Disease-rating confusion

By TOM J. BECHMAN

SUDDEN death syndrome and soybean cyst nematode vie for the dubious distinction of public enemy No. 1 in soybeans. The two aren’t related, notes Brian McBlain, Stewart Seeds, Greensburg, Ind. One can set up the crop for damage by the other. If nematodes and SDS are in the same field, SDS may be more severe.

Since there is no known complete resistance, rating systems come into play especially for SDS. That’s why you need to pay careful attention and ask questions.

“Tolerance is different than resistance,” says Darrell Daniels, CCA with Rosen’s, Fishers, Ind. “With complete resistance, there is no rating. For example if an insect is resistant to a specific class of insecticide, then the insect will not be killed at any rate of that insecticide.”

Tolerance implies different levels of susceptibility or ability to survive. Hence there are rating systems for tolerance. “There is simply no standard rating system for tolerance that I am aware of,” Daniels concludes.

My best advice is to sort very carefully when comparing soybean varieties from different companies,” says Melissa Lehman, a certified crop adviser and agronomist with Agronomic Solutions LLC, Topeka, Ind.

Lehman used seed guides from 2006 to compare how companies rate varieties for SDS. “I found companies using three different scales,” she says. “Asgrow, Dekalb and Golden Harvest used a 1 to 9 scale, where 1 was excellent tolerance. Garst, LG Seeds and

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TOUGH DISEASE: This variety won’t rate strong for SDS tolerance. The exact rating depends on the scale used by the company selling the variety.

Pioneer also used a 1 to 9 scale, but 9 was excellent and 1 was very poor. “McKillop Seeds, Wabash, Ind., used a 1 to 5 scale where 1 was excellent. There’s no logic to this madness.”

SDS variable factor

To make matters worse, varieties rated as excellent by whatever scale may still fall apart under extreme pressure. “We’ve seen that happen in a few fields, and we went back to the drawing board,” McBlain explains.

In fact McBlain’s company rented space on a farm in 2006 to compare dozens of SDS varieties after some of the best-rated seed stock anywhere didn’t hold in ’05. As they walked the plots in late summer, variability was the key word.

Tiny differences in micro-climate impact symptoms, McBlain acknowledges. “Even with plots only 15 to 20 feet long, plants on one end can look healthy, while those on the other show symptoms,” he says. “Severity changes quickly from spot to spot.”

To top it off, sometimes there is yield loss even with no aboveground symptoms, McBlain says. Losses up to 8 bushels per acre are possible without aboveground symptoms.

Best advice

One option is to look for an independent source rating varieties for SDS, notes Jeff Nagel, CCA and agronomist with Westland Co-op, Lafayette, Ind. He uses a Web site closely tied to Southern Illinois University. Visit www.ripsoybeans.org. “It’s the Varietal Information Program for Soybeans, and it contains a link to SU screening,” he notes.

Realize, however, that even SIU ratings are an indicator, not a guarantee, McBlain says.

Tolerance vs. resistance

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