

CULTURE TEST OF A LOCAL FUNGAL STRAIN ON OLIVE-POMACE

Hamid Sonia

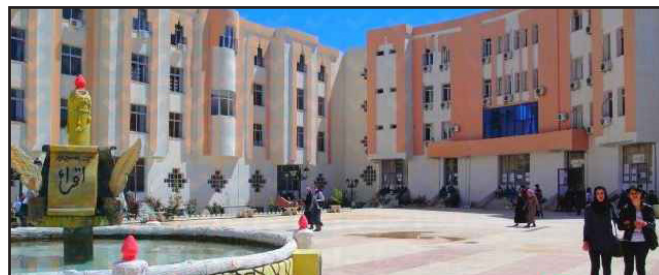
Akli Mohand Oulhadj University, Bouira, Algeria

Abstract:

In this work we have tried to valorize by biotechnological means a sub-product of olive cultivation; olive pomace from the oil mill of Bejaia (Sidi Aiche) using it as fermentation substrate in the production of an entomopathogenic fungal biomass. A physico-chemical and microbiological characterization was conducted on this olive residue.

The results of the olive pomace physicochemical analysis show fairly variable rates, which are estimated at 91%, 5.4% and 1.54% respectively for dry matter, ashes and soluble sugars. Low cellulose content was recorded in the order of 18%. With a slightly acid pH= hydrogen potential (6.02), the pomace will provide a medium for the development of fungal strains.

Conducting the solid-state fermentation of *B.bassiana* on the olive-pomace substrate matrix as energy and carbon sources, in order to produce a biomass of *Beauveria bassiana*, yielded encouraging results (biomass production of 1.2×10^8 spores / ml), accompanied by a variation in pH and degradation rates of the appropriate cellulosic compounds and soluble sugars.



Biography:

Hamid Sonia has completed her PhD from Faculty of Sciences and Postdoctoral studies from University of Sciences and Technology Houari Boumediene, Algeria. Currently she is an Assistant Master Class B at the Faculty of Natural and Life Sciences and Earth Sciences, University of Bouira and Member of the Doctoral Committee at the Université M'Hamed Bouguerra Boumerdes, She has published 4 papers in reputed journals.