Shooting fish in a barrel - easy. Raising them in one - definitely not, at least when black sea bass are concerned.

UNCW scientists celebrated their success in conquering that challenge Wednesday, dining on some of the first full commercial crop of black sea bass ever born in captivity and raised to market weight.

Paul Vroman, the chef at downtown’s Tango du Chat, served the specimens cut into sushi and fried whole with avocado mint.

“I ate it raw last night and cooked in the morning,” said Vroman, one of about 10 area chefs giving researchers feedback on the crop. “It’s a beautiful fish.”

Scientists at the University of North Carolina Wilmington hope that’s a sentiment shared in kitchens across the country as they explore demand for the farm-raised fish and for the trade secrets developed to grow them.

The wild black sea bass market is about a $1.5 million a year industry, said project leader and marine science professor Wade Watanabe, who has been working on raising black sea bass for nearly a decade. The fish are found in waters from North Carolina to New England and are popular in Chinese cuisine.

“It could be real profitable,” Watanabe said. “We think the fish has the potential to become a very popular seafood product.”

There are no buyers yet, but interest is there, he said. UNCW’s intellectual property policy divides proceeds from institutional research between the university, which gets 60 percent of net revenues, and the researchers, who get 40 percent.

Aquaculture is a $50 million industry in North Carolina that has been growing 9 percent to 15 percent a year for the past decade, said Tom Losordo, a biological engineering professor at N.C. State University. But most farmed fish are freshwater species.

Marine fish are generally much trickier animals to raise, Watanabe said. They have smaller eggs, generating more delicate larvae, and they have finicky diets. Freshwater fish can be fed store-bought food. The young black sea bass require live plankton, he said.

Watanabe, also a leader in research on raising flounder, began looking at black sea bass in the late 1990s at the suggestion of Capt. Carl Snow, a commercial fisherman in Carolina Beach, who noticed how well the fish survived in his holding tanks coming back to dock.

After success raising fish caught in the wild, the researchers have been experimenting to find optimal conditions for raising them through their entire life cycle, facing questions like how densely the fish can be stocked, what level of salinity is best and what hormones induce them to spawn.

“It’s tedious,” Watanabe said. But the offshoot could also mark another source of food and perhaps relief for wild black sea bass, which are considered overfished in the waters south of Cape Hatteras. Last year, officials implemented a quota on commercial fishing in this area.

Daniel Baden, director of the Center for Marine Science at UNCW and head of its economic development program, said this was only one aspect in the school’s growing marine biotechnology efforts.