

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

**Chemicals Found in Sambucus canadensis**

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	ALANINE	Fruit	300	1485	-0.8735049927392996	
5	ALPHA-AMYRIN-PALMITATE	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
5	ALPHA-AMYRIN-PALMITATE	Leaf	--	--		
14	ARGININE	Fruit	470	2326	-0.5291435977685278	USDA's Ag Handbook 8 and sequelae)
112	ASCORBIC-ACID	Fruit	360	1782	-0.17368960442994769	USDA's Ag Handbook 8 and sequelae)
3	ASPARTIC-ACID	Fruit	580	2871	-0.9574113584887939	USDA's Ag Handbook 8 and sequelae)
3	BETA-AMYRIN-PALMITATE	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
53	BETA-CAROTENE	Fruit	4	18	-0.11600695344068511	USDA's Ag Handbook 8 and sequelae)
47	BETA-SITOSTEROL	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
47	BETA-SITOSTEROL	Leaf	--	--		
28	CALCIUM	Fruit	380	1881	-0.4558178287284867	USDA's Ag Handbook 8 and sequelae)
2	CAMPESTEROL	Leaf	--	--		
2	CAMPESTEROL	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
5	CYANIN	Fruit	--	--		
2	CYSTINE	Fruit	150	742	-0.30176503740231525	USDA's Ag Handbook 8 and sequelae)
15	FIBER	Fruit	70000	346000	1.9280958845990008	USDA's Ag Handbook 8 and sequelae)
8	GLUTAMIC-ACID	Fruit	960	4752	-0.6603670628927117	USDA's Ag Handbook 8 and sequelae)
12	GLYCINE	Fruit	360	1782	-0.7050445118463198	USDA's Ag Handbook 8 and sequelae)

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	HISTIDINE	Fruit	150	742	-0.6805138378407519	USDA's Ag Handbook 8 and sequelae)
6	IRON	Plant	16	79	-0.6452696070354266	
3	ISOLEUCINE	Fruit	270	1336	-0.691335624114916	USDA's Ag Handbook 8 and sequelae)
2	LEUCINE	Fruit	600	2970	-0.4530573680539287	USDA's Ag Handbook 8 and sequelae)
27	LINOLEIC-ACID	Seed	106530	169600	0.5353160219759161	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
4	LYSINE	Plant	260	1287	-1.0954520396154683	
15	METHIONINE	Fruit	140	693	-0.32696949392698277	USDA's Ag Handbook 8 and sequelae)
3	MUCILAGE	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	N-NONACOSANE	Leaf	--	--		
39	NIACIN	Fruit	5	25	-0.4772218216222814	USDA's Ag Handbook 8 and sequelae)
64	OLEANOLIC-ACID	Leaf	--	--		
18	OLEIC-ACID	Seed	8040	12800	-0.8738766959416714	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
13	PALMITIC-ACID	Seed	11658	18560	-0.31664802756465443	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
11	PANTOTHENIC-ACID	Fruit	1	7	-0.7083122636259013	USDA's Ag Handbook 8 and sequelae)
7	PHENYLALANINE	Fruit	400	1980	-0.4667288235330872	USDA's Ag Handbook 8 and sequelae)
4	PHOSPHORUS	Fruit	369	2036	-0.3584113260261537	USDA's Ag Handbook 8 and sequelae)
14	POTASSIUM	Fruit	2699	14356	-0.3150109742062989	USDA's Ag Handbook 8 and sequelae)

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
176	QUERCETIN	Fruit	--	--		
15	RIBOFLAVIN	Fruit	1	3	-0.4303249009534089	USDA's Ag Handbook 8 and sequelae)
87	RUTIN	Flower	7700	52000	0.047303860256882914	
87	RUTIN	Leaf	35000	38000	1.3545803769236988	
8	STEARIC-ACID	Seed	5628	8960	-0.37098846575323996	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
12	STIGMASTEROL	Leaf	--	--		
12	STIGMASTEROL	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
35	TANNIN	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
31	THIAMIN	Fruit	1	3	-0.29859918253223444	USDA's Ag Handbook 8 and sequelae)
4	THREONINE	Fruit	270	1336	-0.6990686286563343	USDA's Ag Handbook 8 and sequelae)
29	TRYPTOPHAN	Fruit	130	559	-0.40903013650243103	USDA's Ag Handbook 8 and sequelae)
8	TYROSINE	Fruit	510	2524	0.04362322524613731	USDA's Ag Handbook 8 and sequelae)
3	VALINE	Fruit	330	1634	-0.5816375343333002	USDA's Ag Handbook 8 and sequelae)