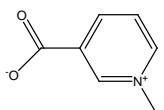


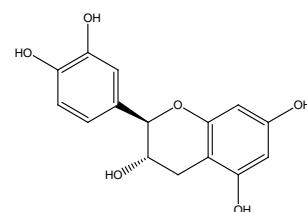
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# *Marrubium alysson* L. Ameliorated Methotrexate-Induced Testicular Damage in Mice through Regulation of Apoptosis and miRNA-29a Expression: LC-MS/MS Metabolic Profiling

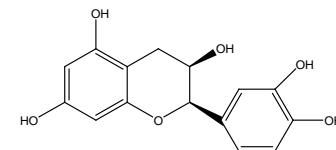
## Additional Experimental Detail



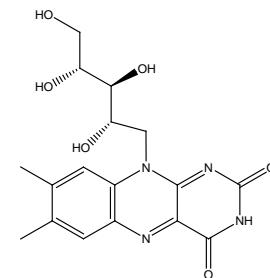
Trigonelline



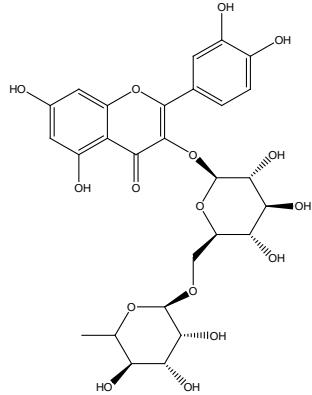
Catechin



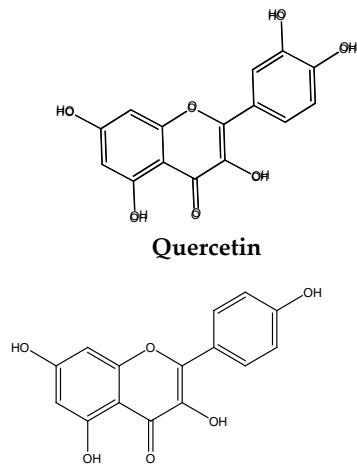
(-)-Epicatechin



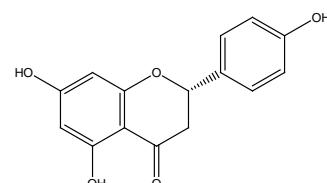
(-)-Riboflavin



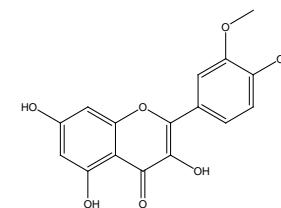
Rutin



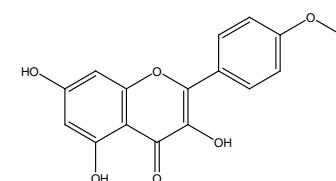
Kaempferol



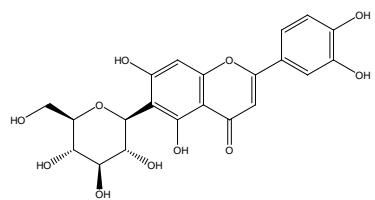
Naringenin



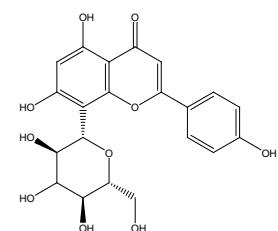
Isorhamnetin



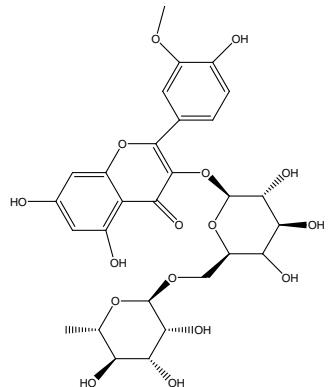
Diosmetin



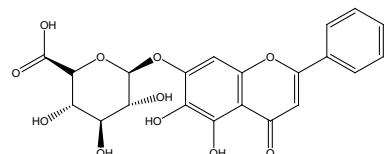
Isoorientin



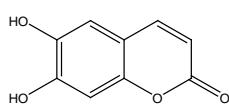
Apigenin 8-C-glucoside



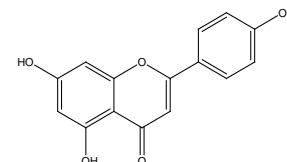
Isorhamnetin-3-O-rutinoside



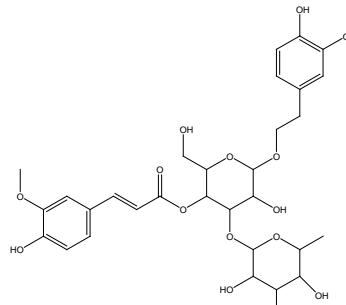
Baicalein-7-O-glucuronide



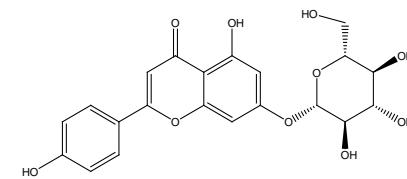
6,7-dihydroxycoumarin  
(Aesculetin)



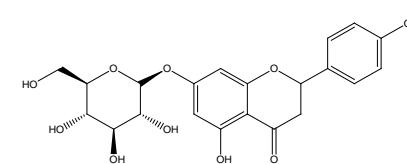
Apigenin



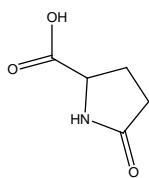
Leucosceptoside A



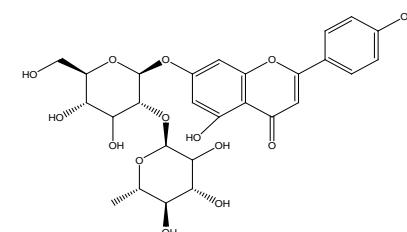
Apigenin-7-O-glucoside



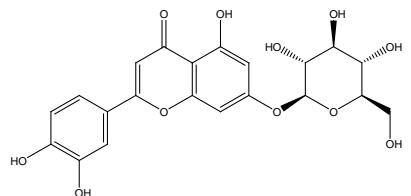
Naringenin-7-O-glucoside



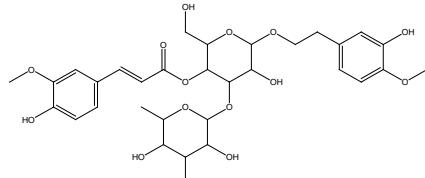
L-5-Oxoproline



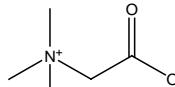
Apigenin 7-O-neohesperidoside



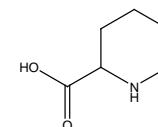
Luteolin-7-O-glucoside



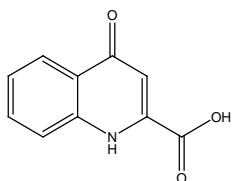
Martynoside



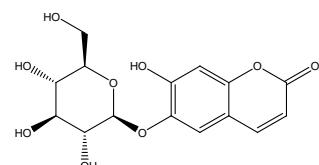
Glycine-Betaine



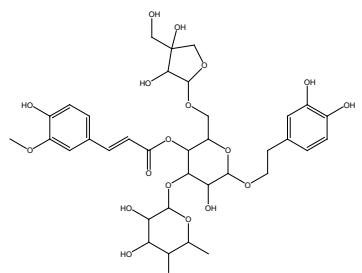
Pipecolate



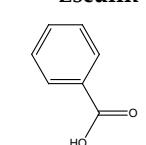
Kynurenic acid



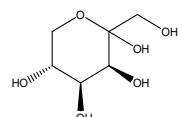
Esculin



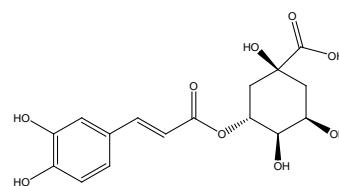
Alyssonoside



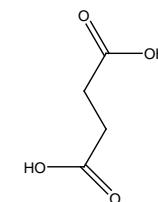
Benzoic acid



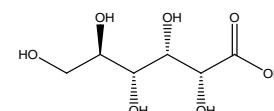
D-(+)-Tagatose



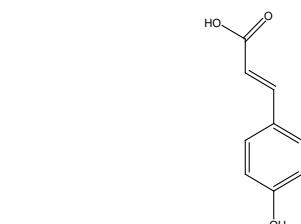
Chlorogenic acid



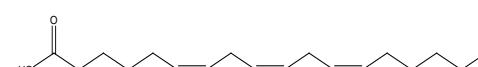
Succinic acid



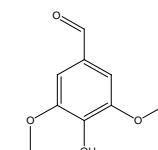
Gluconate



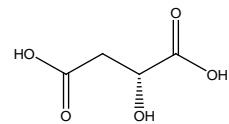
3-(4-hydroxyphenyl)prop-2-enoic acid



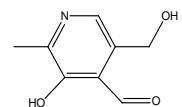
gamma-Linolenic acid



Syringaldehyde



**D-(+)-Malic acid**



**Pyridoxal**

**Figure S1.** Chemical structures of the identified compounds in methanolic extract of *M. alysson* L.

**Table S1.** Primer sequences and annealing temperatures for the measured genes by real time PCR.

	Forward Primer	Reverse Primer	Annealing Temperature
NF-κb	5'-CAATGGCTACACAGGACCA-3'	5'-CACTGTACCTGGAACCGAGA-3'	52° C
TNF-α	5'-TCTACTGAACCTCGGGGTGATCG-3'	5'-TGATCTGAGTGTGAGGGTCTGGG-3'	56° C
p53	5'-ACCGCCGACCTATCCTTACC-3'	5'-TCTTCTGTACGGCGGTCTCTC-3'	56° C
β-actin	5'-ACGGCCAGGTCATCACTATTG-3'	5'-CAAGAAGGAAGGCTGGAAAAGA-3'	52° C
miRNA-29a	5'-GCGCACTGATTCTTTGGTGTTCAG-3'	5'-GCGAGCACAGAATTAATACGAC-3'	51° C
RNU6B	5'-CTCGCTTCGGCAGCACATA-3'	5'-CGCTTCACGAATTGCGTG-3'	53° C