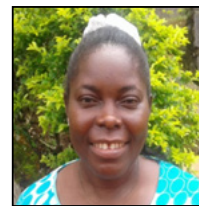


Dietary Fibre and Vitamin E Contents of five Cucurbitaceae Oilseeds from different regions in Cameroon

Mercy Bih Achu Loh



ABSTRACT

There is insufficient food composition data on all local foods and foodstuffs from the different agro-ecological zones in Cameroon, for use by consumers, Nutrition and Health workers.

Methodology: As part of this, insoluble, soluble, total dietary fibre and vitamin E levels were evaluated in five species of Cucurbit oilseeds (egusi or pistachio) from different agro-ecological zones in Cameroon. These were Cucumeropsis mannii, Cucurbita maxima, Cucurbita moschata, Lagenaria siceraria and Cucumis sativus. The dietary fibres were analyzed by enzymatic methods and vitamin E by High Performance Liquid Chromatography. **Results:** Dietary fibre and vitamin E levels did not depend on the region of origin but on the species. The seeds were rich in dietary fibre especially insoluble dietary fibre, which varied from 15.70 (C. sativus) to 19.21 g/100 EP (C. mannii). Soluble dietary fibre was from 4.35 (C. maxima) to 6.60 g /100g EP (L. siceraria) and total dietary fibre from 20.19 (C. sativus) to 25.13 g /100 EP (L. siceraria). Vitamin E analysis (in µg/g EP of seed) revealed the absence of gamma-tocotrienols and β-tocopherols in all the samples, and β-tocopherol in C. mannii oils. Alpha, gamma and β-tocopherols were present in the rest of the samples.

BIOGRAPHY

Pr Mercy BIH ACHU épouse LOH, an Associate Professor and Researcher at the of University Yaoundé I, has her expertise in the field of Food Science and Nutrition. She has been valorising locally under-utilized food and foodstuffs, especially oilseeds of the Cucurbitaceae family, from which she has several original publications in international journals. Her current research interests are valorizing other under-utilized local foodstuffs, fruits and local dishes that could be used to solve nutrition related illnesses. She is also very much interested in food transformation and preservation in order to reduce post-harvest losses which are a real problem in Cameroon. She is part of the team working on the compilation of a Food Composition Table for Cameroon, according to the FAO guidelines.

PUBLICATIONS

1. Kuagny Mouafo R. B., Achu Loh M. B., Saha Foudjo B. U., Kansci G., Domkem S., Medoua Nama G., Nya E., Kuitekam P. and Fokou E. (2019). Physicochemical Characteristics and anti-nutritional factors of some underutilized tubers (Dioscorea Spp and Coleus esculentus) grown in Cameroon. International Journal of Advanced Research. 7(9): 795-806
2. Achu M. B. Loh, Yisa Njowe K.B. and Kana Sop M.M. (2017). Preliminary Proximate Composition and Mineral contents of Five Edible insects from Cameroon. International Journal of Current Microbiology and Applied Sciences, 6 (3): 1984-1995
3. Achu Loh M. B., Madah Silatsa J. and Fokou E. (2016). Antioxidant Capacity and Mineral Contents of five Species of Cucurbitaceae Seeds from Cameroon. International Journal of Recent Scientific Research, 7(5):10961-10970.
4. Kamda Silapeux A. G., Fokou E., Achu Loh M.B., Raducanu D., Kansci G., Ifrim I., Lazar I. (2014). Protective effect of edible Cucurbitaceae seed extract from Cameroon against oxidative stress. Environmental Engineering and Management Journal,13(7): 1721-1727
5. Achu M B., Fokou E., Kansci, G., and Fotso M. (2013). Chemical evaluation of protein quality and phenolic compound levels of some Cucurbitaceae oilseeds from Cameroon. African Journal of Biotechnology, 12 (7): 735-743

5th International Conference on Food science and Healthcare Nutrition | July 13, 2020

Ayub Agricultural Research Institute, Faisalabad-Pakistan

Citation: Mercy Bih Achu Loh, Dietary Fibre and Vitamin E Contents of five Cucurbitaceae Oilseeds from different regions in Cameroon, Food science congress 2020, 5th International Conference on Food science and Healthcare Nutrition, July 13, 2020, pp.56