

RISK OF TOXINS IN HAIL-DAMAGED CROPS

I received a call the other day asking about hazards from feeding silage made out of hail-damaged corn that had lots of mold. Is this a problem?

Silage is an excellent choice for salvaging hail-damaged crops like corn, milo, and even soybeans. But hail-damaged crops often get some molds on them, and some of these molds can produce mycotoxins, such as aflatoxin or vomatoxin.

But quite frankly, it is very unlikely that micotoxins will be a serious problem at all in our area. It takes just the right conditions in terms of plant damage, corn moisture content, temperature, humidity, and infection by the fungus to produce the micotoxin. Still, it can happen.

Now, it's not totally clear what affect silage fermentation has on various micotoxins if they happen to be present when the crop is chopped. It appears that fermentation does not neutralize or destroy most micotoxins. But, micotoxin concentration will be diluted because of all the stem and leaf material mixed with the grain in silage. And, ruminant livestock that eat silage generally have a high tolerance for micotoxins.

I'm more concerned about potential nitrate levels in some of our silage made from hail or drought damaged crops. Ensiling does reduce nitrate dangers some, but we never can predict by how much. For that reason, I suggest you test any silage made from questionable feeds for nitrates before you feed that silage as a major part of your ration.

You probably won't have any problems at all from toxins in your silage. But it does pay to be cautious, test for nitrates, and feed unusual silages carefully.

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