



Alaska Fisheries Development Foundation, Inc.

FOR IMMEDIATE RELEASE
March 31, 1990
Contact: Mel Monsen
(907) 276-7315

BREAKTHROUGH RESEARCH SHOWS PROMISE FOR ARROWTOOTH FISHERY

ANCHORAGE, ALASKA -- The Gulf of Alaska holds 2.1 million metric tons of arrowtooth flounder, and no one wants to eat them. Arrowtooth is a deep-water flatfish species with an odd characteristic. It produces an enzyme that breaks down the muscle tissue when the fish is cooked. Instead of firm, flaky meat like most sole and flounder, arrowtooth is soft and mushy.

Alaska Fisheries Development Foundation is helping unlock the puzzle of arrowtooth flounder, and a scientist working on the project has made a major breakthrough. Dr. Diana Wasson of the National Marine Fisheries Service in Kodiak said the enzyme at work in arrowtooth flounder acts like scissors to cut the proteins in the meat into tiny pieces. After identifying the enzyme and tracking its work on arrowtooth flesh, Dr. Wasson was able to block the activity of the enzyme using powdered beef plasma, an ingredient commonly used in processed meats, cakes, pasta and pizza dough.

"Arrowtooth flounder has been one of the enduring puzzles of the North Pacific fisheries," said Mel Monsen, executive director of AFDF. "We've known for a long time that if we could just figure out how to maintain the texture of arrowtooth flounder, we would have a huge, readily available resource perfect for processing in Alaska. Dr. Wasson's work, if employed by the seafood industry, will be a breakthrough of monumental proportions."

Monsen said the next stage will be a pilot study to make surimi from arrowtooth. The white flesh and light flavor of arrowtooth--along with the size

- MORE -

of the resource in the Gulf of Alaska--make it an ideal candidate for surimi processing.

"We think that by using arrowtooth as an alternative raw material for surimi, processors in Alaska can add flexibility to their operations and also reap additional profits from arrowtooth," Monsen said. "Right now, arrowtooth are only processed on a small scale, and they have very little value on the fillet market."

Dr. Wasson said many questions still remain about the economics of arrowtooth surimi. "Markets, machinery and production methods all hold their own share of the unknown," she said. "But at least, as far as arrowtooth and its enzyme are concerned, we can move forward with a common understanding of the problem."

The arrowtooth flounder study was funded by a grant from the Alaska Science and Technology Foundation. The project arose as a result of AFDF's three-year flatfish development project, which has provided impetus for a shore-based flounder and sole fishery in the Gulf of Alaska. Since the project began in 1987, three Alaskan processors have begun year-round flatfish production.

12

