A Gardener's Glossary of Grass

Dan Heims hortiholic@comcast.net Google the Israeli movie "The Scientist"

Endocannabinoid system – Natural receptors found in the human body that respond to Cannabis compounds.

Cannabis sativa – Very tall plants to 20', narrow leaves, willowy structure, cerebral, creative high

Cannabis indica - Shorter plants with wider leaves to 7' tall, stocky structure, high THC, Hash, suitable for indoor culture

Cannabis ruderalis – shorter plants, low THC, not photoperiod sensitive, Afghan origin

Cannabis hybrids – mixed results in many ways

THC – The sought-after drug that gets one high, has many medicinal values

CBD – No high, many medicinal benefits, anti-inflammatory. Used in salves

CBN - No high, insomnia-killer

Entourage effect- Different ratios of THC:CBD for better benefit than a single source

Hydrocarboxylation – bringing Cannabis to a specific heating point to release the pharmaceuticals

Terps or Terpenes – natural flavoring essences extant in many varieties, have medicinal effects. Lemon, Pine, Lavender.

Dispensaries: Legal storefronts to purchase your Cannabis. Well-regulated.

Budtenders- People behind the counter with a lot of knowledge on a store's products, like:

Bud – Sold by the gram in a dizzying array of varieties

Kief – Trichomes(glands) and leaf material, often twice as potent as the flower. No chemicals used.

Hash – Pure trichomes detached from the plant by physical action or ice-process. No chemicals used.

BHO – Butane Hash Oil – potent oil that uses Butane as a solvent to produce oil. Often used in vape pens.

Shatter – Usually made from BHO. Taffy like substance loved by dabbers. Powerful.

RSO- Rick Simpson's Oil – a tarry oil made from whole plant extract. Used in cancer treatments.

CO2 oil – Highest potency, less flavor, often used in vape pens

Consumption devices:

Dabbing units used to consume: Waxes/Oil vaporized by quartz nails heated by electricity or propane torch)

Vapes/Cartridges- used to vaporize potent CO2/BHO oils/Distillates. The wave. Very discreet. Other vape units can use bud ground by a grinder that can also yield kief by a succession of screens.

Bongs, pipes, "glass" - Smokeable: Flower (bud)

Topicals: Salves/body lotion/lubricants/Patches/Suppositories

Edibles:

Sodas/Candy/Cookies/Gummies/Popcorn/Beer/

Microdosing: mostly edible Medicinal/Psychological/Sexual

RSO cancer treatment/Sleep/cancer prevention High THC concentrate (85%)

Growing: a growing area big or small is called a "grow".

Clone- a rooted cutting identical to the parent

Dehu - Dehumidification equipment

Lights – many choices from LEDs to Very High Output fluorescent to plasma bulbs

Nutes – Fertilizer or stimulants to form bigger buds. Huge industry.

A FIRST COLUMN MAY BE NEEDED TO PREPARE READERS

Gardening

Jeff Lowenfels: Should a garden columnist give advice on growing cannabis?

Author: Jeff Lowenfels Updated: September 28, 2016 Published December 26, 2014

I try and stay away from politics in this column. Gardening is not supposed to be controversial or divisive (once you stop using poisonous chemicals, that is). Still, it's been my habit to vent a bit in the last column of the year. I suspect this year's comments might be a bit more controversial than others. I hope not.

The fact of the matter is that as the garden columnist for a paper in a state that has just voted to legalize the recreational use of pot - and the possession of up to six cannabis plants -- I find myself in an unusual position. Should I write about this soon-to-be-legal plant or do I continue to treat it as if it were illegal?

Normally, I would check my trusty Garden Writers Manual for advice, but given that Alaska is only the fourth state to re-legalize use of pot, there isn't anything on the matter. I am on my own, perhaps even setting the policy for other garden writers in other states that will eventually legalize pot.

I know that writing about this plant has the potential to upset a portion of my readership. Cannabis sativa is a plant that has been maligned for reasons political as well as economic, with screaming racial overtones (which is why I call it by its proper Latin name, cannabis, and not "marijuana"). Most don't realize that some mere 70 years ago, I would have written about Cannabis sativa for both medicinal uses and fiber production and no one would have blinked an eye.

This was before the likes of Randolph Hearst, who wanted paper to come from his pulp, not hemp, and Harry J. Anslinger, fresh new head of a federal agency that he needed to grow into a bureaucracy -- and so repeatedly claimed cannabis made people commit violent crimes and otherwise act like antisocial maniacs. What ensued really was "reefer madness" (fueled in the recent election, in my opinion). It is time to stop this nonsense.

Some readers will be appalled that a newspaper of general circulation, read in school classrooms even, would consider allowing words of advice on growing cannabis in one's backyard or living room. Yet each and every one of us knows folks who have partaken (I admit to it) and yet somehow they still lead normal lives, can put coherent sentences together, do complicated math, raise families and hold good jobs and don't rob banks, houses or people, or even act like Charlo Greene.

Sure, there are some plants I don't write about. Datura, for one. This is because it is so deadly poisonous. Cannabis is most assuredly not deadly. And there are others, like Himalayan balsam (Impatiens glandulifera), aka poor man's orchid, which I do write about, but only to tell people not to grow them because they harm the environment.

There are already quite a few plants that I write about which raise the ire of certain readers. Some readers, by way of example, object vigorously when I write about lawns. It is a different kind of grass, but there are those who are militantly adamant we shouldn't be growing it and I most definitely shouldn't be encouraging the planting of it.

And don't get me started on the trouble I get into every time I write about dandelions. Write about a controversial plant!

Cannabis sativa (along with Cannabis indica) happens to be a very quick, relatively easy plant to grow and a very delicate and lovely annual. It is open-pollinated and easy to hybridize. It makes a terrific, quick hedge. And, yes, some varieties have psychoactive properties and yes, some folks grow it just for that reason. So what? The fact that you can make vodka from potatoes has never stopped anyone from giving advice on how to grow them every year.

Because of the Alaska Supreme Court's 1975 Ravin decision, the police can't come into the privacy of your home to bust you for growing cannabis for personal use. Yet how many have grown it using dangerous chemicals, have been oblivious to the accumulation of dangerously high levels of nitrates in their crops and have remained ignorant of the dangers of fungi? Too many and that is a shame. I think it is time to end this silliness. Cannabis is, after all, just a plant (and one that is already pretty heavily cultivated in Alaska).

So the question of the day is: What is this columnist going to do now that Alaska has decided that cannabis can be grown recreationally? The law is very clear: Only those over 21 can be in possession of cannabis. The law is also very clear on sales of tobacco, alcohol and firearms, as well as a whole host of other things that are off limits to minors, but are included in this paper's coverage. We can police the growing of cannabis just like we do the others. And we can write and talk about growing cannabis just like we do the others as well.

MY FIRST COLUMN WITH CANNABIS ADVICE

Arts and Entertainment

Jeff Lowenfels: Tips for growing cannabis in era of legalization

Author: Jeff Lowenfels Updated: September 28, 2016 Published February 20, 2015

This is the first column in which I give advice on growing weed, so let me make a few quick asides, starting with this: I feel no need to defend myself when I write about Cannabis sativa. With all due respect, the fight (and associated silliness) is over. Please don't send me "Reefer Madness"-induced comments.

Second, I have been writing this column since 1976. I know that when a handful of readers ask the same question, there are many more who want the answer as well, but were afraid to ask. In all the years I have written this column, only the prospect of growing fresh tomatoes from a newly constructed outdoor greenhouse has garnered as much gardener excitement.

Third, it is time to start celery seeds indoors, under lights, if you want to have starts ready for transplanting in late April. These are tiny seeds and slow growers, and there is a lot of time between now and then. In my humble opinion, one has to really love celery to grow it -- though I am the first to admit, you haven't really tasted it until you've had it right from the garden. You will need supplemental lighting.

All right. So the big question I am getting these days is where to find Cannabis sativa seeds. They don't contain a bit of THC, the drug's active ingredient, but you cannot mail them because of the way federal law defines marijuana (really, folks, that name is racist; it's Cannabis sativa) to mean all parts of the plant, which includes seed unless it is sterilized.

There is a growing trade selling cannabis seeds on the Internet, but it is not yet legal. In fact, from the date Ballot Measure 2 takes effect, Feb. 24, until the state issues regulations -- which could take until May 2016 -- there will be some legal gray areas. So, right now, if you want to obtain cannabis seeds, your best bet will be to obtain them locally -- that is, in state. Personally, I am predicting that cannabis will become the new tomato for home growers and (legal) seed catalogs will follow.

Once you get seeds, you can plant them, but not before you ensure you understand what you have and have enough light. Like petunias, there are lots of varieties of cannabis strains, as they say. I won't go into it here, but some grow larger than others, and some are stronger -- meaning more THC -- so expect at least 2- or 3-foot to 8-foot plants. All do best in well-draining soil full of organics and should not become root bound, which means you will need to transplant up. And plants that big all need lots of supplemental light until at least April. You definitely need some wattage here. Don't waste your time without supplemental lights.

All cannabis seeds should be rolled in endomycorrhizal fungi containing at least Glomus mosseae and Glomus intraradices. And mix some into the soil before potting on, as well. Avoid fertilizers with phosphorus or keep the middle number of the fertilizer very low. Keep the soils just slightly moist. Seeds germinate in about four days and are easy to grow.

Other tips? Cannabis responds well to pinching growing tips by forming branches. Keep it all organic, of course. Bug attacks? Use neem oil-based products. Fertilizers? Organics with low phosphates and mycorrhizal fungi. Questions? Just ask me.

Of course, there is another way to get started growing weed, and that is to use clones. These are cuttings that have been rooted. They have all the characteristics of their parent and, since cannabis plants are male and female, with only the female producing THC, you are assured of the plant's sex when you use a clone. (You can, incidentally, find "feminized" seeds that will only produce female plants). You do not need a male for pollination, as you are not growing for fruit.

One last point. In nature, most cannabis plants flower only as the days get shorter. The main exception are auto-flowering plants. If you can get seeds or cuttings for them, great. Your plants will flower regardless of day length. These are the perfect seeds for growing cannabis outdoors in the Alaska summer.

All other plants will need special care. After about eight weeks or so of growth, you will need to mimic fall to get plants to flower. This may be difficult when days are getting longer and either requires moving indoors or bagging every night. Visit an indoor grow store for some easy solutions, such as tents, or better yet, construct a grow room out of a spare closet, using a good electrician, of course

So, there you have it. You can start celery this week, buying seed from racks or mail order. And, thanks to Proposition 2, starting Feb. 24 you can legally get some seeds or clones and start growing cannabis.

TYPICAL COLUMN with cannabis included (see bold)

Gardening

Jeff Lowenfels: Battling powdery mildew

Author: Jeff Lowenfels Updated: September 28, 2016 Published July 24, 2015

Wow, what a summer. You cannot beat this weather. As far as I am concerned, it has been good for everything except the mosquitoes and I don't feel sorry for them. We've had sunshine and more warm weather than we deserve, just enough rain to so that things look lush green without any help on our part and there is more to come.

All one has to do is look around. The incomparable public gardens from Homer to Fairbanks would be a Kodak salesman's dream, if Kodak salesmen still existed. And your own gardens, no doubt, are singing loudly both with color and birds. This is one of the big advantages of having a great garden: The insects they attract bring in the birds.

I got several questions about the trollius. We have at least two types that people grow here with terrific results. The first are yellow-blossomed plants. These bloomed several weeks ago. They are short plants, growing into a round, foot-tall mound producing a few dozen blossoms. They officially go by the name Trollius pumilus and every Southcentral Alaska yard could use a few. Not only do they bloom early and profusely with absolutely no care, the rest of the season they present a great texture and green color contrast to other perennials.

Right now, however, we are just finishing the taller, orange-flowered trollius season. These are Trollius chinensis. These globeflowers are up to 3 feet tall. In both size and color, there's no mistaking them from their earlier-blooming cousins. Both of these can be divided if they are getting too big. They are "dig and divide" plants that form large clumps easily divided with a spade into quarters and replanted. The best time is after they flower. Add a bit of endomycorrhizal fungi, use native soil and don't worry too much once you have them replanted. This is a hardy, easy-to-grow family.

Next, I am constantly asked about climate change given the weather patterns of late. All I can say is that anytime I hear someone question climate change, I point out two things. First, the growing season here has doubled in 100 years. This is simply mind-boggling and goes way beyond the fact that there's no snow on the mountains that surround Anchorage. That usually does the trick. If it doesn't, I point out that in Lenore Hedla's "Gardens for Alaskans," she strongly notes that meconopsis and verbascum do not make it here. They didn't. However, they do now. The blue poppy, in fact, is quite popular. If you see some around, ask for seed when the flowers are finished. Let them winter in the garden as they need that cold.

Powdery mildew is the name given to white and -- well, how else to say it -- powdery fungi that were once only a pain in cucumber grower's greenhouse. Listen up, cannabis growers, as this is a problem many of you are facing as you try to establish a legal grow in your backyard greenhouse (though the problem can hit indoors as well).

In any case, PM, as it is abbreviated, is usually white, sometimes gray and there are several different species of fungi involved, not just one. It comes from spores, usually carried by wind currents (yes, even into a greenhouse) or on clothing, attached to other plants or even your dog or cat. It is everywhere, but spores usually stay dormant -- that is, until it gets humid and warm. When it hits, you will see it. And plants will first yellow, then eventually die.

Once powdery mildew hits, it's hard to control, so preventing PM is the trick, and it is one that not everyone can pull off easily. Air circulation between plants, low humidity (below 50 percent) and watering early in the day all help. So will opening the door or lowering the thermostat on the automatic fan.

If you have an attack, you can try several remedies. Pick one. The most popular is, probably, spraying with a solution of 1/2 teaspoon of baking soda mixed in a quart of water. However, if you spray with a 50-50 milk-water solution you may have better results. This is used on outdoor cucumbers and landscape plants that get PM. There are lots of reports that a milk-water spray will prevent powdery mildew if applied every week.

Finally, I think it is important for the individual yardener to know that I received tons of comments on the column about relaxing our collective lawn angst and every single one of them was positive. So, just in case you were in the garden shed on this one, it is time to come out. Really. Relax on the lawn and enjoy the summer.

SOME USEFUL RESOURCES

Google:

Google is the gardener's best tool. Cannabis advice galore!

Books:

<u>The Cannabis Encyclopedia: The Definitive Guide to Cultivation</u> by GWA member George Van Patten. IT REALLY IS DEFINITIVE. While we went mainstream, George wrote several cannabis books under the name "Jorge Cervantes," and all of them are helpful to the newbie.

<u>Marijuana: Pest & Disease Control</u> by Ed Rosenthal sets out all the problems a grower might encounter, why one needs to be concerned and what to do about it. Some of the remedies are not organic so I include the following book!

<u>Teaming With Microbes: The Organic Gardener's Guide To the Soil Food Web</u> by Jeff Lowenfels and Wayne Lewis. Cannabis and the soil food web really go together. The plants respond amazingly to the right mycorrhizal fungus and organic treatment and given where the product is headed, that is good. NO PESTICIDES allowed with Cannabis should be the first rule! Much to my amazement and delight, <u>Teaming With Microbes</u> has become a bible to organic cannabis growers.

Mycorrhizal Fungi:

Right now, only one commercial mycorrhizal fungi forms associations with cannabis roots: Rhizophagus intraradices is its current name. It used to be called **Glomus mosseae** and some labels still list it as such. Your readers only need this one mycorrhizal fungus unless they are using cover crops, too.

Presenter Help:

If you have questions we would be happy to try and answer them!

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