

## Copper sulfate proves helpful for controlling catfish egg mortality

A consortium of federal laboratories has selected several scientists at the Stuttgart National Aquaculture Research Center (SNARC) in Stuttgart, AR and Mississippi State University (MSU) for an 'Excellence in Technology Transfer' Award for their work in developing copper sulfate as an effective treatment for fungal infections in catfish eggs.

Fungal infections of hatchery-reared catfish eggs frequently cause serious losses and can result in losses up to \$1.1 million dollars per year for the industry. The only FDA approved compounds for fungus control are very expensive drugs with human safety concerns as well as storage precautions.

These researchers from the US Department of Agriculture, Agricultural Research Service at SNARC and MSU determined that copper sulfate could be an inexpensive and safe treatment that effectively controls fungal growth on catfish egg. This accomplishment will save catfish hatchery managers thousands of dollars in treatment expenses.

Freeport-McMoRan Copper & Gold Inc. is partnering with SNARC, gaining seven years exclusivity on FDA-labeling on the product.

The research team was selected for the award because of its direct benefit to the catfish aquaculture industry and the large monetary savings

in treatment costs. Savings on production costs are critical to the US farm-raised catfish industry due to the increases in feed cost, fuel and labor, and competition in domestic markets with imported fish. A typical hatchery with 300 hatching troughs would annually spend about \$35 to treat with copper sulfate compared to \$2,155 and \$1,370 to treat with formalin and hydrogen peroxide, respectively.

The research team, made up of Dave Straus, Drew Mitchell, and Ray Carter of SNARC and Jim Steeby of Mississippi State University, was honored at a recent event hosted by the Federal Laboratory Consortium (FLC) Mid-Continent Region held in Jackson Hole, WY. On hand for the award event were team representatives Dave Straus and Jim Steeby.

The FLC was formally chartered by Congress in 1986 to promote and strengthen technology transfer activities and is a nationwide network of federal laboratories that strives to link lab-developed technologies and expertise with the private sector. More than 250 major federal laboratories and centers and their parent departments and agencies are FLC members. The Mid-Continent region of the FLC includes fourteen states and over 100 laboratories - [www.flcmidcontinent.org](http://www.flcmidcontinent.org) or [www.federallabs.org](http://www.federallabs.org).



Ray Carter, Dave Straus and Drew Mitchell with their award plaques presented by the Federal Laboratory Consortium.



Dave Straus and Jim Steeby were honored in Jackson Hole, WY for their work with copper sulfate.