

HOW PEST SCOUTING CAN INCREASE SOYBEAN YIELDS

The Ohio Soybean Council (OSC) funds a variety of research each year to increase the profitability of Ohio's soybean producers.

At this point in the growing season, it is important to manage soybean fields for fungal diseases, weeds and pests.

OSC has partnered with the Ohio State University's Ohio Agriculture Research and Development Center (OARDC) to bring you the most up-to-date research and to provide timely information applicable to the 2016 growing season.

The following recommendations were made by OSU researchers based on their assessments of the current season.

DISEASE MANAGEMENT

Dr. Anne Dorrance, research-extension soybean pathologist in the department of plant pathology at the OARDC, encourages farmers to determine if foliar fungicides are needed on their crop around mid-summer.

According to Dorrance, frogeye leaf spot is easy to identify in the field. Plants with one to three lesions should be treated with an effective fungicide unless the weather forecast calls for dry conditions ahead.

"In 2015 at Western, we had this level of disease on a highly susceptible variety at the R2 or full flower growth stage, which was then followed by a solid three weeks of no rain and little dew," said Dorrance. "There was no benefit to the fungicides."

Dorrance cautions farmers that during dry conditions, fungicide applications may intensify mite infestations and remove natural enemies like fungi, which help assist in keeping this pest in order.

WEED MANAGEMENT

Dr. Mark Loux, professor in applied research-extension in the area of weed management in field crops, recommends soybean producers spend a little extra time scouting fields during these late summer months.

Late summer is when soybean fields are susceptible to the presence of Palmer amaranth. The end goal would be to find and remove plants before they can produce a viable seed.

According to Loux, this can be accomplished in multiple ways, including driving along fields using binoculars, riding an ATV around the field, or even searching for weeds with a drone.

“Ideally, any Palmer amaranth found without viable seed are cut off just below the soil line, removed from the field and burned,” said Loux. “Seeds that are black and hard are probably viable and in this case, the seed heads can be cut off and bagged gently, and then removed from the field.”

Loux reminds producers that during harvest, stop or go around patches of Palmer amaranth until a positive identification can be made. Harvesting through a patch of Palmer amaranth further disperses seeds within the field and contaminates the combine with possible movement of seed into other fields.

PEST MANAGEMENT

Bean leaf beetles are a threat that Dr. Kelley Tilmon sees as being an issue during the late summer part of the 2016 growing season.

Tilmon is an associate professor in the department of entomology and provides research in the area of ecology and management of insect pests of agronomic crops.

According to Tilmon, August is a month that soybean producers should be prepared for soybean aphids, bean leaf beetles and spider mites.

“Later summer bean leaf beetles cause more problems from pod feeding than from defoliation,” said Tilmon. “Treatment is justified if 10 to 15 percent of pods are damaged and bean leaf beetle adults are still active in the field.”

Soybean aphids could cause a large amount of yield losses if not controlled early on. After the R5 growth stage, treating for aphids is rarely profitable.

“Soybean aphids start causing measurable yield losses at around 500 aphids per plant, and a decision threshold of 250 aphids/plant allows time to treat before economic loss occurs,” added Tilmon.