

# P Viburnum prunifolium

## Common Name(s)

Black Haw

## How Used

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Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	1-METHYL-2,3-DIBUTYL-HEMIMELLITATE	Stem Bark	--	--	Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
16	ACETIC-ACID	Bark	--	--	
0	ACETYL-OLEANOLIC-ACID	Bark	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ACETYLRURSOLIC-ACID	Bark	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
32	AESCULETIN	Bark	--	--	
10	ALPHA-AMYRIN	Root Bark	--	--	

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
10	ALPHA-AMYRIN	Bark	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
18	AMENTOFLAVONE	Root Bark	--	--	
18	AMENTOFLAVONE	Bark	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	ARBUTIN	Root Bark	--	--	
15	ARBUTIN	Bark	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
9	BETA-AMYRIN	Bark	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
9	BETA-AMYRIN	Root Bark	--	--	
47	BETA-SITOSTEROL	Root Bark	--	--	
0	CAPRONIC-ACID	Bark	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	CAPRYLIC-ACID	Bark	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

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77	CHLOROGENIC-ACID	Bark	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
23	CITRIC-ACID	Root Bark	--	--	Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
4	D-CATECHIN	Leaf	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DEXTRIN	Bark	5000	5000	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	EO	Bark	2800	3300	-0.6768709538636533
30	ESCULETIN	Bark	--	--	
13	FORMIC-ACID	Bark	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	GLUCOSE	Bark	--	--	
0	HEPTACOSANE	Bark	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	ISOCHLOROGENIC-ACID	Bark	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ISOVALERIANIC-ACID	Bark	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference	Citation
5	ISOVALERIC-ACID	Root Bark	130	130		
27	LINOLEIC-ACID	Bark	--	--		
15	MALIC-ACID	Root Bark	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
6	MYRISTIC-ACID	Bark	--	--		
0	N-HEPTACOSANE	Bark	--	--		
64	OLEANOLIC-ACID	Bark	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
64	OLEANOLIC-ACID	Root Bark	--	--		
0	OLEANOLIC-ACID-ACETATE	Root Bark	--	--		
18	OLEIC-ACID	Bark	--	--		
9	OXALIC-ACID	Root Bark	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
13	PALMITIC-ACID	Bark	--	--		
0	PENTOSANS	Bark	160000	160000 -1		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference	Citation
0	PROTEIN	Bark	24000	24000	-2.04292587634628	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	RESIN	Root Bark	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	SACCHAROSE	Bark	3000	3000		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	SALICIN	Root Bark	2.2	2.2		
15	SALICIN	Root	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
15	SALICIN	Bark	--	--		
34	SALICYLIC-ACID	Bark	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
44	SCOPOLETIN	Fruit Juice	--	--		
44	SCOPOLETIN	Root Bark	4	90	1	
3	SCOPOLIN	Bark	--	--		
0	SITOSTEROL	Bark	--	--		

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	STARCH	Bark	55000	55000	-0.4576123353164109 List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
14	SUCROSE	Bark	--	--	
35	TANNIN	Root Bark	20000	20000	-1.4032939781516864 Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
22	UMBELLIFERONE	Fruit Juice	--	--	
0	URSOLIC ACID ACETATE	Root Bark	--	--	
89	URSOLIC-ACID	Root Bark	--	--	
89	URSOLIC-ACID	Bark	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
9	VALERIC-ACID	Bark	--	--	
9	VALERIC-ACID	Root Bark	--	--	Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	VIBURNIN	Bark	--	--	Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
0	VIBURNUM PRUNIFOLIUM GLUCOSIDE	Bark	--	--	

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference	Citation
0	VIBURNUM PRUNIFOLIUM POLYENE	Root Bark	--	--		
0	VOLATILE ORGANIC ACIDS	Root Bark	--	--		
0	VOLATILE ORGANIC ACIDS	Stem Bark	--	--		