

You've got to admit that the "value proposition" for the herbicide Round-Up is, like most pharmaceuticals, just a little bit too good to be true. A value proposition, if you are not familiar with that marketing term, is the promise made to the consumer of what will be done in exchange for your money. The promise in this case is that "our product will cheaply, safely and effectively kill only the bad weeds but not you or any of the good plants (especially if you have selected Round-Up Resistant GMO varieties!)". And the trick has worked for this chemical is now the world's #1 weed killer. Furthering the smoke and mirrors of seduction, Monsanto advertising boldly stated that eventually herbicide use will drop as the weeds sort of go away. But, alas, the exact opposite has happened, now we need heavier and heavier applications, and the volume required is increasing exponentially, especially in the past two years. Glyphosate won't even kill the super-weeds, poison-resistant mutants that require the use of additional and even more toxic poisons. We know something has gone awry because annual sales now exceed 200 million pounds a year; and it's getting worse.

I mean we are all born to succumb to these promotional promises! The prevailing myth in the marketing of the most popular drugs, antacids for acid reflux, high blood pressure medications, cholesterol lowering statins, and especially the anti-depressants, is that you can continue living exactly as you have been doing, continuing all the things that have caused you to become out of balance, but along comes our little Silver Bullets thus enabling you to continue doing all the wrong things, almost forever, and there will be virtually no price whatsoever. Poof! Frustrating symptoms gone! The most astonishingly absurd claim of all must be the Holy Grail of pharmacy, that which will magically restore erectile dysfunction. Here we are talking about what must most certainly be the most byzantine bioengineering miracle ever made, never mind the 40 years of bad roads, punishment and abuse that one has endured and the claim states that performance will be good as new, no symptoms, no side effects, no down side (unless you read the microscopic fine print in the circular!). We want these things to work, so badly...we not only don't read the fine print, we also try to ignore the side effects.

Perhaps that is why we have not had any significant new information about the world's #1 herbicide, essentially since 1985. "Hush, we really don't want to know anything bad!" And then along comes Purdue's professor emeritus DONALD HUBER. And, yes, the messenger has bad news, very bad news and lots of it. This is going to be a very bitter pill indeed. Already the label has been changed. Those old claims about being biologically degraded quickly. Not true. The claims about being "safe enough to drink", well, don't expect that one to last either. It's not safe, and just because you can't find the stuff a few days post-application doesn't mean it's gone! Oh, no, can you say 23 years and counting? The majority of the scientific information in this story comes from work performed or compiled by Dr. Huber, to whom I am tremendously indebted. Please read on.

**DON'T KILL THE MESSENGER**

“Why didn’t anyone tell us?” people whine. Actually people probably tried but no one wanted to hear it. So, we now have (from a multitude of causation) a 9000% increase in Alzheimer’s dementia, a 500% increase in allergic reaction to soybeans, and an average yield drag on GMO crops of 7%. But we didn’t see that. For one, we weren’t trained to look for the symptoms, and they are many, you can see them in the plants. Iron chlorosis (yellow leaves) when there is plenty of iron. A 500% increase in fusarium mold in root colonization in the soil. Super weeds popping up that have never been seen before, as well as new super pathogens for the plants. Crop diseases that have been basically put out to pasture for decades are re-emerging left and right, and this is true for pasture crops, cultivated crops and even forest crops.

But, you are probably asking, what does this have to do with my livestock. Well the answer is not how, but how many ways, not where, but where to start. Since all livestock eat plants lets start there. Over 165 million acres of RR crops are sprayed annually. Glyphosate does not kill plants directly. In fact, if plants are put into sterile soil it will not kill them. If you add minerals to your spray tank it will inactivate the weed killer completely, and even more strangely, if fungicide is sprayed at the same time glyphosate will not work. The reason being, glyphosate is a mineral chelator. That means it immobilizes minerals, virtually all of them and they plant dies because they can’t access critical minerals needed for plant immunity. Glyphosate was first patented in 1964 as a chelator, then as an herbicide 10 years later. The soil fungi and pathogens are the actual hit men that take out the plant. By using glyphosate, you are essentially giving your plants “A.I.D.S.” and they are completely vulnerable to the mildest pathogen. Round-Up Resistant plants, which were first unleashed in 1996 have a gene inserted that make them less likely to die of the mineral loss because it lowers their efficiency and they limp along until they are able to find more minerals later. This explains the yield drag, which occurs just from the presence of the gene alone, even if you don’t use the herbicide. The problem for us is that the plant never recuperates, never has enough minerals, never has enough nitrogen-fixing ability to create nitrogen for adequate amino acid production so we get, for starters, “empty calories”. We are creating plants that are low in all the critical minerals, low in the extremely vital immune-making minerals, low in protein, and therefore empty.

## 10 BAD THINGS ROUND-UP DOES TO SOIL AND PLANTS

- 1) Binds up essential nutrients, almost all cations including Nickel, Sulfur, Cobalt, Iron, Calcium, Magnesium, Manganese, Nitrogen, Phosphorus, Potassium, Zinc, and Copper.
- 2) Accumulates in the critical areas of the plant especially the seeds, shoot tips, root tips, reproductive parts, and the critical root nodules. At least 80% of the herbicide stays in the plant as long as it is alive.
- 3) By chelating critical minerals needed for enzyme production, glyphosate knocks such enzymes as ferric reductase needed to solubilize bound iron in the soil. There is a

“domino effect’ when one enzyme pathway is knocked out and other systems begin to go down as well.

4) Causes a toxic increase in soil pathogens such as Fusarium mold increasing both their numbers as well as stimulating an increase in virulence.

5) Simultaneously causes a dreadful decrease in beneficial soil microbes such as the very protective pseudo-monads.

6) Decreases lignin production which is a structural component of plants, thus making them more vulnerable to weather, wind and other damages. Lignin is also required for resistance to plant parasites and disease. There are over 40 serious plant diseases that are known to be worsened by the presence of glyphosate.

7) Due to decreased photosynthesis, decreased enzyme activity and decreased efficiency and vitality causes the plant to require up to twice the water intake to survive, thus making the plant very susceptible to drought.

8) Creates “super weeds” that are totally resistant to glyphosate. New monsters are popping up every year requiring applicators to dig further and further into the weapons cache.

9) Accumulates in the soil, binding and immobilizing minerals, In most soils over half remains after 23 years. However, the drug is released from bondage back into the plant following any application of phosphorus.

10) Causes bud and fruit abortion, hormonal disruption, stunting, increased disease from pathogens and parasites, increased abiotic diseases such as sun scald, bark cracking and winter kill.

## 10 BAD THINGS ROUND-UP DOES TO LIVESTOCK THAT CONSUME PLANTS

1) Late application of herbicide tends to enter into the developing parts of the plant in large quantities, which includes the reproductive parts, especially the seeds. Seeds can legally contain up to 200 ppm glyphosate, which is 800% of the known toxic level. It has been shown to be toxic to the placenta, testicular cells, intestinal lining and other sensitive parts. Glyphosate is proven to be toxic to animal cells at 0.5 ppm. Chicken manure from birds eating GMO grain when applied to fields at a rate of only 4 tons/acre will give a full dose of glyphosate to the field, yielding application levels between 0.36-0.75 ppm, in other words, more than the *normal* application rate! Just from manure.

2) The use of straw from wheat that has been immune-crippled from glyphosate from previous crop application or burn-downs almost always shows damage from the plant disease known as head scab. Toxins from this disease can absorb via skin contact and

the exposed animals then become subject to infertility. This has been confirmed in sows and cows.

3) Necropsies from dairy cattle that have died (some herds are suffering losses of up to 20% per year) show a universal and extreme deficiency of Manganese, a mineral severely chelated and immobilized by glyphosate and one that is essential for dozens of known enzyme pathways critical for maintenance of the immune system. Manganese deficient animals cannot detoxify mycotoxins, are far less resistant to heat and cold and have a sharp drop in resistance to parasites and disease. Manganese, Copper and Zinc are required to make SOD (superoxide dismutase) the main mechanism required to remove toxins and poisons from the body. After necropsy reports indicated “no detectable levels of manganese” in livers of dead animals, the herds were placed on supplemental Manganese and mortality levels dropped from the shocking 20% loss rate to less than ½%.

4) Plants used as crops that have had glyphosate exposure are deficient in, among other things, Copper and Magnesium which are both critical for normal prion function in the brain and nervous tissue. This is a smoking gun in Mad Cow Disease, Chronic Wasting and other CNS degeneration. As I mentioned previously, humans have had a 9000% increase in Alzheimer’s Disease since 1990 and it is a well-documented fact that several critical minerals if present in adequate amounts will deter or prevent the dementia.

5) Glyphosate-exposed plants have damage to the root nodules that fix nitrogen and therefore have a diminished ability to fix nitrogen, to make amino acids and to make protein. This is an “empty calorie” food causing livestock to experience lack of satiety, constant hunger and the desire to eat toxic or noxious non-foods in search of something satisfying. RR GMO production accounts for 93% of the US production of soy and 70% of the production of corn.

6) The herbicide causes a serious destruction of beneficial soil microbes and a radical increase in pathogenic fungi such as Fusarium mold which will average a 500% increase. These mold toxins accrue in the plant and bioaccumulate in the livestock causing poor digestion, compromised immunity, liver toxicity, and the subsequent emergence of low-grade chronic illness such as foot rot, pinkeye, mastitis, high somatic cell counts, ringworm, mange, and an increased incidence of ambient soil-borne diseases such as anthrax, blackleg, wooden tongue, lumpy jaw and others. Where there is a drag on the immune system there is also a marked increase in susceptibility to epidemic diseases such as Johnes, TB, Brucellosis and Foot and Mouth. Fusarium mold was the primary underpinning of the plague epidemics of medieval Europe, causing a large-scale human toxicosis.

7) Genome-altered plants are recognized by the digestive system as “foreign proteins” which is another word for “allergens”. Allergies to feedstuffs is skyrocketing and it takes a serious toll on production, fertility and immune strength. Necropsies of pigs show

allergic inflammation of the stomach and intestinal lining following ingestion of GMO feeds, cattle rumen tissue shows ulceration and permanent deterioration.

8) Endophyte-bearing plants such as fescue that have been exposed to glyphosate directly or from weed-eradication applications or burn-downs on previous crops show a dramatic increase in level of endophytes causing a rise in vascular diseases including foot sloughage, tail loss and other serious disease.

9) Any pregnant animal (or human) consuming plants with a level of glyphosate approaching 0.5ppm are subject to miscarriage and abortion due to the toxic effect on the placental tissue. It's also toxic to sperm causing lower sperm counts and increased abnormal sperm.

10) Alfalfa is now the 4th largest crop grown in the US, over 22 million acres and it is a prime source of protein and nitrogen for livestock. Even though there are virtually no weed problems with the crop, the new RR GMO version has been released. Dr. Huber says that within 5 years time, thanks to genetic pollen drift, and from the genes that can jump into soil microbes and thus spread, there will be no normal alfalfa left in the US.

#### IT GETS WORSE

Now Dr. Huber has reported consistent research from numerous colleagues that show something even more frightening, they are finding a tiny organism that is showing up in the body tissue of farm livestock that have eaten feeds contaminated with or that were grown with glyphosate. This organism is like a bacteria but much, much smaller, in fact it takes a 30,000 power microscope to even see it. This is the size of a small virus. No one even knows what this organism does nor of what it is capable of doing to animal health. Obviously, if it grows in animals it is very likely that it will be found in the tissues of humans that eat RR GMO foods.

Expect to see more and more revelations coming regarding this previously unknown potential pathogen. Dr. Huber, also a former colonel in the US military and an expert in biological warfare, recently fired off a letter of scientific warning to Secretary of Agriculture Tom Vilsack. The letter was marked urgent and unveiled the known facts about the recent discovery of this organism. He asked for a delay in the approval of any new RR GMO crop as well as more scientific investigation and scrutiny. Dr Huber's letter stated that this mystery microbe holds the potential to be the worst disaster since we opened Pandora's Box several decades ago, in fact, he warned that this appears to have more potential for global disaster than any other phenomenon he has been aware of in his entire career as a university plant pathologist. Two weeks later the Secretary quietly oversaw the official stamp of approval from the US government and subsequent release of GMO alfalfa onto the marketplace! So far there has been no official response to the letter.

THERE ARE SEVERAL THINGS YOU CAN DO RIGHT NOW

1) The most obvious first step is to begin your own farm detoxification by ceasing the use of these herbicides if you use them. The same goes for bringing RR plants to your farm. Just think if everyone suddenly woke up and just stopped using it...we've done it before with drugs such as thalidomide, DES, Vioxx, DDT, and many others that were once thought to be safe but years later found to be dangerous. It really is that simple.

2) Have your well and drinking water tested for pollution of all sorts. Unfortunately glyphosate has contaminated much of the ground water and running water in the US. If your water tests positive, especially if it is high level exposure, then water remediation is in order.

3) Thoroughly remineralize yourself, your family and your livestock and do it now. In this day and age, especially given the chelation effects as discussed, and the subsequent reduction in mineral levels in food and feeds, it becomes critical to provide adequate levels of all the essential minerals. All livestock should have continuous access to free-choice minerals for times of need. I outline very simple, very affordable mineral plans for all livestock at [www.willwinter.com](http://www.willwinter.com).

4) Share articles, CDs and DVDs such as those by Dr. Huber with your friends and neighbors. Write newspaper and magazine articles making others aware of their actions and provide suggestions for alternatives for weed management.

5) Speaking of weed management, there is a plethora of information about all sorts of natural weed-control techniques. No one has to be dominated by weeds. First of all, check out "indicator weed" books to find out what your particular infestation is trying to tell you. Use mowers or living lawnmowers" (goats and sheep) for weed control around buildings, fences or other structure. Use natural solutions that destroy weeds mechanically, thermally or physically. Be creative!

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