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Headline: Troublesome Pasture Plant of the Week – Honey Locust



Hermitage, MO - Honey Locust (*Gleditsia Triacanthos*) is a member of 12 species of thorny trees and/or shrubs in the pea family called Fabaceae. They are native to North and South America, tropical Africa, and central and eastern Asia. Some species are cultivated as ornamentals, and a number are useful for timber or as animal fodder. Pasture infestations of Honey Locust are a common concern in many pastures, abandon fields, woods, and stream banks in Missouri. This medium-sized, fairly quick growing, tree can grow to heights of 100 feet over a period of time. Even on a young, first year's growth, sharp multi-sticker development will occur, causing concerns about tire punctures and possible foot damage in livestock. Left unchecked Honey Locust will overtake pastures limiting its production and use. This can result in a very costly fix.

This leguminous, perennial, woody plant is one of the easiest trees to identify on your farm. The leaves are alternate, pinnately compound with 15 to 30 leaflets per structure. The leaflets are oval to elliptical in shape about ½ to 1 ½ inches in length. The young, light green twigs have a distinct zigzag pattern as it grows. Large multifaceted thorns can be found anywhere on the tree and may reach ten inches or more in length on larger trees. The root system is a strong tap with many lateral feeders, which spread out in all directions. One of the most common distinguishing features of this legume is the large, dark brown twisted seed pods which develops as a fruit in the fall of the year. Cattle will often eat these pods and deposit the seeds throughout the pasture thus spreading Honey Locust wherever the cows go. If left unchecked, your farm will have locust sprout problems for years to come as the seeds can lay in the ground for a long time before sprouting.

Mechanical treatment for Honey Locust will only work if the entire root system is removed. This is very hard to do if the tree is very old. Multiple mowing (3 to 4 times a year) over several years

will give only marginal results. If plants are clipped or cut with a chainsaw you need to apply a chemical to the stump within a few minutes of the cut. If no chemical treatment is applied to the stump, the tree will sprout again. Foliar spraying applied to the leaves of smaller trees during the early summer months will work well, if you get a good coating over the entire tree. Basal bark spraying will work as well, if applied properly. For larger trees, you can use a chainsaw during the winter months, to cut a double ring around the tree approximately 1 to 2 inches deep spaced about 6 to 8 inches apart. The first cut should be at least two feet off the ground, making sure to cut the cambium layer completely around the tree trunk. Then apply your chemical to the cuts. When the tree dies, it will remain standing for several years thus eliminating handling the tree and its thorns.

Effective mixtures for stump cuts would include a mixture of a 33% solution containing (Triclopyr) Remedy, Garlon, or Pasturegard and (Picloram) Tordon or Surmount with Diesel fuel or mineral oil. For a foliar spray, try mixing Grazon P & D or GrazonNext HL at the highest rating and Remedy in water with a good surfactant. Do not use diesel fuel or mineral oil in a foliar spray, as it will kill the leaves before they get a chance to absorb the chemicals into the tree. You will still have to physically remove the dead tree sprouts from the field after they die.

If you are renting your pastures to other livestock producers, make sure there are agreements in place to control these common pests, along with most other undesirables as they will decrease the value of your property over time.

For more information on pasture plant identification, please contact your local MU Extension Agronomy Field Specialist.