

Proceedings: Florida Equine Institute

September, 18 2008

Jason Ferrell – UF IFAS

Understanding Herbicide Labels

Pesticide labels are a legally enforceable document that must be followed. The information on the label is not a set of suggestions that one can choose to follow or ignore. The label also contains great amounts of information to instruct applicators on how best to use a particular product.

Use sites. Every pesticide is labeled for a particular “site”. For example, a herbicide labeled for use on cotton cannot be applied to wheat. Likewise, a herbicide labeled on turfgrass can’t be applied to pastures/hay fields. The use sites are listed on every pesticide label showing where it can be used.

Use rates. Every pesticide has use rates listed on the label. They generally list the maximum amount of product that can be applied per application, and the maximum amount that can be applied per year. It is a violation to apply more than the maximum use rate.

Grazing/haying restrictions. Grazing restrictions are listed on the label and generally differentiate between lactating and non-lactating animals. “Lactating animals” does not refer to any animals that is currently producing milk. It refers specifically to those animals whose milk is used for human consumption. For example, a goat that is nursing a kid is not considered a “lactating animal”. Conversely, a goat that is being milked for cheese production is a “lactating animal”. “Non-lactating” or “other livestock” refer to any other animals on that pasture, without regard to species. Cows, horses, sheep, etc. are all considered “other livestock” if their milk is not being used by humans.

IFAS recommendations. Herbicide labels are commonly greater than 10 pages in length and contain recommendations for several crops. This makes finding specific information very difficult. To simplify the process, IFAS-Extension has condensed each of these labels as a quick-reference guide. The recommendations are updated annually and contain information about use rates, grazing restrictions, optimum use timings, and control of specific weeds. These recommendations can be accessed through www.uflweed.com.

How Herbicides Work

Herbicides work by inhibiting a biological process within the plant that is essential for life. It can halt photosynthesis, hormone production, chlorophyll synthesis, amino acid production, or several other systems. The success of herbicides comes from the fact that they target processes that are specific to plants with very little cross-over to animals. For example, animals (including humans) do not photosynthesize, they do not make chlorophyll or amino acids, and they have very different hormones from plants. This being the case, many herbicides are “non-toxic” to animals because they only disrupt processes that are unique to plants.

The fact that herbicides are often “non-toxic” does not mean that they should be considered as “safe” or used in a way contrary to the label. Proper clothing (PPE, personal protection equipment) is specifically listed on every herbicide label and it must be worn during mixing or application.