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## **Harvest Weed Management**

KSU Extension Weed Science Specialist Dr. Sarah Lancaster wrote a KSU Agronomy eUpdate article this week on fall scouting for weeds and equipment cleaning (read in its entirety at: <a href="https://eupdate.agronomy.ksu.edu/article\_new/weed-management-practices-fall-scouting-and-equipment-cleaning-561-5">https://eupdate.agronomy.ksu.edu/article\_new/weed-management-practices-fall-scouting-and-equipment-cleaning-561-5</a>). In it, she shares this about waterhemp species: "research conducted in Georgia showed that one female plant in five acres added about two million seeds per acre to the soil. Those seeds can have impacts for many years. It took six years of total Palmer amaranth control to deplete the seedbank by 98% in Texas". That's a lot of weed seeds – and a long time to clean them up.

As you read the article (it provides some excellent tips on preventing the spread of weeds...), you might ask: why would I plan harvest around my weediest fields last or clean the combine out so often? Some University of Wisconsin research helps with the answer.

Their 2019 analysis required collection of material from four different areas of the combine: header, feeder house, rock trap, and rotor area. Sample seeds from the collections (31) were grown out and counted. The highlights?

Viable weed seed was found in 97 percent of the samples. In short, weed seeds *are* getting through your combine.

Header samples contributed to 49 percent of the weed seeds emerged. The feeder house contributed another 30 percent.

If we have weeds at harvest, they *are* going to get through the machine and *will* likely remain viable for future growth. Not only can this be a problem on the farm on which we saw the weed escapes, but in your other fields – and those of your neighbors (transport can dislodge seed as well) – too. The result is often the spread of weed seeds to previously clean fields as well as increases in the potential for herbicide resistance issues.

Trying to prevent the spread of weed seeds? Check out Dr. Lancaster's article at the link above. The Wisconsin study results can be found on our Meadowlark Extension District Crops & Soils page under news columns: https://www.meadowlark.k-state.edu/crops-soils/index.html