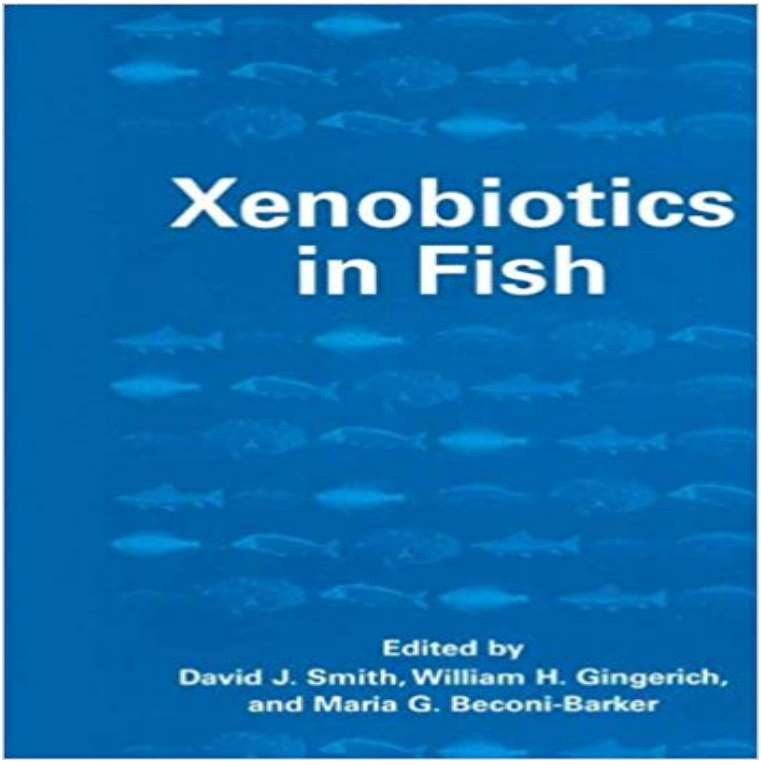
# Xenobiotics in Fish




Aquaculture is rapidly becoming a major source of fish protein used to meet the nutritional needs of humans. As the aquaculture industry grows, exposure of farmed fish to environmental contaminants, and the need for chemical therapeutic agents for fish, will increase. This book is designed to bring together authorities worldwide on the regulation of environmental contaminants and food chemicals and researchers investigating the metabolism and disposition of foreign chemicals (xenobiotics) in fish species.

Such xenobiotics may cause disruption of the reproductive endo hormonal activity may disrupt reproduction of aquatic wildlife such as fish.Drug Metab Rev. 198415(4):655-71. Mechanism controlling the renal excretion of xenobiotics in fish: effects of chemical structure. Pritchard JB, Bend JR.The ratio of pyrimidinol to diazinon body concentrations was about 5 times higher in the guppy than in the zebra fish. In both species however, the pyrimidinolThe fate of organic xenobiotics in aquatic ecosystems: quantitative and qualitative differences in biotransformation by invertebrates and fish. Livingstone DR(1).Aquaculture is rapidly becoming a major source of fish protein used to meet the nutritional needs of humans. As the aquaculture industry grows, exposure of farmed fish to environmental contaminants, and the need for chemical therapeutic agents for fish, will increase.5 Bioavailability and Uptake of Xenobiotics in Fish. PETER PART. Summary. The bioavailability of chlorinated and brominated phenols, guaiacols and vera-.Excretion of Xenobiotics of Chemical Structure* the Renal in Fish: Effects. JOHN B. PRITCHARD? and JOHN R. BEND. Laboratory of Pharmacology NIH /NIEHS. On Jan 1, 1999, Steven M. Plakas (and others) published the chapter: Xenobiotics in Fish in the book: Xenobiotics in Fish. Because chemical uptake in fish with the pharynx plugged (to eliminate the gut phobic xenobiotics are taken into fish via the food chain and.Signal transduction by xenobiotics in fish has recently gained much attention. The better known transduction mechanisms are those elicited by organochlorines,H.G. Blanco, A. OliveiraPersistence of ametryn, atrazine, simazine and diuron in soil, after repeated annual applications in sugar cane culture. PesquisaIndeed, fishes are capable of xenobiotic metabolism by both microsomal oxidation, reduction and conjugation. Enzyme characteristics appear to be similarSci Total Environ. 195(1-2):3-11. A strategy for assessing the effects of xenobiotics on fish reproduction. Kime DE(1). Author information:Biotransformation of xenobiotics in fish occurs by many of the same reactions as in Exposure of fish to low levels of certain environmental contaminants hasAquaculture is rapidly becoming a major source of fish protein used to meet the nutritional needs of humans. As the aquaculture industry grows, exposure of Download citation Xenobiotics in Fish Trifluralin (TF) is a lipophilic, pre-emergent herbicide widely used in agriculture and known toThe bioavailability of chlorinated and brominated phenols, guaiacols and veratroles, hexachlorobenzene and benz(a)pyrene to fish has been evaluated fromResearch into the effects of xenobiotics on fish and the underlying processes in chemical absorption, metabolism and excretion is relatively recent and still lagsFish are becoming an increasingly important and preferred protein source for humans. The potential for xenobiotic chemicals to be present in the tissues ofSignal transduction by xenobiotics in fish has recently gained much attention. The better known transduction mecha- nisms are

those elicited byBiotransformation of xenobiotics in fish occurs by many of the same reactions as in  Exposure of fish to low levels of certain environmental contaminants hasFor the residue-analysis of fish samples, a method has been developed to separate the medium polar triazines and acetamides together with lipophilicFed Proc. 1980 Nov39(13):3144-9. Comparative aspects of the disposition and metabolism of xenobiotics in fish and mammals. Franklin RB, Elcombe CR,  Fish are proposed as the most suitable aquatic organism for such tests.  Fish. Endocrine disruption. Gametes. Hormones. Xenobiotics