

Unsaturated fatty acids composition in Ahuahutle Eggs

Krisousacotixia azteca J.

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Insects in Asia, Africa, Australia and Latin America are regular part of the local diets and Ahuahutle is valued by population as a cheap source of fatty acid staple to meet nutrition lipids requirement mainly unsaturated fatty acids for human health. Of all edible insects Ahuahutle mosquito eggs specie is among the most appreciated in Mexico, their consumption is wide spread by their sensory characteristics not as a good source of unsaturated fatty acids. The purpose of this research is to assess the fatty acid composition of the Ahuahutle *Krisousacorixia azteca J* specie and to let the people know the benefits they can bring in health among citizens.

Fatty acid composition of the oil extracted from insects was analyzed to identify total FA; saturated and unsaturated, the samples were captured at Texcoco lake July 2008. Total fatty acids was extracted with petroleum ether using soxhlet apparatus; saturated and unsaturated FA by gas chromatography entitled with a fused silica capillary column using helium as a carrier gas. Data obtained was: Total Fatty Acids 7.77%; oleic acid w-9, 22.81%; linoleic acid w-6, 18.41%; estearic acid 5.17% and palmitic acid 3.15%, amounts obtain from total FA. Ahuahutle is a good source of MUFA oleic acid more stable than polyunsaturated PUFA and w-6 and w-3 that are essential FA because they can not be synthesized by the human body. FA in Ahuahutle present resistance to oxidative deterioration and enhance metabolic effects on human health.