

Principal Researcher	Hidemi Kumai			Number of Researchers	13	
Research Institution · Department · Title	Professor, Faculty of Agriculture, Kinki University			Location of Institution	Nara	
Title of Project	Biological and Biochemical Studies on Resource Propagation of Pacific Bluefin Tuna <i>Thunnus thynnus</i>					
Abstract of Research Project	<p>The objective is to accumulate biological and biochemical knowledge relating the reproductive physiology, larval and juvenile developments, and nutritional requirements for the resource propagation of Pacific bluefin tuna <i>Thunnus thynnus</i> (BFT). This can also contribute to the global research and development for the aquaculture of BFT. The project studies include: environment conditions for the optimum maturing and mating and morphological gonad development of BFT, about 180 kg BW, in the rearing site of Fisheries Laboratory, Kinki University, early development of endocrine glands, adipose cells and tissues, energetic nucleotides, stress substances, enzyme activities of nutrient metabolisms as well as disease control and feed development. If BFT artificially produced at the Fisheries Laboratory in '96 and '98 spawn in the term of project, it will be the first record to attain the completely controlled aquaculture of BFT in the world.</p>					
References	<p>H. Kumai: Bluefin Tuna. in "Advances in Marine Aquaculture" (ed. by H. Kumai), Houbunsha, Tokyo, 2000, pp. 212-216. (in Japanese)</p> <p>H. Kumai <i>et al.</i>: Mortality of northern bluefin tuna <i>Thunnus thynnus</i> due to trauma caused by collision during grow-out culture. <i>World Aquaculture</i>, 31, 632-639 (2000).</p>					
Term of Project	Fiscal years 2002-2006. (5years)					
Budget Allocation (in thousand of yen)	FY2002	FY2003	FY2004	FY2005	FY2006	TOTAL
	40,200	15,500	11,200	10,800	10,800	88,500
Homepage Address	http://www.nara.kindai.ac.jp/					