ABSTRACT

The two varieties of pumpkin seeds such as orange pumpkin seed (OPS) and white pumpkin seed (WPS) were analyzed with their ethanol extracts for the estimation of fatty acid components through GC-MS analysis. 37 compounds were analyzed in total in both OPS and WPS where about 19 compounds were pinpointed to be present in OPS, 25 compounds in WPS and about 8 compounds to be present common in both OPS and WPS. The peak area % concentration obtained from analysis were compared with the known peak area % concentrations of WILEY8.LIB and the results were interpreted. Some of the compounds determined to be present in higher concentration in OPS include were Propane 1,1,3-triethoxy- (6.58 %), Hexadecanoic acid, 1-(hydroxymethyl)-1,2 ethanediyl ester (9.38 %), 9,12-Octadecadienoyl chloride, (Z,Z)- propanetriyl ester, (E,E,E)- (17.59 %), 9-Octadecenoic acid, 1,2,3-propanetriyl ester – (19.19 %), Squalene (21.33 %) and those identified in WPS include Beta.-Sitosterol (5.10%), 9-Octadecenoic acid,1,2,3-propanetriyl ester (E,E,E) (5.65%), Chondrillasterol (7.30%), Propane, 1, 1, 3- triethoxy- (7.50%), Bicyclo[10.1.0]tridec-1-ene (40.55%). Among them biological activities of some of the important compounds are suggested. This study thus offers the base for using OPS and WPS as an herbal supplement.