Ask A Vet: Maple City News

Sunday, November 20, 2016

Dear Dr. Weldy's,

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Recently, I came across a posting on Facebook warning of the dangers of Red Maple leaf poisoning. A horse had recently died suddenly and the post claimed that maple leaf toxicity was to blame. Our yard has several red maple trees, some guite close to the front pasture. How serious a threat is this?

Dear Reader,

My favorite season of the year has to be fall. Football, mild temperatures, and the changing foliage are greatly anticipated. Unfortunately, the red maple, while visually spectacular in autumn, can be life threatening to a horse. The mechanism by which this happens is not entirely clear. We know that wilted leaves are to blame and that most poisonings occur in the fall. We also know that downed tree limbs or frost that brings leaves down quickly are common to many red maple toxicities. It only takes one or two pounds of wilted leaves to be deadly to a 1000 lb. horse.

Horses begin exhibiting clinical signs of red maple toxicity within 48 hours of ingestion. These symptoms include: depression, poor appetite, yellow to brown gums, brown or dark red urine, increased heart rate, increased respiratory rate and possible kidney failure late in the course of the disease. The toxic substances in the leaves cause an acute hemolytic anemia, meaning the red blood cells are broken down and destroyed. Because there are fewer red blood cells to carry oxygen, the heart and lungs speed up in an attempt to get oxygen to the internal organs. The broken red blood cells also release hemoglobin and methemoglobin which give a brown color to the gums and urine. These substances are also toxic to the kidneys, resulting in kidney failure at high enough levels.

As with many equine ailments, this one is a lot easier to prevent than to treat. Most horses will only consume leaves if there is nothing left to eat or if they are bored. Feeding plenty of hay (possibly using a slow feeder in order to make it last all day) when the grass is not plentiful can make the toxic plants seem less enticing. Be sure to remove fallen limbs promptly, paying close attention to any leaves that may have fallen from the branch. If you have identified a red maple and feel like it is in too close a proximity to your horses, have it removed or transplanted.

Now, not all red leafed maples are Red Maple trees. The red maple is uniquely identified by its three pointed leaf. So, check with your local extension agent or knowledgeable landscape expert by bringing them a few of your suspect leaves. They will be able to help you with a positive identification.

-Dr Wade Hammond