



HURV19PAN (Panakeia)

Up to 18% CBG.

Undetectable THC.

Undetectable CBD.

HURV19PAN is the first and only hemp variety available worldwide with undetectable THC in flower. It is also one of few varieties producing high amounts of CBG. Through many years of research, we are now offering this naturally-developed variety to Canadian farmers who can bring CBG to consumer markets. Cannabis Orchards is proud to produce feminized seed for HURV19PAN in Ottawa, Ontario and distribute these seeds to Hemp and Cannabis license holders across Canada. Leading the way to Cannabis 3.0, with the proven commercial success for growers.



Innovative.

Uniform.

Rigorous.

CBG: Cannabis 3.0

What is CBG?

Cannabigerol (CBG) is the precursor from which all other cannabinoids are synthesized, which is why it's often referred to as the "mother" or "stem cell" of cannabinoids. While the research conducted on CBG is still in its infancy, the potential health benefits of CBG could be extensive. The studied effects of CBG are as follows:

Pain Relief: "Furthermore, CBG has more potent analgesic, anti-erythema and lipooxygenase blocking activity than THC, mechanisms that merit further investigation." Doi: 10.2147/tcrm.s1928

Anti-Inflammatory: "CBG attenuated murine colitis, reduced nitric oxide production in macrophages (effect being modulated by the CB₂ receptor) and reduced ROS formation in intestinal epithelial cells. CBG could be considered for clinical experimentation in Inflammatory Bowel Disease (IBD) patients." Doi: 10.1016/j.bcp.2013.01.017

Neuroprotection: "CBG was extremely active as neuroprotectant in mice intoxicated with 3-nitropropionate (3NP), improving motor deficits and preserving striatal neurons against 3NP toxicity." Doi: 10.1007/s13311-014-0304-z

A comprehensive pharmacological review of CBG can be found here: DOI: 10.1124/jpet.120.000340



Advantages

Speed: Early harvesting (Late-September in most regions). No THC remediation necessary. High market demand. All bringing your harvest to fruition sooner.

Yields: Under optimal conditions, HURV19PAN produces more than 4000 pounds of *whole plant* biomass per acre.

Risk reduction: Zero THC = No Hot Hemp. HURV19PAN cannot go hot. Zero THC = zero farming, transport, extraction, or sales risks due to THC.

Economic advantages: Currently, HURV19PAN is the only CBG industrial hemp variety approved by Health Canada, meaning exclusive market advantage for HURV19PAN growers. *HURV19PAN has proven market success, with CBG products across Canada being derived from HURV19PAN biomass.*

Product advantages: All cannabinoid markets are available as HURV19PAN produces zero THC - flower is always compliant, extracts/concentrates/ edibles/tinctures never go above THC limits, CBG biomass has higher value than CBD.

Finding a buyer for your biomass: Although we cannot guarantee to find a buyer for your biomass, we have partnered with CBD Export Global, who have a dedicated sales team to help find a buyer for your excess HURV19PAN flower within Canada and in Europe. This is an *optional* service you can use if interested.



CBD
Export Global



Cultivation

Planting: Region dependent, we suggest late May - June for most provinces.

Flowering: 60 days after seeding.

Spacing: 3'-5' depending on planting date.

Harvesting: Late September – Early October.

Yields: High yielding, up to 4000 lbs/acre in biomass.

Structure: Indica dominant. Medium, stout plant, stacking flower with numerous branching. Medium internode length.

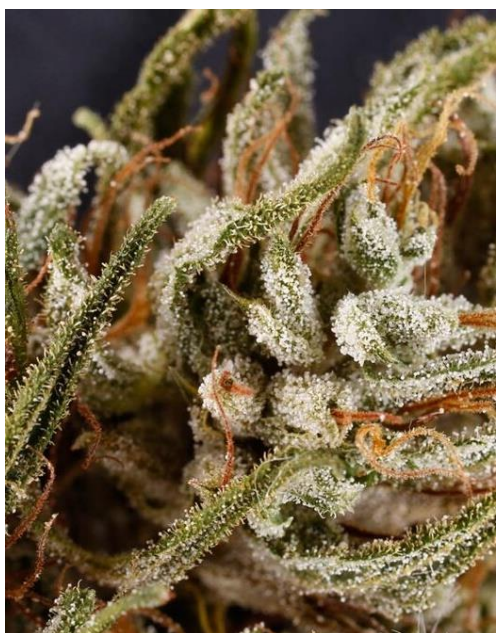
Potency: Outdoors, expect up to 16% CBGA, <0.01% THC and <0.01% CBD in flower. Indoors, expect up to 18% CBGA, <0.01% THC and <0.01% CBD in flower.

In 17 field trials across British Columbia, Alberta, Manitoba, Saskatchewan, Ontario and Quebec, HURV19PAN consistently tested undetectable in THC and CBD (<0.001% w/w). Due to lab error, faint amounts of CBD or THC may falsely be detected (less than <0.1% w/w).

Feminization: 99%+ feminized.

Hermaphroditism: In high cannabinoid hemp, hermaphroditism is a possibility. HURV19PAN will exhibit hermaphroditic traits if grown in sub-optimal conditions. Careful monitoring and proper farming/husbandry can successfully mitigate these issues. Please remember that all high-cannabinoid feminized hemp requires continual monitoring and care. We strongly advise all farmers to walk their fields.

In our outdoor trials, a typical range of 0.1-1% of plants exhibited hermaphroditism, which varied depending on location and climate conditions. Hermaphroditism may reach up to 10-15% with improper care or unfavorable growing conditions.



Technical support

For some farmers, growing feminized hemp seeds can be new. Here are some tips to help mitigate these difficulties.

Ideally, start your seeds in a climate controlled environment (indoor or in greenhouse) to maximize germination.

Provide enough space (3-5 feet) between plants.

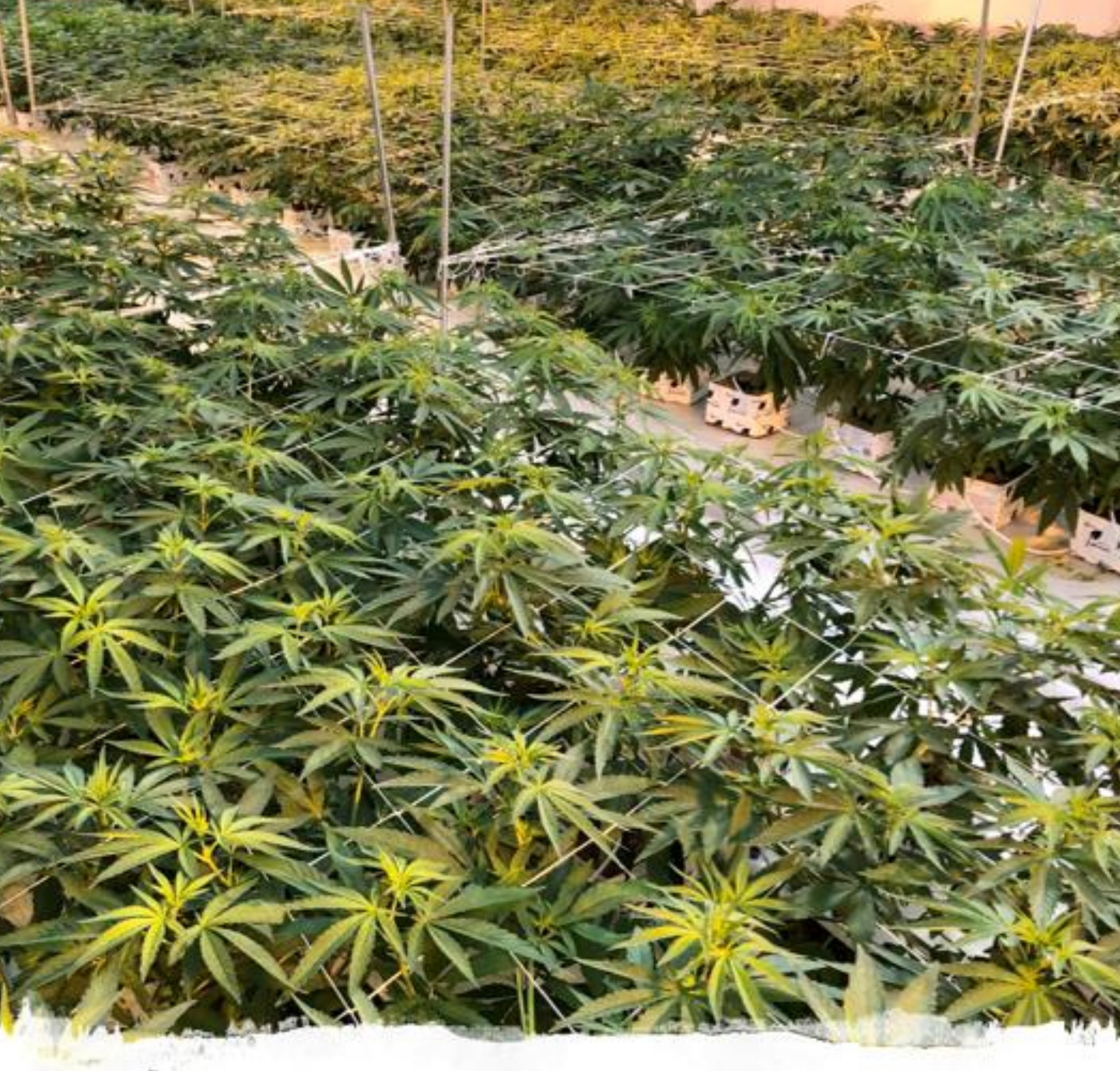
Detect hermaphroditic/male traits early to avoid pollination of your plot (***see picture for an example of pollen sac forming on a hermaphrodite plant***). You may pull these plants from your cultivation site. These signs typically appear up to 4 weeks prior to flower or 45 days after planting.

The light cycle needs to reach 14 hours of daylight to stimulate your plants to flower. From this time period, flower requires a minimum of 4 weeks and ideally 8 weeks to fully mature in content. If your area does not permit this, it is suggested to invest in darkening blankets to initiate flowering.

Most processors who will purchase your biomass will likely want flower to be compliant with Health Canada regulations for Cannabis. This includes microbial, pesticide, and heavy metal testing conducted at a Health Canada approved laboratory. Consult Health Canada for a list of approved testing laboratories near you.

If you have any difficulties with cultivating HURV19PAN, or if you have any questions, our team, which includes a CSGA-recognized plant breeder and agronomist with experience in cultivating HURV19PAN, is available to assist you. Email us at cultivation@cannabisorchards.ca.





Price

Seed: minimum order quantity of ten thousand seeds.

Price: 1.50 CAD/seed + 10% royalty on biomass sales.

Biomass: We are offering biomass grown in greenhouse, as well as biomass grown outdoors. Please contact us.

Clones: Current HC regulations do not allow for sale of clones to industrial hemp license holders.

Email: sales@cannabisorchards.ca

*Developed in partnership
with Hemp Trading in Spain*



Produced and distributed by

