Treated Hay for Horses
Nuhn Forage

Producing high quality hay can be incredibly difficult due to unpredictable Canadian weather. Often, baling small square bales at the appropriate moisture of 14-18% is not always possible.

Unfortunately, hay baled greater than 18% moisture (82% DM) will likely heat during storage, leading to mould growth, decreased feed value, and palatability issues with livestock. Applying buffered propionic acids during baling is a safe and effective method to reduce mould growth and bale at moistures above 18% moisture. This leads to an increased baling window and higher quality hay. Square bales typically lose moisture during storage – applying a buffered acid has been shown to reduce the amount of dry matter loss and improve feed quality.

Mouldy hay decreases the feed value, particularly nutrients and dry matter. Baling hay under 14% moisture leads to very dry hay, which causes increased leaf shatter and dry matter loss and ultimately; dusty hay. Therefore, baling at the desired moisture level is beneficial in preventing these losses. Mould tends to grow when there is sufficient oxygen and moisture in the mow, especially as the hay heats during storage.

Another concern to horse owners is that mouldy, dusty hay can cause respiratory issues in susceptible equids. Buffered propionic acid products such as The Juice, reduce and inhibit mould growth during the cure down period. Buffered acids are applied directly onto the hay as its baled. The Juice is a buffered organic acid, generally applied at 2%. It is non-corrosive on equipment and safe for horses, unlike its unbuffered predecessors.

The most popular question from horse owners is; “can treated hay be fed to horses”? Propionic acid is a natural product of microbial fermentation of feedstuffs in the horse’s cecum and large intestine (colon). They are metabolized and absorbed into the bloodstream and used as an energy source. The large intestine produces considerable amounts of organic acids due to hind-gut fermentation, than would otherwise be ingested from a properly treated hay product.

Combine mould inhibition with the added fuel factor, **buffered acids are both safe and effective for all livestock.** Studies conducted at the University of Illinois have shown no detrimental clinical effects on the well-being of horses consuming treated hay, and yearling gain was not affected.

Applying a buffered acid product at the correct rate is crucial to a successful hay crop. Using a moisture tester is a great tool to determine the moisture content of hay and ensure uniform application. Windrows and high spots tend to increase hay moisture and require more buffered acid, making moisture monitoring very important. Relying on the average moisture will lead to inaccurate application rates, and poorer hay.

Remember not to store treated and untreated hay beside or in contact with one another, as moisture will gravitate from the higher to lower moisture hay!