

# Alfalfa seed study complete

The development of Roundup Ready Alfalfa represents a significant innovation allowing for more effective weed control and lower overall herbicide use with lower toxicity to applicators, as well as reduced use of environmentally-damaging herbicides.

In 2005, the U.S. Department of Agriculture Animal and Plant Health Inspection Service deregulated RRA, allowing it to be planted.

Some people fear that RRA will inevitably contaminate all hay and even that gene flow (the movement of pollen) from RRA could contaminate other plants.

Consequently, in 2007, the U.S. District Court required APHIS to re-regulate RRA, prohibiting any future sale or planting of RRA seed, to prepare an environmental impact statement before it could deregulate RRA, and to develop guidelines by which already planted RRA could be managed for forage and seed.

The U.S. Supreme Court reversed the lower court's ruling to a degree in a 7-1 decision in June.

A lot of misinformation about RRA has been dispersed and interested parties should be aware of scientific facts when considering the issue.

The Council for Agricultural Science and Technology has an excellent publication entitled, "Gene Flow in Alfalfa: Biology, Mitigation, and Potential Impact on Production."

Genes do not move from plant to plant like a contagious disease. Gene flow in alfalfa mostly occurs when an insect "trips" the flower to release pollen grains, which can adhere to the insect.

As the insect flies to other blooms, pollen grains become dislodged, fertilizing that flower and leading to seed production. Insects, generally, a few species of bees, are an integral part of alfalfa seed production.

Isolation has long been required to maintain seed purity because gene flow was a significant issue in alfalfa seed production.

Preventing gene transfer between hay fields is simpler and is to the hay grower's advantage because hay quality declines with plant maturity (the onset of flowering and seed production) greatly reducing the dollar value of the hay.

Additionally, any seed that might be produced would likely die upon germination because established alfalfa puts compounds into the soil that are toxic to alfalfa seedlings. Hence, non-RRA and RRA hay production can coexist with proper management. The EIS has been completed, and while it is anticipated

that seed of RRA will be available in time for planting in spring 2011 (NMSU recommends late summer planting), RRA is still regulated and the USDA is now considering two options regarding deregulation, the first of which is complete deregulation.

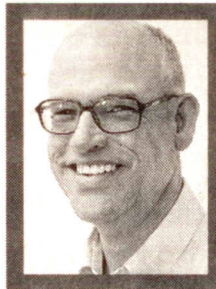
The second option places restrictions on where RRA seed can be grown. Because New Mexico is not currently a major alfalfa seed producing state, the more restrictive option, as currently described, may have little impact. That is: RRA forage fields cannot be harvested for seed; RRA forage grown within 165 feet of an alfalfa seed field must be harvested when or before it reaches 10 percent bloom; and RRA seed fields have to be identified by GPS coordinates and be at least five miles from any non-RRA seed field.

There are other restrictions regarding seed harvesting equipment and seed handling that also would apply to New Mexico RRA seed fields.

Your County Cooperative Extension Service Office also can provide information about alfalfa planting and management.

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## AG SENSE



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