



Fish Health Section Newsletter

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FLUORESCENT ANTIBODY TECHNIQUE FOR CHANNEL CATFISH VIRUS

A direct fluorescent antibody technique for channel catfish virus (CCV) has been developed and was successfully applied to the detection of CCV in infected cell cultures.

Leighton slip cultures of channel catfish ovary cells, in the 50th passage, were infected with CCV (strain CCV Ala). Two cultures were fixed immediately after the 30 minute adsorption period and 2 additional cultures were fixed every 2 hours thereafter for 12 hours. One cell culture at each time interval was stained with a 1:8 dilution of the FA conjugate. The second cell culture was stained with an H & E series.

Infected channel catfish ovary cells showed a fluorescence at 4 hours post adsorption. At 6 hours post adsorption, the fluorescence became more pronounced and the syncytial type of cytopathic effect became more readily evident. Cytopathic effect in the cultures progressed to the point where, at 10 hours post adsorption, the cultures were almost completely destroyed. Intranuclear inclusion bodies in the H & E stained cultures were present as early as 2 hours post adsorption. At 4 hours post adsorption, the intranuclear inclusion bodies were more apparent. As time progressed, the prevalence of the inclusions increased. Control cell cultures, fixed over the same time schedule, showed neither fluorescence nor inclusion bodies (for comment or further information contact Mr. Paul R. Bowser, Dept. of Fisheries and Allied Aquacultures, Swingle Hall, Auburn University, Auburn, Alabama 36830)

NEW PUBLICATION

A new journal entitled Journal of Fish Diseases will be published quarterly starting in January 1978. Dr. Ronald J. Roberts at the University of Stirling, Scotland, will be editor with an editorial board consisting of Dr. G. Hoffman, Dr. S. F. Snieszko and Dr. K. Wolf from USA, Dr. P. de Kinkelin, France, Dr. O. Ljungberg, Sweden and Dr. A.L.S. Munro and Dr. J. P. Stevenson, U.K. , *G.N. Bauer, Russia*.

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COMMITTEE REPORTS

-TECHNICAL PROCEDURES- Pete Bullock reports there has been some confusion regarding the procedure which should be followed to obtain a copy of The Suggested Procedures for the Detection and Identification of Certain Infectious Diseases of Fishes, commonly known as the "blue book". All new FHS members receive the Procedures when they join the Section. Others who wish to obtain a copy should send a check for \$2.00 made payable to Fish Health Section, AFS; to the Chairman of the Technical Procedures Committee: G. L. Bullock, Eastern Fish Disease Laboratory, Route 1, Box 17A, Kearneysville, West Virginia 25430. Upon receipt of this check, a copy of the Procedures will be sent.

Members of the 1977 Technical Procedures Committee are: Gary Camenisch, Hatchery Biologist, Springfield, Missouri; Trevor Evelyn, Pacific Biological Station, Nanaimo, B.C. Canada; Dan Mulcahy, Western Fish Disease Laboratory, Seattle, Washington; and John Schachte, Jr., Rome Fish Pathology Lab, Rome, New York. One of the prime objectives of the Technical Procedures Committee for 1977 is to complete the revision of the Procedures.

-NEWSLETTER- Steve Flickinger asks for help from all FHS members in ferreting out items of interest for the newsletter. Because he is most interested in fish culture, his contacts and readings do not cover fish health to the degree that many FHS members do.

-MEMBERSHIP AND BALLOTING- Dianne Elliott is continuing the procedure used last year of making a red circle around the address label of members who have not paid their dues for 1977. Please pay your dues promptly because it is a drain on the rest of us to carry you along. If you have just recently paid your dues, you might still receive the red circle because address labels were made in advance of printing and mailing the newsletter. Please accept our apologies!

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The NEWSLETTER of the Fish Health Section of the American Fisheries Society is published four times annually in accordance with Section objectives and mailed to the Section membership in good standing at the time of publication. The use of company or registered trade names does not constitute an endorsement but serves only to keep the members informed. Contributions to the NEWSLETTER are encouraged and should be sent to one of the following Committee members no later than May 20 to be included in the next quarterly issue:

Dr. Stephen A. Flickinger (editor), Dept. of Fishery and Wildlife Biology,
Colorado State University, Ft. Collins, CO 80523.

Dr. Charles R. Berry, Jr., Utah Cooperative Fishery Unit, U.S.U.,
Logan, UT 84322.

Dr. Wilmer H. Rogers, Fisheries Bldg., Auburn Univ., Auburn, AL 36830.

Dr. Glen L. Hoffman, Fish Farming Experiment Station, P.O. Box 860,
Stuttgart, AR 72160.

Dr. Guy L. Tebbit, Wildlife Vaccines, 11475 W. 48th Ave.,
Wheat Ridge, CO 80033.

-PROFESSIONAL STANDARDS- Ivan McElwain states that members of the FHS Professional Standards Committee have been selected for the up-coming year. They are: Dr. Richard Heckman, Brigham Young University; Dr. Courtney Gustafson, Pennsylvania Fish Commission; Mr. Douglas Mitchum, Wyoming Game and Fish Department, and Dr. Richard Stroud, Oregon State University.

Using the certification of Fish Health Inspectors as a guide, the committee will be developing criteria and procedures for registering "general practitioners" in the field of fish health. The basic objective is to develop a peer review system within the fish health profession. The committee will also be contacting Canadian officials to get automatic acceptance of FHS Fish Health Inspectors as authorized health inspectors for fish shipments into Canada. This will eliminate the additional work of FHS members sending curricula vitae to Canada for clearance.

-NOMINATING- Doug Mitchum has had little to do this early but will get busier as elections approach.

SPECIAL PROJECTS

-Project #1- Glossary of Fish Health Terms. George Post reports that the glossary is in final draft form but that \$2,000 is needed to get it published and to provide a free copy to each FHS member. Remaining copies might be sold by AFS for \$4.00 each with \$2.50 going to AFS for mailing, advertising and storage and \$1.50 going to FHS for future projects. Comments on this arrangement are welcome.

-Project #2- Nomenclature of the Bacterial Diseases of Fish. Dr. Snieszko succeeded in publishing a note on the problems facing bacteriologists specializing in diseases of fishes in the February issue of the American Society for Microbiologists News. In brief he pointed out that the taxonomy and nomenclature of some common pathogenic bacteria (such as Aeromonas spp.) need further clarification. Also, the 8th Edition of Bergey's Manual of Determinative Bacteriology does not list some well-described fish pathogenic bacteria such as Hemophilus piscium, and Pasteurella piscicida. There are plans for a 9th Edition of Bergey's Manual and this FHS Special Project should provide valuable recommendations to the editors of the new edition.

-Project #4- FHS Organized Module(s) on Annual AFS Meeting Program in Vancouver, B.C. in September 1977. Tosh Yasutake comments that he is planning two sessions, 1.5 hr each. One session will have invited speakers and the other will have contributed papers. More details will be forthcoming.

-Project #3- Development of FHS Position on Accelerating the FDA Registration of Minor-use Drugs and Chemicals. Ron Goede is busily attempting to gain biopolitical support for our plight regarding chemical registration. He is hopeful that the Colorado River Wildlife Council, the Western Association of Game and Fish Commissioners and other similar organizations will rally to our cause. Ron's biggest problem is trying to get a good estimate of the economics involved with use of drugs and chemicals in fisheries. He is interested in both the dollars spent on drugs and chemicals and the economic losses that might occur if the compounds are unavailable for use. Send your thoughts to Ron on this important issue.

MEETINGS

Previously announced but reminded:

TAVOLEK INTERNATIONAL SYMPOSIUM ON April 4-6, 1977, at the Sea-Tac
DISEASES OF CULTURED SALMONIDS Motor Inn, Seattle, Washington.
Contact Dr. John L. Fryer, Dept.
of Microbiology, O.S.U., Corvallis, OR 97331.

CRUSTACEAN HEALTH WORKSHOP April 20-22, 1977, at the Flagship Hotel in
Galveston, Texas. Contact Jorge K. Leong,
NMFS, 4700 Ave. U, Galveston, TX 77550.

New announcements:

EASTERN FISH HEALTH WORKSHOP At the end of April 1976 the first Eastern Fish Health Workshop was held at Hershey, Pennsylvania, in conjunction with the meeting of the Northeast Wildlife Conference. The Fish Health Workshop was attended by individuals interested in diseases of fresh and salt water fishes and was patterned after Fish Health Workshops held annually in the West and Midwest. Although last year's workshop was largely organizational with brief presentations of current research activities, this year's workshop will be more structured to accommodate presentations by a large group of scientists investigating the health of fish and shellfish. The workshop is being hosted by the Pathobiology Division of the National Marine Fisheries Service Northeast Fisheries Center, Oxford Laboratory, and will be held in Easton, Maryland on May 26 and 27, 1977. For further information contact Dr. Aaron Rosenfield, Pathobiology Division, National Marine Fisheries Service Northeast Fisheries Center, Oxford Laboratory, Oxford, Maryland 21654. Telephone 301-226-5193.

MID-YEAR MEETING OF THE FISH DISEASE COMMITTEE OF THE SOUTHERN DIV., AFS June 9, 1977, at Swingle Hall, Auburn Univ., Auburn, Alabama. A representative of each state in the Southern Division is encouraged to attend and present a summary of fish disease activities or problems in his state. Contact Dr. Mac V. Rawson, Auburn University Cooperative Extension Service, 800 Downtowner Boulevard, Suite 104, Mobile, Alabama 36609.

WESTERN DIVISION AFS July 10-13, 1977 in Tucson, Arizona. Contact Gary Chapman, 1350 S.E. Goodnight Ave., Corvallis, OR 97330.

MANAGEMENT, DISEASE AND NUTRITION OF TROPICAL MARINE FISHES August 22-26, 1977, hosted by the Waikiki Aquarium. Contact Dr. Leighton Taylor at the Waikiki Aquarium, 2777 Kalakaua Avenue, Honolulu, Hawaii 96815. A recent fish health seminar was held at the Aquarium.

MISCELLANY

Markewitch, A. P. (Dept. of Zool, Acad. Sci., Kiev, USSR). 1956, (English transl. 1976). PARASITIC COPEPODS ON THE FISHES OF THE USSR. Izdatelstvo Akad. Nauk Ukrainskoi SSR, Kiev (Engl. Transl. TT 70-53090, U.S. Dept. Commerce, Nat. Tech. Info. Serv., Springfield, VA 22161, 445 pp.

Although belated, this translation will be helpful to those who have difficulty in obtaining Russian literature. It is in two parts: Part I concerns the morphology, development, biology, economic importance of pathology. Part II contains descriptions of all the Russian species known in 1956. There are identification keys and the illustrations include drawings of the intact parasites and details of the appendages useful in identification of the species. (G. L. Hoffman).

That handy reference, Trout and Salmon Culture by Earl Lietritz has been revised and is available for \$3.00 from California Department Fish and Game, Office of Procurements, Documents Section, P.O. Box 20191, Sacramento, CA 95820. (S. J. Puttmann).

A DECISION NOT TO PURSUE THE PUBLICATION OF A RECENT FISH VACCINE CONFERENCE has been made following consultations between Editor Bob Kendall and Don Amend, Past President of the AFS Fish Health Section. Norden Laboratories of Lincoln, Nebraska, had initially planned to publish and had set part of the type when a company decision was made not to enter the aquaculture business. Norden contacted AFS to see if we were interested in carrying through with all rights and galleys accruing to the Society. We have strong reservations about several of the papers and experience has shown a limited market for fish disease publications. (C. L. Sullivan).

THE LAMAR FISH CULTURAL DEVELOPMENT CENTER, operated by the U.S. Fish and Wildlife Service, will be redirecting its work effort beginning this spring. In the past, emphasis at the Center has been on pollution control techniques for fish hatcheries and on the development of new equipment and devices for trout culture. New program emphasis at Lamar will concentrate on the culture techniques of anadromous alosids, especially American shad (Alosa sapidissima). Work will begin this spring with the acquisition of eggs from runs of fish in the Delaware and Connecticut Rivers. We would appreciate corresponding with interested persons especially those that have information on the diseases and husbandry of anadromous alosids.

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