WHAT ARE THE KEY ELEMENTS TO IMPLEMENT COEXISTENCE BETWEEN GE AND NON-GE ALFALFA?

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SPEAKER BACKGROUND

Our farm has been a commercial alfalfa producer since 1968 and we currently have 4,500 acres in alfalfa hay production. These acres are managed by my two sons. We have been certified organic hay producers since 1986 and were among the first farms in Idaho to obtain organic certification from our state. We also grow commercial hay and have two pivots in Round-up Ready alfalfa. The first pivot of RR was planted in 2006. Our farm is located in a mountain valley of 5,000 feet elevation which has a relatively short growing season. Our alfalfa acres are approximately 60% dryland with the balance irrigated with pivots. The dryland production is dependent on adequate winter snowfall.

HOW WOULD YOU DEFINE COEXSTENCE?

I believe that a reasonable coexistence program would allow an alfalfa grower to choose to plant any variety as long as in doing so he does not create an unacceptable economical problem on his neighbor's existing operations.

IS COEXISTENCE POSSIBLE?

At the present time we find coexistence of organic, export and RR alfalfa hay production to be possible on our farm.

WHAT ARE THE KEY POLICIES AND MECHANISMS NECESSARY TO IMPLEMENT COEXISTENCE BETWEEN GE AND NON-GE ALFALFA CROPS?

This depends on careful cleaning methods when moving equipment from RR fields to other commercial or organic fields. It means that satisfactory buffers exist between RR, commercial and organic fields. These methods and dates are duly noted and our procedures examined and approved by our organic inspector. Our customers are informed when they purchase RR alfalfa hay. Our organic customers also have been made aware that we grow some RR alfalfa. Our valley's short growing season precludes any alfalfa seed production and our isolation prevents any interaction with seed producers. A delegation of exporters from South Korea examined our records, procedures and our farm. They certified our operation as eligible to ship organic alfalfa to their country. This year we shipped organic alfalfa hay to both Japan and South Korea.

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WILL THE INTRODUCTION OF ROUNDUP-READY ALFALFA INEVITABLY RESULT IN THE DESTRUCTION OF ORGANIC, EXPORT OR OTHER GE-SENSITIVE ALFALFA PRODUCTION?

Our experiences indicate that proper grower practices monitored by certifying agencies and informed customers allow organic and RR alfalfa to coexist.

IT IS LIKELY THAT COEXISENCE WOULD MEAN THAT SOME GROWERS (BOTH GE-ADAPTING AND NON-GE) WILL HAVE TO ADJUST METHODS OR SACRIFICE CHOICES IN ORDER TO ACCOMPLISH THE BROADER GOAL OF COEXISTENCE. HOW SHOULD THAT BE DECIDED?

Neighborly coexistence may not be possible in all alfalfa growing areas and in all grower's situations. In any case, proper grower practices are required and in many situations the conditions in the growing area need to be monitored and some practices will need to be adjusted accordingly. It is entirely possible that some grower's choices will become unavailable.

IS ZERO CONTAMINATION OF ALFALFA HAY OR SEED POSSIBLE?

The seed industry has developed rules when there is a possibility of damage to any seed grower. There is always the possibility of some small degree of contamination involving any product. Zero tolerance has in time proved to prevent reasonable use. The technology of analysis has become so refined that stray molecules of whatever can be found.

HOW SHOULD THRESHOLDS FOR CONTAMINATION (WHETHER ZERO OR LOW LEVEL PRESENCE) OF GE-SENSITIVE ALFALFA PRODUCTION BE DECIDED?

Seed certification is important to any alfalfa grower. The end product purity is important to alfalfa hay customers. I believe knowledgeable industry standards developed by GE, non-GE growers and seed producers and organic consumers will provide reasonable results and adequate protection. State seed certifying agencies can and will make seed growers comply with standards that will satisfy the industry as a whole.

SHOULD SUCH POLICIES AND MECHANISMS BE DETERMINED BY GOVERNMENT REGULATION OR BY INDUSTRY STANDARDS?

I believe the industry itself can develop threshold tolerances and procedures that will satisfy the customers of our product, both organic and export. Our customers, by necessity, determine what standards we must comply with.

HOW IMPORTANT IS A COEXISTENCE STRATEGY FOR ALFALFA GROWERS AND THE ALFALFA INDUSTRY?

Coexistence of GE alfalfa production into the production of alfalfa hay commerce including organic already exists. In our sales of organic, regular non-organic and RR alfalfa hay we have not experienced any problems. Our organic certifying agency examines our safeguards against any possibility of cross contamination beginning with soil preparation all the way to harvest,

storage and shipping. This has proved to be satisfactory with our customers including organic exporters. If we do not satisfy the organic inspectors we won't be selling organic hay.

GENERAL COMMENTS & CONCLUSIONS

We use RR alfalfa when a field is heavily infested with noxious perennial weeds. Morning glory is our most pervasive weed. RR alfalfa greatly reduces the use of herbicides to control this weed. We have found that the use of roundup is only necessary every two or three years eliminating more intensive and potentially troubling herbicides. The appropriate use of RR alfalfa is another grower tool to reduce herbicide residues provide a more desirable product and increase revenues.

NOTE ON THIS PUBLICATION:

This article is published as a part of a panel discussion on Coexistence between Genetically-Engineered (GE) alfalfa and non-GE alfalfa held December 13, 2011 at Las Vegas, NV at the Western Alfalfa & Forage Conference. Each panelist was asked for their views on coexistence, guided by several specific questions. ***Background:*** *As a general background, Roundup Ready alfalfa was first released in 2005, and subsequently the subject of a lawsuit which precluded further planting from 2007 through 2011, while USDA-APHIS conducted an Environmental Impact Study. A key component of both the lawsuit and the EIS was the question as to whether gene flow and contamination would harm non-GE growers. USDA-APHIS decided in 2010 that Roundup Ready alfalfa was safe for the environment and further plantings were authorized early in 2011. However, coexistence between divergent systems remains an important issue, particularly for organic growers, seed growers and companies, and exporters. Subsequent documentation and efforts to encourage coexistence and solve the issues between GE and non-GE production have been ongoing by farmers, companies, hay grower and seed groups, Universities, and government agencies.*