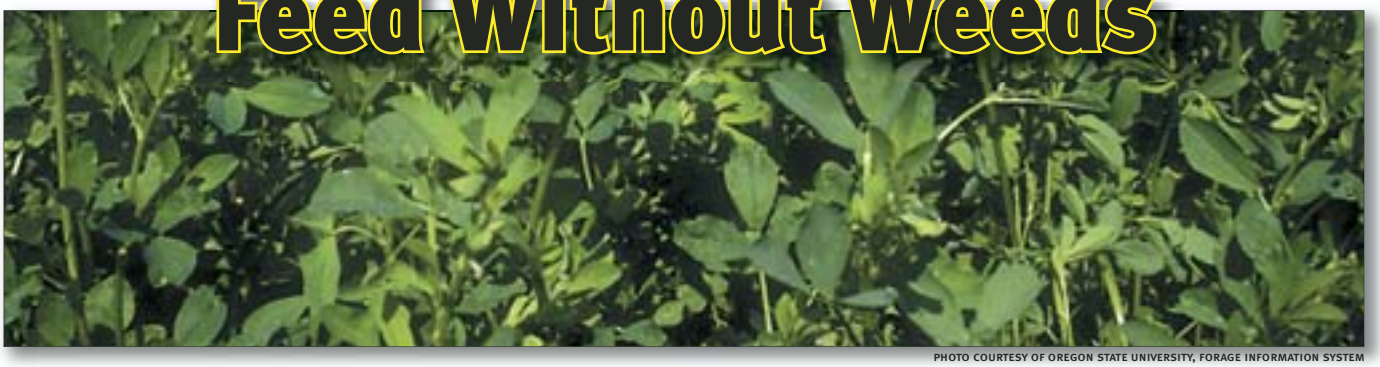
Feed Without Weeds



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Roundup Ready alfalfa may boost hay quality.

by ***Barb Baylor Anderson***

If you're looking for new ideas to spruce up your hay production or pasture profitability this year, Roundup Ready® alfalfa may be an option. The first biotech alfalfa seed on the market, with tolerance to Roundup® herbicides, is available for beef producers nationwide through about 20 seed brands as part of a limited U.S. product launch.

Mark McCaslin, president of Forage Genetics International, Nampa, Idaho, says Roundup Ready alfalfa brings a new dimension to the forage market because it improves weed control. The company partnered with Monsanto and Montana State University to develop the technology.

"Weed competition often results in less forage yield and lower quality," he says. "The Roundup Ready alfalfa system provides a very effective and efficient tool for improved weed control."

"What we've seen in the research is that Roundup Ready alfalfa allows you to improve crop management practices that can lead to better quality hay," adds Chris Peterson, Monsanto's Roundup Ready alfalfa marketing manager. "We want beef producers to know you can grow feed without weeds. Producers will see fewer weeds in their forage, which means higher quality feed, and better feed means potentially more beef per acre."

Crop quality advantages

Monsanto and university trials comparing competitive alfalfa systems with the Roundup Ready system indicate Roundup Ready alfalfa can produce more-consistent, higher-quality hay. Producers see reduced crop injury compared to conventional herbicides and fewer weeds from broad-spectrum weed control. Weeds decrease hay quality, reducing total digestible nutrients (TDN) and relative feed value (RFV).

"When you have fewer weeds in your forage, you are going to get more quality hay and you are going to have a greater-value feed product," Peterson says. "Researchers in general have found in their analyses that Roundup Ready alfalfa had lower acid detergent fiber (ADF), lower neutral detergent fiber (NDF) and higher relative feed value than other alfalfa."

In Monsanto and university trials, Roundup Ready alfalfa had an average 90% weed control in the first cutting after seeding [24 pounds (lb.) of weed per acre], compared to 64% weed control in the herbicide-treated conventional standard (544 lb. of weed per acre). In the establishment year, those same trials found that Roundup Ready alfalfa's purity in the first cutting was 97%. Second and third cuttings were nearly 100% pure. Roundup Ready alfalfa also helped eliminate noxious weeds in the stand.

"Stand establishment is critical to alfalfa growth. Roundup Ready alfalfa and Roundup herbicides applied at the third trifoliate can help produce a thicker stand by eliminating weed pressure," Peterson says. "Producers can expect healthier, faster growing stands. Roundup herbicides can be sprayed from planting until five days before cutting with no restrictions. Roundup Ready alfalfa can be grazed within five days of application."

Economic advantages

Peterson says that when producers consider the system from a profit standpoint, there may be more return long-term than from a conventional system. "Your incremental profit opportunity in the establishment year can be $60 per acre," he says. "That's based on a half-ton-per-acre yield advantage at an average value of $120 per ton of hay."

Peterson adds that cost of the technology must be considered over the life of the stand. "The initial price tag may seem high, but you get a favorable return on investment," he says. "The first cutting in the first season will pay most of the technology fee."

Peterson explains that the price of Roundup Ready technology is based on shared value with growers over the life of the stand. Growers west of the Rocky Mountains use higher herbicide and seeding rates, and obtain higher yields. The estimated economic value of the Roundup Ready technology is worth more for those growers when compared to management practices in the East. The price of the technology royalty is higher in the Western states ($150 per 50-lb. bag) than in the East ($125 per 50-lb. bag) to help level the playing field.

"At an average value of $120 per ton per acre, a half-ton yield improvement equals about $60 additional profit," Peterson reiterates. "For a grower east of the Rockies using a 20-pound seeding rate, that would equal about two and a half acres to the bag, or about $50 per acre for the cost of the technology. That leaves a $10 per acre net profit the first year. Producers who get five years from the Roundup Ready alfalfa stand receive the benefit of the technology all five years, after typically paying for the benefit the first season."

"Beef producers can benefit directly from Roundup Ready alfalfa when they produce and feed their own hay. Beef producers that purchase hay may benefit indirectly from a more consistent local supply of high-quality hay," McCaslin says. "The Roundup Ready alfalfa system should improve the consistency of forage quality in alfalfa hay production and help producers facilitate the balancing of beef rations."

Since the seed is currently available only through a limited domestic launch, producers must sign a Monsanto Technology/Stewardship Agreement. Peterson notes that Roundup Ready alfalfa has all the necessary U.S. feed and safety approvals, but any product produced from Roundup Ready alfalfa, including hay and hay products, may only be used, exported to, processed or sold in countries where regulatory approvals have been granted.

"We have seen good product adoption already," Peterson says. "Demand was strong in the fall, and supplies will be tight this spring." AJ