SELECTING HORSE HAY IN LOUISIANA

The Educated Horseman: Nutrition Series

Selecting the right hay for horses in Louisiana is essential for maintaining their health, performance and overall well-being. Given Louisiana's hot and humid climate, it's important to choose hay that not only meets the nutritional needs of horses but also remains fresh and free of mold or other contaminants. The most commonly available types of hay available in Louisiana include bermudagrass hay, bahiagrass hay, alfalfa hay and timothy hay. Each type of forage has a unique nutritional profile and level of palatability, which should be considered when selecting the hay for your horses.

Types of Hay

Mature bermudagrass hay. Photo by Neely Heidorn

Bermudagrass hay is a widely available warm-season perennial grass that is suitable for grazing and hay production and is productive from spring until late fall. Bermuda hay typically contains a mixture of other grasses such as dallisgrass and bahiagrass. Bermuda hay commonly contains 8%-12% crude protein and 55%-60% digestible fiber. It is low in calcium and has adequate levels of potassium and moderate levels of energy. Horses tolerate it well, especially if harvested at an early maturity stage. If cut at the correct stage of growth, it should be fine-stemmed and soft to the touch, making it more appealing to horses. Purchase bermudagrass hay that is green, leafy and with thin stems. It should be clean and free from mold, dust or foreign material. Avoid hay that is overly mature or has a high percentage of stems which can reduce nutritional value and palatability.

Bahiagrass hay is another warm-season grass that is well adapted to the soil types commonly found in Louisiana. Bahiagrass pastures can take longer to establish and are generally lower in nutritional value compared to bermudagrass, with crude protein levels ranging from 6%-10% and digestible fiber around 50%-55%. Some horses find bahiagrass hay to be less palatable due to its texture, especially if harvested late. Bahiagrass is also known to increase respiratory distress in horses with allergies or heaves. However, it can still be a good forage option if mixed with other, more palatable hay types. Choose bahiagrass hay that is green and leafy with a low stem content. It should be free of weeds, dust and mold. Early cutting ensures higher nutritional value and better palatability with higher crude protein and lower fiber content. If your horse is affected with heaves or recurrent airway obstruction, it is recommended to choose a variety of hay with less potential to aggravate the condition.

Alfalfa hay. Photo by Neely Heidorn

Alfalfa hay is a legume hay that is higher in protein and energy than grass hays and is not typically grown in Louisiana. Alfalfa hay is usually purchased from out-of-state sources. It typically contains 15%-20% crude protein, 50%-55%

Types of Hay (cont.)

digestible fiber and is rich in calcium. Horses find alfalfa hay highly palatable due to its soft texture and leafy nature. However, due to its high-quality nutrients, it should be introduced slowly to reduce gastrointestinal upset. Alfalfa can be useful to manage horses with ulcers due to its bicarbonate content. Alfalfa hay should be green, leafy and soft, with minimal stems. Hay that is overly mature will have thicker stems and reduced nutritional value. Check for any signs of blister beetles, which can be toxic to horses.

Timothy hay is a popular hay for horses that is palatable and easy to digest. Timothy is adapted to grow in the midwestern and eastern regions of the United States. It is not adapted to Louisiana's growing conditions and will need to be purchased from out of state. Timothy hay is known for its soft, fine texture and has crude protein values of 10%-15% and digestible fiber values of 55%-60%. When purchasing timothy hay, select hay that has few seed heads or blooms.

Evaluating Hay

When selecting hay for your horses in Louisiana where humidity can impact hay storage and quality, it's important to evaluate hay based on several factors:

- **Maturity at harvest:** The stage of maturity at which the hay was harvested greatly affects its quality. Hay that is cut before it fully matures will have a higher nutrient content and be more palatable. Hay that is cut later tends to be coarse and lower in nutritional value but may be better for horses with lower caloric requirements.
- **Color:** High-quality hay should be green, indicating that it was harvested and dried properly. Brown or yellow hay suggests that it was either overly mature at harvest or improperly stored, leading to nutrient loss; however, bleached hay can still provide adequate nutrition depending upon your horse's individual needs.
- **Leafiness:** The majority of a hay's nutrients are found in its leaves. Therefore, choose hay that is leafy rather than stemmy. Fine-stemmed hay is generally more palatable and digestible for horses while thicker stemmed hay indicates a more mature hay.
- **Smell:** Fresh hay should have a pleasant, sweet smell and be free of dust or mold. If the hay has been exposed to rain or has not been dried adequately prior to baling, it can become problematic for horses.
- **Texture:** The texture of the hay should be soft and pliable. Coarse or brittle hay is less palatable and may be less digestible, leading to wasted feed.

Evaluating Hay (cont.)

- **Moisture content:** Hay should have a moisture content between 10%-15%. Hay that is too dry may be brittle and dusty, while hay that is too moist can mold easily and pose a risk of colic or respiratory issues.

- **Foreign material:** Check for the presence of weeds, sticks or other foreign materials, which can reduce the hay's nutritional value and pose a risk of injury or digestive upset.

Choosing the right hay for your horses involves understanding the different types of hay available, their nutritional profiles, and how to assess their quality. Bermudagrass, bahiagrass, alfalfa and timothy hay each offer unique benefits and challenges. By focusing on hay that is green, leafy, soft and free from contaminants, you can ensure that your horses receive the best possible nutrition. Proper storage and regular inspection of hay bales will help maintain hay quality, providing your horses with a consistent and safe forage source year-round.

References

Duren, S. E., & Jackson, S. G. (1999). The Horse Nutrition Handbook. Lexington, KY: Kentucky Equine Research, Inc.

Hintz, H. F., & Cymbaluk, N. F. (1994). Nutritional requirements of horses. Journal of Animal Science, 72(8), 2681-2689.

Hoffman, R. M., & Parker, A. J. (2011). The effects of forage quality on the health and performance of horses. Proceedings of the 7th International Conference on Equine Nutrition, Lexington, KY.

Lawrence, L. A., & Coleman, R. J. (2001). Feeding hay to horses: nutritional considerations. Journal of Equine Veterinary Science, 21(8), 353-358.

National Research Council. (2007). Nutrient Requirements of Horses: Sixth Revised Edition. Washington, DC: The National Academies Press.

Saastamoinen, M., & Edwards, G. (1987). Grass hay as a source of energy and protein for horses. Livestock Production Science, 18(4), 365-375.

Staniar, W. B., & Stowe, H. D. (2001). The role of hay quality in equine nutrition. Veterinary Clinics of North America: Equine Practice, 17(3), 551-563.

Visit our website: www.LSUAgCenter.com

Pub. 3372-D (online) 11/24

Author

Neely Heidorn, Ph.D.
Associate Professor,
Equine Extension Specialist