Oral Health Dent Manag 2016, 15:7(Suppl)
http://dx.doi.org/10.4172/2247-2452.C1.040

Extraction, characterization and fatty acid profile of African star apple seed (*Chrysophyllum albidum*) oil

Ominyi C E, **Ominyi C J** and **Nwali U**
Akanu Ibiam Federal Polytechnic Unwana, Nigeria

Oil was extracted from *Chrysophyllum albidum* seed using petroleum ether as solvent. The yield of the oil was found to be 4.98%. The result of characterization of the oil extract showed that it has iodine value of 163.3 mg, saponification value of 90.71 mg, acid value of 19.70 mg, percentage free fatty acid was 9.90% and dirt content was 0.23%. The specific gravity of the oil at 25°C and its content was found to be 0.8269 and 10.00%, respectively. The color analysis gave red, yellow, blue and neutral to be 1.1, 2.2, 2.1 and 0.0, respectively. Thus, the oil was found to be a drying oil. The fatty acid profile of the oil was also determined with the aid of gas liquid chromatography used fatty acids in methyl esters and was found to have oleic acid (C18:1) as the predominant fatty acid having an area of 40.10125%. It was also found to contain alpha linoleic acid (omega-3) and linoleic acid (omega-6) which are essential to the human body but cannot be synthesized by its metabolic processes.

janefrancesonyia@yahoo.com

Effect probiotics with medicinal plants on broiler meat quality and replacing ability of dietary antibiotic

M S K Sarker[1], **G.M. Kim**[2], **N R Sarker**[1], **T N Nahar1**, **K S Ryu**[2] and **C J Yang**[3]
[1]Bangladesh Livestock Research Institute, Bangladesh
[2]Chonbuk National University, Republic of Korea
[3]Sunchon National University, Republic of Korea

One hundred seventy five 1 day old Ross broiler chicks were studied to know the potentiality of plants, *Salicornia herbacea* and *Houttuynia cordata* with probiotics (SHP) and suitable level in replacing antibiotic. For the study, the birds were divided into many groups: control (basal diet), antibiotic (basal diet+0.05% OTC) and 0.5%, 1.0% and 2.0% SHP with basal diet. The birds were randomly arranged in a wire cage with 5 replications having 7 chicks in each. Significantly, highest protein percentage in broiler meat fed 2.0% SHP was recorded when compared with other groups ($P<0.05$). Crude fat significantly reduced in 1.0% SHP like antibiotic compared to 2.0% SHP and control group ($P<0.05$). The lipid oxidation of meat in SHP groups showed significantly lower values compared to control ($P<0.05$). Lowest abdominal fat was found in 0.5 to 1.0% SHP compared to 2.0% SHP and similar with antibiotic fed broilers ($P<0.05$). Mineral in meat (Fe and Mg) showed an increasing trend in the increasing level of SHP than other groups. Although no statistical differences were observed in n6/n3 fatty acids among the group, but there is a lowering trend noticed in 1.0% SHP fed broiler meat. In conclusion, addition of 1.0% SHP can be suitable level in improving meat quality and replacement of antibiotic that could be utilized for safe food for human as well as baby.

sazdulkarim@yahoo.com