

Swine Management News



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University of Delaware A Trip To Rodale Farm

Every now and then I feel compelled to write about topics other than pigs. Sometimes there are more far-reaching issues that affect all of us in agriculture. Today I want to tell you about my experiences on a recent trip to the Rodale Experimental Farm.

Rodale is a name connected with quite a bit of research in the organic production of crops. Along with other cooperative extension colleagues, I toured the Rodale Experimental Farm, which is located just outside of Allentown, Pennsylvania. Some of what I saw was exciting. Other things scared me.

First, the good news. One part of the tour was viewing small-scale vegetable production using organic methods. We talked with the researcher who is looking into the applications of organic production for vegetable crops. He was objective in his perspective, which engendered confidence in what his results may offer. He explained the different techniques that they plan to evaluate in small-scale demonstrations and in large-scale, commercial trials.

These trials are a way to establish which of the organic techniques could prove effective for commercial use. While the

researcher was hopeful that many of the methods would work, he was convinced that only objective, properly designed research trials could prove the effectiveness. Here was an objective scientist who was seeking methods to reduce the use of pesticides and fertilizers in vegetable crop production — not a bad goal for all of agriculture if it proves to be cost-effective and proven by properly designed research.

Now, the bad news. We also toured some of the commercial agronomic crop plots where comparisons were being made between conventionally grown corn, soybeans, and hay crops and that which was organically grown. My major concern about the research trials I viewed was the poor weed control in the conventional plots. Usually, we would call the resulting weed control poor. This control was purportedly an example of "conventional" farming practices.

My colleagues and I told the researcher this was a poor example and asked her what the herbicide program on the soybean plot was. She said she didn't know but claimed it was a standard recommendation from the land-grant institution. She added that no post-emergent chemical had been put on the field. When asked about insect scouting of the field, the researcher indicated that the only pest insects she knew to affect

soybeans that were present in the plots were Japanese beetles. When asked about corn earworm in beans, she seemed not to know what we were talking about!

We pressed this researcher further, asking again about herbicides, to which she replied she didn't know much about herbicides and had no desire to learn anything about them. Keep in mind, this person conducts research comparing conventionally and organically grown field crops.

Don't get me wrong. We need more research in the areas of reducing or even eliminating our agricultural inputs. All farmers would love to reduce input costs and maintain or improve the net profit from their crop production. But research done in these areas has to be done by professionals who know and understand both conventional and organic growing methods. At the very least, researchers must be objective about the results. Valid trials cannot be carried out by people who have no desire to learn about alternatives to producers they are studying.

We in the American agricultural sector have done an excellent job of producing an abundant and safe source of food for our population. Trends reveal that consumers want fewer chemicals used in the production of their food. Because farmers realize this, they would be willing to adapt to never methods of crop production, especially if it is lower in inputs.

We can't tolerate, however, researchers who are not willing to give the alternatives an objective evaluation. It is commendable that Rodale has initiated a major push into evaluating these alternative methods of production, but at the same time, we must be critical of any research that is not conducted within the parameters of good science.

Livestock Notes

Proper Forage Sampling Techniques

An essential component of formulating balanced rations is knowing the quality of the forages to be used in the ration. Accurately knowing forage quality is the result of accurate forage sampling and testing.

Often forage testing is neglected or forgotten. However, returns from a good forage testing program can average \$65/cow/year. Obtaining accurate forage reports depends, to a large extent, on using correct sampling methods on the farm.

The following guidelines have been established for sampling forages. These guidelines will help ensure that your sample is representative of what you are actually feeding.

• *Silage - Upright Silos:* 1. Sample during filling so that the forage analysis is available for ration balancing when the silo is opened.

2. Take several handfuls from each load as it is being unloaded. Make note of changes from field to field. NOTE: Colored plastic squares can be blown in between loads from different fields or when changes occur within a field. When feeding, the colored plastic will denote a forage change, allowing for ration adjustments if necessary.

3. Composite samples by field (or by parts of field if differences occur within a field). Mix well, subsample, and refrigerate in airtight plastic bags.

4. Fermented silage should also be tested, occasionally, as it is fed out. Take several grab samples, composite, and refrigerate in an

airtight plastic bag.

• *Silage Horizontal Silos:* 1. Rake the entire surface that is currently being used.

2. Take several grab samples from the raked material. (Enough samples should be taken to get a complete representation).

3. Mix thoroughly and subsample. Seal in airtight plastic bag and refrigerate.

4. In a horizontal silo, determine drymatter biweekly as the moisture content can fluctuate by 5-7 percent.

• *Hay:* 1. Obtain core samples or pull a handful from center of bale.

2. Sample many bales, to obtain a good cross section.

3. Accurately identify sample as either legume, grass, or mixed hay.

4. Take samples that represent different fields, cuttings, etc.

5. Samples can be taken both when hay is put in and when it is taken out of storage.

• *TMR (Total Mixed Rations):* 1. TMRs should be sampled once each month.

2. Obtain fresh samples from several feedings.

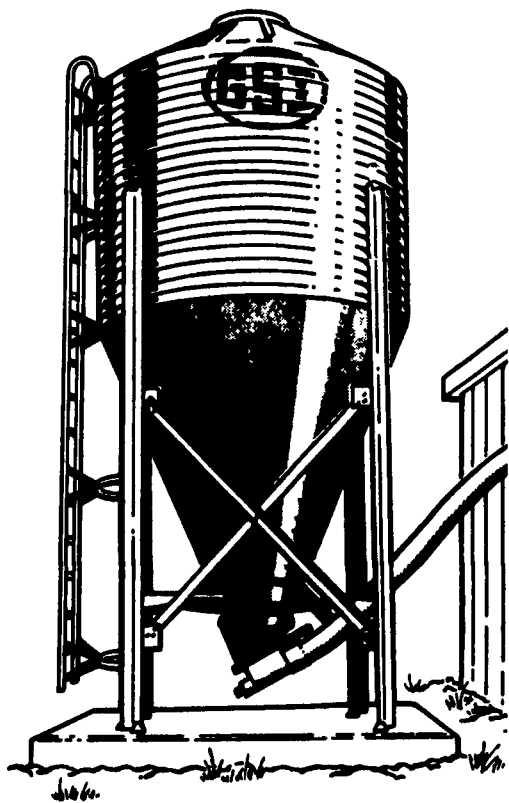
3. Composite and mix well, place sample in airtight bag, and refrigerate.

4. TMR testing can show errors that may occur during mixing.

How often should forages be tested? To keep rations well balanced, sample and test whenever a change in forages occur. Test a minimum of four times per year. Sample and test haylage more often to check for heat-damaged protein. Test forages anytime a nutritional problem arises.



FEED BINS

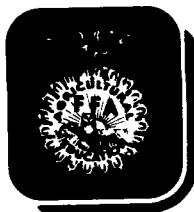


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