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: antiinflammatory, antipeptic, antipsoriac, antiulcer.

- plant: immunostimulant, keratolytic, superative, vulnerar

- arbutin: antiseptic, antitussive, artemicide, bactericide.

- 5-12% leaf: candicidice, diuretic, insulin sparing, (pesticide), urinary-antiseptic

- alpha-amyrin: antitumor, cytotoxic

- ß-sitosterol: androgenic, anorexic, antiadenomic, antiandrogenic, antifeedant, antifertility, antigonadotrophic, antiinflammatory, antileukemic, antimitugenic, antiprogestational, antiprostatadendomic, antiprostatitic, antitumor, antiviral, artemicide, bactericide, cancer-preventative, candicidice, estrogenic, gonadotrophic, hepatoprotective, hypcholesterolemic, hypoglycemic, hypolipidemic, (pesticide), sperricide, viricide

- betulinic acid: antitumor, cytotoxic

- citric acid: antiaiphtic, anticalculic, anticoagulant, antioxidant.

- leaf: antitumor, disinfectant, hemostat, litholytic, refrigerant

- formic acid: antiseptic, antisympotic, counterirritant, (pesticide)

- gallic acid: ACE inhibitor, anticarcinomic, antifibrinolytic, antioxidant, antiseptic, antiviral, astringent, bacteriastatic, cancer-preventative, but carcinogenic, hemostat, nephrotoxic, (pesticide), styptic

- hyperin: antiinflammatory, antioxidant, antitussive, antiviral, capillary fortifier, capillarigenic, diuretic, hepatoprotective, hypotensive, (pesticide), viricide

- isoquercitinin: antifeedant, cancer-preventative, capillarigenic, diuretic, hypotensive, (pesticide)

- leaf: antitumor, antiurethrotic, cytotoxic

- lupeol: antitumor, antiurethrotic, cytotoxic

- plant: antitumor, antiurethrotic, cytotoxic

- malic acid: bacteristat, bruchiphobe, hemopoetic, (pesticide), sialagogue

- leaf: cathartic

- monotropein: antifeedant, antigastric, antiinflammatory, cancer

- leaf: antifeedant, antigastric, antiinflammatory, cancer
leaf  preventative, diuretic, (larvistat and pesticide)
oleanolic-acid  abortifacient, anticariogenic, antifertility, antihepatotoxic, antiglycinic, cancer-preventative, cardiotonic, diuretic, hepatoprotective, uterotonic
plant
quercetin  5-lipoxygenase inhibitor, aldose-reductase inhibitor, (allelochemic), anti-tumor promoter, anti-Crohn’s, anti-PMS, antiaggregant, antiallergic, antianginal, antiasthmatic, anticataract, anticolitic, antidermatitic, antidiabetic, antiestrogenic, antifeedant, antiflu, anti-rabies, antihelminthic, antipolio, antiviral, HIV reverse transcriptase inhibitor, antigastric, antihepatotoxic, antihistaminic and antiinflammatory, antileukotrienic, antilipidperoxidant, antioxidant, antiperiodontal and antiplaque, antipermeability, antipharyngitic, antipodriac, antispiori, antitumor, antiradicular, bactericide, calmodulin-antagonist, cancer preventative, protects capillaries, cyclooxygenase-inhibitor, cytotoxic, hypoglycemic, insulinogenic, (juvabional, larvistat, pesticide), lipoxygenase inhibitor, mast-cell stabilizer, mutagenic, spasmyolytic, teratologic, tumorogenic, vasodilator, xanthine oxidase inhibitor, CAMP phosphodiesterase inhibitor
leaf
quinic acid  choleric

6-20% bark
antidiarrheic, antidyseptic, antimutagenic, anti-

nephritic, antioxidant, antiradicular, antiviral, bactericide, cancer-preventative, hepatoprotective, (pesticide), psychotropic, viricide.
ursolic acid
antidiabetic, antiinflammatory, antileukemic, antiobesity?, antitumor, CNS depressant, cancer-preventative, cytotoxic, diuretic, hepatoprotective, hypoglycemic, (pesticide)
uvaol  antitumor, cytotoxic

* Mentha arvensis
wild mint, field mint

1.8-cineole
(allelopathic) anesthetic, antibronchitic, anticitarhrh, antilaryngitic, antipharyngitic, antirhinitic, antiseptic, antitussive, bactericide, CNS-stimulant, choleric, counterirritant, dentifrice, expectorant, fungicide, liver toner, hypotensive, (insect repellant and pesticide), rubefacient, sedative
acetic acid
plant
acidulant, antiototic, antivaginitic, bactericide, expectorant, fungicide, mucolytic, osteolytic, (pesticide), protistacide, spermicide, ulcerogenic, verrucolytic
alpha-pinene
plant 10-300 ppm
antinflammatory, cancer-preventative (coleoptophile, insectifuge, insectiphile, pesticide)
camphene  spasmogenic
carvone
leaf
antiseptic, CNS stimulant, cancer-preventative, carminative (insecticide, insect repellent, pesticide)
0.81-2.6%
vermicide
caryophyllene plant
antiedemic, antiinflammatory (insect repellant, perfumery, pesticide, termitifuge) spasmolytic

eugenol essential oil
analgesic, anaesthetic, antiaggregant, antiedemic, antiinflammatory, antioxidant, antiprostaglandin, antiisepic, antitumour, cancer-preventative, candidicide, choleric, cytotoxic, febrifuge, fungicide, (apifuge, insectifuge, juvabional, larvicide, pesticide, herbicide), irritant, ulcerogenic, vermifuge

formic acid plant
antiseptic, antisyncopic, counterirritant, (pesticide)

furandial plant 2-5ppm
antiseptic, fungicide (insecticide, pesticide)

hesperidin plant
antiDNA, antiRNA, antiallergic, antioxidant, antistomatotic, antiviral, capillariprotective, choleric (pesticide), vasopressor

limonene leaf 20-3520 ppm
acetylcholinesterase inhibitor--anti-Alzheimerian?, anticancer, antilithic, antiviral, viricide, bactericide, cancer-preventative, (herbicide, insecticide, insect repellant, pesticide), irritant, sedative, spasmolytic

linalool leaf
antiseptic, antiviral and viricide, bactericide, cancer-preventative, fungicide, (insect repellant, perfumery, pesticide, termite repellant), sedative, spasmolytic, tumor-promoter

luteolin shoot
aldose-reductase inhibitor, antiinflammatory, antihistaminic, antioxidant, antitussive, cancer-preventative, choleric, diuretic, (pesticide), spasmolytic, xanthine oxidase inhibitor

menthol leaf 1,000-24,385 ppm
antiedemic, analgesic, anaesthetic, antibronchitic, antiflammatory, antineuralgic, antidontalgic, antipruritic, antirheumatic, antiseptic, antisinusitic, bradycardic, bronchomucolytic, bronchorheic, CNS depressant, calcium-antagonist?, carminative, counterirritant, gasterosative, myorelaxant, (perfumery, pesticide), rubifacient, spasmolytic, vibriocide

menthone plant 71-24,000 ppm
analgesic, antiinflammatory, cancer-preventative, sedative, spasmolytic

myrcene leaf 10-2,485 ppm
analgesic, antimutagenic, antinoceptive, bactericide (insect repellant, insecticide, pesticide) spasmolytic

p-cymene leaf, 9-29ppm
analgesic, antiflu, antiviral and viricide, antirheumatologic, bactericide, fungicide (herbicide, insect repellant, pesticide)

piperitone leaf, 13-1285 ppm
antiasthmatic
pulegone plant 100-24460 ppm antiacetylcholinesterase inhibitor--anti Alzheimerian?, antihistaminic, antipyretic, cancer-preventative, cerebrotoxic, hepatotoxic (avifuge, herbicide, insecticide and insect repellant, pesticide), flea repellant, sedative

rosmarinic acid plant 28,000 ppm antianaphylactic, anticomplementary, antiedemic, antigenadotrophic, antihepatotoxic, antitherpetic, antiviral, viricide, antiinflammatory, antileukotrienic, antilipoperoxidant, antioxidant, antiradicular, antishock, antithreotopic, bactericide, cancer-preventative (pesticide)

leaves 71-228 ppm

thujone plant cerebrodepressant, convulsant, epileptogenic, hallucinogenic, (herbicide, pesticide), resprainhibitor, spasmolytic