

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

By Scott Emanuelli¹

SPEAKER BACKGROUND

I am a fourth generation Imperial Valley farmer. My great grandfather started J. Emanuelli & Sons in 1918. In 2007 we got into the seed business as Top Notch Seeds, for which I serve as the General Manager. Top Notch Seed's primary business is alfalfa and Bermuda-grass seed production and conditioning (organic and conventional). In 2010, our family joined up with a group of farmers and began compressing and exporting hay. I currently serve on the board of directors for both the Imperial County Farm Bureau and the California Alfalfa and Forage Association. During this time I have had a front seat in the discussions as Imperial Valley declared itself a Roundup Ready Alfalfa free growing region.

HOW WOULD YOU DEFINE COEXISTENCE?

Coexistence can be defined as the ability to exist at the same time or place, possibly needing to put aside differences. When two sides coexist and create positive and equal relationships, it enhances our ability to succeed. I once read that successful coexistence requires the acknowledgement that the others exist.

IS COEXISTENCE POSSIBLE?

As it stands today, co-existence is not possible in the Imperial Valley. In the Imperial Valley, we have approximately 450,000 farmable acres and at any time 125,000 to 225,000 of those acres consist of Alfalfa. During certain cycles, 50% of our valley could be planted to alfalfa hay. Approximately 50% of it is custom harvested and machines travel back and forth between fields without clean downs and possibly without knowledge of whether the stand would be GE or conventional. Imperial County has a very large honey bee business and bees are scattered around the entire valley increasing the potential for cross pollination. In addition to all that, a large percentage of our alfalfa acreage could possibly go to seed and all of our hay will definitely go to bloom during our extreme summer heat. However on a larger scale, Imperial Valley serves as an example of how co-existence is possible.

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

It is necessary to implement and maintain GE free growing regions to ensure proper co-existence of GE and non GE alfalfa crops. In addition, industry standards will need to be set and strictly followed.

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

As long as we have these strict growing regions and Round Up Ready free zones, GE alfalfa won't necessarily destroy organic, export, or other GE sensitive production. With proper stewardship we can maintain "true and pure" organic and conventional hay and seed for such markets. As long as we have customers that demand zero tolerance of GE contamination we as an industry must ensure we can produce their demands, because if we can't someone else will.

IT IS LIKELY THAT COEXISTENCE 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?

Is it almost certain that co-existence would mean many sacrifices be made and methods be adjusted. How this is decided is very tricky. Producers should have a large voice in making these decisions. However ultimately we must let our customers have the last say. As businessmen we let our customers dictate what we produce and right now the majority of them are still wanting conventional and organic products. Once we contaminate the conventional and organic products we can't go back.

IS ZERO CONTAMINATION OF ALFALFA HAY OR SEED POSSIBLE?

Zero Contamination of alfalfa hay and seed must be possible or we are going down a very scary road. It's imperative that we as an industry recognize a need to maintain the ability to produce zero contamination as a control measure. As a member of an agricultural county that is very important to the US, this is crucial. Our economy would take a major hit as we currently ship approximately 30% to 40% of our hay and an even greater percentage of our alfalfa seed to GE sensitive markets.

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

Thresholds of contamination levels from zero to low level presence should be decided by the customers. The consumers after all are our target market that makes our industry strive.

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

Policies and mechanisms for such thresholds should be determined by industry standards. As an industry, we know what we want and how to get there. Strict industry standards and policies should be set that if broken could be enforceable.

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

A coexistence strategy for alfalfa hay and seed growers and the industry as a whole may be the single most important issue we are facing right now. As our world's population grows and our farmable acres shrink, we will need to continue to strive to improve our products and our yields. GE and non GE alfalfa will play equally important roles in this process, thus we need to ensure that we can coexist in a way that is least harmful to one another.

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.*