When horse owners consider hay for their horses, a number of criteria are generally considered. Of major importance is the hay must be free of mold and dust. It needs to contain nutrients needed by the horse and it must be palatable. If these criteria are met, the type of hay should not matter. However, that is not the case with many horse owners. When discussing the selection of hay, many owners first consider the type of hay. Can it be alfalfa or should it be a grass or how about a mix of grass and a legume. If a group of horse owners were to be polled the results would reflect some who felt alfalfa was the best hay for horses, some would suggest it never be fed and a few would ride the fence being neither strongly for or against alfalfa hay.

It is widely know that alfalfa hay is an excellent source of nutrients. In table 1, there is a comparison between mid maturity legume hay (alfalfa) and mid maturity cool season grass hay. From the comparison, it is evident that the legume hay can supply more digestible energy, more crude protein and calcium than the cool season grass hay. If alfalfa hay is comparatively priced with grass hay, the cost per unit of nutrients can make it a better buy.

It is common that horses consuming alfalfa hay will voluntarily consume more hay on a daily basis than when fed grass hay. As horses will readily consume alfalfa it makes this forage suitable to meet a significant portion of the horse’s daily requirements for energy and protein. Work at the University of Kentucky reported that gestating mares in either the 5th or 10th month of gestation were able to meet their requirements for energy and protein with voluntary daily intakes of 2.0% body weight. With mares during early lactation daily dry matter intakes of alfalfa hay increased to 2.45% (McCown et all 2011). These intakes indicate that the horse can consume adequate amounts of quality forage on a daily basis.

While the horse will readily consume alfalfa hay the forage is also a good source of nutrients. In work using alfalfa vs. soybean meal as a protein source resulted in yearling fillies having similar daily gains (Wall et all 1998). In addition weanlings fed an alfalfa based diet there was no improvement in growth by adding supplemental sources of crude protein above the total protein supplied in the alfalfa control diet. This suggests that protein requirements can be met with alfalfa forage (Coleman et al 1997).

If alfalfa forage is the basic forage in the feeding program horse owners need to supplement nutrients that may be lacking but can take advantage of what the alfalfa supplies. This does mean that intakes need to be controlled to prevent excessive feed intakes.
As with the maintenance horses and the broodmare, the horse at light work consumes a greater portion of its nutrient requirements, when alfalfa hay is the basis for the feeding program. However concerns with feeding levels of protein in excess of the horse’s requirements and concerns with wet stalls and ammonia in the barn may cause horse owners to select a grass type hay and not pure alfalfa hay.

A concern with performance horses fed more concentrated diets is the risk of ulcers. It has been reported that stalled horses in training have a greater incidence of ulcers when compared to horses maintained on pasture. The amount of hay offered has been implicated in this increase in ulcers. Why is this concerning horse owners? Horses are grazers that eat small amounts of feed on a frequent basis. This continuous consumption of forage has horses chewing more which results in more saliva production which aids in buffering stomach acids. While feeding high quality alfalfa hay may result in a lower feed intake, research has shown that alfalfa hay can reduce the incidence of ulcer formation. Researchers in Tennessee reported a reduction in the incidence of ulcers when horses were fed alfalfa hay verses grass hay. More recently, Texas researchers have reported that feeding alfalfa hay resulted in a reduced incidence of ulcers in yearling horses. The benefit of alfalfa hay is related to its buffering capacity due to the higher levels of protein and calcium in comparison to grass hay.

Horse owners are or should be concerned about the presence of mold in the hay they are feeding regardless of what type of hay it is. It has been noted by some horse owners that there is an increase presence of mold in alfalfa hay. While there is potential for this to be true, the mold may be the result of the hay producers putting up hay with slightly higher moisture content in order to preserve the leaf content of the hay. The presence of the mold is more a function of hay production, not the fact it is alfalfa. For horse owners, alfalfa hay can be an effective feed, however, it is important that intakes of nutrients are controlled for certain classes of horse in particular, those horses with lower nutrient needs.

For those supplying hay, what does the horse owner want?

1) A hay that is free of mold and dust. Moldy hay has been implicated as a cause of the respiratory condition called heaves. The moldy hay causes an allergic reaction which affects the horse’s ability to exhale. The hay fed to horses must be free of mold.

2) A consistent product. Hay that is green, leafy with a fresh odor. In addition, bales need to be consistent throughout the lot of hay. Not always easy to do if a mixed hay is produced.

3) Free of trash and other potentially harmful things.
4) A bale size that is consistent with the management practices of the horse owner. If the horse owner does not have equipment to move larger packages of hay or appropriate places to store hay, then a small square bale may be the package most desired. It is difficult for the owner to change how they care for feed their horses to accommodate large hay packages.

The bottom line is alfalfa hay does have a place in feeding programs for horses. It is generally hay that is well accepted by the horse and provides significant levels of nutrients. Alfalfa hay and horses are a good mix when good feed management is provided.

Table 1. A comparison of nutrient content of mid maturity legume hay and mid maturity grass hay (on Dry Matter Basis)

<table>
<thead>
<tr>
<th></th>
<th>DM %</th>
<th>DE Mcal/kg</th>
<th>Crude protein %</th>
<th>Calcium %</th>
<th>Phosphorus %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid Maturity Legume</td>
<td>83.9</td>
<td>2.43</td>
<td>20.8</td>
<td>1.37</td>
<td>0.30</td>
</tr>
<tr>
<td>Mid Maturity Grass*</td>
<td>83.8</td>
<td>2.18</td>
<td>13.3</td>
<td>0.66</td>
<td>0.29</td>
</tr>
</tbody>
</table>

* Cool season grass hay


Literature Cited:


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