

Meadowlark District Extension News
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David G. Hallauer, District Extension Agent, Crops & Soils/Horticulture

Starter Fertilizer on Soybean?

Is there any value to starter fertilizer on soybeans? They do remove significant nutrient levels – eight tenths of a pound of Phosphorous (P) and 1.4 pounds of Potassium (K) per bushel. With that in mind, they can indeed respond to starter fertilizer, particularly in the case of low Phosphorous levels.

K-State guidelines for soybeans include taking a soil test for phosphorus (P), potassium (K), sulfur (S), zinc (Zn), and boron (B). If fertilizer is recommended by soil test results, then fertilizer should either be applied directly to the soybeans or indirectly by increasing fertilizer rates to another crop in the rotation by the amount needed for the soybeans.

The most consistent response to starter fertilizer with soybeans would be on soils very deficient in one of the nutrients listed above, or in very high-yield-potential situations where soils have low or medium fertility levels. Furthermore, starter fertilizer in soybeans can be a good way to complement nutrients that may have been removed by high-yielding crops in the rotation, such as corn and help maintain optimum soil test levels.

Banding fertilizer to the side and below the seed at planting is an efficient application method for soybeans. This method is especially useful in reduced-till or no-till soybeans because P and K have only limited mobility into the soil from surface broadcast applications.

However, with narrow row soybeans, it may not be possible to install fertilizer units for deep banding. In that situation, producers can surface-apply the fertilizer. Fertilizer should not be placed in-furrow in direct seed contact with soybeans because the seed is very sensitive to salt injury.

What about nitrogen? Soybean seldom responds to nitrogen (N) in the starter fertilizer. However, some research under irrigated, high-yield environments suggests a potential benefit of small amounts of N in starter fertilizer.

Iris Leaf Spot

Iris leaf spot is a fungal disease that attacks the leaves and occasionally the flower stalks and buds of iris. Look for small (1/8 to 1/4 inch diameter) spots to appear on the leaves. The borders of these spots are a reddish color and surrounding tissue first appears water-soaked and then yellows with time. Spots enlarge after flowering and may coalesce.

The disease tends to be worse in wet weather and may kill individual leaves. Though the disease will not kill the plant directly, repeated attacks can so reduce plant vigor that the iris may die. Spores are passed to nearby plants by wind or splashing water.

Removal and destruction of dead leaves will help control the disease. Spray with a product containing the active ingredient chlorothalonil (and labelled for iris leaf spot!) starting when leaves appear in the spring. Sprays need to be repeated every seven to 10 days for four to six sprays. Since iris leaves are waxy, be sure to include a spreader-sticker in your spray to insure good coverage.