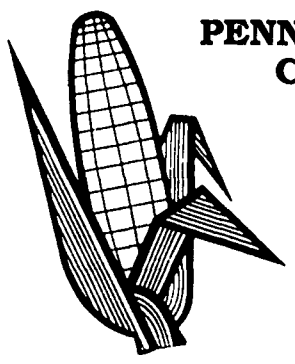
CORN TALK NEWS
PENNSYLVANIA MASTER CORN GROWERS ASSOC., INC.



PENNSYLVANIA MASTER CORN GROWERS ASSOCIATION

Between The Rows

Dr. Greg Roth
Penn State Agronomy
Assistant Professor

ARE WE SUSTAINABLE?

Recently I was asked to make a presentation on the sustainability issues facing corn growers in Pennsylvania. Given the concern over sustainability these days, it's something many of us should be prepared to address, but as I found, it's a rather complicated subject to deal with.

First you need to define sustainability and that alone is not an easy task. Several of us who have discussed this at length recently came up with some guidelines for "sustainbility" that we feel comfortable with.

To be sustainable, a cropping system should be: 1) economically viable, 2) have little impact on the environment, 3) minimize its dependence on non-renewable resources, such as energy, 4) be socially acceptable to the rest of the population, and 5) minimize its dependence on external or off-farm inputs.

Personally, I can go along with all but the last one since I have a difficult time understanding why we shouldn't import products that can be produced more efficiently somewhere else.

Let's briefly examine each of these issues and some of the sustainability considerations we need to consider about corn production in Pennsylvania.

Is corn production economically viable here in the long run? That depends to a large degree on the individual situation, but if we look at the big picture we'll see that corn acreage is down in Pennsylvania by about 400,000 acres in the last 10 years. This means a fair amount of growers have elected not to grow as much corn or to participate in government set-aside programs.

Much of our economic competitiveness in the future will depend on our ability to compete with Midwest corn producers. Several issues appear to be important: 1) Can we compete given the soils and field size considerations we have to work with? 2) Can we produce the consistent quality of corn desired by industry? 3) Will low transportation costs continue to make it easy to import corn into the state? and 4) Can we continue to maintain the access to and afford the technology as we have had in the past?

I think we can be competitive in the future since our livestock industry is growing. Transportation costs may increase in the future and many of the less productive corn acres have been taken out of production. We will have to be committed to maintaining our production efficiency, however, to take advantage of these trends.

How is corn production impacting on the environment? I maintain there are probably five main environmental areas we need to be concerned about and that we are making good progress in each area. These include soil erosion, nitrate leaching, phosphorous buildup in soils, pesticide leaching and runoff, and effects on birds and wildlife.

The growth of conservation tillage and the new conservation tillage equipment innovations will help to address the soil erosion problem. We hope that new innovations such as the nitrogen soil test and nutrient management planning can help reduce some of the excesses of the past and reduce the nitrate leaching problem.

Pesticide leaching and runoff should also be declining with new low rate products, reduced dependence on atrazine, the new atrazine regulations, and the decline in the use of some insecticides. Wildlife problems should also be on the decline as some of the more toxic products have been phased out.

If anything, recently it seems as if wildlife is getting the upper hand in many situations and negatively affecting the corn. Phosphorous (P) buildup in soils is the one problem that will be difficult to solve, but it results mostly from importing more P on to the farm than we're taking off and is not necessarily a result of corn production. If anything, good corn yields should help to reduce this problem.

In assessing the sustainability on an individual situation, we should consider all of these factors. The best answer is often difficult to arrive at. For example, is it better to no-till and use more pesticides than it is to plow, disk and harrow and use more energy and increase the potential for soil erosion and nutrient runoff? The best answer probably depends upon field specific conditions such as slope, leaching potential, and the mobility of the pesticides. I think that with careful decision making, some growers can approach the level where their impact on the environment is minimal.

How dependent are we on nonrenewable resources such as energy? Corn production consumes a substantial amount of energy, but unlike some industries, it produces about three times as much energy in the product as is used. So, on the balance, we are an energy producing industry.

Can we be more energy efficient? I think so, but as in many industries, this often comes down to economic decisions. Questions regarding input decisions such as hybrid maturities, dryer modifications, N fertilizer rates, and storage systems all revolve around the cost of energy.

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