

IATTC Achotines Laboratory is the Only Facility Worldwide to Report 25 Years of Sustained Spawning by Captive Yellowfin Tuna

La Jolla, CA, USA, November 26, 2021 --- The Inter-American Tropical Tuna Commission (IATTC), a Regional Fishery Management Organization based in La Jolla, CA, reports reaching a milestone of 25 years of sustained spawning of yellowfin tuna at its Achotines Laboratory in the Republic of Panama. The Early Life History (ELH) Group of the IATTC conducts research on yellowfin tuna spawning. The near-daily spawning of yellowfin tuna at the Achotines Laboratory represents the only sustained spawning of yellowfin tuna in captivity in the world.

Yellowfin tuna spawn at the Achotines Laboratory in an in-ground, concrete tank (17 m diam x 6 m depth, 1,362 m³ volume). In 1994, an expansion of the Laboratory's tank and seawater system, financially supported by the IATTC and the Overseas Fishery Cooperation Foundation (OFCF) of Japan, accommodated research studies of yellowfin tuna at the Laboratory. Yellowfin tuna commenced spawning in the land-based tank in October 1996.

The yellowfin tuna spawning program supports research on the reproductive biology of adult tunas as well as investigations of the early life stages. The ELH group conducts ecological experiments to estimate the effects of biotic and environmental factors on the egg, larval and early-juvenile stages of yellowfin and uses the results to develop growth and survival models of early life stages prior to recruitment to the tuna fisheries in the eastern Pacific Ocean. The captive spawning of yellowfin tuna also supports laboratory investigations of the effects of climate change on pre-recruit life stages.

The studies of yellowfin growth and survival during the early life stages have strong application to tuna ecology and aquaculture. Improved rearing success of early-juvenile yellowfin at the Achotines Laboratory now provides opportunities to experimentally study all pre-recruit life stages (0-6 mo of age) and supports the potential completion of full-life-cycle rearing of yellowfin at the Laboratory.

Information on the research conducted at the IATTC's Achotines Laboratory is available at <https://www.iattc.org/AchotinesLab/AchotinesDefaultENG.htm>.

For additional information, contact Daniel Margulies (dmargulies@iattc.org) or Vernon Scholey (vscholey@iattc.org).