

عنوان مقاله:

New Approaches for the Effective Utilization of Fish Skin Wastes of Aluterus monoceros

محل انتشار:

مجله زمین شناسی،محیط زیست و علوم بهداشتی, دوره 2, شماره 2 (سال: 1395)

تعداد صفحات اصل مقاله: 6

نویسندگان:

Rethinam Senthil - Biological Materials Lab, CSIR-Central Leather Research Institute, ISchool of Electricals and Electronics Department, VIT University

Sathyaraj W. Vedakumari - Biological Materials Lab, CSIR-Central Leather Research Institute, ISchool of Electricals and Electronics Department, VIT University

Thiagarajan Hemalatha - Biological Materials Lab, CSIR-Central Leather Research Institute, ISchool of Electricals and Electronics Department, VIT University

Vijayan Sumathi - Biological Materials Lab, CSIR-Central Leather Research Institute, ISchool of Electricals and Electronics Department, VIT University

Nallathambi Gobi - Department of Textile Technology, Anna University, Chennai, Tamil Nadu, India

Thotapalli P. Sastry - Biological Materials Lab, CSIR-Central Leather Research Institute, ISchool of Electricals and Electronics Department, VIT University

خلاصه مقاله:

Unicorn leatherjacket (Aluterus monoceros) is an export quality fish mainly used for fillet production, the skin of which is discarded as waste due to its toughness. Wastes emanated from the fish processing industry have become an important source of environmental pollution. Aim: The study investigates the potentials of A. monoceros skin to produce value-added products viz., fish leather and fish meal. Materials and Methods: 5 kg of fish skin from 20 kg of fish was used for the present study. Leather produced from fish skin was characterized for its physico-chemical properties using Fourier transform infrared spectroscopy (FTIR), thermogravimetric analysis (TGA), scanning electronmicroscopy (SEM), etc. Biochemical components viz., protein, fat, and salt content of the fish skin were also estimated. Results: Leather produced from fish skin possessed 88 MPa tensile strength. Biochemical estimations proved that the fish skin had 28% protein content. Conclusion: On the basis of the characterization and evaluation results, it could be concluded that this processed fish skin could be used for leather goods production. In addition, this fish skin could be included as a component in fish meal preparation

کلمات کلیدی:

_ _ _ _ _ _ _ _

Aluterus monoceros, fish leather, fish meal, fish skin waste, unicorn leatherjacket

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/991386

