



MARYLAND COOPERATIVE EXTENSION

UNIVERSITY OF MARYLAND
COLLEGE PARK • EASTERN SHORE

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FEBRUARY EXTENSION HAPPENINGS

CALL THE OFFICE TO REGISTER

- Pesticide Applicators Re-certification – Dorchester County, Feb. 1, 7-9 p.m. (410-228-8800); St. Mary's County, Feb. 16, 6 p.m. (301-475-4482)
- Maryland Ag Forum – Feb. 13, Prince George's Equestrian Center
- Do you want to become certified to do your own nutrient management plan? If so, you can attend training in Kent County. Training for pasture-based operations (horses, beef, goats, sheep, etc.) will be held Feb. 28 and March 15 (must attend both days) at the Kent County Public Works Complex 9 a.m. – 4:30 p.m. each day. Cost is \$20 for the certification exam. For the daytime sessions, an additional \$15 will be charged for lunch the first day. For more information, call the Maryland Department of Agriculture Nutrient Management Program at 410-841-5959.
- Lower Shore Horseman's College, Feb. 18, 9 a.m. – noon, Wicomico County Extension Office. This event, co-sponsored by the University of Maryland and MidAtlantic Farm Credit, will cover Equine Nutrition, Pasture Management and Designing a Pasture System.

consumption of preservative-treated hay, indicating that the hay had no negative effects on the horses. A study conducted at Cornell University showed that when given a choice, horses preferred untreated alfalfa over alfalfa that had been treated with a mixture of propionic and acetic acid. However, when only given the treated hay, daily consumption did not decrease. Thus, after a short conditioning period, horses will consume acid-treated hay. So given that propionic and acetic acids are produced naturally in the gastrointestinal systems of horses, and that treated hay is less likely to be musty or moldy than untreated hay, the feeding of preservative-treated hay is not harmful. In fact, it can be quite beneficial in reducing heaves and other respiratory problems that are more likely to occur with untreated hay.

If you prefer to feed untreated hay, ask your hay supplier if the hay you are purchasing is treated. If you are buying from a local hay grower, he will be able to tell you. But if you are buying from a dealer and the hay came from another state or Canada, the dealer may not know whether or not it was treated. The same is generally true if you purchase hay at auctions.

If you wish to feed organically grown hay, you will need to purchase it from certified organic growers. At this time, there are very few organic hay growers, so the supply of organically grown hay is very limited.

—Les Vough
Forage Crops Extension Specialist
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Ask the Experts

Q I heard that hay that is improperly dried before baling might be treated with chemicals. Is this true? How can I be sure that my horses are getting organic hay?

A Some hay growers apply preservatives (organic acids, yeast cultures, enzymes, etc.) to prevent the growth of the bacteria and fungi that sometimes cause heat, musty odor and mold in inadequately dried hay. Under mid-Atlantic weather conditions, it is often difficult to dry hay sufficiently in the field before baling, hence the application of preservatives. Most preservatives applied to horse hay contain organic acids that are the same as those found in the horse's gastrointestinal tract. Propionic and acetic acid, the most common organic acids in hay preservatives, are produced naturally in the cecum and colon of the horse as a result of microbial digestion of fibrous feeds. These organic acids can be used as mold inhibitors and applied when hay is not yet dry enough to bale safely, but rain is coming and the crop may be lost if not baled early. Studies have shown a decrease in the heating and molding of hay during storage with the use of preservatives.

A study conducted at the University of Illinois found that yearlings receiving hay treated with a mixture of propionic and acetic acids consumed just as much hay and gained just as much weight over a one-month feeding trial as yearlings consuming untreated hay. Clinical measures of the horses' well being – such as serum enzyme levels – were not affected by