

**Dr. Duke's Phytochemical and Ethnobotanical Databases**

**Chemicals found in Macadamia spp**

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	ALANINE	Seed	3290.0	3385.0	-1.4394266296250449	USDA's Ag Handbook 8 and sequelae)
0	ARACHIDIC-ACID	Seed	17135.0	20925.0	1.3927513042906738	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
14	ARGININE	Seed	8990.0	9250.0	-0.651685772304995	USDA's Ag Handbook 8 and sequelae)
112	ASCORBIC-ACID	Seed		0.0	-0.33845664486186666	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ASH	Seed	12400.0	17000.0	-0.9288006312090696	--
3	ASPARTIC-ACID	Seed	8270.0	8500.0	-1.250756068091798	USDA's Ag Handbook 8 and sequelae)
1	BEHENIC-ACID	Seed	2140.0	5425.0	-0.17018309317532632	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
53	BETA-CAROTENE	Seed		0.0	-0.42930857989782434	USDA's Ag Handbook 8 and sequelae)
28	CALCIUM	Seed	355.0	1075.0	-0.5640904382936407	USDA's Ag Handbook 8 and sequelae)
0	CARBOHYDRATES	Seed	137300.0	159000.0	-1.4482083063097846	--
12	COPPER	Seed	2.0	3.0	-1.071630409922484	USDA's Ag Handbook 8 and sequelae)
7	CYANIDIN	Plant				--
2	CYSTINE	Seed	960.0	985.0	-1.5061249379617578	USDA's Ag Handbook 8 and sequelae)
1	DHURRIN	Leaf				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	EICOSENOIC-ACID	Seed	15000.0	24025.0	0.6311996710654364	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FAT	Seed	714000.0	775000.0	2.6843108448809203	--
15	FIBER	Seed	25000.0	67150.0	-0.534008734447337	--
0	GADOLEIC-ACID	Seed	10470.0	10770.0	0.8880433663524464	USDA's Ag Handbook 8 and sequelae)
8	GLUTAMIC-ACID	Seed	17820.0	18330.0	-0.9865584608612779	USDA's Ag Handbook 8 and sequelae)
12	GLYCINE	Seed	3710.0	3815.0	-1.0319131133663428	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	HISTIDINE	Seed	1680.0	1730.0	-1.1681569438383435	USDA's Ag Handbook 8 and sequelae)
6	IRON	Seed	18.0	200.0	0.2286303167080437	--
3	ISOLEUCINE	Seed	2440.0	2510.0	-1.0184585764225154	USDA's Ag Handbook 8 and sequelae)
0	KILOCALORIES	Seed	6910.0	7220.0	1.8479794630968498	--
7	LAURIC-ACID	Seed	715.0	10850.0	-0.41502866596136057	--
2	LEUCINE	Seed	4620.0	4750.0	-1.180351848740021	USDA's Ag Handbook 8 and sequelae)
27	LINOLEIC-ACID	Seed	10710.0	14725.0	-0.7916683537629705	--
4	LYSINE	Seed	3240.0	3330.0	-1.1877551336006706	USDA's Ag Handbook 8 and sequelae)
65	MAGNESIUM	Seed	1160.0	1190.0	-0.6938251351008979	USDA's Ag Handbook 8 and sequelae)
15	METHIONINE	Seed	920.0	950.0	-0.8688550021245444	USDA's Ag Handbook 8 and sequelae)
13	MUFA	Seed	581710.0	598340.0	3.5369602250432144	USDA's Ag Handbook 8 and sequelae)
6	MYRISTIC-ACID	Seed	4680.0	6200.0	-0.21483985559209862	--
39	NIACIN	Seed	13.0	22.0	-0.6252053381989392	--
18	OLEIC-ACID	Seed	391270.0	497550.0	3.111052923513173	--
13	PALMITIC-ACID	Seed	67120.0	71300.0	0.7715492989480708	--
2	PALMITOLEIC-ACID	Seed	113385.0	190650.0	4.278003319772141	--
7	PHENYLALANINE	Seed	2600.0	2675.0	-1.0586897723250352	USDA's Ag Handbook 8 and sequelae)
4	PHOSPHORUS	Seed	1015.0	1750.0	-0.9522186413503544	USDA's Ag Handbook 8 and sequelae)
14	POTASSIUM	Seed	2640.0	3785.0	-0.7725884973027902	--
0	PROLINE	Seed	3960.0	4075.0	-1.426463067606293	USDA's Ag Handbook 8 and sequelae)
0	PROTEACIN	Seed				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	PROTEIN	Seed	75500.0	92000.0	-1.261349453696573	USDA's Ag Handbook 8 and sequelae)
4	PUFA	Seed	12710.0	13075.0	-0.7064076302198383	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	RIBOFLAVIN	Seed		1.0	-0.9674166926890354	USDA's Ag Handbook 8 and sequelae)
7	SALICYLATES	Seed	5.0	6.0	-0.3079859080069262	--
1	SERINE	Seed	3510.0	3610.0	-1.3347131065720281	USDA's Ag Handbook 8 and sequelae)
0	SFA	Seed	110370.0	113525.0	0.537023797231042	USDA's Ag Handbook 8 and sequelae)
1	SODIUM	Seed		50.0	-0.6363455024232486	USDA's Ag Handbook 8 and sequelae)
8	STEARIC-ACID	Seed	23560.0	27810.0	0.03799252527851179	--
31	THIAMIN	Seed	3.0	4.0	-0.6165338688916807	USDA's Ag Handbook 8 and sequelae)
4	THREONINE	Seed	2630.0	2705.0	-1.2152095987797609	USDA's Ag Handbook 8 and sequelae)
8	TYROSINE	Seed	3370.0	3465.0	-0.9905890588975241	USDA's Ag Handbook 8 and sequelae)
3	VALINE	Seed	3210.0	3300.0	-1.0729112024842091	USDA's Ag Handbook 8 and sequelae)
0	WATER	Seed	28800.0	31000.0	-0.7544634510138826	--
77	ZINC	Seed	17.0	18.0	-0.7702843174200885	USDA's Ag Handbook 8 and sequelae)