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Criteria for Pesticides Used in the Production of Marijuana In Colorado

The following represents the Colorado Department of Agriculture's (CDA) policy regarding the criteria for pesticide use that would not be a violation of the label when used for the production of marijuana (Cannabis) in Colorado. This policy may be rescinded or superseded at any time by the CDA.

Background Information

Pesticide Labeling:

Both state and federal law require that pesticides be applied according to label directions. As part of the directions for use, pesticide labels will specify the particular crops and/or sites to which they can be applied. Depending on the particular pesticide, the crops/sites listed on the label can be expressed very specifically (e.g., "wheat"), or more generally (e.g., "grain crops"). While a pesticide with a label that specifies "wheat" can only be applied to wheat, a pesticide that lists "grain crops" on the label can be applied to wheat, barley, oats, rye, etc.

In determining which pesticides, if any, might be used legally on marijuana, the CDA worked with the Environmental Protection Agency (EPA) to determine if marijuana might fit into any general crop groups, such as herbs, spices or vegetable gardens. EPA's and CDA's current position is that marijuana is not an herb, a spice or a vegetable. Crop groups are defined in the Code of Federal Regulations (C.F.R.). Nowhere within 40 C.F.R. is marijuana (Cannabis) listed under any crop grouping and therefore cannot be considered as such.

EPA has indicated that marijuana is not listed as a crop/site on any pesticide label. EPA also considers marijuana to be a federally defined "controlled substance" that currently makes it difficult to address the issue of considering it a crop. However, EPA does concede that some pesticides may have broadly written label language that would allow use on marijuana. In addition, EPA is currently in discussions with the CDA to address the need for pesticide use on marijuana through state-specific Special Local Need 24(c) registrations (section 24(c) is the part of FIFRA that allows this)



Food Crops and Tolerances:

By law, EPA is responsible for regulating the pesticides that are used by growers to protect crops and for setting limits on the amount of pesticides that may remain in or on foods marketed in the USA. These limits on pesticides left on foods are called "tolerances"

EPA establishes tolerances for each pesticide based on the potential risks to human health posed by that pesticide. Some risk assessments are based on the assumption that residues will always be present in food at the maximum level permitted by the tolerance. Other risk assessments use actual or anticipated residue data, to reflect real-world consumer exposure as closely as possible.

EPA sets the tolerance limits for each pesticide that may be found on foods, but the US Department of Agriculture (USDA) enforces tolerances established for meat, poultry and some egg products, while the Food and Drug Administration (FDA) enforces tolerances established for other foods. In this way, these federal agencies ensure that the nation's food supply is maintained safely at all times. An exemption from a tolerance is granted when the total quantity of the pesticide chemical in or on all raw agricultural commodities for which it is used is not considered hazardous to the public's health.

Marijuana is consumed in several ways including most commonly through smoking, through Marijuana extracts that are used to produce edibles and through lotions and creams containing marijuana extracts which are applied to and absorbed through the skin. The CDA and EPA in our initial discussions felt that since marijuana was being processed and consumed in different forms of edible foods, then pesticides tolerances should apply. However, after much discussion the CDA made the following determinations.

- 1) Marijuana is currently defined as a Schedule I drug, not a food crop.
- 2) USDA and FDA do not consider marijuana to be a food crop.
- 3) USDA cannot enforce tolerances unless the food is intended for interstate commerce. Marijuana in Colorado can not legally cross state boundaries and therefore, even if it was considered a food that required a tolerance, USDA could not enforce tolerances.
- 4) The Colorado Department of Agriculture has no authority to establish or enforce food tolerances.

Therefore, CDA does not believe that current Federal or State laws require that pesticides used on marijuana must be tolerance exempt. However, the CDA highly recommends that marijuana producers only use pesticides that are tolerance exempt because the active ingredients of these pesticides have been determined to pose a minimal threat to human health.



Criteria To Establish What Products May Not be a Violation of the Label To Use on Marijuana:

In general, CDA does not make recommendations on which pesticides to use for a specific crop and pest problem. In particular, the Colorado Department of Agriculture does not recommend the use of any pesticide on marijuana, or any other food crop for which the pesticide has not been specifically tested, registered and labeled to ensure its safe use with the respect to workers and consumers.

The use of pesticides in Colorado is regulated under the Pesticide Applicators' Act, sections 35-10-101 – 128, C.R.S. The Colorado Pesticide Applicator Act prohibits use of a pesticide in a manner inconsistent with the product labeling:

35-10-117(1)(i) C.R.S.: unless otherwise authorized by law, it is unlawful and a violation of this article for any person to use, store or dispose of pesticides, pesticide containers, rinsates, or other related materials, or to supervise or recommend such acts, in a manner inconsistent with labeling directions or requirements, unless otherwise provided for by law, or in an unsafe, negligent, or fraudulent manner.

Most pesticides require registration with the US EPA. Since legal marijuana production is a new crop, marijuana is not currently specifically listed as a crop on the label of any EPA-registered pesticide. Most pesticides have product labeling (including directions for use) that will not allow use on marijuana. However, CDA has identified products whose labels are broadly written and do not clearly prohibit use on marijuana.

The CDA does consider marijuana to be a food crop for purposes of assessing risk to human health. Even though marijuana is not classified as a food crop by the EPA, it is consumed by people and careful consideration must be made of the potential human health risks of pesticide residues on marijuana. One of the CDA's key criteria for pesticides applied to marijuana is that the pesticide product does not prohibit use on food crops.

Labeling Criteria Guidelines:

All pesticides sold and/or distributed in the state of Colorado must be registered with the Environmental Protection Agency and the Colorado Department of Agriculture, except for products exempt from federal registration under Section 25(b) of the Federal Insecticide, Fungicide, Rodenticide Act (FIFRA) and federal rule 40 CFR 152.25(f), which only require registration with the Department. This ensures that the products are properly labeled, risk assessments for environmental and public safety have been conducted and the products are determined to meet the claims on the labeling of the product.

It is a violation of the state law for commercial pesticide applicators, persons making applications for hire, to use products that are not registered with EPA or CDA. When the CDA



identifies products being distributed in Colorado that require registration with EPA, but are not; we refer these unregistered pesticide products to EPA for further enforcement action and pursue action under state law if the product requires registration for sale or distribution in Colorado.

Any pesticide registered with Colorado Department of Agriculture may be used in accordance with its label directions for the cultivation of marijuana in the State of Colorado under the following conditions:

- a) The label allows for use on unspecified crops and/or plants (i.e.: bedding plants, flowering plants, “other crops”, and;
- b) The label allows use at the intended site of application (allowed use in greenhouses), and;
- c) The label directions do not prohibit use on crops or plants intended for human consumption.

Definition of crops and crop groups

The meanings of crops and groups of crops listed on a pesticide label are defined in rule at 40 CFR section 180. For example, “Pome Fruits” is defined at 40 CFR 180.41(c)(14) with a list of all of the commodities in this crop group, by common name and scientific name. Marijuana is not listed in any crop grouping in 40 CFR Section 180. Therefore, marijuana cannot legally be considered;

- a fruit, vegetable, herb, or spice
- an ornamental
- a “shrub”.
- as Hemp
- Hemp is not an ornamental or a “shrub”.

Other label restriction considerations:

The following label language examples are not all inclusive of all label restriction statements that the CDA must consider. Label language restrictions are reviewed and determinations for allowed uses are made on a case by case basis.

- Any label prohibiting use on “food crops” would not be allowed for use on marijuana. A product possibly could be used on hemp if the end use of the hemp plant is not intended for consumption.
- Some labels do list “hemp” or “industrial hemp” as a use site. Marijuana is not included in the term “hemp”.



- “Residential Use” label statements means the product cannot be used for commercial production (marijuana or hemp)
- “Outdoor Residential Use Only” means not for use on marijuana grown in a greenhouse or grow room, and only for personal use.
- “Only for industrial, commercial buildings, residential and landscaped areas”. An industrial or commercial building being used to grow marijuana is being used as a greenhouse, not as an industrial or commercial building any longer. A greenhouse is defined in 40 C.F.R., Part 170.3, “...as any operation engaged in the production of agricultural plants inside any structure or space that is enclosed with nonporous covering and that is of sufficient size to permit worker entry.”

The list of products that CDA has determined would not be a violation of the label to use on Marijuana can be found on the CDA’s website at:

<https://www.colorado.gov/pacific/agplants/pesticide-use-marijuana-production>

On the table that lists pesticides that are not a violation of the label to use on Marijuana, we are providing information on whether a listed product can be used under three different Cannabis production scenarios:

- Commercial marijuana production, intended to be sold and/or distributed to the general public (likely grown indoors but recreational marijuana is not restricted to indoor/greenhouse production)
- Home grown personal use marijuana, intended for personal consumption only (could be indoors, outdoors, or in a greenhouse)
- Hemp (likely field grown)

CDA currently will review pesticide labels upon request and is maintaining a list of products whose labels we have reviewed and determined do not prohibit use on marijuana in violation of section 35-10-117(1)(i), C.R.S., as long as the applicator follows the label directions.

The list developed by the CDA is intended to assist growers in distinguishing those pesticide products whose labels do not legally prohibit use on marijuana from those that do. It is not an endorsement or recommendation to use these products in the production of marijuana in Colorado. These products have not been tested to determine their health effects if used on marijuana that will be consumed and thus the health risks to consumers is unknown. By including products on this list, therefore, CDA makes no assurances of their safety or effectiveness when used on marijuana and accepts no responsibility or liability for any such use.

