Considerations For Growing Hay

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ranking of the entries done during the first day correlates to the ranking of entries by test.

However, there are exceptions. A sample of hay may look, feel and smell great, but have virtually no nutritional value, while a slightly sour-smelling, sun- and rain-damaged sample may contain a superior blend of nitrogen, carbohydrates and acid-detergent and acid nuetral fibers.

That happens, Vough said, and generally there aren't very many good explanations for why the abnormal occurs.

But it doesn't happen often enough to negate the general relationship of hay's nutritional quality and its sensory qualities.

"The main thing I'm looking at, from a visual assessment standpoint, is stage of maturity, leafiness, color, foreign material and odor and condition," he said.

Cutting in the morning after the dew dries, getting a quick dry down, achieving a low moisture condition and harvesting before the leaves get brittle may take some experience to become familiar with the timing of events, but with attention to detail, and confidence derived from learning through education and experience, consistently high quality hay can result.

There are basics to raising hay that constitute a foundation from which the finer points of raising top quality hay are built.

Rather than discuss some of the considerations that can go into producing hay show samples, Vough said concentrating on producing quality forages from long-lasting stands should be the goal.

One of the most obvious considerations is field selection. There are only so many "ideal" fields in the world and they don't come with every farm.

To optimize growth of any cultivar, a field should provide not only basic plant survival requirements, but ideal requirements.

"In field selection, I would prefer to put alfalfa on the best soils of the farm," Vough said.

"South facing fields will generally develop faster, but you don't have to be limited to south-facing slopes," he said. "(Plants in fields with a southern exposure) will usually start growth earlier in spring than on a north slope, but the south-facing fields also tend to dry out faster in summer."

Vough said he likes to see soils that have good depth, are well-drained and have good fertility for alfalfa production.

"Alfalfa is not adapted to poorly drained soils," Vough said. "It will not persist. None of the crops will do well on shallow, droughty soils, but alfalfa has a much higher yield potential than what we typically get in the Mid Atlantic region.

"I think some of it has to do with field selection," he said. "Alfalfa tends to get planted on marginal soils. In some cases fertility is a factor."

Alfalfa does require a high level of fertility, he said, with pH and potash being most important, especially as a producer intensifies management.

According to Vough, if a producer is on a three-cut per season system, the soil fertility isn't as critical as those who manage for five cuttings per year.

Of course, the basics of production includes having soil tests taken and then providing the limiting nutrients to achieve reasonbly extected optimum production.

Vough said that, historically, it was not recommended to spread manure on alfalfa, out of the consideration that the plant is a legume, capable of producing its own nitrogen.

That may change in the near future, as a result of trials involving the use of manure on top of mixed alfalfa-grass fields.

"There is the potenital to utilize the nutrients in the manure with alfalfa-grass mixtures," he said, adding that the plants will primarily benefit from the potash, but that alfalfa will also utilize the nitrogen "very well if it's there."

The pH (which is a measure of free hydrogen) is likewise important to maintain, he said.

"Once the pH drops below 6.5, I would suggest top dressing lime. There is data to indicate that when pH drops below 6.5 it definitely has an affect on yield."

Harvesting is also key for consistent production of top quality hay.

He said harvesting at the appropriate stage of maturity is the most important consideration.

For alfalfa, except for the first cutting, he said to cut it in the late bud/early bloom stage.

The first cutting should be done before bloom, actually in early bud stage, because the first blooms of the season arrive one to two weeks later relative to the maturity in the rest of the plant. Therefore the fiber content is much higher and the quality lower in first cutting.

Ideally, first cutting hay should be some of the best, with summer hay being worst.

He said that in the Southwest United States the spring and fall cuttings are usually of dairy quality, while the summer cutting are more likely to be sent to the stockyards.

Orchard grass should be cut in late boot to early heading stage to get prime quality without affecting standability.

Timothy however, should be cut when fully headed for a very important reason — the plant stand will have a better chance at surviving and overall production.

As with orchard grass, the best quality Timothy would also be cut during the late boot/early heading stage, but Timothy is "sensitive" at that point, Vough said.

If cut before fully headed, Vough said the regrowth of

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