

Do We Need Soybean “Supplements”?

URBANA, ILL.

Soybean planting lags as many growers finish planting corn throughout the state, said Emerson Nafziger, University of Illinois Extension agronomist. But good progress is expected in many areas. Though the penalty for planting late was unusually large in 2010, most past research indicates that yield losses from planting in late May tend to be relatively modest.

With the lag in planting time suggesting more stress to come, and with commercial interest running high, there is a growing tendency to treat soybean seed with fungicides, insecticides and inoculants, as well as other materials to increase growth or help protect the crop from stress.

Nafziger doesn't have a problem with this, but said that it's often not a decision that is based on clear research findings.

“It makes some sense to apply inoculant if soybeans are going into a field for the first time on more than 5 years, or for the first time ever,” he said. “But we've typically been unable to find a response to using bacterial inoculant routinely in fields that were in soybean two or three years earlier.”

One of the problems is that such effects, if any, are typically so small that “proving” the material produced an effect is almost impossi-

ble, Nafziger added.

“Some researchers and companies have abandoned the normal standard of statistical proof, simply noting that since it takes only a fraction of a bushel in added yield to pay for such inputs, it makes sense to use them even if they do little or nothing much of the time,” he said. “Such an approach applies to other inputs, such as micronutrients and growth regulators, for which we've never really seen a clear deficiency.”

Nafziger said this becomes a decision based somewhat on emotion, since growers may never see a response even if there is one. For some, the satisfaction of having done their best to provide for the crop is worth it.

“With high soybean prices and so many ‘small-or-no-response’ products available, one does need to be somewhat concerned about total costs and, perhaps, about possible negative interactions among such inputs,” he said. “We can compare these to nutritional supplements that some people take, many of which are not taken in response to a deficiency. These may or may not have an effect by themselves, but their interactions could be problematic. We need to be careful when we load a crop with inputs, especially those that do not have a definable effect on the crop.” Δ