Are Hay and Straw sprayed?

In British Columbia, hay is seldom sprayed with herbicides as it is considered a low quality crop. This results in a small chance that manure from cows or horses, that have eaten the hay, contains herbicide residues. If the hay does contain herbicides, depending on the conditions of where the manure is stored, it is likely that the herbicides would have been broken down quickly. Mushroom manure would be an alternative if herbicide residues are a concern.

Straw can come from any cereal crop. Herbicides are often sprayed after the crop has been harvested but before the remaining vegetation is collected for straw. This is called a burndown – where herbicides are applied to prevent weeds from coming up in the Fall and Winter. It may be difficult to determine what has been sprayed unless it is known exactly where the straw was from as sellers gather straw from various sources.

Are MCPA and Dicamba persistent in straw?

MCPA (2-methyl-4-chlorophenoxyacetic acid) is a phenoxy herbicide that has a very low persistence in soil. On average, it has a half-life of 14 days to 1 month; however, it can vary depending on the conditions. It rapidly degrades with microorganisms, sunlight, and moisture.

Dicamba is a benzoic acid and has a moderate persistence in soil. It has a half-life of 1 to 4 weeks in soil but will degrade faster with increasing temperatures, soil moisture, and acidic soil. It also does not bind to soil particles and is highly soluble in water.

Overall, these two herbicides quickly degrade and do not persist in the soil for long periods of time compared to the herbicide, Picloram.

Can the straw used on my plants affect their emergence or health?

This is difficult to determine as it depends on the following factors:

• The time between the herbicide spray and when the straw was harvested. Herbicides may be broken down before the straw

- was harvested.
- Conditions after the herbicides were sprayed. Sunlight, high temperatures, rain, and microorganisms all contribute to how fast or slow herbicides are broken down.
- The time the straw was stored after harvest. Storing in a dark, dry place would slow the breakdown.
- Recognizing symptoms of herbicide use. Many symptoms of herbicide use can also look like nutrient deficiency or other diseases.

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