

Koi Herpes Virus Vaccine Update

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Koi herpes virus remains an issue of great concern among koi dealers, retailers and owners. As such, lines of defense are springing up on multiple fronts.

For example, Israel-based aquaculture vaccine

A vaccine for koi herpes virus might be on the horizon for U.S. koi dealers and retailers. (Courtesy of Kathleen Buckner/BowTie Inc.) manufacturer KoVax reported that it reached the final stages of licensing its KHV vaccine for sale in the United States, where no such preventive is available. Currently sold in Israel under the name KV3, the KVV vaccine is undergoing review by U.S. Department of Agriculture's Animal and Plant Health Inspection Service. The process requires submission of an extensive amount of biological tests and inspections data.

At press time, KoVax founder and CEO Yaniv Kotler could not provide a firm timeline as to when the vaccine might hit the U.S. market. Kotler said if the regulatory review progressed as expected, KoVax would possess a license to sell KV3 in the United States in the near future.

Kotler said the KHV vaccine, available in Israel since 2004, was used to vaccinate more than 50 million pond fish by the end of 2008. No spontaneous KHV eruptions are evident in Israel, Kotler said.

Upon approval for sale of the KHV vaccine in the United States, Kotler said "it is recommended to all koi and carp fish breeders, farmers and hobbyists that want to prevent KHV infection in their facilities."

Andy Goodwin, Ph.D., professor and fish pathologist at the University of Arkansas at Pine Bluff, followed the KV3 vaccine in scientific literature. Based on his observations, Goodwin said the research version of the KHV vaccine appears effective. "I think U.S. hobbyists would like to have a safe and effective vaccine," Goodwin said. The KHV vaccine proves much more important in other parts of the world, however, where cultured common carp are a vital food source, Goodwin said.

While the KHV vaccine winds its way through a complex regulatory web, the U.S. koi industry continues to encourage the adoption of best practices to combat the spread of KHV. Project KHV, a charitable organization spearheaded by Associated Koi Clubs of America, developed a certification program that provides a framework to help koi dealers

minimize the incidence of KHV in their stock. At press time, Project KHV anticipated a national rollout of the Koi Dealer Best Health Practices Certification Program in mid-2009.

Kari Peters, co-owner of Peters & Sons Koi & Pond Supply in Martinez, Calif., said her operation's procedures changed a lot in response to the KHV threat. Peters said their company was one of the first koi dealers to receive certification under the BHP program, as the program's beta testing phase drew to a close in January this year.

"We opened for business in 1999 when hints of the disease were showing up in California," Peters said. "There was very little known about 'gill disease'/KHV or prevention from spreading it to customers."

Peters said she closely tracked the scientific research findings into the newly identified disease. "When it became apparent that the disease is most often asymptomatic in cooler water, we began a heated quarantine procedure," Peters said. "When Project KHV asked us to participate in their aquatic-veterinarian-designed Koi Dealer Best Health Practices Certification Program for certification, we eagerly accepted the invitation and improved our methods of protocol and biosecurity."

Among other elements, Peters said the protocol involves using a gated area to koi from different breeders in separate pond systems for three weeks. Peters & Sons Koi & Pond Supply maintain a water temperature in the mid-70s during that time, keep daily records and stats, treat for parasites, scrape and scope the koi and keep a close watch on the koi to see if any symptoms occur that indicate bacterial or viral infections, Peters said. If there are no indications of problems, Peters said she adjusts the water temperature to that of the sales tanks, and the koi are then available for sale.

Koi Acres in Scandia, Minn., also was certified under the BHP program. Owner Mike Swanson said program compliance required minimal adjustment because he already worked with a local aquatic veterinarian in implementing recommended disease prevention protocols.

One area where the certification did demonstrate improvements was in documentation, Swanson said. Thanks to new documentation procedures implemented under the BHP program, all Koi Acres employees can see, at any given time, what treatments or tests already were performed by other employees. Once the BHP program rolls out nationwide — and hobbyists become more educated as to what certification means — Swanson said he expects BHP certification to carry significant value in koi customers' eyes.