

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Sambucus canadensis*

| Activities Count | Chemical               | Plant Part | Low PPM | High PPM | StdDev               | Reference Citation   |
|------------------|------------------------|------------|---------|----------|----------------------|--|
| 47               | BETA-SITOSTEROL        | Leaf       |         |          |                      | --   |
| 5                | ALPHA-AMYRIN-PALMITATE | Leaf       |         |          |                      | --   |
| 35               | TANNIN                 | Seed       |         |          |                      | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 12               | STIGMASTEROL           | Leaf       |         |          |                      | --   |
| 12               | STIGMASTEROL           | Plant      |         |          |                      | J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.   |
| 5                | ALPHA-AMYRIN-PALMITATE | Plant      |         |          |                      | J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.   |
| 176              | QUERCETIN              | Fruit      |         |          |                      | --   |
| 3                | MUCILAGE               | Seed       |         |          |                      | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 64               | OLEANOLIC-ACID         | Leaf       |         |          |                      | --   |
| 1                | N-NONACOSANE           | Leaf       |         |          |                      | --   |
| 2                | CAMPESTEROL            | Plant      |         |          |                      | J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.   |
| 5                | CYANIN                 | Fruit      |         |          |                      | --   |
| 47               | BETA-SITOSTEROL        | Plant      |         |          |                      | J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.   |
| 3                | BETA-AMYRIN-PALMITATE  | Plant      |         |          |                      | J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.   |
| 2                | CAMPESTEROL            | Leaf       |         |          |                      | --   |
| 11               | PANTOTHENIC-ACID       | Fruit      | 1.0     | 7.0      | -0.7083122636259013  | USDA's Ag Handbook 8 and sequelae)   |
| 31               | THIAMIN                | Fruit      | 1.0     | 3.0      | -0.29859918253223444 | USDA's Ag Handbook 8 and sequelae)   |
| 15               | RIBOFLAVIN             | Fruit      | 1.0     | 3.0      | -0.4303249009534089  | USDA's Ag Handbook 8 and sequelae)   |
| 53               | BETA-CAROTENE          | Fruit      | 4.0     | 18.0     | -0.11600695344068511 | USDA's Ag Handbook 8 and sequelae)   |

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|------------------|---------------|------------|---------|----------|----------------------|------------------------------------|
| 39               | NIACIN        | Fruit      | 5.0     | 25.0     | -0.4772218216222814  | USDA's Ag Handbook 8 and sequelae) |
| 6                | IRON          | Plant      | 16.0    | 79.0     | -0.6452696070354266  | --                                 |
| 29               | TRYPTOPHAN    | Fruit      | 130.0   | 559.0    | -0.40903013650243103 | USDA's Ag Handbook 8 and sequelae) |
| 15               | METHIONINE    | Fruit      | 140.0   | 693.0    | -0.32696949392698277 | USDA's Ag Handbook 8 and sequelae) |
| 7                | HISTIDINE     | Fruit      | 150.0   | 742.0    | -0.6805138378407519  | USDA's Ag Handbook 8 and sequelae) |
| 2                | CYSTINE       | Fruit      | 150.0   | 742.0    | -0.30176503740231525 | USDA's Ag Handbook 8 and sequelae) |
| 4                | LYSINE        | Plant      | 260.0   | 1287.0   | -1.0954520396154683  | --                                 |
| 3                | ISOLEUCINE    | Fruit      | 270.0   | 1336.0   | -0.691335624114916   | USDA's Ag Handbook 8 and sequelae) |
| 4                | THREONINE     | Fruit      | 270.0   | 1336.0   | -0.6990686286563343  | USDA's Ag Handbook 8 and sequelae) |
| 3                | ALANINE       | Fruit      | 300.0   | 1485.0   | -0.8735049927392996  | --                                 |
| 3                | VALINE        | Fruit      | 330.0   | 1634.0   | -0.5816375343333002  | USDA's Ag Handbook 8 and sequelae) |
| 112              | ASCORBIC-ACID | Fruit      | 360.0   | 1782.0   | -0.17368960442994769 | USDA's Ag Handbook 8 and sequelae) |
| 12               | GLYCINE       | Fruit      | 360.0   | 1782.0   | -0.7050445118463198  | USDA's Ag Handbook 8 and sequelae) |
| 4                | PHOSPHORUS    | Fruit      | 369.0   | 2036.0   | -0.3584113260261537  | USDA's Ag Handbook 8 and sequelae) |
| 28               | CALCIUM       | Fruit      | 380.0   | 1881.0   | -0.4558178287284867  | USDA's Ag Handbook 8 and sequelae) |
| 7                | PHENYLALANINE | Fruit      | 400.0   | 1980.0   | -0.4667288235330872  | USDA's Ag Handbook 8 and sequelae) |
| 14               | ARGININE      | Fruit      | 470.0   | 2326.0   | -0.5291435977685278  | USDA's Ag Handbook 8 and sequelae) |
| 8                | TYROSINE      | Fruit      | 510.0   | 2524.0   | 0.04362322524613731  | USDA's Ag Handbook 8 and sequelae) |
| 3                | ASPARTIC-ACID | Fruit      | 580.0   | 2871.0   | -0.9574113584887939  | USDA's Ag Handbook 8 and sequelae) |
| 2                | LEUCINE       | Fruit      | 600.0   | 2970.0   | -0.4530573680539287  | USDA's Ag Handbook 8 and sequelae) |
| 8                | GLUTAMIC-ACID | Fruit      | 960.0   | 4752.0   | -0.6603670628927117  | USDA's Ag Handbook 8 and sequelae) |
| 14               | POTASSIUM     | Fruit      | 2699.0  | 14356.0  | -0.3150109742062989  | USDA's Ag Handbook 8 and sequelae) |

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|------------------|---------------|------------|----------|----------|----------------------|--|
| 8                | STEARIC-ACID  | Seed       | 5628.0   | 8960.0   | -0.37098846575323996 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 87               | RUTIN         | Flower     | 7700.0   | 52000.0  | 0.047303860256882914 | --   |
| 18               | OLEIC-ACID    | Seed       | 8040.0   | 12800.0  | -0.8738766959416714  | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 13               | PALMITIC-ACID | Seed       | 11658.0  | 18560.0  | -0.31664802756465443 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 87               | RUTIN         | Leaf       | 35000.0  | 38000.0  | 1.3545803769236988   | --   |
| 15               | FIBER         | Fruit      | 70000.0  | 346000.0 | 1.9280958845990008   | USDA's Ag Handbook 8 and sequelae)   |
| 27               | LINOLEIC-ACID | Seed       | 106530.0 | 169600.0 | 0.5353160219759161   | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |