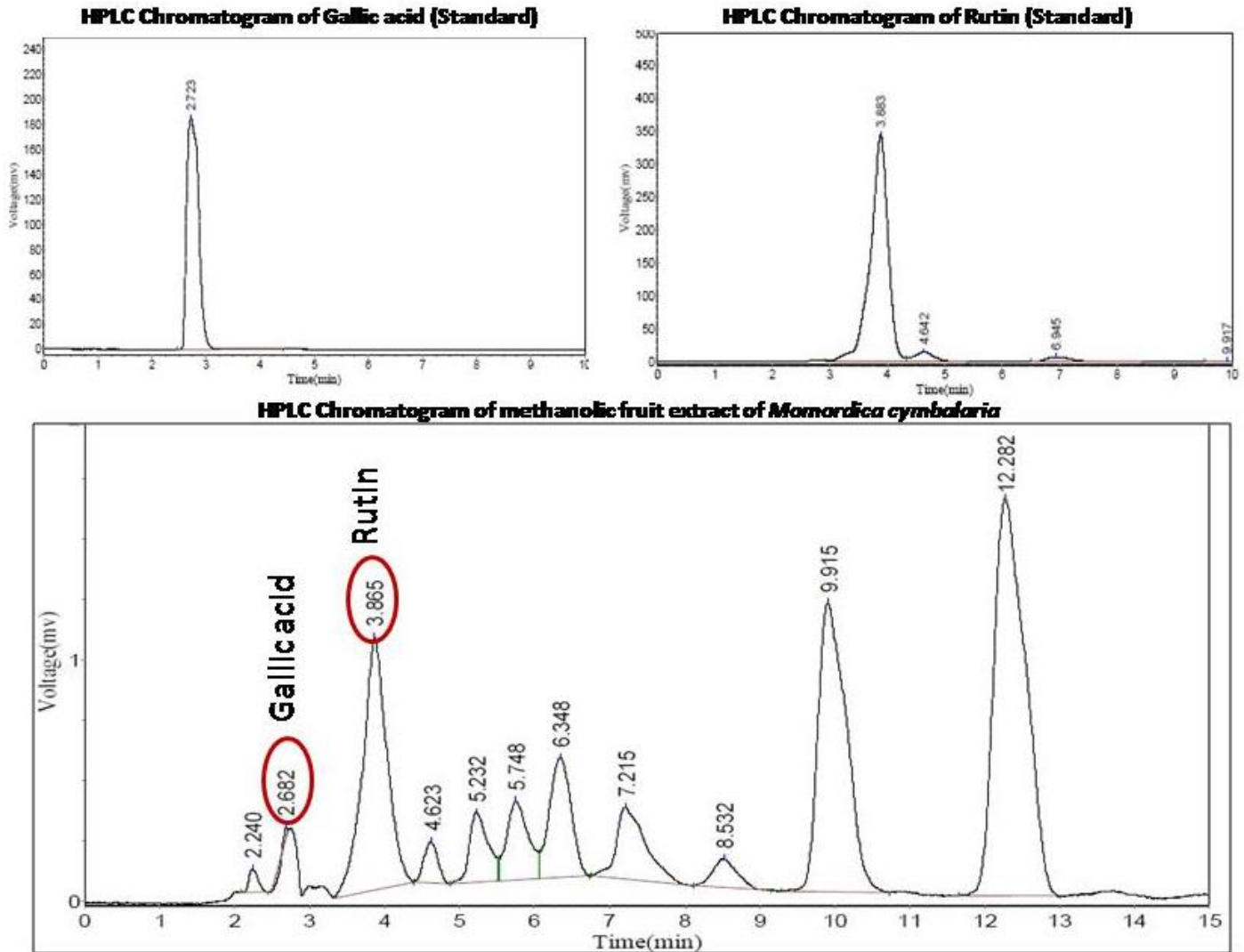


Supplementary data files

Supplementary data 1.

HPLC Chromatogram of methanolic fruit extract of *Mommordica cymbalaria*



Legends: HPLC analysis of methanolic fruit extract of *Mommordica cymbalaria* revealed the presence of gallic acid and Rutin, it was confirmed by comparing the retention time (RTs) of respective reference standards with the observed RTs in the extract.

Quantification of Rutin and Gallic acid MeMC by HPLC

RRS code	Rutin	Gallic acid
Retention time (min)- Standard	3.883	2.723
Standard area	7362147	2835319.25
Retention time in MeMC	3.865	2.682
Sample area in MeMC	2831.45	94.15
Purity of standard	98	99
Standard weight	2	2
Sample weight	5	5
sample dilution	10	10
standard dilution	100	100
Concentration in mg per 5 mg weight of MeMC	0.376	0.0328

Supplementary data 2.

Histopathological evaluation scoring of liver tissue of various groups

Score description

Score	Description	Percentage tissue occupied
0	Within normal limits	0
1	Very minimal	0-10
2	Mild	11-20
3	Moderate	21-40
4	Sever	41-100

Groupwise histopathology scoring and statistical analysis results

Parameter	Groupwise scoring (Mean± SEM)		
	Lean control	HFD Control	MeMC 50 mg
Fatty infiltration	0.125 ± 0.10	3.63 ± 0.18***	1.13 ± 0.22*
Macrophage infiltration	0.250 ± 0.12	3.875 ± 0.20***	0.875 ± 0.12*
Vascular changes	0.37 ± 0.16	3.63 ± 0.18	1.00 ± 0.18*
Hepatocellular hypertrophy	0.125 ± 0.10	3.875 ± 0.20***	0.875 ± 0.12*

Note: HFD- High fat diet, MeMC- Methanolic fruit extract of *Mommordica cymbalaria*

The scoring ranks of the various groups were statistically compared by (non-parametric test) Kruskal-Wallis test followed by Dunn's Multiple Comparison Test using Graph Pad version 5.0. The liver tissue of various groups was evaluated for above listed 3 parameters, in the observations the HFD control group animals showed significant histopathological lesions compared to Lean control ($P<0.01$). The MeMC (50 mg/kg) treatment showed near normal histoarchitecture of liver tissue compared to HFD group ($P<0.05$).