

**Dr. Duke's Phytochemical and Ethnobotanical Database****Biological Activities Found in *Sambucus canadensis***

<b>Activity</b>	<b>Chemical Count</b>
11B-HSD-Inhibitor	1
5-Alpha-Reductase-Inhibitor	4
5-HT-Inhibitor	1
5-Lipoxygenase-Inhibitor	1
Abortifacient	1
Acidulant	1
Adjuvant	1
Aldehyde-Oxidase-Inhibitor	2
Aldose-Reductase-Inhibitor	3
Allelochemic	2
Allergenic	4
Alpha-Reductase-Inhibitor	1
Analgesic	4
Androgenic	1
Androgenic?	1
Anemiagenic	1
Angiogenic	1
Angiotensin-Receptor-Blocker	3

<b>Activity</b>	<b>Chemical Count</b>
Anorexic	1
Anthelmintic	1
Antiacid	1
Antiacne	2
Antiacrodynamic	1
AntiADD	1
Antiadenomic	1
Antiaflatoxin	1
AntiAGE	1
Antiaggregant	3
Antiaging	3
Antiakathisic	1
Antialcoholic	1
Antialdosteronic	1
Antialkali?	1
Antialkalotic	1
Antiallergic	7
Antialopepic	3
Antialzheimeran	4
Antiamblyopic	1

<b>Activity</b>	<b>Chemical Count</b>
Antianaphylactic	2
Antiandrogenic	4
Antianemic	2
Antianginal	1
Antiangiogenic	1
Antianorectic	1
Antianxiety	2
Antiapoplectic	1
Antiarabiflavinotic	1
Antiarrhythmic	3
Antiartherosclerotic	2
Antiarthritic	7
Antiasthmatic	3
Antiatherogenic	1
Antiatherosclerotic	5
Antibackache	1
Antibacterial	6
Antiberiberi	1
Anticancer	3
Anticancer (Breast)	1

<b>Activity</b>	<b>Chemical Count</b>
Anticancer (Cervix)	1
Anticancer (Lung)	1
Anticanker	2
Anticapillary-Fragility	1
Anticarcinomic	2
Anticarcinomic (Breast)	1
Anticardiospasmic	1
Anticariogenic	3
Anticarpal-Tunnel	1
Anticataract	7
Anticephalagic	2
Anticervicaldysplasic	3
AntiCFS	1
Anticheilitic	2
Antichilblain	1
Anticlastogen	1
Anticlaudificant?	1
Anticlimacteric	2
Anticold	1
Anticolitic	2

Activity	Chemical Count
Anticomplement	1
Anticomplementary	1
Anticonvulsant	2
Anticoronary	2
AntiCrohn's	2
AntiCTS	1
AntiCVI	1
Anticystitic	1
Antidecubitic	3
Antideliriant	1
Antidementia	5
Antidepressant	7
Antidepressant?	1
Antidermatitic	4
Antidiabetic	5
Antidiabetic?	1
Antidiarrheic	1
Antidote (Acetaminophen)	1
Antidote (Aluminum)	2
Antidote (Cadmium)	1

<b>Activity</b>	<b>Chemical Count</b>
Antidote (Hypoglycin-A)	1
Antidote (Lead)	2
Antidote (Paracetamol)	1
Antidote (Paraquat)	1
Antidysenteric	1
Antidyskinetic	1
Antidyspeptic	1
Antidysphagic	1
Antieczemic	3
Antiedemic	4
Antielastase	1
Antiencephalitic	2
Antiencephalopathic	6
Antiencephalopathic?	1
Antiendometriotic	1
Antiepileptic	2
Antierythemic	1
Antiescherichic	1
Antiestrogenic	2
Antifatigue	4

<b>Activity</b>	<b>Chemical Count</b>
Antifeedant	4
Antifertility	2
Antifibrinolytic	2
Antifibrosarcomic	1
Antifibrotic	1
Antiflu	1
Antigallstone	1
Antigastric	1
Antigastritic	3
Antigingivitic	2
Antiglaucomic	2
Antiglossitic	1
Antigonadotrophic	1
Antigonadotropic	1
Antigranular	1
AntiGTF	1
Antihangover	3
Antiheartburn	1
Antihematuric	1
Antihemorrhagic	1

<b>Activity</b>	<b>Chemical Count</b>
Antihemorrhoidal	1
Antihepatitic	2
Antihepatotic	1
Antihepatotoxic	8
Antiherpetic	5
Antihistaminic	5
AntiHIV	3
Antihomocystinuric	1
Antihydrophobic	1
Antihyperactivity	1
Antihyperammonemic	1
Antihypercholesterolemic	1
Antihyperkeratotic	1
Antihyperkinetic	1
Antihyperlipidemic	1
Antihyperlipoproteinaemic	1
Antihypertensive	9
Antiichthyotic	1
Antiilus?	1
Antiimpotence	1



<b>Activity</b>	<b>Chemical Count</b>
Antiinfertility	2
Antiinflammatory	9
Antiinsomniac	2
Antiinsomniac?	1
Antiinsomnic	1
Antiischemic	1
Antikeratitic	1
Antileishmanic	1
Antileptic	1
Antileukemic	3
Antileukoplakic	1
Antileukotriene	2
Antileukotriene-D4	2
Antilipolytic	1
Antilipoperoxidant	2
Antilithic	2
Antilupus	1
AntiLyme	4
Antilymphomic	1
Antimaculitic	2

<b>Activity</b>	<b>Chemical Count</b>
Antimalarial	3
Antimanic	1
Antimastitic	1
Antimeasles	1
Antimelanomic	2
AntiMeniere's	1
Antimenopausal	3
Antimenorrhagic	2
Antimetastatic	2
Antimigraine	4
Antimorphinic	1
AntiMS	1
Antimutagenic	7
Antimyocarditic	2
Antinephritic	4
Antineuralgic	2
Antineuramidase	1
Antineurasthenic	1
Antineuritic	1
Antineuropathic	1

<b>Activity</b>	<b>Chemical Count</b>
Antinitrosaminic	1
Antinitrosic	1
Antinociceptive	3
Antiobesity	3
Antiophidic	3
Antiorchitic	1
Antiosteoarthritic	1
Antiosteoporotic	3
Antioxidant	15
Antioxidant?	2
Antiozenic	1
Antipancreatic	1
Antipapillomic	1
Antiparkinsonian	6
Antiparotitic	1
Antipellagic	3
Antiperiodontal	1
Antiperiodontic	1
Antiperiodontitic	2
Antiperistaltic	1

<b>Activity</b>	<b>Chemical Count</b>
Antipermeability	1
Antiperoxidant	3
AntiPGE2	1
Antipharyngitic	1
Antiphenylketonuric	2
Antiphotohobic	2
Antipityriasic	1
Antiplatelet	2
Antiplasmodial	2
Antiplatelet	1
AntiPMS	3
Antipneumonic	1
Antipodriac	2
Antipolio	2
Antipoliomyelitic	2
Antiporphyrin	1
Antiprogestational	1
Antiproliferant	3
Antiprostaglandin	2
Antiprostanoid	1

<b>Activity</b>	<b>Chemical Count</b>
Antiprostatadenomic	1
Antiprostatitic	5
Antiprotozoal	1
Antipruritic	1
Antipsoriac	2
Antipsychotic	1
Antipurpuric	1
Antipyretic	2
Antiradicular	5
AntiRaynaud's	2
Antirenitic	1
Antiretardation	1
Antiretinotic	1
Antirheumatic	4
Antirheumatitic?	1
Antirhinitic	1
Antisarcomic	1
Antiscoliotic	1
Antiscorbutic	1
Antiscotomic	1

<b>Activity</b>	<b>Chemical Count</b>
Antiseptic	2
Antishingles	1
Antisickling	2
Antispasmodic	5
Antistreptococcic	1
Antistress	3
Antistroke	1
Antisunburn	1
Antisyndrome-X	1
AntiTGF-beta	1
Antithiamin	1
Antithrombic	1
Antithrombogenic	1
Antithyroid	1
Antitic	1
Antitrypanosomic	2
Antitumor	6
Antitumor (Bladder)	1
Antitumor (Breast)	4
Antitumor (Cervix)	1

<b>Activity</b>	<b>Chemical Count</b>
Antitumor (CNS)	1
Antitumor (Colon)	3
Antitumor (Gastric)	1
Antitumor (Kidney)	1
Antitumor (Lung)	5
Antitumor (Ovary)	1
Antitumor (Pancreas)	1
Antitumor (Prostate)	1
Antitumor (Skin)	1
Antitumor (Stomach)	1
Antitumor-Promoter	3
Antiulcer	11
Antiuremic	1
Antivaricose	1
Antivertigo	1
Antiviral	8
Antivertilgic	1
Antixerophthalmic	1
Anxiolytic	4
Aphrodisiac	1

<b>Activity</b>	<b>Chemical Count</b>
Apoptotic	4
Aromatase-Inhibitor	1
Artemicide	2
Asthma-preventive	1
ATPase-Inhibitor	1
Bacteristat	1
Beta-Adrenergic Receptor Blocker	1
Beta-Blocker	3
Beta-Glucuronidase-Inhibitor	2
Bradycardiac	1
Calcium-Antagonist	1
Calcium-Channel-Blocker	1
Calmodulin-Antagonist	1
cAMP-Phosphodiesterase-Inhibitor	2
Cancer-Preventive	19
Candidicide	2
Capillariprotective	2
Carcinogenic	4
Cardioprotective	5
Cardiotonic	1



<b>Activity</b>	<b>Chemical Count</b>
Cardiotoxic	1
Caspase-8-Inducer	1
Catabolic	2
Chelator	1
Chemopreventive	2
Choleretic	1
Circulotonic	1
Cold-preventive	1
Collagenic	1
Colorant	1
Comedolytic	1
COMT-Inhibitor	1
Copper-Chelator	1
Cosmetic	1
COX-1-Inhibitor	1
COX-2-Inhibitor	3
Cyclooxygenase-Inhibitor	3
Cytochrome-P450-1A2-Inhibitor	1
Cytoprotective	1
Cytotoxic	1

<b>Activity</b>	<b>Chemical Count</b>
Deiodinase-Inhibitor	1
Demulcent	1
Dermatitigenic	1
Detoxicant	1
Diaphoretic?	1
Differentiator	1
Diuretic	6
Elastase-Inhibitor	1
Emetic	2
Essential	8
Estrogenic	3
Estrogenic?	1
Febrifuge	1
Fibrinolytic	1
Fistula-Preventive	1
FLavor	5
Fungicide	1
Gastroprotective	1
Glucosyl-Transferase-Inhibitor	2
Glutathionigenic	1

<b>Activity</b>	<b>Chemical Count</b>
Gonadotrophic	1
Hemolytic	1
Hemostat	2
Hepatomagenic	2
Hepatoprotective	8
Hepatotoxic	1
HIV-RT-Inhibitor	1
Hypercholesterolemic	1
Hypnotic	1
Hypoammonemic	1
Hypoarginanemic	1
Hypocholesterolemic	12
Hypoglycemic	5
Hypolipemic	1
Hypolipidemic	2
Hypotensive	7
Hypouricemic	1
Immunomodulator	4
Immunostimulant	3
Immunosuppressant	1

<b>Activity</b>	<b>Chemical Count</b>
iNOS-Inhibitor	1
Inotropic	1
Insecticide	1
Insectifuge	3
Insectiphile	1
Insulinase-Inhibitor	1
Insulinogenic	1
Insulinotonic	1
Interferon-Synergist	1
Interferonogenic	1
Irritant	1
Juvabional	2
Larvostat	2
Laxative	2
Leucocytogenic	1
Lipotropic	1
Lipoxygenase-Inhibitor	3
Lithogenic	1
Lubricant	2
MAO-A-Inhibitor	1

<b>Activity</b>	<b>Chemical Count</b>
MAO-Inhibitor	1
Mast-Cell-Stabilizer	1
Metal-Chelator (Copper)	1
Metalloproteinase-Inhibitor	1
Metastatic	1
MMP-9-Inhibitor	1
Monoamine-Precursor	3
Mucogenic	1
Mucolytic	1
Mutagenic	2
Myoprotective	1
Myorelaxant	1
NADH-Oxidase-Inhibitor	1
Nematicide	2
NEP-Inhibitor	1
Neuroexcitant	1
Neuroinhibitor	1
Neuroprotective	2
Neurotoxic	1
NF-kB-Inhibitor	2

<b>Activity</b>	<b>Chemical Count</b>
NO-Genic	1
NO-Inhibitor	1
NO-Synthase-Inhibitor	1
Ornithine-Decarboxylase-Inhibitor	2
Osteogenic	1
Oviposition-Stimulant	1
Ovulant	1
Oxidant	2
P450-Inducer	1
P450-Inhibitor	1
PAF-Inhibitor	1
Percutaneostimulant	1
Perfumery	2
Pesticide	8
PGE2-Inhibitor	1
Phagocytotic	2
Phospholipase-Inhibitor	1
Pigment	1
Piscicide	1
Pituitary-Stimulant	1

<b>Activity</b>	<b>Chemical Count</b>
Plasmodicide	1
Prolactinogenic	1
Proliferant	1
Prooxidant	2
Propepic	4
Prostaglandin-Synthesis-Inhibitor	2
Protein-Kinase-C-Inhibitor	1
Protisticide	1
Psychotropic	1
PTK-Inhibitor	1
Quinone-Reductase-Inducer	1
Radioprotective	1
Roborant	1
Sedative	5
Serotoninerpic	2
Soap	1
Spermicide	1
Spermigenic	1
Sunscreen	1
Suppository	1

<b>Activity</b>	<b>Chemical Count</b>
Teratologic	1
Thymoprotective	1
TNF-alpha-Inhibitor	1
Topoisomerase-I-Inhibitor	1
Topoisomerase-II-Inhibitor	2
Tranquilizer	1
Tremorigenic	1
Tumor-Promoter	1
Tumorigenic	1
Tyrosinase-Inhibitor	1
Tyrosine-Kinase-Inhibitor	1
Ubiquiot	2
Ulcerogenic	1
Uricosuric	2
Urinary-Acidulant	1
Urine-Acidifier	1
Urine-Deodorant	1
Uterotonic	1
Vasodilator	8
Vasopressor	2



Activity	Chemical Count
VEGF-Inhibitor	1
Vulnerary	1
Xanthine-Oxidase-Inhibitor	2