stressed by poor diet, environmental stress, improper handling, or other factors. The first principle of disease control should be to prevent stressing the fish. The most common stress in ponds usually is low dissolved oxygen concentration. When ponds are aerated to maintain adequate dissolved oxygen, stress may still result if high feeding rates cause elevated ammonia concentration. Thus, compliance with good water quality management procedures (See BMP Nos. 7, 8, and 9) can reduce stress and minimize the likelihood of disease. Nevertheless, fish disease may still occur in ponds with good water quality.

When diseases occur in ponds, samples of fish should be examined and the disease identified. Once the disease has been identified, an antibiotic, drug, or other chemical known to be effective against the disease often is recommended. Dose rates, application techniques, and withdrawal times for therapeutic agents should follow instructions provided on product labels. Water should not be

intentionally discharged from ponds until the therapeutic agent has degraded.

Use of therapeutic agents

Practices

- *Store therapeutics so that they cannot be accidentally spilled to enter the environment.*
- *Manage pond water levels to prevent or minimize overflow until therapeutic agents have degraded.*
- *Use good water quality management procedures to prevent unnecessary stress to fish.*
- *Make a diagnosis for diseases and a recommendation for disease treatment before applying therapeutic agents.*
- *Follow instructions on labels of therapeutic agents for dose application method, safety precautions, etc.*

Implementation notes

Disease diagnosis and recommendations for treatments should be done by fish health specialists. The Alabama Fish Farming Center can provide assistance with disease identification, treatment recommendations, and treatment oversight.

References

Browson, M. W. 1996. Catfish quality assurance. Publication 1873, Mississippi Cooperative Extension Service.



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