World Academy of Science, Engineering and Technology
International Journal of Nutrition and Food Engineering
Vol:13, No:03, 2019

Monitoring of Pesticide Content in Biscuits Available on the Vojvodina Market, Serbia

Authors : Ivana Loncarevic, Biljana Pajin, Ivana Vasiljevic, Milana Lazovic, Danica Mrkajic, Aleksandar Fises, Strahinja Kovacevic

Abstract : Biscuits belong to a group of flour-confectionery products that are considerably consumed worldwide. The basic raw material for their production is wheat flour or integral flour as a nutritionally highly valuable component. However, this raw material is also a potential source of contamination since it may contain the residues of biochemical compounds originating from plant and soil protection agents. Therefore, it is necessary to examine the health safety of both raw materials and final products. The aim of this research was to examine the content of undesirable residues of pesticides (mostly organochlorine pesticides, organophosphorus pesticides, carbamate pesticides, triazine pesticides, and pyrethroid pesticides) in 30 different biscuit samples of domestic origin present on the Vojvodina market using Gas Chromatograph Thermo ISQ/Trace 1300. The results showed that all tested samples had the limit of detection of pesticide content below 0.01 mg/kg, indicating that this type of confectionary products is not contaminated with pesticides.

Keywords : biscuits, pesticides, contamination, quality
Conference Title : ICFSN 2019 : International Conference on Food Science and Nutrition
Conference Location : Madrid, Spain
Conference Dates : March 26-27, 2019