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"THE GAS CHROMATOGRAPHY MASS SPECTROSCOPICANALYSIS OF ONE UNANI DRUG, "HABB- E- FEELPA"

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ABSTRACT
This work deals with the Gas chromatography mass spectroscopic analysis of one Unani drug, Habb-E-Feelpa, which is prescribed for filariasis and fever. The medicine was procured from a standard Unani medicine vendor at Chennai and was processed suitably to be analysed by GC MS process. The profile showed the some metabolites such as Cyclopropane, 1-butyl-1-methyl-2-propyl-, 1-Adamantanecarboxylic acid, 2-bromo-4-fluorophenyl ester, Hexadecanoic acid, methyl ester, n-Decanoic acid, 9-Octadecenoic acid (Z)-, methyl ester, Methyl 8,9-octadecadienoate, (E,Z,Z)-2,4,7-Tridecatrienal, 9,10-Anthracenedione, 1,8-dihydroxy-3-methyl-, which show promising medicinal roles that could support Habb-e-Feelpa in curing filariasis.

Key words :GC MS, Habb-e-Feelpa, filariasis, fever, Cyclopropane

INTRODUCTION

Habb e feelpa is a Unani medicine which is prescribed for filarial infection and fever. Its ingredients are: Beek biskoparasufeed (*Boerhaviadiffusa*), Rerandchinikattai (*Rheum emodi*), Mughz-e-gaiga, Zanjabeel (ginger dried) and Samagh-e-arabi (*Acacia Arabica* (Lam.). It is imperative to establish the authenticity of alternative medicines such as Ayurveda, Sidhha and Unani systems as they are time tested and in use for centuries. The present workers have worked to scientifically evaluate the veracity of these medicine systems by latest techniques so that deeper knowledge of the mechanism of action of these medicines could be gained.[1-19] The present study in one step further in this endeavour. Not much work in this direction is reported as far as Habb e feelpa is concerned.

MATERIALS AND METHODS

The drug,Habb e feelpawas bought from Unani medicine vendor and was suitably processed by standard procedures for GC-MS analysis.

RESULTS

The Unani drug, Habb-e-feelpaprofile and possible medicinal role of each molecule is indicated is tabulated in Table 1. Figure 1 is the Gas Chromatographic graph ofHabb e feelpa.The possible pharmaceutical roles of each metabolite was deciphered by National Agriculture Library, USA and others as shown in Table 1.[20]

DISCUSSION

The molecules such as Cyclopropane, 1-butyl-1-methyl-2-propyl-, 1-Adamantanecarboxylic acid, 2-bromo-4-fluorophenyl ester, Hexadecanoic acid, methyl ester, n-Decanoic acid, 9-Octadecenoic acid (Z)-, methyl ester, Methyl 8,9-octadecadienoate, (E,Z,Z)-2,4,7-Tridecatrienal, 9,10-Anthracenedione, 1,8-dihydroxy-3-methyl-, the medicinal roles of which are mentioned in Table1clearly support Habb- e-feelpa in curing diseases like filariasis and fever.

CONCLUSION

It could be summarized from the results and discussion that Habb- e-feelpadoes contain important biomolecules which provides a clue to its prescription for the ailments it is given. It will be of interest to probe into the medicinal roles of many compound present in ApkAbraisham, for which there are no reports.

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Figure 1. Indicates the GC MS profile of Habb-E-Feelpa

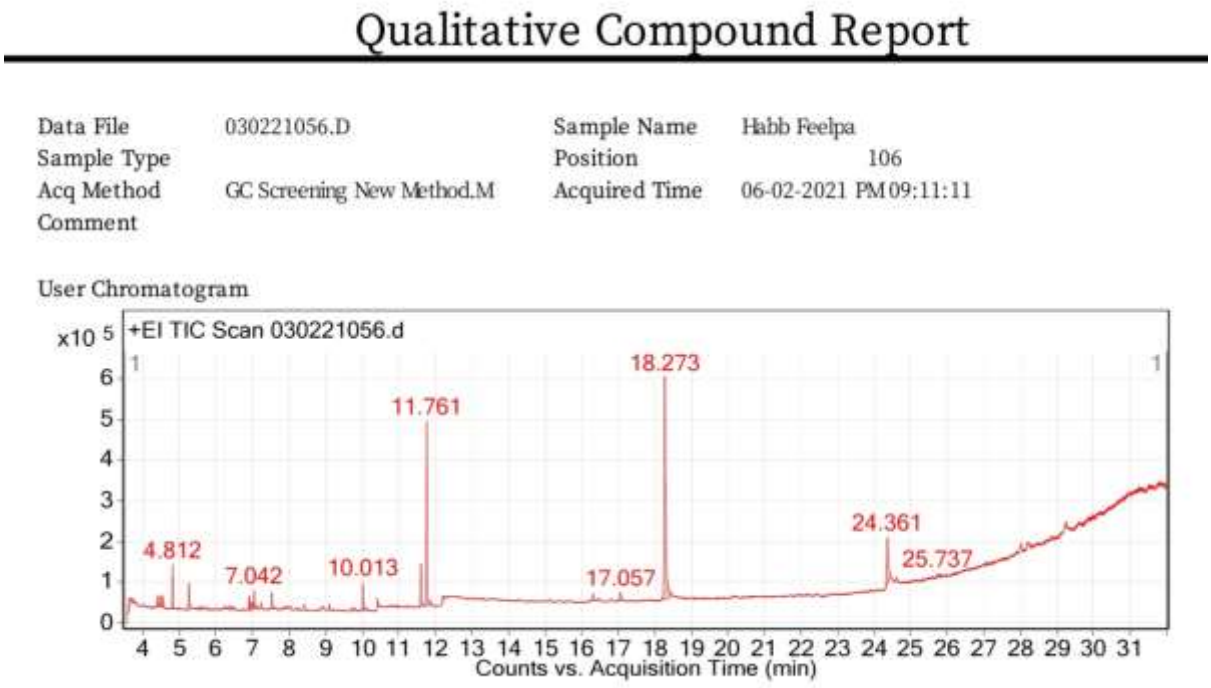

Table1. Indicates the retentions values, types of possible compound, their molecular formulae, molecular mass, peak area and their medicinal roles of each compound as shown in the GC MS profile ofHabb-E-Feelpa

Ret.	Molecule	Mol. Formula	Mol.	%	Possible Medicinal Role

Time			Mass	Peak area	
4.55	Cyclopropane, 1-butyl-1-methyl-2-propyl-	C11H22	154.2	1.01	Catechol-O-Methyl Transferase inhibitor, methyl donar and methyl guanidine inhibitor
5.25	Dodecane, 1-fluoro-	C12H25F	188.2	3.03	Not known
6.39	1-Adamantanecarboxylic acid, 2-bromo-4-fluorophenyl ester	C17H18BrFO2	352	0.71	Arachidonic acid-Inhibitor, Increases Aromatic Amino Acid Decarboxylase Activity, Inhibits Production of Uric Acid,
7.01	.alpha.-Farnesene	C15H24	204.2	0.62	5 alpha reductase inhibitor, HIF 1 alpha inhibitor, Ikappa B alpha phosphorylation inhibitor, increases alpha mannosidae activity, Interleukine 1 alpha inhibitor, testosterone 5 alpha reductase inhibitor, TNF alpha inhibitor
10.01	Hexadecanoic acid, methyl ester	C17H34O2	270.3	2.58	Catechol-O-Methyl Transferase inhibitor, Acidifier, Acidulant, Arachidonic acid-Inhibitor, Increases Aromatic Amino Acid Decarboxylase Activity
10.41	n-Decanoic acid	C10H20O2	172.1	1.05	Acidifier, Arylamine-N-Acetyltransferase-Inhibitor, Decreases GABA ergic, Increases NK cell activity, Inhibits TNF
11.60	9-Octadecenoic acid (Z)-, methyl ester	C19H36O2	296.3	4.63	Arachidonic acid-Inhibitor, Increase Aromatic Amino Acid Decarboxylase Activity, Catechol-O-Methyl Transferase inhibitor
11.76	Methyl 8,9-octadecadienoate	C19H34O2	294.3	19.98	Catechol-O-Methyl Transferase inhibitor
12.21	Dodecanoic acid	C12H24O2	200.2	0.95	Arachidonic acid-Inhibitor, Increase Aromatic Amino Acid Decarboxylase Activity, Inhibits Uric Acid production,
17.06	(E,Z,Z)-2,4,7-Tridecatrienal	C13H20O	192.2	1.31	Zinc provider, anticancer, antidote, antitumor, Cytochrome-P450-2E1-Inhibitor, Decreases C-Teleopeptide Excretion, Decreases Deoxypyridinoline Excretion, Decreases Endothilial Leukocyte Adhesion, Decreases Epinephrine Production, Decreases Oxalate Excretion
18.27	9,10-Anthracenedione, 1,8-dihydroxy-3-methyl-	C15H10O4	254.1	44.27	Catechol-O-Methyl Transferase inhibitor