

Soybean Production 2012 – Reducing Risk

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There are many production practices that reduce risk, but most come with a cost. Identify production practices that have been problems and take steps to reduce their risk. Use practices that have been proven to reduce risk. The costs of these practices often result in profitable dividends.

Variety selection – The single most important decision is variety selection. Spend the time to find proven varieties that have done well throughout your area and state. University Variety Trials are a great place to start. While one maturity group or variety may make production easy, select a few varieties from a couple of maturity groups best suited to your area. Environmental conditions have a major impact on yield. Growth stages spread over several weeks may capitalize on favorable weather instead of one bad weather event affecting the entire crop. Liberty-Link soybeans are an option to consider now that University yield data is available.

Fertility – Soil Test! Use recommended rates from reliable soils labs. Soil pH and availability of nutrients are the keys to healthy plants and high yields. Inoculate if there are any Bradyrhizobium japonicum bacterium concerns. Bradyrhizobium japonicum bacteria fix nitrogen from the atmosphere for use by the soybean plant. Low pH, sandy soils, flooded soil conditions, or no soybeans planted in the last three to five years would be a few of the reasons to inoculate. Soybeans require approximately four pounds of nitrogen per one bushel. Inoculation is very important! There are also many different inoculants on the market – they are not all the same.

Seedbed Preparation – Use a burn-down herbicide four to six weeks prior to planting. Even if you plan to use conventional tillage, a clean seedbed will allow planting when weather is favorable. Stale seedbed preparation is another tool that facilitates early planting. When seedbeds are prepared in the fall, planting can begin after a timely burn-down application. With a narrow planting window, this may allow for planting at the optimum time. Resistant weed problems and early season insect pests can also be reduced.

Weed Control – Use a pre-emergence herbicide. Early weed competition robs yield. While glyphosate has been the mainstay of weed control in recent years, resistant weeds and timely applications present problems. Liberty-Link soybeans are an option to consider. Pre-emergence herbicides give you time to plant your crop before weeds escape. Rotation is another practice that should be included in your farm plan. Rotation between a grass crop and soybeans goes a long way in reducing weed problems.

Insect and Disease control – Timing! Due to numerous insects and diseases that attack soybeans, proper timing of insecticides and fungicides is a must. Scout fields weekly and treat when thresholds are reached. After treating, check results and retreat as needed. Soybean seed quality at harvest is a result of proper timing of insecticides and fungicides. Insects and diseases can reduce photosynthate production, cause pod abortion, and/or plant death. While environmental conditions at harvest affect quality, insect feeding on pods can compromise the integrity of the pods providing sites for disease and moisture to attack the developing seed.

Harvest Aids – Harvest aids can reduce foreign matter and increase harvest efficiency. Weed problems may result in shattering losses and further delays due to wet weather. Weeds could also be more serious in following years because of the extra time weed seeds have to reach maturity. Harvest aids reduce these problems and may also aid in the desiccation of soybeans. Mature pods on soybean plants with green leaves and green stems are a major problem in soybeans grown in the South. Proper timing of harvest aids is essential. Research has shown harvest aids could be applied to determinate and indeterminate varieties when all seeds separate easily from the pod membrane in the top four nodes. Applying harvest aids earlier resulted in reduced yields. Check all areas of the field. Use recommended rates when applying harvest aids.

Marketing Plan – Good record keeping produces sound marketing plans. If you don't feel comfortable marketing your soybean crop look for help. There are experts in designing marketing strategies. Δ

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