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Titolo Fish Chemosenses / / editor, Klaus Reutter

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Soggetti Fishes - Physiology

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Taste Smell

Chemoreceptors Electronic books.

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Note generali Errata sheet inserted.

Nota di bibliografia Includes bibliographical references and index.

Nota di contenuto Development and evolution of the olfactory organ in gnathostome fish

in rainbow trout: revisited / Toshiaki J. Hara -- Olfactory discrimination in fishes / Tine Valentincic -- In-vivo recordings from single olfactory sensory neurons in goldfish (Carassius auratus) during application of olfactory stimuli / H.P. Zippel ... [et al.] -- Olfactory cross-adaptation: not a peripheral but a general phenomenon / H.P. Zippel ... [et al.] -- Review of the chemical and physiological basis of alarm reactions in cyprinids / Kjell B. Døving ... [et al.] -- The system of solitary chemosensory cells / Anne Hansen -- Barbel taste system in

catfish and goatfish / Sadao Kiyohara and Junzo Tsukahara -- Subtypes of light and dark elongated taste bud cells in fish / Klaus Reutter and

/ Eckart Zeiske and Anne Hansen -- Olfactory responses to amino acids

Anne Hansen -- Efferent synapses in fish taste buds / Klaus Reutter and Martin Witt -- Comparison of taste bud types and their distribution

Sommario/riassunto

on the lips and oropharyngeal cavity, as well as dentition in cichlid fish (Cichlidae, Teleostei) / Lev Fishelson -- Role of gustation in two populations of deep-sea fish: comparison of mesopelagic and demersal species based on volumetric brain data / H.-J. Wagner -- Comparison of taste preferences and behavioral taste response in the nine-spined stickleback Pungitius pungitius from the Moscow River and White Sea basins / Alexander O. Kasumyan and Elena S. Mikhailova.

"This book deals with chemosensory systems of fishes and covers the well known olfactory and the gustatory senses as well as the less popular solitary chemosensory cells. Chemosenses play an essential role in the life of a fish. They help fish in their search for food, to consume it and digest it. They also help fish to find their conspecifics and to avoid enemies or predators. Fish live in varied and often extreme ecological conditions frequently inhabiting niches such as caves or at great depths in the oceans. The chemosensory organs of such well adapted fish are highly specialized and evolved in contrast to the chemosenses of sight-hunting fish. Fishes have developed diverse strategies to survive within the widely varying water bodies, owing, at least in part, to the highly evolved chemosensory systems. A group of internationally reputed specialists have contributed to this book. It contains six chapters devoted to fish olfaction, one chapter to solitary chemosensory cells and six chapters to the fish taste"--Provided by publisher.