

Fall Fertilization Can Move You Up the Profit Curve

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WHERE ARE YOU on the profit curve? Couldn't you be doing better? Most can. Very few farmers are managing at a level that gives them the opportunity to optimize returns on purchased inputs and utilize soil and water resources most efficiently. There's nearly always room for improvement...and one way is to apply a part of next year's fertilizer requirements this fall.

Moving Up the Profit Curve – With Better Management

We often talk about high yields and their effect on profits. What builds high yields? Superior management, that's what. And profits improve as management gets better, as illustrated in **Figure 1**.

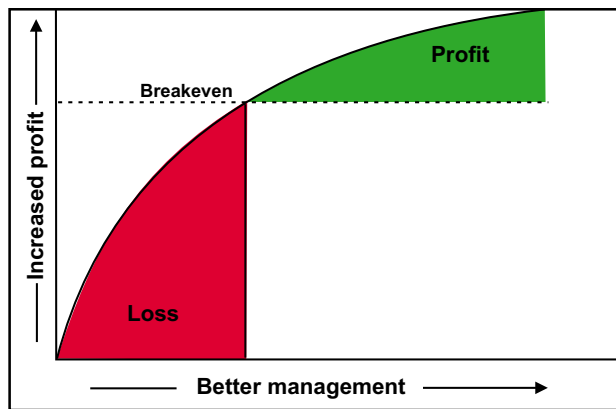


Figure 1. Increased profit and better management go hand-in-hand.

Why Fall Fertilization?

Why not fall fertilization? By getting phosphorus (P), potassium (K), and aglime applied this fall, you give yourself more time to perform other essential tasks as planting season approaches. You eliminate the danger of NOT getting soil fertility requirements in the ground to support the season-long, nutritional demands of the 2002 crop. Look at the demand a high yielding corn crop puts on the soil (**Figure 2**).

What happens if the soil can't supply the nutrients the crop needs? You know the answer to that. Yield potential drops, and profits are lost. And, that's in a perfect growing season, without the effects of cold, wet springs or hot, dry summers. Optimum soil fertility can't make up for all the losses weather-stresses can inflict on a crop, but it can sure help.

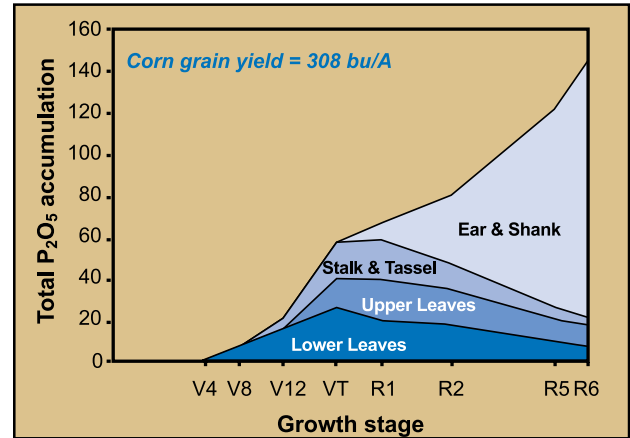


Figure 2. Uptake of P by high yielding corn throughout the growing season.

Fall fertilization helps to maintain the soil fertility levels that will take the crop from planting to harvest, sometimes with dramatic results, as shown by 1999 Ohio research results. **Figure 3** shows how P and K fertility contributed to good corn yields, even during a period of extreme drought. This long-term study (more than 20 years) has proven time and again that high P and K fertility supports top yields, in good and bad weather years. Fall fertilization helps to get that fertility in place in a timely fashion.

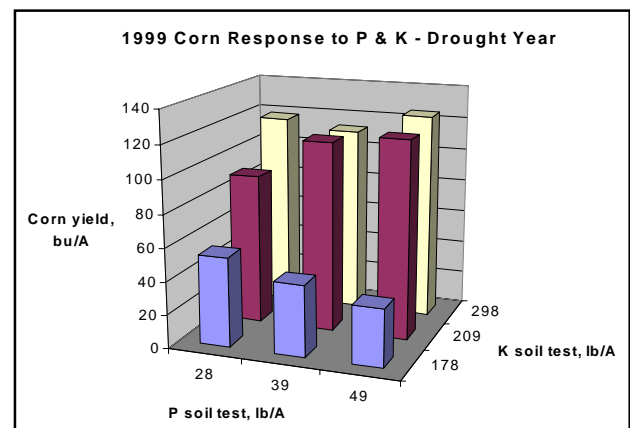


Figure 3. Corn response to different soil test levels in a corn-soybean rotation. Soil tests were taken after the 1998 soybean harvest. Source: Dr. Jay Johnson, Ohio State University, 1999.

Dr. Jay Johnson, Ohio State University scientist who conducted the research noted above says, "We encourage fall fertilization of P and K when it can be applied prior to primary tillage. In conven-

tional and reduced tillage systems, the advantage of fall application is that it places those nutrients deeper and throughout the soil profile and minimizes any salt effect. Even in true no-till systems, P and K can be fall-applied when there is sufficient crop residue to prevent water...and nutrient...movement across the soil surface.”

Fall Fertilization Offers Many Advantages

You should look at fall as the beginning of production of next year’s crop. You can use fall to plan, but it is also an ideal time to apply P, K, and aglime for spring-planted crops. There are many advantages to fall fertilization.

- Fall is an ideal time to soil sample.
- Fall fertilization saves valuable time next spring.
- Fall fertilization spreads farmer and fertilizer supplier workloads over more months.
- Fall fertilization assures that P and K will be applied where they are needed.
- Fall fertilization reduces the chance of rutting and compacting wet soils.

- Fall fertilization gives P and K more time to move into the soil and aglime more time to react to support early, vigorous growth next spring.

Fall Fertilization Is Environmentally Friendly

When fertilizer is applied in the fall, there is less chance that intense rainfall will occur soon after application, when nutrient runoff is greatest. This is particularly true on conservation tilled areas where significant amounts of residue remain on the soil surface to protect against soil loss.

Phosphorus can be safely applied to most soils if it is incorporated. However, on sloping soils, where there is inadequate ground cover and where erosion is a problem, it is best to apply P near planting time. Potassium should not be applied in the fall on sandy soils with low cation exchange capacities (CECs).

Fall Fertilization Is Economically Sound

Time is money, and fall fertilization beats the odds on delays next spring. It is an important part of intensive, high yield crop production...a system that helps move you up the profit curve. ■

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