Abstract Template

Abstract Title: Sepration and Identification of many Natural Products of Iraqi plant is *plantago lanceolata* and study of its antioxident and anticancer therapy

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Abstract (not more than 300 words)

Phytochemicals are well known that plant produce these chemicals to protect themselves but recently many researcher work to isolated ,separation and identification many natural products which are very important to human. The phytochemical research is an effective approch the bioactive and therapeutic assay .Natural Products Chemistry & Research deals with chemical compounds found in nature that usually has a pharmacological or biological activity for use in pharmaceutical drug discovery and drug design.

The plant under study is *plantago lanceolata* (P.l) grow in the Iraqi environment profusely and they are widely used in folk medicine. we carried the chemical of volatile oils from dried plant parts by using cleavanger apparatus, while other chemical separation have been acquired continuously by soxhlet, using different organic solvents (petroleum ether, chloroform, ethanol and also hot ethanol).

We also obtained the fractions from the crude extracts by using column chromatography (CC) technique, and extracted fatty acids from the extracts of petroleum ether and it's parts of each plants after saponification process, while phenols and organic acids were obtained from the parts of the crude extracts (chloroform, ethanol, and hot ethanol) after acid hydrolysis process. The NMR spectroscopy technique was also used for identification of these isolated compounds from the obtained fractions using 1HNMR and 13C-NMR, then we obtained several pure compounds which are identified as followings; **Luteolin, pheophytin B, sitosterol, daucosterol, bezoic acid, Coumarin , dihydrocoumarin**.

The expermental results of antioxident and anticancer showed that Luteolin compound has antioxident activity was 72.68% at 8µL concentration compared with standered sample which was 80.06% at the same concentration . On the other hand, the anticancer result of the same compound was 60%on the normal cells(PNT2a), while it’s activity on the cancer cells (A2780)was 80% .

Keywords— *Anticancer , Antioxident, Natural Products, Phaytochemicals*

Professional Biography

Muthanna Jasim Mohammed is a ass. Prof. of Natural Products in University of Mosul, College of Education for Pure Science, Biology Department. He complete his Ph.D. Natural Products at University of Mosul in 2013. He worked a part of his PhD research in Strathclyde University in Glasgow , UK. His M.Sc.Degree in Plant at University of Mosul in 2000 and his B.Sc. in Biology at University of Mosul in 1997. He have many article publications in Natural Products Isolation, and Idetification compounds which used in drug . He has published more than 20 papers in reputed journals .



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