

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 | -- | -- | | |
| 0 | ARACHIDIC-ACID | Seed | 1206 | 1920 | -0.4678536622769215 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 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) |
| 0 | ASH | Fruit | 6150 | 32918 | -0.6149047103811897 | USDA's Ag Handbook 8 and sequelae) |
| 3 | ASPARTIC-ACID | Fruit | 580 | 2871 | -0.9574113584887939 | USDA's Ag Handbook 8 and sequelae) |
| 0 | BALANOPHORIN | Leaf | -- | -- | | |
| 0 | BALDRIANIC-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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|----------------|---|------------|---------|----------|----------------------|--|
| 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 | Leaf | -- | -- | | |
| 47 | BETA-SITOSTEROL | Plant | -- | -- | | J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991. |
| 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. |
| 0 | CARBOHYDRATES | Fruit | 184000 | 910800 | 0.6840450068714193 | USDA's Ag Handbook 8 and sequelae) |
| 0 | CHRYSANTHEMIN | Fruit | -- | -- | | |
| 0 | CYANIDIN-3,5-DI-O-BETA-D-DIGLUCOSIDE-P-COUMARATE | Fruit | -- | -- | | |
| 0 | CYANIDIN-3-O-(6-O-CIS-P-COUMAROYL-2-O-BETA-D-XYLOPYRANOSYL)-BETA-D-GLUCOPYRANOSIDE-5-O-BETA-D-GLUCOPYRANOSIDE | Fruit | -- | 70 | | |
| 0 | CYANIDIN-3-O-(6-O-TRANS-P-COUMAROYL-2-O-BETA-D-XYLOPYRANOSYL)-BETA-D-GLUCOPYRANOSIDE | Fruit | -- | 80 | | |
| 0 | CYANIDIN-3-O-BETA-D-XYLOGLUCOSIDE-5-GLUCOSIDE | Fruit | -- | -- | | |
| 0 | CYANIDIN-3-SAMBUBIOSIDE | Fruit | -- | -- | | |
| 0 | CYANIDIN-3-SAMBUBIOSIDE-5-GLUCOSIDE | Fruit | -- | -- | | |
| 0 | CYANIDIN-3-XYLOGLUCOSIDE-5-GLUCOSIDE-P-COUMARATE | Fruit | -- | -- | | |
| 5 | CYANIN | Fruit | -- | -- | | |

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|----------------|---------------|------------|---------|----------|----------------------|--|
| 2 | CYSTINE | Fruit | 150 | 742 | -0.30176503740231525 | USDA's Ag Handbook 8 and sequelae) |
| 0 | FAT | Fruit | 5000 | 24750 | -0.45221358061563943 | USDA's Ag Handbook 8 and sequelae) |
| 0 | FAT | Seed | 201000 | 320000 | 0.28766309174876803 | |
| 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) |
| 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. |

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|----------------|----------------|------------|---------|----------|----------------------|--|
| 0 | LINOLENIC-ACID | Seed | 68340 | 108800 | 1.319516239730575 | 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) |
| 0 | MORRONISIDE | Shoot | 500 | 1000 | -1 | |
| 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. |

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|----------------|------------------|------------|---------|----------|----------------------|--|
| 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) |
| 0 | PROLINE | Fruit | 250 | 1238 | -0.7602800007850423 | USDA's Ag Handbook 8 and sequelae) |
| 0 | PROTEIN | Seed | 106000 | 106000 | -1.1368122034040098 | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | PROTEIN | Fruit | 6180 | 24750 | -1.1360910308835501 | USDA's Ag Handbook 8 and sequelae) |
| 176 | QUERCETIN | Fruit | -- | -- | | |

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|----------------|--------------|------------|---------|----------|----------------------|--|
| 0 | RESIN | Seed | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 15 | RIBOFLAVIN | Fruit | 1 | 3 | -0.4303249009534089 | USDA's Ag Handbook 8 and sequelae) |
| 0 | RUBBER | Plant | -- | 12700 | 1.366529661191856 | |
| 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.Plis 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. |

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| 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) |