

The following 2 pages are a reprint from the May 2000 issue of *KOW Ruminations*.

# KOW Ruminations

*Fully independent soil consulting-agronomy-nutrition. We do dairy nutrition from the soil up.*

Produced by WF&M for KOW Consulting Assoc. ph/fx 608-762-6948, email tweaver@mhtc.net

May 2000

## Mold / Mycotoxins, A Symptom, Not The Root Problem

The growing problem seems to have some running scared, but it's only a symptom of a sick/unbalanced farm system.

Have you noticed the attention mycotoxins are getting lately? Reading my farm papers gives me the impression that for *some unknown reason*, molds/mycotoxins are stealthily infiltrating our feedstuffs, threatening the health and productivity of every dairy herd in the country. What-ever will we do?! One headline was "Extension team gearing up for *assault* on mycotoxins." Gee, this gives me visions of my days in the Marine Corps (but it's hard to envision a team of University experts dressed up like USMC Recon guys and parachuting onto farms to defend them from the enemy –*mycotoxins*). The term *battlefield* is even used in one article.

Do these *enemy mycotoxins* have a mind, a battle plan, of their own? Is this nature's biological warfare against the dairy industry? When described in this language the problem of *mycotoxins* is an ominous one indeed! Add to it the general symptoms of being attacked with this biological weapon and it's enough to make the most courageous of dairymen sweat: Rumen / digestive upsets, diarrhea, reduced feed intake, rough hair coats, silent heats, irregular estrus cycles, and poor fresh cow performance including a higher incidence of DAs, ketosis, retained placenta, mastitis, etc.

All of the above *truly are* general symptoms of mycotoxiosis (and by the way, *rumen acidosis* also) and if one suspects mycotoxin contamination of feedstuffs, it should be taken *very seriously* –especially since some are known to travel up the food chain and can be carcinogenic to humans.

Nevertheless, is it appropriate to react as if the molds of the world are conspiring against us, or to be intimidated by the fear of the unknown? While there is much we do not know about molds / mycotoxins (and I'm in favor of studying them to learn more) there are some *basic* things we do know – but we seem to have forgotten the value of that knowledge.

I would like to submit to you that a good portion of modern / conventional dairy management advice today is driving us toward this *mycotoxiosis crisis*. Molds have little brain with which to conspire against us. The reason they are fairing so well (and producing their toxic by-products [mycotoxins] on our farms) is because *we've created conditions favor-*

*able for them*. Like so many of the *monster bugs* that threaten our livestock, molds are opportunistic parasites. Following are some things that are being promoted *from the soil up* that are favoring molds and putting our cows at risk:

### Soil Management and Crop Management:

\*Imbalanced soil fertility practices, including but not limited to excess N use and improper / excess manure management / rates.

\*(Non) crop rotations without perennial forages or rotations that lack diversity. Even cash grain farmers are starting to recognize that corn-beans-corn is *not a real* rotation and see the train wreck of disease, insect, and soil sickness problems coming. **There are many rotation options that would be better, cost less, and produce better feed for cows than our current fad of corn and more corn as the base of the ration.**

\*No-till in these (non)rotation schemes that leaves too much unincorporated residue that serves as a home for mold spores.

### Crop Harvest & Storage Management:

Many have abandoned sound practices for fermenting forages. Although molds / mycotoxins get their start in the field, now-a-days, they are often given the greatest opportunity to multiply while in storage. The majority of trouble is coming from *corn silage* stored in bunkers / pits / piles.

### Dairy Feeding Programs:

Dairy cows were designed to digest primarily legume and cool season grass forage. The ruminant digestive system doesn't function properly on today's conventional high grain and/or corn silage based ration programs. One of the benefits of a *healthy* microbial environment in a cow's rumen is its ability to detoxify and protect the cow from *some* natural poisons –such as molds and their by-products. Additionally, the main feed source of mycotoxins is the *grain or corn silage*. Today's fad of crowning corn silage as king of forages, growing it no-till with excess N and/or manure in a poor crop rotation strategy, storing it in less than ideal

conditions (allowing molds to multiply) and then feeding it in an *on the edge* / rumen acidosis ration scheme –this is the recipe for disaster.

You may be thinking right now, “Come on Tom, *who do you think you are* to be contradicting what so many other *experts* are telling us to do today? They *can't* be wrong . . .”

Hey, I am just a guy who still has the *freedom* to give it to ya straight. I don't work for one of the large corporations / Co-ops that stands to profit from this unbalanced approach. Think about it: Seed profits, chemical weed control profits, fertilizer profits, feed supplement profits and then on top of it you can be *sold* lots of *product based solutions* to solve the problems this approach creates. Yep, one can create quite a cash flow –toward everyone but the farmer.

I realize I am often stroking *somebody's* fur the wrong way in this newsletter. I realize taking an unpopular position puts me at risk for being interpreted as an *arrogant troublemaker*. For you *farmers* who take offense at my confident approach, I wish you'd dare to visit or speak with one of our long term clients. Our sincere intent is to look out for the interest of the family dairy farm. Being wishy-washy won't help a bit.

I'll end with this quote from the April 2000 issue of the *Wisconsin Agriculturalist* by a former *banker and secretary of the WI Dept. of Ag, Trade and Consumer Protection*, Howard Richard.

“My regard for big agribusiness is not too different than my opinion of the testimony of tobacco executives who lied about not knowing the adverse health effects of smoking. Farmers should treat the interests of large corporations with the same suspicion.”