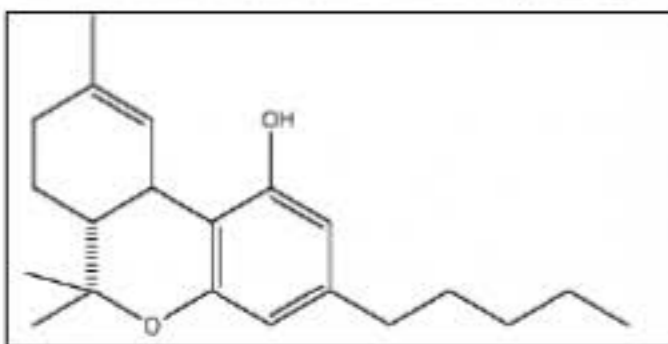


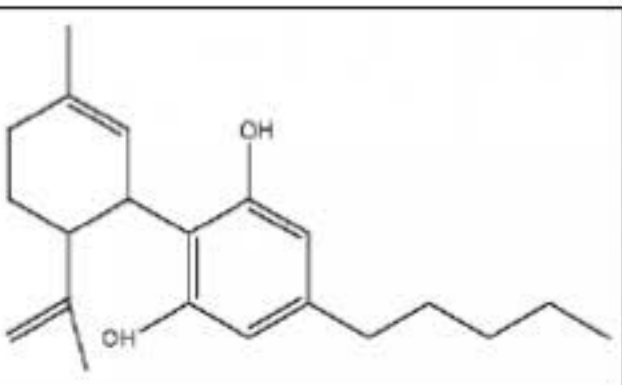
Phytocannabinoid Effects

Δ^9 -Tetrahydrocannabinol (THC)



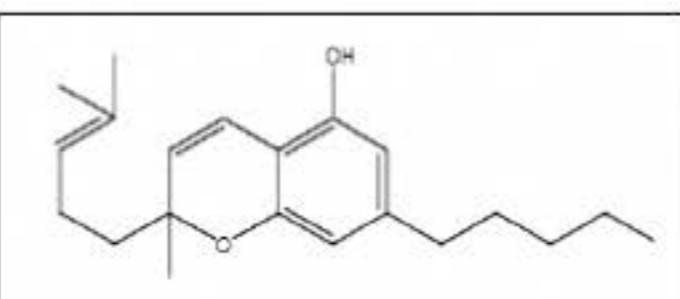
- Analgesic via CB1, CB2
- Antipruritic
- Neuroprotective/Antioxidant
- 20 times the anti-inflammatory effect of aspirin
- Twice the anti-inflammatory effect of hydrocortisone
- Not a Cox-1 or Cox-2 inhibitor
- Reduces amyloid plaque build-up

Cannabidiol (CBD)



- Neuroprotective antioxidant, strongly inhibits glutamate excitotoxicity; more potent antioxidant than Vitamins C, E
- Inhibits uptake of anandamide, weakly inhibits its breakdown
- Alerting vs. THC
- Anticonvulsant
- Anti-anxiety
- Cytotoxic in breast cancer and many other cancer cell lines; cytopreservative for normal cells
- Antagonist at GPR55 and GPR18
- Antagonizes tumor necrosis factor alpha in rodent rheumatoid arthritis.
- Not Cox-1 or Cox-2 inhibitor
- Agonist at serotonin receptor (why it may counter anxiety)
- Reduces nausea
- Improved cognition in hepatic encephalopathy
- Enhances adenosine receptor A2A signaling via inhibition of an adenosine transporter, suggesting anti-inflammatory and analgesic role
- Prevents prion accumulation and neuronal toxicity
- Powerful activity against MRSA

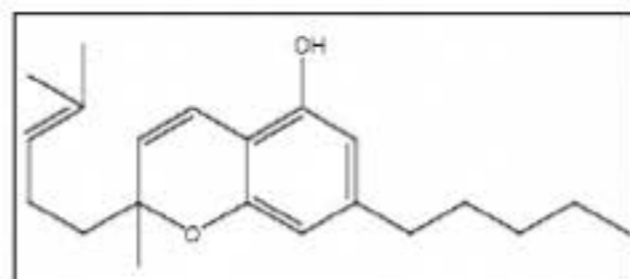
Cannabigerol (CBG)



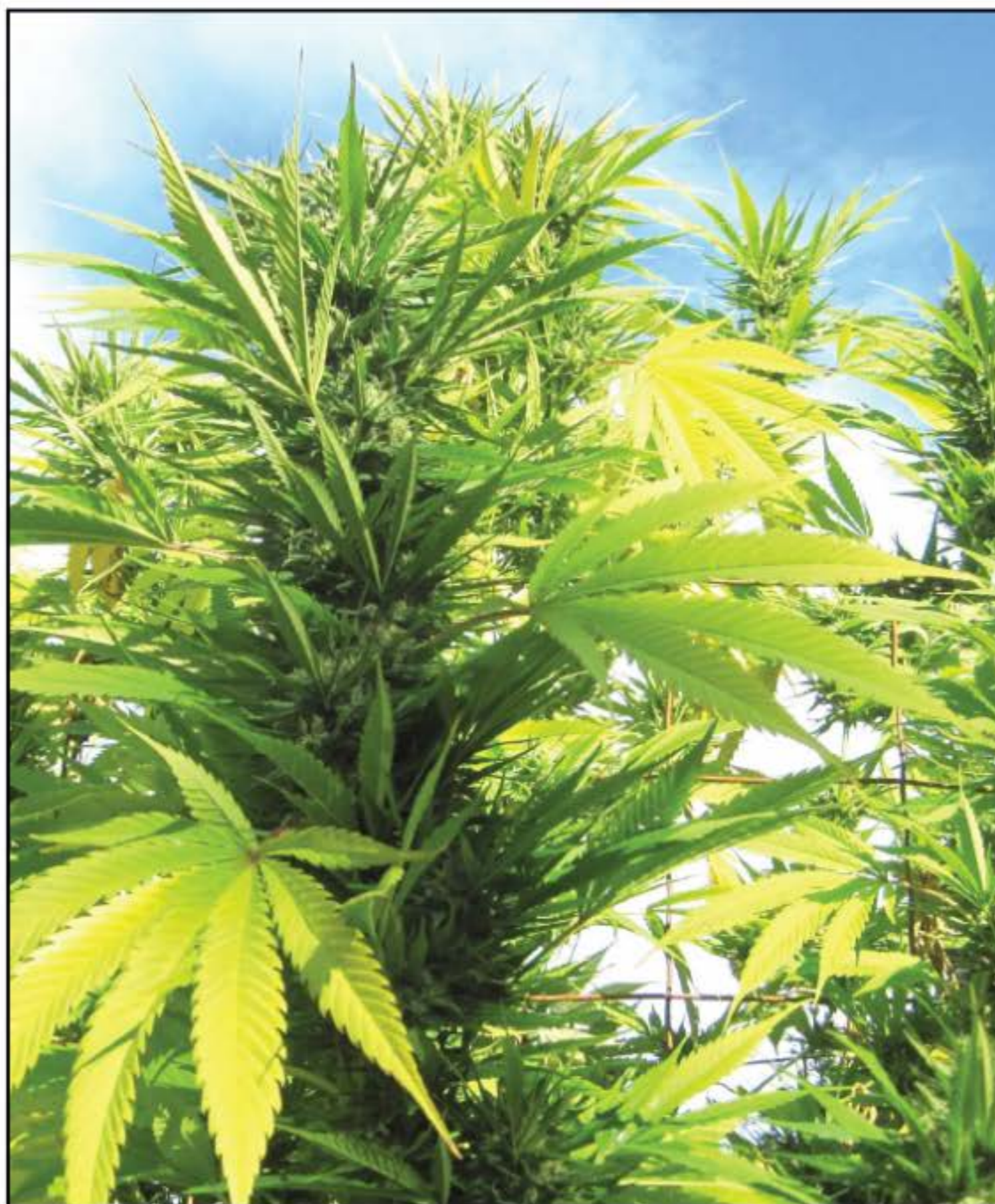
- GABA uptake inhibitor (more potent than THC or CBD)
- Modest antifungal activity
- Antidepressant

- Anti-hypertensive
- Next most effective phytocannabinoid vs. breast cancer after CBD
- Inhibits keratinocyte proliferation (anti-psoriasis?)
- Powerful activity against MRSA
- Analgesic?
- Inhibits anandamide reuptake.
- TRPM8 antagonist (application in prostate cancer?)

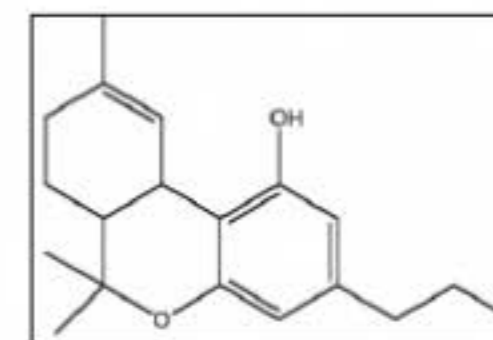
Cannabichromene (CBC)



- Anti-inflammatory
- Analgesic (less than THC)
- Antibiotic/antifungal
- Cancer cytotoxic agent
- CBC extract antidepressant in rodents
- Anandamide reuptake inhibitor

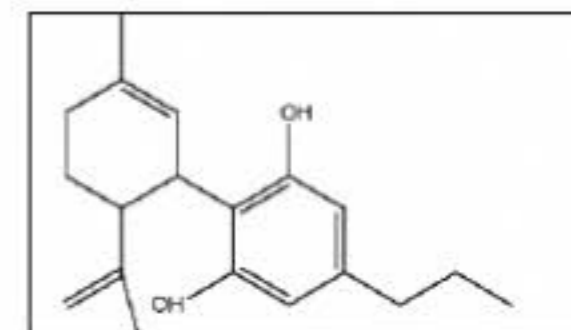


Tetrahydrocannabivarin (THCV)



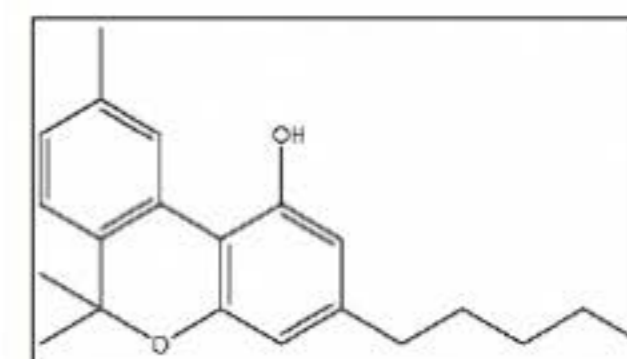
- CB1 antagonist at low doses, but CB1 agonist at higher doses.
- Produces weight loss, decreased body fat, increased energy expenditure in obese mice.
- Anticonvulsant in rodent cerebellum and pyriform cortex.

Cannabidivarin (CBDV)



- Anticonvulsant in hippocampal slices

Cannabinol (CBN)



- Sedative
- Anticonvulsant
- Anti-inflammatory
- Antibiotic, potent against MRSA
- TRPV2 agonist of interest in burns
- Inhibits keratinocyte proliferation (utility in psoriasis?)
- Stimulates recruitment of quiescent mesenchymal stem cells in marrow, promoting bone formation
- Inhibited breast cancer resistance protein. Megadoses might help treat breast tumors.