WHEEL TRAFFIC REDUCES ALFALFA YIELD AND PERSISTENCE

If you expect to harvest alfalfa soon, be careful to minimize wheel traffic on wet soils. It can have a large effect on alfalfa production.

Every time you harvest a field of alfalfa, swathers, rakes, tractors, balers, and other equipment drive over nearly every plant one or more times. During an entire year, some plants are driven on over 10 times.

All this traffic has to cause some damage, but how much? Studies have shown that when fields are dry and firm, plants driven on within one day of cutting and before regrowth occurs will yield about 5 to 7 percent less at next cutting. But driving on these plants just seven days after cutting, when regrowth shoots have started to grow, reduces yield over 25 percent and survival of these plants is reduced. Driving over the same plants a second or third time the same day caused about the same change in survival or yield as driving over them just once.

However, when fields are wet, wheel traffic causes much more compaction. When this happens, yield loss typically exceeds 30 percent, even if regrowth has not yet started.

These studies emphasize the benefits of baling and removing bales from hay fields as quickly as possible after cutting as well as minimizing driving on wet soils. It also suggests that adjusting equipment so more wheels trail one another, or that following the same trail when removing bales or stacks from fields can reduce damage from wheel tracks.

Alfalfa fields must be driven on during harvest, but you can lessen damage by controlling where, when and how often you drive.

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