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GC-MS analysis of methanol extract of *Alysicarpus monilifer*-whole plant

K. Karthikeyan* and C. K. Dhanapal

Department of Pharmacy, Faculty of Engineering and Technology, Annamalai University, Annamalai Nagar, Chidambaram

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ABSTRACT

Alysicarpus monilifer L. (DC.) belonging to the family of Fabacea, which is a turf forming legume and native to Africa and Asia. In India it is distributed throughout the plains- Madras, Jammu, Bombay, Punjab, Gujarat- except Kutch and Bulsar, Madhya Pradesh and Uttar Pradesh. Alysicarpus monilifer considered to be as a significant folklore medicine for the various ailments. A very less scientific studies have been conducted on it's medicinal, pharmacological and ethano botanical aspects of this plants. The current study was carried out to analyze the active phytoconstituents present in the methanol extract of whole plant of Alysicarpus monilifer. Totally two hundred and two constituents was identified in the gas chromatography with mass spectroscopic analysis of methanol extract of whole plant of Alysicarpus monilifer.

Keywords: *Alysicarpus monilifer;* methanol; Gas chromatography; Isoquinoline, Lucenin, Phytol, acetate, Neophytadiene, Stigmasterol.

INTRODUCTION

Botanical Description
Scientific Name: *Alysicarpus monilifer* (L.) DC.
Synonyms: Hedysarum moniliferum L.
Family: Fabaceae
Sub family: Faboideae
Tribe: Desmodieae
Sub tribe: Desmodiinae

Alysicarpus monilifer is a low growing much branched annual or perennial herb, 5-15 (-50) cm tall. Leaves simple; ovate, elliptical or lanceolate, cordate at the base, 2.5-7.5 cm long, prominently nerved, glabrous or sparsely pubescent beneath. Racemes spicate, axillary and terminal, 1-15 cm long; flowers lax in dense along racemes. Pods distinctly moniliform, 3-5 jointed, 1-2 cm long and calyx not longer than first joint; glabrous or sparsely pubescent; articles 2.5-3 mm long and 2-3 mm wide, with a smooth to reticulate surface sculpture.

Alysicarpus monilifer L. (DC.) (Fabacea), commonly known as Samervo (Gujarati) or Juhi ghas (Hindi), is a turf forming legume and native to Africa and Asia. In India it is distributed throughout the plains- Madras, Jammu, Bombay, Punjab, Gujarat- except Kutch and Bulsar, Madhya Pradesh and Uttar Pradesh. It is a prostrate, procumbent or decumbent perennial herb; stem of which is around 12- 60cm long, woody at the base. It is a branched; branches are terete clothed with covering trichomes. The herb is up to 50cm in length and hairy when young.

This plant is used traditionally in anti-inflammatory and in stomach ache. An antidote to snake bite. It is also used in skin diseases and as a diuretic. The leaves are used in fever and jaundice[1]. This is an attempt to determine the

phytochemical compounds present in the methanol extract of *Alysicarpus monilifer* by Gas Chromatography and Mass Spectroscopy (GC-MS) technique.

MATERIALS AND METHODS

(i) Collection and Identification of plant material

The aerial parts *of Alysicarpus monilifer* were collected from authentic dealers from Tirunelveli, Tamilnadu. The identification of the plant materials was confirmed by consulting the Research officer- Botany (Scientiest-C), Central Council for Research in Ayurveda & Siddha, Govt. Of India (Retired), Tirunelveli, Tamilnadu. The whole plant of *Alysicarpus monilifer* were dried under shade, segregated, pulverized by a mechanical grinder and passed through a 40 mesh sieve.

(ii) Preparation of extract

The collected plant material was dried (30±2ºC) for 14 days, ground and sieved to get fine powder from which the extracts were prepared by subjecting to the successive extraction, by using a hot continuous percolation method in Soxhlet apparatus[2] with petroleum ether (60-80^{o}C) for defatting purpose, ethyl acetate (70-80^{o}C) and methanol (60^{o}C-70^{o}C) . The powdered whole plant was extracted with petroleum ether (1L). After complete extraction (18 hrs), the solvent was removed by distillation under reduced pressure. Then the dried whole plant powdered further undergoes extracted with Ethyl acetate (70-80^{o}C) finally extracted with methanol (60^{o}C-70^{o}C). After complete extraction (18 hrs), the solvent was removed by distillation under reduced pressure. The resulting extract was dried using a water bath to get semisolid.

(iii) Gas Chromatography (GC-MS) analysis

The GC-MS was performed by using Thermo GC- Trace Ultra Ver: 5.0, Thermo MS DSQ II. ZB 5- MS capillary standard Non-Polar column was used. Dimension 30Mts, ID: 0.25mm, Film: 0.25 µm. Carrier gas: He, Flow: 1.0 ML/Min. Temp Prog: Oven temp 70 C raised to 260 C AT 6 C/MIN. Injection volume: 1 micro liter.

(iv) Identification of compounds

Interpretation mass spectrum of GC-MS was conducted using the database of National Institute Standard and Techniques (NIST) which consist of more than 62,000 patterns. The relative percentage amount of each component was calculated by comparing its average peak area to the total areas. The spectrum of the unknown component was compared with the spectrum of the known component inherent in the NIST library. The name, molecular weight and structure of the components of the test materials were ascertained.

Fig:1 GCMS Chromatogram of methanol extract of *Alysicarpus monilifer* whole plant

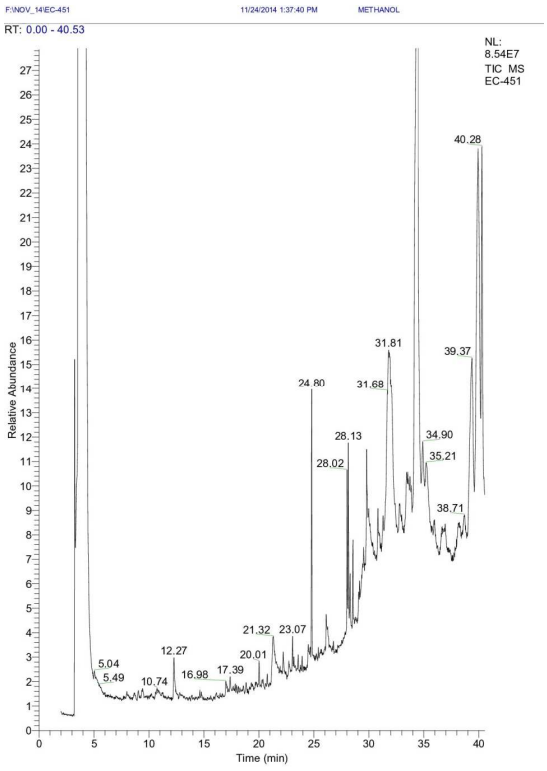

Table 1: Phytochemical compounds identified in methanol extract of *Alysicarpus monilifer*

S.no	Compound name	Run time	Probability	Molecular formula	Molecular weight	Area %
1	Acetyl Chloride (CAS)	3.27	77.11	C_2H_3ClO	78	0.85
2	Carbonic di chloride (CAS)	3.27	15.98	CCl_2O	98	0.85
3	1-Chloro-1-nitrosoethane	3.27	4.35	C_2H_4ClNO	93	0.85
4	Ethane, 1-chloro-2-nitro-	3.27	0.73	$C_2H_4ClNO_2$	109	0.85
5	Butanenitrile, 3-chloro-(CAS)	3.27	0.61	C_4H_6ClN	103	0.85
6	Oxalylchloride	3.27	0.49	$C_2Cl_2O_2$	126	0.85
7	Methanamine, N-hydroxy-N-Methyl-	3.62	50.56	C_2H_7NO	61	41.06
8	Ethanol, 2-nitro-(CAS)	3.62	7.51	$C_2H_5NO_3$	91	41.06
9	1,1,4,4-TETRADEUTERIOTERTAMETHYLENEDIAMINE	3.62	6.34	$C_4H_8D_4N_2$	88	41.06
10	Propanedioic acid (CAS)	3.62	4.48	$C_3H_4O_4$	104	41.06
11	Ethylenediamin	3.62	2.80	$C_2H_8N_2$	60	41.06
12	1-PROPANOL-O-D	3.62	2.47	C_3H_7DO	60	41.06
13	PROPANOL, 2,3-DIHYDROXY-	3.62	1.89	$C_3H_6O_3$	90	41.06
14	CYCLOPENTANEACETIC ACID	3.62	1.60	$C_7H_{12}O_2$	128	41.06
15	Nitrous acid, methyl ester (CAS)	3.62	1.47	CH_3NO_2	61	41.06
16	(E)-4-Methyl-1-oxo-2-pentenyl 2-Phenoxycyclopropyl Ketone	9.42	12.38	$C_{15}H_{18}O_2$	230	0.12
17	Methyl 6-[3-(perfluorophenyl)prop-2-yl]-3-methyl-cyclohex-2-en-1-carboxylate isomer	9.42	6.01	$C_{18}H_{19}F_5O_2$	362	0.12
18	2,2'-DIHYDRO PEROXY-2,2,2',2'-TETRAPROPYL ETHER	9.42	5.77	$C_{14}H_{30}O_5$	278	0.12
19	7-oxabicyclo[2.2.1]hept-5-ene-1,2-exo,3-exo-trimethanol	9.42	5.33	$C_9H_{14}O_4$	186	0.12
20	(-)-Elema-1,3,11(13)-trien-12-ol	9.42	3.41	$C_{15}H_{24}O$	220	0.12
21	4,4-Dichloro-1-(cyclohex-1'-enyl)butan-2-ol	9.42	3.14	$C_{10}H_{16}Cl_2O$	222	0.12
22	Scanlonenyne	9.42	3.02	$C_{15}H_{21}BrO_3$	328	0.12
23	4-[3,4-Dimethoxycyclohexyl]-n-butanol	9.42	2.79	$C_{12}H_{24}O_3$	216	0.12
24	7-(1-n-hexylethenyl)bicyclo[4.1.0]heptane	9.42	2.24	$C_{16}H_{28}$	220	0.12
25	4H-Dibenzo[de,g]quinoline, 5,6,6a,7-tetrahydro-1,2-dimethoxy-, (R)- (CAS)	10.72	5.31	$C_{18}H_{19}NO_2$	281	0.16
26	tetracyclo[4.3.0.0(2,7)]nonane-7,7,8,8-tetracarbonitrile	10.72	4.07	$C_{13}H_8N_4$	220	0.16
27	9-(2-Hydroxyprop-2-yl)-6-methylbicyclo[4.4.0]dec-3-en-2-one	10.72	4.07	$C_{14}H_{22}O_2$	222	0.16
28	3-[[Hydroxyimino-(2-nitrophenyl)methyl]-amino]-propanoic acid, ethyl ester	10.72	4.07	$C_{12}H_{15}N_3O_5$	281	0.16
29	(E)-4-(3-Hydroxy-1-propenyl)phenol	10.72	3.75	$C_9H_{10}O_2$	150	0.16
30	Phenol, 4,4'-sulfonylbis- (CAS)	10.72	3.46	$C_{12}H_{10}O_4S$	250	0.16
31	3-oxo-2-phenylthiomethyl cyclohexane carbonitrile	10.72	3.33	$C_{14}H_{15}NOS$	245	0.16
32	10-Chlorotricyclo[4.2.1.1(2,5)]deca-3,7-dien-9-ol	10.72	3.33	$C_{10}H_{11}ClO$	182	0.16
33	Ethanone, 1-(2-hydroxy-5-methylphenyl)-	12.27	6.57	$C_9H_{10}O_2$	150	0.47
34	1H-Indole, 1-methyl- (CAS)	17.02	17.04	C_9H_9N	131	0.15
35	(1a,3b,5b,7a)-1,4,4,7-tetrabromo-8,8-dimethyltricyclo[5.1.0.03,5]octane	17.02	7.25	$C_{10}H_{12}Br_4$	448	0.15
36	1-(4-Cyanophenyl)-1-phenylethynylmethanol	17.02	6.40	$C_{16}H_{11}NO$	233	0.15
37	2,3,4-Tri-0-Ethylpentitol 1,5-diacetate (1-D)	17.02	5.16	$C_{15}H_{27}DO_7$	320	0.15
38	Ethyl [1,2,3,4-tetrahydro-1-naphthyl]acetate	17.02	4.96	$C_{14}H_{18}O_2$	218	0.15
39	Dimethyl (Z)-3-(prop-3'-enylidene)-4-vinylcyclopentane-1,1-dicarboxylate	17.02	4.77	$C_{14}H_{18}O_4$	250	0.15
40	(+-)-3-(3-(4-(3-Bromopropyl)phenyl)-3-hydroxypropyl)indole	17.02	4.03	$C_{20}H_{22}BrNO$	371	0.15
41	Diethy{[1-Hydroxy2-(propen-2-yl)-3-chloro-2-cyclohexen-1-yl]methyl}phosphonate	17.02	3.16	$C_{14}H_{24}ClO_4P$	322	0.15
42	3,6-Dimethyl-5-chloro-2(1H)-pyrazinone	17.02	2.23	$C_6H_7ClN_2O$	158	0.15
43	3-Acetyl-3'"-phenyl[4]staffane	17.02	1.97	$C_{28}H_{32}O$	384	0.15
44	2-Isopropyl-tricyclo[4.3.1.1(2,5)]undec-3-en-10-ol	20.01	3.13	$C_{14}H_{22}O$	206	0.25
45	4,4'-Dimethyl-2,2'-dimethylenebicyclohexyl-3,3'-diene	20.01	2.88	$C_{16}H_{22}$	214	0.25
46	à-Guaiene	20.01	2.66	$C_{15}H_{24}$	204	0.25
47	Butyl 4,7,10,13,16,19-docosahexaenoate	20.01	2.55	$C_{26}H_{40}O_2$	384	0.25
48	Benzene, (1-butylhexadecyl)- (CAS)	20.01	2.55	$C_{26}H_{46}$	358	0.25

49	3-Tridecanone, 7-methyl-13-phenyl-	20.01	2.16	$C_{20}H_{32}O$	288	0.25
50	2-(7-xi.Hydroxy-4,[7-13CH3]-dimethyl-(1à-H),2,3,(4áH),(4à-H),7,8,(8aà-H)-octahydronaphthalen-1-yl)propionic acid	21.30	11.62	$C_{15}H_{22}O_2$	234	0.88
51	1-(3-Phenyl-2-propenyl-1-d)-4-piperidine-4-d-carbonitrile	21.30	9.36	$C_{15}H_{16}D_2N_2$	226	0.88
52	syn-Bicyclo(4.2.1)non-3-en-9-ol	21.30	5.11	$C_9H_{14}O$	138	0.88
53	2,6-Dimethyl-2-octen-7-yn-6-ol	21.30	3.71	$C_{10}H_{16}O$	152	0.88
54	9-Thiabicyclo[3.3.1]non-6-en-2-amine, N-methyl-,9-oxide, (endo,syn)-	21.30	3.71	$C_9H_{15}NOS$	185	0.88
55	ethyl(+-)-(2'à,3'á-3-ethoxy-4-(3'-(2"-furyl)-2'-methylcyclopentan-1'-on-2'-yl)-2(E)buteno-ate	21.30	2.54	$C_{18}H_{24}O_5$	320	0.88
56	(3R*,3aS*,5aR*,9aS*)-3-Methyldecahydro-4H-cyclopenta[c]inden-4-one	21.30	2.34	$C_{13}H_{20}O$	192	0.88
57	((2-(3-Benzylsulfonyl-4-methylcyclohexyl)propyl)sulfonyl methyl)benzene	21.30	2.34	$C_{24}H_{32}O_4S_2$	448	0.88
58	(4aR*,6aS*,6bS*,10aS*,11aS*)-Tetradecahydro-6H-indeno (1,7a-a)inden-6-one	21.30	2.25	$C_{16}H_{24}O$	232	0.88
59	Pluchidiol	22.21	14.98	$C_{13}H_{20}O_2$	208	0.17
60	Cyclohexane, 1,3,5-trimethyl-2-octadecyl- (CAS)	22.21	9.98	$C_{27}H_{54}$	378	0.17
61	5,5,8a-Trimethyl-3,5,6,7,8,8a-hexahydro-2H-chromene	22.21	9.59	$C_{12}H_{20}O$	180	0.17
62	2,3-Bis(1-methylallyl)pyrrolidine	22.21	6.00	$C_{12}H_{21}N$	179	0.17
63	L-Mannitol, 1-deoxy-, cyclic 3,4:5,6-bis(ethylboronate) 2-acetate	22.21	3.45	$C_{12}H_{22}B_2O_6$	284	0.17
64	3-(3a,6a-Dimethyl-2,5-dioxo-hexahydro-thieno[2,3-b]pyrrol-4-yl)-propionic acid, methyl ester	22.21	2.71	$C_{12}H_{17}NO_4S$	271	0.17
65	11-Azabicyclo[4.4.1]undecane, 11-methyl- (CAS)	22.21	2.50	$C_{11}H_{21}N$	167	0.17
66	Methyl 10H-phenoxazine-5-carboxylate	22.74	14.73	$C_{14}H_{11}NO_3$	241	0.12
67	(-)-2-(2-Hydroxy-4-methylcyclohexyl)acrylaldehyde semicarbazone	22.74	9.81	$C_{11}H_{19}N_3O_2$	225	0.12
68	4,4'-Bi-(1,2,3,6-tetrahydro-1-methylpyridyl)	22.74	3.28	$C_{12}H_{20}N_2$	192	0.12
69	Butanamide, 2-ethoxythiocarbonylthio-3-oxo-N-phenyl-	22.74	2.90	$C_{13}H_{15}NO_3S_2$	297	0.12
70	1-(4-Nitrophenyl)-3,6-diazahomoadamantan-9-one	22.74	2.45	$C_{15}H_{17}N_3O_3$	287	0.12
71	5-Methyltricyclo[6.3.0.0(1,5)]undec-3-en-6-one	22.74	2.26	$C_{12}H_{16}O$	176	0.12
72	1-Propyl-3,6-diazahomoadamantan-9-ol	22.74	2.08	$C_{12}H_{22}N_2O$	210	0.12
73	3-Oxo-androsta-1,4-dien-17á-spiro-2'-3'-oxo-oxetane	22.74	2.08	$C_{21}H_{26}O_3$	326	0.12
74	(4Ar-(4aalpha,5beta,8abeta))-5-ethyl-2,3,4a,5,8,8a-hexahydro-1,4-naphthalenedione	22.74	1.84	$C_{12}H_{16}O_2$	192	0.12
75	3,7,11,15-Tetramethyl-2-hexadecen-1-ol	23.07	7.96	$C_{20}H_{40}O$	296	0.30
76	Neophytadiene	23.07	5.30	$C_{20}H_{38}$	278	0.30
77	2(1H)-Benzocyclooctenone, decahydro-10a-methyl-, trans	23.07	4.14	$C_{13}H_{22}O$	194	0.30
78	18-Nonadecen-1-ol	23.07	4.14	$C_{19}H_{38}O$	282	0.30
79	Phytol, acetate	23.07	3.00	$C_{22}H_{42}O$	338	0.30
80	Hexadecanoic acid, methyl ester (CAS)	24.80	49.99	$C_{17}H_{34}O_2$	270	1.64
81	1-O-(ter-Butyldiphenylsilyl)-5-O-(tert-butyldimethylsilyl)- 4-O-formyl-2,3-O-isopropylidene-á,D-fructopyranose	26.15	92.69	$C_{32}H_{48}O_7Si_2$	600	0.57
82	5-[1,1-Dichloro-2-(tert-butyldimethylsilyl)imino-2-(p-chlorophenyl)vinyl]-3-p-chlorophenylisothiazole	26.15	2.55	$C_{23}H_{24}Cl_4SSi$	528	0.57
83	24-hydroxy-3,4-secolanost-4,(28),8-dien-3-nitrile	26.15	2.45	$C_{30}H_{49}NO$	439	0.57
84	N-Cyclohexyl-3á-methoxy-4'-methylidene-4',5',16á,17á-tetrahydro-5à-androstano[17,16-b]furan-5'-imine	26.15	1.04	$C_{29}H_{45}NO_2$	439	0.57
85	DELPHINOFOLINE	26.15	0.92	$C_{23}H_{37}NO_7$	439	0.57
86	3-(3-Nitrophenylimino)-4-(di-n-propylamino)-2,5-benzothiazocine-1,6-dione	26.15	0.21	$C_{22}H_{22}N_4O_4S$	438	0.57
87	4-(1,2,2,2-Tetraffluoro-1-trifluoromethylethyl)-2-bromo-3-methoxy-5-fluoro-6-pent-1-ynylpyridine	26.15	0.03	$C_{14}H_{10}BrF_8NO$	439	0.57
88	1,4-Bis(3,4-dibutylthien-2-yl)-1,3-butadiyne	26.15	0.03	$C_{28}H_{38}S_2$	438	0.57
89	9-(Tetrahydropyran-2"-yl)-6-[2'-phenyl-3',4',5',6"-tetrapropylphenyl]-9H-purine	26.15	0.00	$C_{34}H_{44}N_4O$	524	0.57
90	N-Carbethoxy-8,9,11,12-tetramethoxy-1-methyl-1,2,3,4-tetrahydronaphtho[2,1-f]isoquinoline	26.15	0.00	$C_{25}H_{29}NO_6$	439	0.57
91	2-[(4-Methylphenyl)thio]benzthiazole	28.11	11.24	$C_{14}H_{11}NS_2$	257	1.77
92	2-(2'-Methoxy-5'-methylphenyl)-5,6-dimethyl-1,4-benzoquinone	28.11	6.81	$C_{16}H_{16}O_3$	256	1.77
93	10-Methoxy-1,8-dihydroxy-9(10H)-anthracenone	28.11	4.66	$C_{15}H_{12}O_4$	256	1.77
94	3á-Acetyloxy-20-oxopregn-5-en-19-yl sulfamate	28.11	3.38	$C_{23}H_{35}NO_6S$	453	1.77
95	10-[(à,à-Dideuterio)benzylthio]-1,8-dihydroxy-9-anthrone	28.11	2.53	$C_{21}H_{14}D_2O_3S$	348	1.77
96	Octadecanoic acid, methyl ester (CAS)	28.56	63.47	$C_{19}H_{38}O_2$	298	0.35
97	Heptadecanoic acid, 16-methyl-, methyl ester	28.56	18.67	$C_{19}H_{38}O_2$	298	0.35
98	5,5"-Bis[2-(1-trimethylsilylethynyl)]-2,2':6',2"-terpyridine	29.82	44.23	$C_{25}H_{27}N_3Si_2$	425	2.66
99	N-Benzyl-2-[4,5-bis(methylthio)-1,3-thiole-2-ylidene]-[1,3]-dithiolo[4,5-c]pyrrole	29.82	3.98	$C_{17}H_{15}NS_6$	425	2.66
100	2-Hexadecen-1-ol, 3,7,11,15-tetramethyl-,[R-[R*,R*-(E)]]- (CAS)	29.82	2.81	$C_{20}H_{40}O$	296	2.66

101	cis-13,16-Docasadienoic acid	29.82	2.20	$C_{22}H_{40}O_2$	336	2.66
102	2,6,10,14,18,22-Tetracosahexaene, 2,6,10,15,19,23-hexamethyl- (CAS)	29.82	1.51	$C_{30}H_{50}$	410	2.66
103	(4R*,5R*,9S*)-5,9-Dimethylspiro[3.5]nonan-1-one	29.82	1.28	$C_{11}H_{18}O$	166	2.66
104	12,15-Octadecadienoic acid, methyl ester	29.82	1.28	$C_{19}H_{34}O_2$	294	2.66
105	6-Nonen-1-ol, (E)- (CAS)	29.82	1.23	$C_9H_{18}O$	142	2.66
106	cis-11-Tetradecen-1-ol	29.82	1.18	$C_{14}H_{28}O$	212	2.66
107	(1R*,2R*)-2-[(1S*)-1-Cyclohexylethyl]cyclopropylmethanol	29.82	1.13	$C_{12}H_{22}O$	182	2.66
108	FLAVONE 4'-OH,5-OH,7-DI-O-GLUCOSIDE	30.84	8.63	$C_{27}H_{30}O_{15}$	594	0.42
109	METHYL (12E)-12-[(2,4-DINITROPHENYL)HYDRAZONO]DODE CANOATE	30.84	6.96	$C_{19}H_{27}DN_4O_6$	408	0.42
110	1-N-PENTADECYL-DECAHYDRONAPHTHALENE	30.84	3.58	$C_{25}H_{48}$	348	0.42
111	1,1'-Bicyclohexyl, 4-methyl-4'-pentyl-	30.84	3.45	$C_{18}H_{34}$	250	0.42
112	1,1'-Bicycloheptyl (CAS)	30.84	3.45	$C_{14}H_{26}$	194	0.42
113	Ethyl iso-allocholate	30.84	3.45	$C_{26}H_{44}O_5$	436	0.42
114	Methyl 18-fluoro-octadec-9-enoate	30.84	3.31	$C_{19}H_{35}FO_2$	314	0.42
115	Spiro[5.5]undecane (CAS)	30.84	2.80	$C_{11}H_{20}$	152	0.42
116	11,14-Diphenylpyridazino[4',5':3,4]pyrrolo[1,2-f]phenanthridine	31.83	63.61	$C_{30}H_{19}N_3$	421	5.87
117	7-(2"-Hydroxyisopropyl)-4-hydroxy-18,19-dihydro-3,6-dimethoxy-17-(cyclopropylmethyl)-6,14-ethenomorphinane	31.83	15.24	$C_{27}H_{37}NO_4$	439	5.87
118	6,14-endo-Etheno[7,7,2',2']-4',4"-dimethyl-1'-à-oxospirocyclobutanotetrahydronorthebaine	31.83	3.21	$C_{26}H_{31}NO_4$	421	5.87
119	S-[(E)-S-Phenyl-N-(p-tolylsulfonyl)-1-trimethylsilyl-3-methylbut-1-enyl]sulfoxime	31.83	2.84	$C_{26}H_{31}NO_3S_2Si$	435	5.87
120	10,13,23,26-Tetraoxo-2,5,8,15,18,21-hexaoxatricyclo[20.4.0.4(9,14)]hexaicosa-1(22),9(14),11(12),24(25)-tetraene(diquino-18-crown-6)	31.83	1.93	$C_{20}H_{20}O_{10}$	420	5.87
121	5-Amino-2-phenyl-4-(p-methoxyphenyl)-4-[4'-(N,N-dimet hylamino)phenyl]-7-(pyrrolidin-1'-yl)-1,6-naphthyridine-8- carbonitrile	31.83	0.88	$C_{26}H_{23}N_5O$	421	5.87
122	3,20-Dimethoxy-10,13,22,23-tetraoxa-7,16-dithiahexacyclo[12.6.2.2(2,6).0(2,24).0(9,23).0(17,21)]tetracosa-1(21) 2,4,6(24),17,19-hexaene	31.83	0.71	$C_{20}H_{20}O_6S_2$	420	5.87
123	6,13-Dibromo-5,7,12,14-tetramethyldibenzo[b,i][1,4,8,11]tetraazacyclotetradecahexaenato nickel II	31.83	0.48	$C_{22}H_{22}Br_2N_4$	500	5.87
124	3,4-Dihydro-1H-2-benzothiopyran-1-acetamide	32.81	5.30	$C_{11}H_{13}NOS$	207	0.44
125	Pyridine-3-carboxylic acid, 1,4-dihydro-5-cyano-2-hydroxy-4-(4-isopropylphenyl)-6-methyl-, ethyl ester	32.81	5.30	$C_{19}H_{22}N_2O_3$	326	0.44
126	(R)-(-)-2-Propen-1-yl-4,6-dimethoxybenzoic acid1-methyl-hept-6-enyl ester	32.81	4.48	$C_{20}H_{28}O_4$	332	0.44
127	2-(Acetoxymethyl)-3-(methoxycarbonyl)biphenylene	32.81	3.80	$C_{17}H_{14}O_4$	282	0.44
128	Diethyl 3-phenyl-1-(phenylamino)prop-2-enephosphonate	32.81	3.65	$C_{19}H_{24}NO_3P$	345	0.44
129	Tris(trimethylsily)phosphite	32.81	3.23	$C_9H_{27}O_3Psi_3$	298	0.44
130	4,4,6a,6b,8a,11,11,14b-Octamethyl-1,4,4a,5,6,6a,6b,7,8, 8a,9,10,11,12,12a,14,14a,14b-octadecahydro-2H-picen-3-one	33.46	21.31	$C_{30}H_{48}O$	424	1.44
131	Propanoic acid, 2-(3-acetoxy-4,4,14-trimethylandrost-8-en-17-yl)-	33.46	5.18	$C_{27}H_{42}O_4$	430	1.44
132	Lucenin 2	33.46	4.98	$C_{27}H_{30}O_{16}$	610	1.44
133	Myristic acid, 2-(trimethylsiloxy)-1-[(trimethylsiloxy)methyl]ethyl ester	33.46	3.72	$C_{23}H_{50}O_4Si_2$	446	1.44
134	9,12-Octadecadienoic acid (Z,Z)-, 2-[(trimethylsilyl)oxy]-1-[[(trimethylsilyl)oxy] methyl]ethyl ester (CAS)	33.46	3.14	$C_{27}H_{54}O_4Si_2$	498	1.44
135	Isoquinoline	33.46	2.21	$C_{18}H_{23}NO_2$	285	1.44
136	Di-(2-ethylhexyl)phthalate	34.44	27.50	$C_{24}H_{38}O_4$	390	21.77
137	1,2-Benzenedicarboxylic acid, mono(2-ethylhexyl) ester	34.44	13.35	$C_{16}H_{22}O_4$	278	21.77
138	Methyl 2-benzoyloxycarbonylamino-2,3,4,6-tetradeoxy-6-{methyl-[(1R)-phenylethyl]amino}-à-D-erythro-hexopyranoside	34.90	12.32	$C_{23}H_{28}N_2O_5$	412	0.51
139	Docosane (CAS)	34.90	9.93	$C_{22}H_{46}$	310	0.51
140	Nonacosane (CAS)	34.90	9.16	$C_{29}H_{60}$	408	0.51
141	1,4-Diphenyltriphenylene-2,3-diol	34.90	8.80	$C_{30}H_{20}O_2$	412	0.51
142	Ergost-6,22-dien-3.beta,.,5à,8à-triol	34.90	6.74	$C_{28}H_{46}O_3$	430	0.51
143	Dodecane, 5,8-diethyl-	34.90	5.96	$C_{16}H_{34}$	226	0.51
144	13,17-Diethyl-12,18-dimethyl-21,22-dioxaoxophlorin	34.90	3.96	$C_{26}H_{24}N_2O_3$	412	0.51
145	Benzyl[bis(4-methoxyphenyl)phenylphosphonium bromide	34.90	3.66	$C_{27}H_{25}O_2P$	412	0.51
146	Heptadecane, 9-hexyl-	34.90	3.66	$C_{23}H_{48}$	324	0.51
147	Benzo[c]fluorenone	35.25	40.19	$C_{28}H_{26}O_3$	410	0.89
148	bis[(4'-Phenyl-1',2',5'-oxadiazol-3'-yl)methyl]-carbonate- N(2),N(2)-Dioxide	35.25	9.90	$C_{19}H_{14}N_4O_7$	410	0.89
149	3-Cyano-2-ethoxy-4-phenyl-6-morpholino-1,7,10-antyridine	35.25	3.22	$C_{24}H_{21}N_5O_2$	411	0.89
150	Cephalostatin - 2,3-á-epoxide - 12à-pivalate	35.25	2.84	$C_{32}H_{48}O_5$	512	0.89
151	2-Methoxycarbonyl-5-methyl-3,4-diphenyltricyclo[4.4.1.1(2,5)]dodeca-3,7,9-trien-11,12-dione	35.25	0.79	$C_{27}H_{22}O_4$	410	0.89
152	3,4-bis(methoxycarbonyl)-2,5,6-triphenylpyridine	35.97	26.84	$C_{27}H_{21}NO_4$	423	0.22

153	(4'R,6'R)-4-(4',6'-dimethyl-1',3'-dioxan-2'-yl)-5-methoxy-2, 2-dimethyl-2,3-dihydroanthra[1,2-b]furan-6,11-dione	35.97	7.89	$C_{25}H_{26}O_6$	422	0.22
154	Stigmast-5-en-3-ol, (3á,24S)- (CAS)	35.97	4.07	$C_{29}H_{50}O$	414	0.22
155	Acetic acid, 10,13-dimethyl-17-(1-methyl-4-oxo-4-[1,2,4]triazol-1-yl- butyl)-2,3,4,7,8,9,10,11,12,13,14,15,16,17-tetradecahydro-1H-cyc(???)	35.97	3.28	$C_{28}H_{41}N_3O_3$	467	0.22
156	Cytochalasin e	35.97	3.02	$C_{28}H_{33}NO_7$	495	0.22
157	Hexadecanoic acid, 2-phenyl-1,3-dioxan-5-yl ester, cis-(CAS)	35.97	2.91	$C_{26}H_{42}O_4$	418	0.22
158	Toosendanin	35.97	2.79	$C_{30}H_{38}O_{11}$	574	0.22
159	Carda-5,20(22)-dienolide, 3,14,19-trihydroxy-, (3á)-(CAS)	35.97	2.68	$C_{23}H_{32}O_5$	388	0.22
160	CORYMBOTIN H	36.69	48.88	$C_{27}H_{38}O_9$	506	0.80
161	3-(p-Chlorophenyl)-6-phenyl-3-[(N-adamantylamino)carbonyl]-1,2,4-triazine	36.69	1.21	$C_{26}H_{25}ClN_4O$	444	0.80
162	3,4,5-Tribromo-1-methoxypyrrole-2-(piperidiyl)carboxamide	36.69	0.29	$C_{11}H_{13}Br_3N_2O_2$	442	0.80
163	N-Benzyl-N-(2-chlorobenzyl)-N-(2-bromo-3-(2-bromophen oxy)propyl)amine	36.69	0.13	$C_{23}H_{22}Br_2ClNO$	521	0.80
164	Irieol A	36.69	0.06	$C_{20}H_{30}Br_2O$	444	0.80
165	13-Bromo-5-tert-butyl-8-(1-hydroxy-2-phenylethyl)[2.2] metacyclophane	36.69	0.04	$C_{28}H_{31}BrO$	444	0.80
166	Bis[(æ-chloro)-[1,2,3-ü(3)-1-[(trimethylsilyl)oxy]-2-propen-1-yl]nickl(II)]	36.69	0.04	$C_{12}H_{26}Cl_2Ni_2O_2Si_2$	462	0.80
167	7-Bromo-3-[(4-bromo-3,3-dimethylcyclohexylidene)methyl]octahydro-4,7a-dimethyl-1H-indene-2,4-diol	36.69	0.03	$C_{20}H_{32}Br_2O_2$	444	0.80
168	(E)-(3-Phenylallyl) 2-diaza-3-oxobutyrate	38.17	7.79	$C_{13}H_{12}N_2O_3$	244	0.77
169	2-(3-Hydroxypropyl)benzaldehyde	38.17	6.28	$C_{10}H_{12}O_2$	164	0.77
170	Ethyl 1-[N-(2-isopropyl-4-oxoquinazolin-3-yl)amino]-6-oxotetra hydropyridin-2-carboxylate diasteroisomer	38.17	5.31	$C_{19}H_{23}N_3O_4$	357	0.77
171	Methyl (E)-4,5-dimethoxy-2-(3',4'-dimethoxystyryl)phenylacetate	38.17	4.89	$C_{21}H_{24}O_6$	372	0.77
172	Syn.-Methyl 2-(1-Hydroxy-2-methylpropyl)pent-4-enedithioate isomer	38.17	3.55	$C_{10}H_{18}OS_2$	218	0.77
173	1H-Cyclopropa[3,4]benz[1,2-e]azulene-5,7b,9,9a-tetrol, 1a,1b,4,4a,5,7a,8,9-octahydro-3-(hydroxymethyl)-1,1,6,8-tetramethyl-, 9,9a-diacetate	38.17	3.41	$C_{24}H_{34}O_7$	434	0.77
174	valerenol	38.17	3.15	$C_{15}H_{24}O$	220	0.77
175	PREGN-5-ENE-3,20-DIOL, (3á,20S)-	38.17	2.22	$C_{21}H_{34}O_2$	318	0.77
176	1-(Trimethylsiloxy)-9-octadecanone	38.66	23.78	$C_{21}H_{44}O_2Si$	356	0.48
177	6-Bromo-1-(tert-butyldimethylsilyl)-3-ethylindole	38.66	20.09	$C_{16}H_{24}BrNSi$	337	0.48
178	5-[2'-(2"-Bromo-3"-thienyl)ethenyl]-naphtho[[2,1-b][1]benzothiophene	38.66	13.38	$C_{22}H_{13}BrS_2$	420	0.48
179	Methyl 1,4a-Dimethyl-1,2,3,4,4a,5,6,8,9,10-decahydro-7-oxo-8,8-di(3-pentynyl)-7H-1-phenanthrenecarboxylate	38.66	3.86	$C_{28}H_{38}O_3$	422	0.48
180	4-Phenylselenenylestrone	38.66	3.56	$C_{24}H_{26}O_2Se$	426	0.48
181	3-Acetyl-1-(3,4-dimethoxyphenyl)-5-ethyl-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepine	38.66	2.05	$C_{24}H_{28}N_2O_5$	424	0.48
182	(+-)-(2S,3S)-2-[2-(4-Bromophenyl)-2-oxoethyl]tetrahydro-2H-3-pyranyl acetate	38.66	1.65	$C_{15}H_{17}BrO_4$	340	0.48
183	1,2-Dicarbomethoxy-1,2-dihydro-1,4-diphenylphthalazine	38.66	1.39	$C_{24}H_{20}N_2O_4$	400	0.48
184	4-Acetyloxyimino-6,6-dimethyl-3-methylsulfanyl-4,5,6,7-tetrahydro-benzo[c]thiophene-1-carboxylic acid methyl ester	38.66	1.23	$C_{15}H_{19}NO_4S_2$	341	0.48
185	2,2'-Bis(2-hydroxy-2-ethylbutyl)-1,1'-binaphthyl	38.66	1.18	$C_{32}H_{38}O_2$	454	0.48
186	4-Bromo-5'-chloro-2'-phenoxybutyranilide	39.35	21.32	$C_{16}H_{15}BrClNO_2$	367	3.39
187	(S)-N-(2'-Methoxy-[1,1']binaphthalen-2-yl)butyramide	39.35	12.27	$C_{25}H_{23}NO_2$	369	3.39
188	7-Chloro-3,4-dihydro-3-[4-[methylthio]phenyl]-1,9(2H,10 H)-acridinedione	39.35	7.93	$C_{20}H_{16}ClNO_2S$	369	3.39
189	trans-12-Azido-1,2,11,12-tetrahydro-3-methyl-11-benz[j]a centhrylenol acetate	39.35	6.23	$C_{23}H_{19}N_3O_2$	369	3.39
190	BISTRIMETHYLSILYL N-ACETYL EICOSASPHINGA-4,11-DIENINE	39.35	4.90	$C_{28}H_{57}NO_3Si_2$	511	3.39
191	Nickel, [(1,2-ü)-butadiyne][1,2-ethanediylbis[bis(1-methylethyl)phosphine]-P,P']-	39.35	4.14	$C_{18}H_{34}NiP_2$	370	3.39
192	phosphoenolpyruvate-tri-TMS	39.35	3.25	$C_{12}H_{30}O_5PSi_3$	369	3.39
193	1H-Purin-6-amine, [(2-fluorophenyl)methyl]- (CAS)	39.35	2.36	$C_{12}H_{10}FN_5$	243	3.39
194	Pentasiloxane, dodecamethyl- (CAS)	39.35	1.76	$C_{12}H_{36}O_4Si_5$	384	3.39
195	Stigmast-5-en-3-ol, (3á,24S)- (CAS)	39.93	6.88	$C_{29}H_{50}O$	414	7.98
196	3-Cholestanol, 2-fromyl-3-benzyl-	39.93	4.44	$C_{35}H_{54}O_2$	506	7.98
197	Cholest-5-en-3-ol (3á)- (CAS)	39.93	3.31	$C_{27}H_{46}O$	386	7.98
198	17a-Methyl-3á-methoxy-17a-aza-D-homoandrost-5-ene-17-one	39.93	2.20	$C_{21}H_{33}NO_2$	331	7.98
199	Pseudosolasodine diacetate	39.93	2.12	$C_{31}H_{49}NO_4$	499	7.98
200	3á-Hydroxy-5-cholen-24-oic acid	39.93	2.04	$C_{24}H_{38}O_3$	374	7.98
201	13-Docosenamide, (Z)-	40.28	38.78	$C_{22}H_{43}NO$	337	3.50
202	9-Octadecenamide, (Z)- (CAS)	40.28	15.33	$C_{18}H_{35}NO$	281	3.50

RESULTS AND DISCUSSION

GC-MS chromatogram of the methanol extract of whole plant of *Alysicarpus monilifer* **(Fig.1)** clearly shows 19 peaks indicating the presence of 19 phytochemical compounds. The identification of the phytochemical compounds was based on the peak area, retention time and molecular formula. The **table 1** shows the compound name with its probality, molecular weight, molecular formula, run time and % area. The results reveal the presence of Acetyl Chloride (CAS), Carbonic di chloride (CAS), 1-Chloro-1-nitrosoethane, Ethane, 1-chloro-2-nitro-, Butanenitrile, 3-chloro-(CAS), Oxalylchloride, Methanamine, N-hydroxy-N-Methyl-, Ethanol, 2-nitro-(CAS), Ethanol, 2-nitro-(CAS), 1,1,4,4-TETRADEUTERIOTERTAMETHYLENEDIAMINE, Propanedioic acid (CAS), Ethylenediamin, 1-PROPANOL-O-D, PROPANOL, 2,3-DIHYDROXY-, CYCLOPENTANEACETIC ACID, Nitrous acid, methyl ester (CAS), (E)-4-Methyl-1-oxo-2-pentenyl 2-Phenoxycyclopropyl Ketone, Methyl 6-[3-(perfluorophenyl)prop-2-yl]-3-methyl-cyclohex-2-en-1-carboxylate isomer, 2,2'-DIHYDRO PEROXY-2,2,2',2'-TETRAPROPYL ETHER, 7-oxabicyclo[2.2.1]hept-5-ene-1,2-exo,3-exo-trimethanol, (-)-Elema-1,3,11(13)-trien-12-ol, 4,4-Dichloro-1-(cyclohex-1'-enyl)butan-2-ol, Scanlonenyne, 4-[3,4-Dimethoxycyclohexyl]-n-butanol, 7-(1-n-hexylethenyl)bicyclo[4.1.0] heptanes, 4H-Dibenzo[de,g]quinoline, 5,6,6a,7-tetrahydro-1,2-dimethoxy-, (R)- (CAS), tetracyclo[4.3.0.0(2,7)]nonane-7,7,8,8-tetracarbonitrile, 9-(2-Hydroxyprop-2-yl)-6-methylbicyclo[4.4.0]dec-3-en-2-one, 3-[[Hydroxyimino-(2-nitrophenyl)methyl]-amino]-propanoic acid, ethyl ester, (E)-4-(3-Hydroxy-1-propenyl)phenol, Phenol, 4,4'-sulfonylbis- (CAS), 3-oxo-2-phenylthiomethyl cyclohexane carbonitrile, 10-Chlorotricyclo[4.2.1.1(2,5)]deca-3,7-dien-9-ol, Ethanone, 1-(2-hydroxy-5-methylphenyl)-, 1H-Indole, 1-methyl-(CAS), (1a,3b,5b,7a)-1,4,4,7-tetrabromo-8,8-dimethyltricyclo[5.1.0.03,5]octane, 1-(4-Cyanophenyl)-1-phenylethynylmethanol, 2,3,4-Tri-0-Ethylpentitol 1,5-diacetate (1-D), Ethyl [1,2,3,4-tetrahydro-1-naphthyl]acetate, Dimethyl (Z)-3-(prop-3'-enylidene)-4-vinylcyclopentane-1,1-dicarboxylate, (+-)-3-(3-(4-(3-Bromopropyl)phenyl)-3-hydroxypropyl)indole, Diethy{[1-Hydroxy2-(propen-2-yl)-3-chloro-2-cyclohexen-1-yl]methyl}phosphonate, 3,6-Dimethyl-5-chloro-2(1H)-pyrazinone, 3-Acetyl-3'''-phenyl[4]staffane, 2-Isopropyl-tricyclo[4.3.1.1(2,5)]undec-3-en-10-ol, 4,4'-Dimethyl-2,2'-dimethylenebicyclohexyl-3,3'-diene, à-Guaiene, Butyl 4,7,10,13,16,19-docosahexaenoate, Benzene, (1-butylhexadecyl)- (CAS), 3-Tridecanone, 7-methyl-13-phenyl-, 2-(7-xi.Hydroxy-4,[7-13CH3]-dimethyl-(1à-H),2,3,(4áH),(4à-H),7,8,(8aà-H)-octahydronaphthalen-1-yl)propionic acid, 1-(3-Phenyl-2-propenyl-1-d)-4-piperidine-4-d-carbonitrile, syn-Bicyclo(4.2.1)non-3-en-9-ol, 2,6-Dimethyl-2-octen-7-yn-6-ol, 9-Thiabicyclo[3.3.1] non-6-en-2-amine, N-methyl-,9-oxide, (endo,syn)- , ethyl(+-)-(2'à,3'á-3-ethoxy-4-(3'-(2''-furyl)-2'-methylcyclopentan-1'-on-2'-yl)-2(E)buteno-ate, (3R*,3aS*,5aR*,9aS*)-3-Methyldecahydro-4H-cyclopenta[c]inden-4-one, ((2-(3-Benzylsulfonyl-4-methylcyclohexyl)propyl)sulfonyl methyl)benzene, (4aR*,6aS*,6bS*,10aS*,11aS*)-Tetradecahydro-6H-indeno (1,7a-a)inden-6-one, Pluchidiol, Cyclohexane, 1,3,5-trimethyl-2-octadecyl- (CAS), 5,5,8a-Trimethyl-3,5,6,7,8,8a-hexahydro-2H-chromene, 2,3-Bis(1-methylallyl)pyrrolidine, L-Mannitol, 1-deoxy-, cyclic 3,4:5,6-bis(ethylboronate) 2-acetate, 3-(3a,6a-Dimethyl-2,5-dioxo-hexahydro-thieno[2,3-b]pyrrol-4-yl)-propionic acid, methyl ester, 11-Azabicyclo[4.4.1]undecane, 11-methyl- (CAS), Methyl 10H-phenoxazine-5-carboxylate, (-)-2-(2-Hydroxy-4-methylcyclohexyl)acrylaldehyde semicarbazone, 4,4'-Bi-(1,2,3,6-tetrahydro-1-methylpyridyl), Butanamide, 2-ethoxythiocarbonylthio-3-oxo-N-phenyl-, 1-(4-Nitrophenyl)-3,6-diazahomoadamantan-9-one, 5-Methyltricyclo[6.3.0.0(1,5)]undec-3-en-6-one, 1-Propyl-3,6-diazahomoadamantan-9-ol, 3-Oxo-androsta-1,4-dien-17á-spiro-2'-3'-oxo-oxetane, (4Ar-(4aalpha,5beta,8abeta))-5-ethyl-2,3,4a,5,8,8a-hexahydro-1,4-naphthalenedione, 3,7,11,15-Tetramethyl-2-hexadecen-1-ol, Neophytadiene, 2(1H)-Benzocyclooctenone, decahydro-10a-methyl-, trans, 18-Nonadecen-1-ol, Phytol, acetate, Hexadecanoic acid, methyl ester (CAS), 1-O-(ter-Butyldiphenylsilyl)-5-O-(tert-butyldimethylsilyl)- 4-O-formyl-2,3-O-isopropylidene-á,D-fructopyranose, 5-[1,1-Dichloro-2-(tert-butyldimethylsilyl)imino-2-(p-chlorophenyl)vinyl]-3-p-chlorophenylisothiazole, 24-hydroxy-3,4-secolanost-4,(28),8-dien-3-nitrile, N-Cyclohexyl-3á-methoxy-4'-methylidene-4',5',16á,17á-tetrahydro-5à-androstano[17,16-b]furan-5'-imine, Delphinofoline, 3-(3-Nitrophenylimino)-4-(di-n-propylamino)-2,5-benzothiazocine-1,6-dione, 4-(1,2,2,2-Tetraffluoro-1-trifluoromethylethyl)-2-bromo-3-methoxy-5-fluoro-6-pent-1-ynylpyridine, 1,4-Bis(3,4-dibutylthien-2-yl)-1,3-butadiyne, 9-(Tetrahydropyran-2''-yl)-6-[2'-phenyl-3',4',5',6''-tetrapropylphenyl]-9H-purine, N-Carbethoxy-8,9,11,12-tetramethoxy-1-methyl-1,2,3,4-tetrahydronaphtho[2,1-f]isoquinoline, 2-[(4-Methylphenyl)thio]benzthiazole, 2-(2'-Methoxy-5'-methylphenyl)-5,6-dimethyl-1,4-benzoquinone, 10-Methoxy-1,8-dihydroxy-9(10H)-anthracenone, 3á-Acetyloxy-20-oxopregn-5-en-19-yl sulfamate, 10-[(à,à-Dideuterio)benzylthio]-1,8-dihydroxy-9-anthrone, Octadecanoic acid, methyl ester (CAS), Heptadecanoic acid, 16-methyl-, methyl ester, 5,5''-Bis[2-(1-trimethylsilylethynyl)]-2,2':6',2''-terpyridine, N-Benzyl-2-[4,5-bis(methylthio)-1,3-thiole-2-ylidene]-[1,3]-dithiolo[4,5-c]pyrrole, 2-Hexadecen-1-ol, 3,7,11,15-tetramethyl-,[R-[R*,R*-(E)]]- (CAS), cis-13,16-Docasadienoic acid, 2,6,10,14,18,22-Tetracosahexaene, 2,6,10,15,19,23-hexamethyl- (CAS), (4R*,5R*,9S*)-5,9-Dimethylspiro[3.5]nonan-1-one, 12,15-Octadecadienoic acid, methyl ester, 6-Nonen-1-ol, (E)- (CAS), cis-11-Tetradecen-1-ol, (1R*,2R*)-2-[(1S*)-1-Cyclohexylethyl]cyclopropylmethanol, FLAVONE 4'-OH,5-OH,7-DI-O-GLUCOSIDE, METHYL (12E)-12-[(2,4-DINITROPHENYL)HYDRAZONO]DODE CANOATE, 1-N-PENTADECYL-DECAHYDRONAPHTHALENE, 1,1'-Bicyclohexyl, 4-methyl-4'-pentyl-, 1,1'-Bicycloheptyl (CAS), Ethyl iso-allocholate, Methyl 18-fluoro-octadec-9-enoate, Spiro[5.5]undecane (CAS), 11,14-

Diphenylpyridazino[4',5':3,4]pyrrolo[1,2-f]phenanthridine, 7-(2''-Hydroxyisopropyl)-4-hydroxy-18,19-dihydro-3,6-dimethoxy-17-(cyclopropylmethyl)-6,14-ethenomorphinane, 6,14-endo-Etheno[7,7,2',2']-4',4''-dimethyl-1'-à-oxospirocyclobutanotetrahydronorthebaine, S-[(E)-S-Phenyl-N-(p-tolylsulfonyl)-1-trimethylsilyl-3-methylbut-1-enyl]sulfoxime, 10,13,23,26-Tetraoxo-2,5,8,15,18,21-hexaoxatricyclo[20.4.0.4(9,14)]hexaicosa-1(22),9(14),11(12),24(25)-tetraene(diquino-18-crown-6), 5-Amino-2-phenyl-4-(p-methoxyphenyl)-4-[4'-(N,N-dimethylamino)phenyl]-7-(pyrrolidin-1'-yl)-1,6-naphthyridine-8- carbonitrile, 3,20-Dimethoxy-10,13,22,23-tetraoxa-7,16-dithiahexacyclo[12.6.2.2(2,6).0(2,24).0(9,23).0(17,21)]tetracosa-1(21) 2,4,6(24),17,19-hexaene, 6,13-Dibromo-5,7,12,14-tetramethyldibenzo[b,i][1,4,8,11]tetraazacyclotetradecahexaenato nickel II, 3,4-Dihydro-1H-2-benzothiopyran-1-acetamide, Pyridine-3-carboxylic acid, 1,4-dihydro-5-cyano-2-hydroxy-4-(4-isopropylphenyl)-6-methyl-, ethyl ester, (R)-(-)-2-Propen-1-yl-4,6-dimethoxybenzoic acid1-methyl-hept-6-enyl ester, 2-(Acetoxymethyl)-3-(methoxycarbonyl)biphenylene, Diethyl 3-phenyl-1-(phenylamino)prop-2-enephosphonate, Tris(trimethylsily)phosphate, 4,4,6a,6b,8a,11,11,14b-Octamethyl-1,4,4a,5,6,6a,6b,7,8,8a,9,10,11,12,12a,14,14a,14b-octadecahydro-2H-picen-3-one, Propanoic acid, 2-(3-acetoxy-4,4,14-trimethylandrost-8-en-17-yl)-, Lucenin 2, Myristic acid, 2-(trimethylsiloxy)-1-[(trimethylsiloxy)methyl]ethyl ester, 9,12-Octadecadienoic acid (Z,Z)-, 2-[(trimethylsilyl)oxy]-1-[[(trimethylsilyl)oxy] methyl]ethyl ester (CAS), Isoquinoline, Di-(2-ethylhexyl)phthalate, 1,2-Benzenedicarboxylic acid, mono(2-ethylhexyl) ester, Methyl 2-benzoyloxycarbonylamino-2,3,4,6-tetradeoxy-6-{methyl-[(1R)-phenylethyl]amino}-à-D-erythro-hexopyranoside, Docosane (CAS), Nonacosane (CAS), 1,4-Diphenyltriphenylene-2,3-diol, Ergost-6,22-dien-3.beta,.,5à,8à-triol, Dodecane, 5,8-diethyl-, 13,17-Diethyl-12,18-dimethyl-21,22-dioxaoxophlorin, Benzyl[bis(4-methoxyphenyl)phenylphosphonium bromide, Heptadecane, 9-hexyl-, Benzo[c]fluorenone, bis[(4'-Phenyl-1',2',5'-oxadiazol-3'-yl)methyl]-carbonate- N(2),N(2)-Dioxide, 3-Cyano-2-ethoxy-4-phenyl-6-morpholino-1,7,10-antyridine, Cephalostatin - 2,3-á-epoxide - 12à-pivalate, 2-Methoxycarbonyl-5-methyl-3,4-diphenyltricyclo[4.4.1.1(2,5)]dodeca-3,7,9-trien-11,12-dione, 3,4-bis(methoxycarbonyl)-2,5,6-triphenylpyridine, (4'R,6'R)-4-(4',6'-dimethyl-1',3'-dioxan-2'-yl)-5-methoxy-2, 2-dimethyl-2,3-dihydroanthra[1,2-b]furan-6,11-dione, Stigmast-5-en-3-ol, (3á,24S)- (CAS), Acetic acid, 10,13-dimethyl-17-(1-methyl-4-oxo-4-[1,2,4]triazol-1-yl- butyl)-2,3,4,7,8,9,10,11,12,13,14,15,16,17-tetradecahydro-1H-cyc(???),Cytochalasin e, Hexadecanoic acid, 2-phenyl-1,3-dioxan-5-yl ester, cis-(CAS), Toosendanin, Carda-5,20(22)-dienolide, 3,14,19-trihydroxy-, (3á)-(CAS), CORYMBOTIN H, 3-(p-Chlorophenyl)-6-phenyl-3-[(N-adamantylamino)carbonyl]-1,2,4-triazine, 3,4,5-Tribromo-1-methoxypyrrole-2-(piperidiyl)carboxamide, N-Benzyl-N-(2-chlorobenzyl)-N-(2-bromo-3-(2-bromophen oxy)propyl)amine, Irieol A, 13-Bromo-5-tert-butyl-8-(1-hydroxy-2-phenylethyl)[2.2] metacyclophane, Bis[(æ-chloro)-[1,2,3-ü(3)-1-[(trimethylsilyl)oxy]-2-propen-1-yl]nickl(II)], 7-Bromo-3-[(4-bromo-3,3-dimethylcyclohexylidene)methyl]octahydro-4,7a-dimethyl-1H-indene-2,4-diol, (E)-(3-Phenylallyl) 2-diaza-3-oxobutyrate, 2-(3-Hydroxypropyl)benzaldehyde, Ethyl 1-[N-(2-isopropyl-4-oxoquinazolin-3-yl)amino]-6-oxotetra hydropyridin-2-carboxylate diasteroisomer, Methyl (E)-4,5-dimethoxy-2-(3',4'-dimethoxystyryl)phenylacetate, Syn.-Methyl 2-(1-Hydroxy-2-methylpropyl)pent-4-enedithioate isomer, 1H-Cyclopropa[3,4]benz[1,2-e]azulene-5,7b,9,9a-tetrol, 1a,1b,4,4a,5,7a,8,9-octahydro-3-(hydroxymethyl)-1,1,6,8-tetramethyl-, 9,9a-diacetate, valerenol, PREGN-5-ENE-3,20-DIOL, (3á,20S)-, 1-(Trimethylsiloxy)-9-octadecanone, 6-Bromo-1-(tert-butyldimethylsilyl)-3-ethylindole, 5-[2'-(2''-Bromo-3''-thienyl)ethenyl]-naphtho[[2,1-b][1]benzothiophene, Methyl 1,4a-Dimethyl-1,2,3,4,4a,5,6,8,9,10-decahydro-7-oxo-8,8-di(3-pentynyl)-7H-1-phenanthrenecarboxylate, 4-Phenylselenenylestrone, 3-Acetyl-1-(3,4-dimethoxyphenyl)-5-ethyl-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepine, (+-)-(2S,3S)-2-[2-(4-Bromophenyl)-2-oxoethyl]tetrahydro-2H-3-pyranyl acetate, 1,2-Dicarbomethoxy-1,2-dihydro-1,4-diphenylphthalazine, 4-ACETYLOXYIMINO-6,6-DIMETHYL-3-METHYLSULFANYL-4,5,6,7-TETRAHYDRO-BENZO[C]THIOPHENE-1-CARBOXYLIC ACID METHYL ESTER, 2,2'-Bis(2-hydroxy-2-ethylbutyl)-1,1'-binaphthyl, 4-Bromo-5'-chloro-2'-phenoxybutyranilide, (S)-N-(2'-Methoxy-[1,1']binaphthalen-2-yl)butyramide, 7-Chloro-3,4-dihydro-3-[4-[methylthio]phenyl]-1,9(2H,10 H)-acridinedione, trans-12-Azido-1,2,11,12-tetrahydro-3-methyl-11-benz[j]a centhrylenol acetate, BISTRIMETHYLSILYL N-ACETYL EICOSASPHINGA-4,11-DIENINE, Nickel, [(1,2-ü)-butadiyne][1,2-ethanediylbis[bis(1-methylethyl)phosphine]-P,P']-, phosphoenolpyruvate-tri-TMS, 1H-Purin-6-amine, [(2-fluorophenyl)methyl]- (CAS), Pentasiloxane, dodecamethyl- (CAS), Stigmast-5-en-3-ol, (3á,24S)- (CAS), 3-Cholestanol, 2-fromyl-3-benzyl-, Cholest-5-en-3-ol (3á)- (CAS), 17a-Methyl-3á-methoxy-17a-aza-D-homoandrost-5-ene-17-one, Pseudosolasodine diacetate, 3á-Hydroxy-5-cholen-24-oic acid, 13-Docosenamide, (Z)-, 9-Octadecenamide, (Z)- (CAS).

CONCLUSION

In the present study, two hundred and two phytochemical compounds have been identified from the methanol extract of whole plant of *Alysicarpus monilifer* by Gas Chromatography- Mass Spectrometry (GC-MS) analysis. Isolation of individual phytochemical constituents and subjecting it to biological activities are being undertaken.

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