

**Phytochemicals and Activities of Two
Medicinal Plants Occurring in Northwest British Columbia
Which Are Not Utilized by the Gitksan.**

Potential clinically useful properties are indicated by underlining; potentially toxic or undesirable activities are shown by use of *italics*. Hormonal activities affecting reproduction shown with double underline. Properties whose clinical relevance is not clear to me are left unmarked. Other properties (shown in parentheses). Properties taken from [21].

Arctostaphylos uva-ursi

Kinnikinnik or bearberry

allantoin plant	<u>antiinflammatory</u> , <u>antipeptic</u> , <u>antipsoriac</u> , <u>antiulcer</u> , <u>immunostimulant</u> , <u>keratolytic</u> , <u>superative</u> , <u>vulnerary</u>
arbutin 5-12% leaf	<u>antiseptic</u> , <u>antitussive</u> , <u>artemicide</u> , <u>bactericide</u> , <u>candidicide</u> , <u>diuretic</u> , <u>insulin sparing</u> , (pesticide), <u>urinary-antiseptic</u>
alpha-amyrin β-sitosterol	<u>antitumor</u> , <i>cytotoxic</i> <u>androgenic</u> , <u>anorexic</u> , <u>antiadenomic</u> , <u>antiandrogenic</u> , <u>antifeedant</u> , <u>antifertility</u> , <u>antigonadotrophic</u> , <u>antiinflammatory</u> , <u>antileukemic</u> , <u>antimutagenic</u> , <u>antiprogestational</u> , <u>antiprotastadenomic</u> , <u>antiprostatiitic</u> , <u>antitumor</u> , <u>antiviral</u> , <u>artemicide</u> , <u>bactericide</u> , <u>cancer-preventative</u> , <u>candidicide</u> , <u>estrogenic</u> , <u>gonadotrophic</u> , <u>hepatoprotective</u> , <u>hyopcholesterolemic</u> , <u>hypoglycemic</u> , <u>hypolipedemic</u> , (pesticide), <u>spermicide</u> , <u>viricide</u>
betulinic acid	<u>antitumor</u> , <i>cytotoxic</i>
citric acid leaf	antiaphthic, <u>anticalculic</u> , <u>anticoagulant</u> , <u>antioxidant</u> , <u>antitumor</u> , <u>disinfectant</u> , <u>hemostat</u> , <u>litholytic</u> , refrigerant
formic acid leaf	<u>antiseptic</u> , <u>antisynopic</u> , <u>counterirritant</u> , (pesticide)
gallic acid plant	ACE inhibitor, anticarcinomic, antifibrinolytic, antioxidant, antiseptic, antiviral, astringent, bacteristatic, cancer- preventative, but <i>carcinogenic</i> , hemostat, <i>nephrotoxic</i> , (pesticide), styptic
hyperin leaf	antiinflammatory, antioxidant, antitussive, antiviral, capillary fortifier, capillarigenic, diuretic, hepatoprotective, hypotensive, (pesticide), viricide
isoquercitrin leaf	<u>antifeedant</u> , <u>cancer-preventative</u> , <u>capillarigenic</u> , <u>diuretic</u> , <u>hypotensive</u> , (pesticide)
lupeol plant	<u>antitumor</u> , <u>antiurethrotic</u> , <i>cytotoxic</i>
malic acid leaf	<u>bacteristat</u> , <u>bruchiphobe</u> , <u>hemopoietic</u> , (pesticide), sialagogue
monotropein leaf	<u>cathartic</u>
myricetin	<u>antifeedant</u> , <u>antigastric</u> , <u>antiinflammatory</u> , <u>cancer</u>

leaf	<u>preventative, diuretic</u> , (larvostat and pesticide)
oleanolic-acid plant	<u>abortifacient, anticariogenic, antifertility, antihepatotoxic, antisarcomic, cancer-preventative, cardiogenic, diuretic, hepatoprotective, uterotonic</u>
quercetin leaf	5-lipoxygenase inhibitor, aldose-reductase inhibitor, (allelochemic), <u>anti-tumor promotor, anti-Crohn's, anti-PMS, antiaggregant, antiallergic, antianalylactic, antiasthmatic, anticataract, anticolitic, antidermatitic, antidiabetic, antiestrogenic, antifeedant, antifu, anti-rabies, antiherpetic, antipolio, antiviral, HIV reverse transcriptase inhibitor, antigastric, antihepatotoxic, antihistaminic and antiinflammatory, antileukotrienic, antilipoperoxidant, antioxidant, antiperiodontal and antiplaque, antipermeability, antipharyngitic, antipodriac, antisporiac, antitumor, antiradicular, bactericide, calmodulin-antagonist, cancer preventative, protects capillaries, cyclooxygenase-inhibitor, cytotoxic, hypoglycemic, insulinogenic</u> (juvabional, larvostat, pesticide), lipoxygenase inhibitor, <u>mast-cell stabilizer, mutagenic, spasmolytic, teratologic, tumorigenic, vasodilator</u> , xanthine oxidase inhibitor, CAMP phosphodiesterase inhibitor
quinic acid	<u>choleric</u>
tannin 6-20% bark	<u>antidiarrheic, antidysenteric, antimutagenic, anti-nephritic, antioxidant</u> , antiradicular, <u>antiviral, bactericide, cancer-preventative, hepatoprotective</u> , (pesticide), <u>psychotropic, viricide</u> .
ursolic acid	<u>antidiabetic, antiinflammatory, antileukemic, antiobesity?, antitumor, CNS depressant, cancer-preventative, cytotoxic, diuretic, hepatoprotective, hypoglycemic</u> (piscicide)
uvaol	<u>antitumor, cytotoxic</u>
<i>Mentha arvensis</i>	
wild mint, field mint	
1,8-cineole	(allelopathic) <u>anesthetic, antibronchitic, anticatarrh, antilarngitic, antipharyngitic, antirhinitic, antiseptic, antitussive, bactericide, CNS-stimulant, choleric, counterirritant, dentifrice, expectorant, fungicide, liver toner, hypotensive</u> , (insect repellent and pesticide), <u>rubifacient, sedative</u>
acetic acid plant	acidulant, <u>antiototic, antivaginitic, bactericide, expectorant, fungicide, mucolytic, osteolytic</u> , (pesticide), <u>protistacide, spermicide, ulcerogenic, verrucolytic</u>
alpha-pinene plant 10-300 ppm	<u>antiinflammatory, cancer-preventative</u> (coleoptiphile, insectifuge, insectiphile, pesticide)
camphene	<u>spasmogenic</u>
carvone leaf 0.81-2.6%	<u>antiseptic, CNS stimulant, cancer-preventative, carminative</u> (insecticide, insect repellent, pesticide) <u>vermicide</u>

caryophyllene plant	<u>antiedemic, antiinflammatory</u> (insect repellent, perfumery, pesticide, termitifuge) <u>spasmolytic</u>
eugenol essential oil	<u>analgesic, anaesthetic, antiaggregant, antiedemic, antifeedant, antiinflammatory, antioxidant, anti prostaglandin, antiseptic, antiulcer, cancer-preventative, candidicide, choleric, cytotoxic, febrifuge, fungicide</u> , (apifuge, insectifuge, juvabional, larvicide, pesticide, herbicide), <u>irritant, ulcerogenic, vermifuge</u>
formic acid plant	<u>antiseptic, antisynoptic, counterirritant</u> (pesticide)
furfural plant 2-5ppm	<u>antiseptic, fungicide</u> (insecticide, pesticide)
hesperidin plant	<u>antiDNA, antiRNA, anti allergic, antioxidant, antistomatitic, antiviral, capillariportective, choleric</u> (pesticide), <u>vasopressor</u>
limonene leaf 20-3520 ppm	<u>acetylcholinesterase inhibitor--anti-Alzheimerian?, anticancer, antilithic, antiviral, viricide, bactericide, cancer-preventative</u> , (herbicide, insecticide, insect repellent, pesticide), <u>irritant, sedative, spasmolytic</u>
linalool leaf	<u>antiseptic, antiviral and viricide, bactericide, cancer-preventative, fungicide</u> , (insect repellent, perfumery, pesticide, termite repellent), <u>sedative, spasmolytic, tumor-promoter</u>
luteolin shoot	aldose-reductase inhibitor, <u>antifeedant, antihistaminic, antiinflammatory, antioxidant, antitussive, cancer-preventative, choleric, diuretic</u> , (pesticide), <u>spasmolytic</u> , xanthine oxidase inhibitor
menthol leaf 1,000-24,385 ppm	<u>allergenic, analgesic, anaesthetic, antibronchitic, antiinflammatory, antineuralgic, antidontalgic, antipruritic, antirheumatic, antiseptic, antisinusitic, bradycardic, bronchomucolytic, bronchorrheic, CNS depressant, calcium-antagonist?, carminative, counterirritant, gastro sedative, myelorelaxant</u> , (perfumery, pesticide), <u>rubifacient, spasmolytic, vibriocide</u>
menthone plant 71-24,000 ppm	<u>analgesic, antiseptic, cancer-preventative, sedative, spasmolytic</u>
myrcene leaf 10-2,485 ppm	<u>analgesic, antimutanegic, antinociceptive, bactericide</u> (insect repellent, insecticide, pesticide) <u>spasmolytic</u>
p-cymene leaf, 9-29ppm	<u>analgesic, antifu, antiviral and viricide, antirheumatologic, bactericide, fungicide</u> (herbicide, insect repellent, pesticide)
piperitone leaf, 13-1285 ppm	<u>antiasthmatic</u>

pulegone plant 100-24460 ppm	<u>antiacetylcholinesterase inhibitor--anti Alzheimerian?</u> , <u>antihistaminic</u> , <u>antipyretic</u> , <u>cancer-preventative</u> , <i>cerebrotoxic</i> , <i>hepatotoxic</i> (avifuge, herbicide, insecticide and insect repellant, pesticide), <u>flea repellant</u> , <u>sedative</u>
rosmarinic acid plant 28,000 ppm leaf 71-228 ppm	<u>antianaphylactic</u> , anticomplementary, <u>antiedemic</u> , <i>antigonadotrophic</i> , <u>antihepatotoxic</u> , <u>antiherpetic</u> , <u>antiviral</u> , <u>viricide</u> , <u>antiinflammatory</u> , antileukotrienic, antilipoperoxidant, <u>antioxidant</u> , antiradicular, <u>antishock</u> , antithreotropic, <u>bactericide</u> , <u>cancer-preventative</u> , (pesticide)
thujone plant	<i>cerebrodepressant</i> , <i>convulsant</i> , <i>epileptigenic</i> , <i>hallucinogenic</i> , (herbicide, pesticide), <i>respirainhibitor</i> , <u>spasmolytic</u>