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I am writing to voice my support for the legalization of cannabis. It is long overdue for Maryland to legalize the recreational use of cannabis for adults, bolstering our economy and providing Marylanders with the educational and career experience needed for the future. The success of our current medical industry speaks to that itself. Unfortunately, it is the current cannabis industry's manufacturing practices that I must draw your attention to.

Currently in Maryland, and nationwide, common cannabis cultivation method includes the use of light-emitting diode grow light systems. Although these LEDs were originally used as maintenance troubleshooting tools for printed circuit boards, cannabis cultivators chose them because of their relatively low energy usage, compared to other lighting options. LEDs also differ in their directional square waveform, and that is of particular concern to me. All plants are photosensitive, and cannabis is highly photosensitive. LED lights have the potential to mutate plants in general, including cannabis (Monostori, I., 2018).

To date, I have associated two (2) mutations to the cannabis plant via LED lighting. The first is auto-seeding throughout the cannabis flower itself. This occurs at every calyx, or seed pod, within the cannabis flower. This process is a survival mechanism for the plant, as it does not recognize the waveform of the light and believes it is being attacked by synthetic energy. The second biological change induced causes cylindrical flower formations. This mutation is common with cannabis and is generally associated with too much atmospheric heat. With that in mind, I tested my theories to confirm. I used LED lights to trigger the flowering of a known feminized strain and monitored atmospheric conditions throughout the plant's entire life cycle. Data concludes higher temperatures within the flower itself, destabilizing the cells and triggering both mutations. Additionally, when the cannabis plant produces seeds, it no longer is focusing on medicine production (Cervantes, 2006, p. 69).

Seeds are considered unusable within medical standards. As a patient, I have continued to purchase seeded cannabis flower from businesses within the Maryland Medical Cannabis Commission jurisdiction. I have informed both the commission and cannabis cultivators of my findings to no avail. Although my intentions were pure, I was not received well. The commission refuses to address my concerns and has tried to encourage me to stay silent. Cultivators blame the problem on poor genetics. Meanwhile, patients are being betrayed by a bait and switch and cannabis industry employees simply refuse to discuss the problem.

I support the legalization of cannabis as a whole, and I believe some amendments need to be added. The use of LED lighting should be banned for cannabis flower production. LED lighting may be used for flower production only if the cannabis flower is processed for the concentrate within it, not sold in whole with unusable seeds. Additionally, having found these mutations, reported them appropriately to government and business alike, and being dismissed, I believe all citizens over 21 deserve the right to cultivate their cannabis for personal consumption, with limitations. I trusted the Maryland Medical Cannabis Commission and their businesses to do the right thing and correct their cultivation defects, and they have simply refused.

Considering the commission's wanton disregard for the health of all citizens of Maryland, I do not believe the Maryland Medical Cannabis Commission should be tasked with anything else until they regulate the use of LED lighting among their licensees. After speaking with Mitchel Parke at enforcement for the commission, I was informed the commission could not mandate light use. I am requesting the Maryland Medical Cannabis Commission be granted the authority to restrict the use of LED lighting to concentrate production only. Allowing cultivators to continue as is, opens the door for civil lawsuits as I have considered. Lawsuits are not what this industry needs, we need progress. The use of LED lights for cannabis flower manufacturing represents a foundational crack in this industry and it is simply a matter of time before this industry collapses upon itself. I understand the desire for the legalization of cannabis, however, to move forward now without addressing the crack I identified, would be ill-advised.

At this time I would like to offer this committee some information about me and respectfully request it remains privileged until 2027, as that is when all testing data will be made public. In 2011, after lobbying for SB-308 and suffering a serious head injury, I received some cognitive functioning testing. The first test, Wechsler-IV adult aptitude battery, was administered by the Division of Rehabilitative Services. Upon completing the testing, I was informed that I test autistic. This means there are significant gaps between intellectual abilities. When the doctor evaluated my testing he informed me that I smashed the curve on the puzzle matrix section of the test. As a result, he estimated my IQ as "well into the 200's", and assigned a probability to my puzzle-solving skills of "1 of 5". It was explained to me that there may be as many as four (4) other individuals currently living that are capable of doing what I did.

Although I was in disbelief, I continued my quest for a better understanding of my mental health. Again, I was tested by DORS, and again I smashed the curve in the puzzle matrix. With that in mind, I sought another opinion from a private doctor. As a result of my testing, I was recommended for a career in code-breaking. Shortly after this, I was evaluated again, and again I smashed a curve. This time it was my math score that attracted the attention of the administrator. I never considered a career in theoretical mathematics, but after scoring a 263, it is certainly an option. After nearly ten years of testing, I self-enrolled in a research study at Vanderbilt University's, Frist Center for Autism Innovation. It was Vanderbilt that provided me with the answer I was searching for. Upon completion of intake assessment and accompanying interview

by a child psychologist, I was diagnosed as an evolving schizoid personality. Dr. Lewis explained to me emphatically the difference between me and other psychological conditions. She also encouraged me to go home, hire a publicist, and write whatever comes to my mind. It is slightly ironic to me that I acted on her recommendation six weeks before she offered it.

Not at any time have I ever been impaired by cannabis. However, the headaches and clouded thought that results from smoking cannabis seeds are significant for me. I will not stop writing about cannabis and what I have learned about this industry. If the use of LED lighting is restricted, it would allow me to focus my attention on other areas of need. I do not want to waste my time with the courts when this body can correct the faults of the cannabis industry with the stroke of a pen. Please, I implore you, to ban the use of LED lighting for cannabis cultivation. This is the right thing to do for all Maryland's citizens, not just cannabis patients.

I have extensive medical records available for review upon request. I implore any and all questions.

Anthony Michael Buckler

Author, *LED grow lights add up to a bag full of seeds* https://www.somdnews.com/opinion/letters_to_editor/led-grow-lights-add-up-to-a-bag-full-of-se eds/article_2c7ff768-55ea-51fc-a2c5-5026927f556c.html

References

- Cervantes, J. (2006). Marijuana horticulture: The indoor/outdoor medical grower's bible (5th ed.). Van Patten Publishing.
- Monostori, I., Heilmann, M., Kocsy, G., Rakszegi, M., Ahres, M., Altenbach, S. B., Szalai, G.,
 Pál, M., Toldi, D., Simon-Sarkadi, L., Harnos, N., Galiba, G., & Darko, É. (2018). LED
 Lighting Modification of Growth, Metabolism, Yield and Flour Composition in Wheat
 by Spectral Quality and Intensity. Frontiers in plant science, 9, 605.

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