

# The Extraction of Pearl Essence from Different Types of Fishes

**Manda Mhatre, Yojana Muniv and Rani Thakre**

Changu Kana Thakur Arts, Commerce and Science College, New Panvel (Autonomous), Maharashtra, India

**Abstract:** *Pearl essence is extracted from fish scales. Guanine is an iridescent substance that is found in the epidermal layer and scales. In its crystalline form guanine reflects and refracts light and thus acts as a camouflage to fish. The suspension of guanine in a solvent is called "essence of pearls". It was formerly used in cosmetics and paints. Guanine is lustrous material found in the epidermal layer and scales of most fishes like oil Sardine Mackerel, Herring and various carps bleak, ribbon fish etc. In United States herrings is one of the major species exploited for production of pearl essence. In India, ribbon fish is used for production of pearl essence. When guanine particles are deposited on the inside surface of solid beads, an optical effect similar to that of real pearl is obtained. Therefore, the present comparative study of extraction of pearl essence from scales of different types of fishes may play a decisive role in quantity of pearl essence from different types of fishes.*

**Keywords:** Pearl Essence, Fish Scales, Camouflage to Fish, Guanine, Cosmetics and Paints

## REFERENCES

- [1]. Pagarkar A. U. et.al (2014): Fish waste: its eco-friendly utilization and uses FISHCOOPS, Jan.2014
- [2]. Gopakumar, K. (2002): Textbook of Fish Processing Technology, Indian Council of Agricultural Research, New Delhi. 491 pp
- [3]. Ninave, A. S. and Rathnakumar, K. (2008): Fish Processing Technology and Product Development. Narendra Publishing House, Delhi, 562pp
- [4]. Hafez Jafari et.al (2020): Fish Collagen: Extraction, Characterization, and Applications for Biomaterials Engineering Polymers 2020, 12, 2230.
- [5]. Balange A. K., Joshi, V.R. and Pagarkar, A.U. 2004. Preparation of pasteurized fish ball in curry and its storage study. Journal of Indian Fisheries Association, 30: 141-148.
- [6]. AOAC, 2005. Official methods of analysis of the Association of Official Analytical Chemists International, 18th edition, In Horwitz, W. (Ed.), AOAC, Washington (D. C.), 35: 2-36.
- [7]. Anon .2009. Handbook on fisheries statistics 2008. Department of Animal Husbandry, Dairying and Fisheries. Ministry of agriculture, Govt. of India, New Delhi.
- [8]. Pawar P. 2011. Preparation of battered and breaded product from fresh water fish catla (Catlacatla). M.F.Sc. Thesis submitted to Dr.BalasahebSawant Konkan KrishiVidyapeeth, Dapoli, Maharashtra.
- [9]. Sehgal H.S. and Sehgal G. K. 2002. Aquaculture and socio-economic aspects of processing carps into some value-added products. Bioresource Technology, 82: 291-293.
- [10]. Wu, J.; Guo, X.; Liu, H.; Chen, L. Isolation and Comparative Study on the Characterization of Guanidine Hydrochloride Soluble Collagen and Pepsin Soluble Collagen from the Body of Surf Clam Shell (Coelomactra antiquata). Foods 2019, 8, 11.