Abstract Title: Determination of Flavonoids in Sudanese Honey Samples and Plant Sources Collected from Different Places in Sudan

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Abstract

This investigation was carried out, for the determination of plant source and flavonoids in some honey samples collected from different localities of Sudan depending on pollen grains mixed with honey. Honey samples were prepared by worm water, acetolysis method, stained with basic fuchsine and suspended in glycerin for microscopic examination .Pollen grains were compared with those of similar pollen with other references .The predominant plant species in the honey samples from Damazeen was Azadirachta indica, Gabl Abu-Garin Hyphaena tobacco, Sinnar Wad Hashim, Alfaw and Tallha forests: Helianthus annus. In Eldewaim: Ziziphus spinachristi. In Gaddarif: Acacia seyal var seyal and in Khartoum: Medicago sativa were the source of pollen in the honey samples. For the determination of flavonoids concentration, HPLC was used. Some standards like Hesperetin, Queretin, Kaempferol, Apigenin and Isorhamnetin were used. In a honey sample of Gable Abugarin, two types of flavonoids were detected: Querctrin 6.8 mg/100g and Kaempfrol 1.5 mg/100g.In the honey sample of Tallha area, the Hesperetin 1.97 mg/100g was detected. Gaddarif area: Isorhamnetin 1.217 mg/100g was detected and Khartoum: Isorhamnetin 0.904 mg/100g was detected. In honey samples of SinnarWad Hashim, Eldewaim, AL-faw areas some Peaks of flavonoids were encountered in small concentration but not detected because of the apparent shortness of their detectors. In a honey sample of Eldamazeen flavonoids were not detected.

Keywords— *Determination, Flavonoids, Plant Sources, Honey, Sample and Areas.*

Professional Biography

Ali has completed his PhD at the age of 37 years from Huazhong Agricultural University, Wuhan China. He was working as Research Scientist in Agricultural Research Corporation in Entomology Research Section in Wad Medani, Sudan. He has published more than 22 papers in reputed journals and has been serving as an editorial board member of repute.



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