

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in Morus alba

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	2,4,4',6-TETRAHYDROXYBENZOPHENONE	Wood	--	--		
0	3,2',4'-TRIHYDROXYDIHYDROSTILBENE	Wood	--	--		
0	3,4'-DIHYDROXYDIHYDROSTILBENE	Wood	--	--		
4	5,7-DIHYDROXYCHROMONE	Plant	--	--		
0	6,3',5'-TRIHYDROXY-2-PHENYLBENZOFURAN	Wood	--	--		
0	A-BETA-HEXENAL	Leaf	--	--		
16	ACETIC-ACID	Leaf	--	--		
3	ACETONE	Leaf	--	--		
11	ADENINE	Leaf	--	--		
0	ALBAFURAN-C	Plant	--	--		
0	ALBANIN-F	Plant	--	--		
0	ALBANIN-G	Plant	--	--		
2	ALBANOL-A	Plant	--	--		
0	ALBANOL-B	Plant	--	--		
10	ALPHA-AMYRIN	Root Bark	--	--		
0	ALPHA-BETA-DIMONTANY-GLYCEROL	Plant	--	--		
0	ALUMINUM(AL2O3)	Leaf	8000	18000		
12	ARACHIDONIC-ACID	Seed	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	ARSENIC	Root Bark	0.1	0.1	-0.59974596128421	
112	ASCORBIC-ACID	Fruit	50	1040	-0.21982493303514608	
112	ASCORBIC-ACID	Leaf	2000	3000	-0.16555832480808047	
0	ASH	Fruit	7000	72000	0.39713725772505254	
0	ASH	Leaf	80000	204000	1.5002086483155999	
0	ASPARAGIC-ACID	Leaf	--	--		
7	ASTRAGALIN	Leaf	--	--		
24	BENZALDEHYDE	Plant	--	--		
9	BETA-AMYRIN	Root Bark	--	--		
53	BETA-CAROTENE	Fruit	1	8	-0.1353367732684366	
2	BETA-ECDYSTERONE	Leaf	1	1		
0	BETA-GAMMA-HEXENOL	Leaf	--	--		
0	BETA-RESORCYLALDEHYDE	Wood	--	--		
47	BETA-SITOSTEROL	Leaf	2000	2000	0.002157257976832335	
4	BETA-SITOSTEROL-BETA-D-GLUCOSIDE	Plant	--	--		
22	BETULINIC-ACID	Root Bark	150	150	-0.9097349416284014	Jim Duke's personal files.
22	BETULINIC-ACID	Bark	1800	1800	-0.45685844107981316	Jim Duke's personal files.
4	BIOTIN	Leaf	--	--		
2	BUTYL-ALCOHOL	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BUTYLAMINE	Leaf	--	--		
102	CAFFEIC-ACID	Plant	--	--		
28	CALCIUM	Leaf	7000	27400	0.6124083425478194	
28	CALCIUM	Root Bark	16100	16500	-0.29288458740782497	
28	CALCIUM	Fruit	300	6400	0.5869882979803118	
0	CALCIUM(CAO)	Leaf	14000	24000		
0	CALCIUM-MALATE	Leaf	--	--		
2	CAMPESTEROL	Plant	--	--		
1	CAPROIC-ACID	Plant	--	--		
0	CARBOHYDRATES	Fruit	97000	813000	0.16105814689833803	
0	CARBOHYDRATES	Leaf	400000	633000	0.16820046009689596	
1	CELLULOSE	Leaf	86000	106000	-0.7011564552432713	
3	CHALCOMORACIN	Root	--	--		
77	CHLOROGENIC-ACID	Leaf	--	--		
20	CHOLINE	Leaf	--	--		
0	CHRYSANTHEMIN	Fruit	--	--		
0	CIS-5-HYDROXY-L-PIPECOLIC-ACID	Plant	--	--		
0	CIS-BETA-GAMMA-HEXANOL	Plant	--	--		
23	CITRIC-ACID	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	COPPER	Root Bark	6	6	-0.8436614877321073	
0	CUDRANIN	Wood	--	--		
7	CYANIDIN	Fruit	--	--		
0	CYANIDIN-3-GLUCOSIDE	Fruit	--	--		
0	CYCLOMORUSIN	Root Bark	--	--		
0	CYCLOMULBERRIN	Root Bark	--	--		
0	CYCLOMULBERROCHROMENE	Root	--	--		
0	DIHYDROKAEMPFEROL	Wood	--	--		
0	DIHYDROMORIN	Wood	--	--		
3	DIHYDROQUERCETIN	Wood	--	--		
0	DIHYDROXYRESVERATROL	Wood	--	--		
4	ECDYSTERONE	Leaf	--	--		
0	ETHYL-2,4-DIHYROXYBENZOATE	Plant	--	--		
76	EUGENOL	Plant	--	--		
0	FAT	Seed	330000	380000	0.6037045537002609	
0	FAT	Fruit	4000	32000	-0.3968386637821932	
0	FAT	Leaf	68000	74000	0.3494738048001785	
15	FIBER	Fruit	9000	60000	-0.7707375947396303	
15	FIBER	Leaf	153000	153000	-0.10554407663023341	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	FOLACIN	Leaf	--	--		
0	FOLINIC-ACID	Leaf	--	--		
8	FRUCTOSE	Leaf	--	--		
22	GABA	Leaf	--	--		
7	GLUCOSE	Leaf	--	--		
8	GLUTAMIC-ACID	Leaf	--	--		
7	GLUTATHIONE	Leaf	--	--		
18	GUAIACOL	Plant	--	--		
0	HEXALDEHYDE	Leaf	--	--		
0	HEXEN-(2)-AL-(1)	Leaf	--	--		
0	HYDROXYCINNAMIC-ACID	Leaf	--	--		
0	HYDROXYRESVERATROL	Wood	20000	20000		
5	INOKOSTERONE	Leaf	10	10		
6	IRON	Fruit	19	247	0.4522942458393192	
6	IRON	Root Bark	70	290	0.08007358287786974	
0	IRON-OXIDE(Fe2O3)	Leaf	500	2600	1	
3	ISOAMYL-ALCOHOL	Plant	--	--		
1	ISOBUTYRALDEHYDE	Leaf	--	--		
2	ISOBUTYRIC-ACID	Leaf	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	ISOQUERCETIN	Fruit	--	--		
22	ISOQUERCITRIN	Leaf	--	--		
75	KAEMPFEROL	Wood	--	--		
0	KUWANON-A	Root Bark	--	--		
0	KUWANON-B	Root Bark	--	--		
1	KUWANON-C	Root Bark	--	--		
0	KUWANON-F	Root Bark	--	--		
3	KUWANON-G	Root Bark	--	--		
3	KUWANON-H	Root Bark	--	--		
0	KUWANON-I	Tissue Culture	--	--		
0	KUWANON-J	Tissue Culture	--	--		
2	LEUCINE	Leaf	--	--		
0	LINALOL	Plant	--	--		
27	LINOLEIC-ACID	Seed	--	--		
21	LUPEOL	Plant	--	--		
8	M-CRESOL	Plant	--	--		
1	MACLURIN	Wood	--	--		
65	MAGNESIUM	Root Bark	2310	2450	0.5507122311924819	
0	MAGNESIUM(MGO)	Leaf	2500	7200		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	MALIC-ACID	Leaf	--	--		
14	MANGANESE	Root Bark	15	37	-0.6808788386911311	
0	METHYL-ETHYL-ACETALDEHYDE	Leaf	--	--		
1	METHYL-ETHYL-KETONE	Leaf	--	--		
0	METHYL-HEXYL-KETONE	Leaf	--	--		
21	METHYL-SALICYLATE	Plant	--	--		
1	MORACENIN-D	Root	--	--		
0	MORACETIN	Leaf	--	--		
0	MORACHALCONE-A	Tissue Culture	--	--		
15	MORIN	Wood	3000	4400		
0	MORUSIN	Root Bark	--	--		
3	MUCILAGE	Fruit	--	--		
0	MULBERRANOL	Root Bark	--	--		
0	MULBERRIN	Plant	--	--		
0	MULBERROCHROMENE	Root	--	--		
0	MULBERROFURAN-B	Root Bark	--	--		
0	MULBERROFURAN-M	Plant	--	--		
0	MULBERROFURAN-N	Plant	--	--		
6	MYRISTIC-ACID	Seed	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	N-BUTANOL	Leaf	--	--		
1	N-BUTYRALDEHYDE	Leaf	--	--		
39	NIACIN	Fruit	7	54	-0.08954214940587216	
0	NORARTOCARPANONE	Wood	--	--		
6	O-CRESOL	Plant	--	--		
18	OLEIC-ACID	Seed	--	--		
9	OXALIC-ACID	Leaf	--	--		
0	OXYDIHYDROMORUSIN	Root Bark	--	--		
1	OXYRESVERATROL	Wood	--	--		
8	P-CRESOL	Plant	--	--		
2	PALMITOLEIC-ACID	Seed	--	--		
24	PECTIN	Leaf	--	--		
0	PELARGONIDIN-3-GLUCOSIDE	Fruit	--	--		
0	PETUNIDIN-3-RUTINOSIDE	Fruit	--	--		
26	PHENOL	Plant	--	--		
4	PHOSPHORUS	Fruit	320	3200	-0.004858212337336008	
4	PHOSPHORUS	Leaf	2400	4500	-0.08674149660857437	
0	PHOSPHORUS(P2O3)	Leaf	6500	14000		
0	PHYTATE-PHOSPHORUS	Leaf	1183	2548		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	PICEATANNOL	Wood	--	--		
2	PIPECOLIC-ACID	Leaf	--	--		
14	POTASSIUM	Fruit	1520	10133	-0.6886350931023792	
14	POTASSIUM	Root Bark	4180	5270	-0.8845257200549443	
0	POTASSIUM(K2O)	Leaf	20000	39200		
0	PROLINE	Leaf	--	--		
6	PROPIONIC-ACID	Leaf	--	--		
0	PROTEIN	Fruit	15000	120000	0.14077663777077923	
0	PROTEIN	Leaf	140000	288000	0.7597192152753078	
0	PROTEIN	Seed	250000	250000	0.14414237103378544	
176	QUERCETIN	Plant	--	--		
2	QUERCETIN-3'-GLUCOSIDE	Leaf	--	--		
44	QUERCITRIN	Leaf	--	--		
17	RESORCINOL	Wood	--	--		
68	RESVERATROL	Wood	--	--		
15	RIBOFLAVIN	Fruit	1	14	1.9255081807258456	
87	RUTIN	Leaf	20000	60000	2.720389880848415	
87	RUTIN	Fruit	--	--		
0	SARCOSINE	Leaf	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
44	SCOPOLETIN	Leaf	--	--		
3	SCOPOLIN	Leaf	--	--		
0	SILICA(SIO2)	Leaf	18000	26000		
0	SITOSTEROL	Root Bark	--	--		
0	SITOSTEROL-ALPHA-GLUCOSIDE	Root Bark	--	--		
0	SITOSTERYL-CAPRATE	Leaf	--	--		
0	SITOSTERYL-PALMITATE	Leaf	--	--		
1	SODIUM	Fruit	370	2467	0.04999205291006569	
1	SODIUM	Root Bark	251	520	0.4024004495631337	
0	SOLUBLE-SUGARS	Leaf	122000	288000		
8	STEARIC-ACID	Seed	--	--		
0	STIGMAST-5-EN-3-BETA-OL-7-ONE	Tissue Culture	--	--		
7	SUCCINIC-ACID	Leaf	--	--		
14	SULFUR	Leaf	3000	5600	0.177059964805523	
35	TANNIN	Stem	--	--		
6	TARTARIC-ACID	Leaf	--	--		
2	TETRAHYDROXYSTILBENE	Wood	--	--		
31	THIAMIN	Fruit	--	2	-0.4266044741562528	
0	TRANS-5-HYDROXY-L-PIPECOLIC-ACID	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	TRANS-BETA-GAMMA-HEXANOL	Plant	--	--		
15	TRIGONELLINE	Leaf	--	--		
22	UMBELLIFERONE	Root Bark	--	--		
0	VALERALDEHYDE	Leaf	--	--		
9	VALERIC-ACID	Plant	--	--		
0	WATER	Fruit	850000	875000	0.4540464719334812	
3	XANTHOPHYLL	Leaf	--	--		
77	ZINC	Root Bark	9	14	-1.12857618729367	