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WATER QUALITY AND CANNABIS PRODUCTION

HIGH WATER QUALITY is very important for Cannabis plants. Optimum water should be clean, free of impurities, and have a PH between 6.0 and 7.0. For best results there should be no heavy metals, chlorine, or other harmful chemicals in the water. A relatively novel water treatment method, known as Hydrodynamic Cavitation (HDC for short) has been used for industrial-scale decontamination of polluted water, and has recently been scaled down to allow for household and small-farm applications of this technology.

Researchers <https://www.ijcmas.com/8-8-2019/M.%20Sharath%20Chandra,%20et%20al.pdf> have found that HDC can not only neutralize live pathogens (bacteria and viruses) in water, but can also neutralize Persistent Organic Pollutants. Here is an excerpt from the above article, which demonstrates the power that HDC has to purify water:

OZONEK (2012) REPORTED THAT A SPECIFIC GROUP OF ENVIRONMENTAL POLLUTANTS, NAMELY POPS (PERSISTENT ORGANIC POLLUTANTS) AND RELEASED INTO THE ENVIRONMENT, MAINLY FROM ANTHROPOGENIC SOURCES ARE CHARACTERISED BY THEIR HIGH TOXICITY, PERSISTENCE AND ABILITY TO BIO-ACCUMULATE. THIS GROUP OF ORGANIC POLLUTANTS INCLUDE, AMONGST

OTHERS: POLYCYCLIC AROMATIC HYDROCARBONS (PAHS), CHLOROPHENOLS, POLYCHLORINATED BIPHENYLS (PCBS), DIOXINS PCDD (POLYCHLORINATED DIBENZODIOXINS) AND PCDF (POLYCHLORINATED DIBENZOFURANS), AND SOME PESTICIDES. THESE COMPOUNDS, DEPENDING ON THE PART OF A GIVEN ECOSYSTEM IN WHICH THEY OCCUR (SOIL, BENTHAL SLUDGE DEPOSITS, SURFACE WATER AND GROUNDWATER) MAY UNDERGO SLOW CHANGES DUE TO VARIOUS PHYSICAL, CHEMICAL, BIOLOGICAL OR EVEN PHOTOCHEMICAL PROCESSES. DEPENDING ON THE COMPOUND AND MEDIUM IN WHICH THEY ARE FOUND, AS WELL AS THE ENVIRONMENTAL FACTORS SPECIFIC TO THE MEDIUM, DECOMPOSITION PROCESSES OCCUR AT DIFFERENT RATES, AND THE NEWLY CREATED COMPOUNDS CAN CREATE A BURDEN ON THE ENVIRONMENT TO A GREATER OR LESSER EXTENT. THE TWO KEY MECHANISMS RESPONSIBLE FOR THE DEGRADATION OF ORGANIC POLLUTANTS USING HYDRODYNAMIC CAVITATION ARE, THE THERMAL DECOMPOSITION/PYROLYSIS OF ORGANIC POLLUTANT ENTRAPPED IN THE CAVITIES DUE TO THE GENERATION OF TRANSIENT TEMPERATURE PRESSURE CONDITIONS, AND SECONDLY, THE REACTION OF FREE RADICALS WITH THE ORGANIC POLLUTANT OCCURRING AT THE CAVITY- WATER INTERFACE (SIVASANKAR AND MOHOLKAR 2009).

Due to this information, I have procured a HDC water purification unit and have trialed it for my cannabis production. I have had amazing results. With no scientific method (experimental group and control group), my current crop of plants are growing at a much faster rate than normal, are much healthier, and my clones are having close to 100% success rate, a vast improvement from my prior failure rate.

I continue to research this technology, and at this time I feel confident of the results enough to share this information with you so that you can research it yourself.

Here is a link to the HDC unit that I procured. <https://HDCproducts.com>

Happy Growing,

Dr.420