

Up On The Farm

A Sign of the Times



Bruce Dehm

Anyone driving on a Western New York country road in August will notice the appearance of the somewhat mysterious crop signs near corn, soybean or hay fields. Usually about a square foot in size, these signs are a product of human hands, not the kind that some believe are of alien origin. If you have ever wondered why someone would

advertise something in such a cryptic manner, please understand that the advertising is not for you!

Crop signs are small and simple, but contain a lot of information. It is easy to understand the brand name such as Pioneer, Mycogen, Agriculver, DeKalb, Asgrow or Doebler. These are the companies that grow and distribute seed. The variety of the plant is designated by some combination of letters and number. Other enigmatic symbols may indicate the presence of unseen genetic traits such as disease, pest or herbicide resistance.

Local seed dealers put the crop signs there so that farmers driving by can see the results of the tiny seed they want you to buy from them next year. For the uninitiated, every cornfield, for example, may look alike. However, the trained eye of an experienced farmer sees much more. It is all about the genetic traits that are tucked neatly inside a simple looking seed. Even then, what the eye can see is only the proverbial tip of the iceberg relative to the traits the plant is carrying.

Let's take corn for example to see some of the traits farmers look for in their seed. First of all, what is the crop going to be used for? If it is to be chopped and fed to cows as corn silage, the plant will have more leaves and stalks relative to grain. If it is for silage, does the farmer want a traditional silage or the newer and more digestible BMR variety? If the corn

crop is for grain, will it be fed to livestock, used for ethanol or exported overseas? Once these questions are answered, then the choice is narrowed to traits in categories such as: how the plant adapts to your soil type; how it fits into your crop rotation plan; its adaptability to your type of tillage technology; or ear and grain characteristics such as ear length, height of the ear from the ground, and grain test weight.

Farmers need to decide if they want their corn to be fixed-ear or flex-ear. A flex-ear variety will change the number and size of ears it produces depending on growing conditions. A variety will also have specific features for plant height, stalk strength, root strength, and drought tolerance. Traits for pest and disease resistance include European corn borer, southern leaf blight, northern leaf blight and anthracnose.

Genetically modified seed (GMO) have technology such as Bt (*Bacillus thuringiensis*) genes that allows the plant to protect itself with the same naturally occurring bacterial protein that organic farmers use to control caterpillar pests such as European corn borer, black cutworms, fall armyworms, corn stalk borers, earworms, rootworms, and others. Round-up Ready varieties contain genes that protect crops from the broad-spectrum herbicide while using less fuel and fewer other herbicides to control weeds. Google a variety from a nearby crop sign and get ready to be amazed by the technology that gives us the cheapest and safest food supply in the history of humankind.

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Field sign photo

Table Rock Farm Reports Findings of Study

Table Rock Farm of Castile recently completed an on-farm study of dry cow practices. The study, funded in part by The Northeast Sustainable Agriculture Research and Education organization (SARE), concluded that a teat sealant is statistically as effective as traditional antibiotics when used in dairy cattle with low somatic cell counts (SCC).

The study, carried out from March to November 2006, focused on the time when milking is stopped prior to calving. This is a higher risk time for infections, and to fight that danger, many farms employ antibiotics.

In the Table Rock study, selected dairy cows were treated with teat sealant only, antibiotics only, or a combination of both preparations. Cattle were monitored through their dry period and into the first few months after giving birth. Findings indicated that there were no statistical differences in SCC counts or in the occurrence of clinical mammary infections in any of the three study groups.

The study was similar to a SARE-funded study carried out at Table Rock in 2004, the difference being that the farm had access to a on-farm direct somatic cell counter for the 2006 study, which allowed for a more precise study design and more accurate results.

Catherine Book designed the Table Rock study protocol, and Michael Lanpher, Thomas Nickerson and Ms. Book carried out study procedures. Leslie Scott De Groff of the Perry Veterinary Clinic offered guidance, and results of the study were analyzed by Quality Milk Production Services under the direction of Brad Rausch and Dr. Ynte Schukken.

SARE's mission is that agriculture in the Northeast be diversified and profitable and provide healthful products to its customers. Furthermore, farming will be conducted by farmers who manage resources wisely, who are satisfied with their lifestyles, and who have a positive influence on their communities and the environment.