August 14, 2017 FOR IMMEDIATE RELEASE David Dugan OSU Extension Educator, Agriculture and Natural Resources Adams/Brown/Highland Counties Ohio Valley Extension Education Research Area

## **MASTER Gardener Training in Clermont Co.**

If you are interested in becoming a master gardener the next opportunity is coming up soon. The class will begin in October in Owensville in Clermont Co. Registration deadlines are coming soon. For more details contact the Clermont Co. Extension Office at 513-732-7070. I will have more on this next week.

## Late-Season Scouting for Palmer Amaranth

This information showed up in a very timely manner for us locally. Palmer Amaranth has been found in Highland County in a pretty heavy population in a few fields. In the coming weeks there will be an educational meeting involving Dr. Mark Loux who wrote the information below for the CORN newsletter. Watch for location and date. The tentative date will be the week after the Highland County Fair on the Tuesday or Wednesday. The meeting will cover issues for the coming years and best strategies for herbicide programs to prevent the problem from getting worse.

Palmer amaranth has shown up in a few more places in Ohio this summer at a range of infestation levels, and waterhemp has also become more prevalent. Newly discovered Palmer infestations in some fields were too high to be remediated by walking fields and removing plants, although there is still some potential to mow down weeds and soybeans to prevent seed production and even bigger problems next year. Infestation level in a few other fields was low enough to allow removal of Palmer amaranth plants by a crew of concerned people. Credit is especially given to the entire staff of one dealership in western Ohio who took the time to walk an 80-acre infested field for one of their customers. Palmer was found in several other fields in that area at low levels, and the source appeared to be manure from a dairy operation that had brought in hay from Kansas. It was reassuring to see an immediate coming together of growers and dairy operators and ag business to determine how to deal with the developing Palmer problems, without trying to place blame. The attitude of at least one person organizing the meeting was "we need to have a zero tolerance for Palmer amaranth", and we could not agree more. Remediation will require use of aggressive herbicide programs in infested fields along with continued frequent observation and removal of plants by hand. Essentially all of the Palmer amaranth that we have screened for resistance has been resistant to both glyphosate and ALS inhibitors (site 2), but we have not vet found resistance to PPO inhibitors (site 14). Resistance characteristics of waterhemp populations are more variable. They are all resistant to ALS inhibitors. Resistance to glyphosate is now fairly common in the western half of the state, and PPO resistance is getting a foothold as well. Waterhemp populations in eastern Ohio are more likely to be still sensitive to both glyphosate and PPO inhibitors.



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COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information: go.osu.edu/cfaesdiversity. Neither one of these weeds is a picnic to deal with, and both can cause substantial increases in the cost of herbicide programs. The trend across the country is for them to develop resistance to any new herbicide sites of action that are used in POST treatments. So preventing new infestations of them should be of high priority for Ohio growers. When not adequately controlled, Palmer amaranth can take over a field faster than any other annual weed we deal with. Taking the time to remove any Palmer and waterhemp plants from fields now will go a long way toward maintaining the profitability of farm operations. There is information on Palmer amaranth and waterhemp identification on most university websites, including ours – u.osu.edu/osuweeds/ (go to "weeds" and then "Palmer amaranth"). An excellent brief video on identification can be found there, along with a fact sheet. The dead giveaway for Palmer amaranth as we move into late summer is the long seedhead, and those on female seed-bearing plants are extremely rough to the touch. We recommend the following as we progress from now through crop harvest:

- Take some time now into late summer to scout fields, even if it's from the road or field edge with a pair of binoculars. This would be a good time to have a friend with a drone that provides real-time video, or your own personal satellite. Scouting from the road is applicable mostly to soybean fields, since corn will often hide weed infestations.

- Walk into the field to check out any weeds that could be Palmer amaranth, waterhemp, or are otherwise mysterious. If you need help with identification, send photos to us or pull plants and take them to someone who can identify them.

Where the presence of Palmer amaranth or waterhemp is confirmed, check to see whether plants have mature seed (the Palmer plants with the rough seedheads), by shaking/crushing parts of the seedhead into your hand or other surface that will provide contrast. Mature seed will be small and very dark.
Plants without mature seed should be cut off just below the soil surface, and ideally removed from the field and burned or composted. Plants with mature seed should be cut off and bagged and removed from the field, or removed via any other method that prevents seed dispersal through the field.
If the Palmer amaranth or waterhemp population is too dense to remove from the field, some decisions need to be made about whether or how to mow or harvest. Harvesting through patches or infested fields will result in further spread throughout the field and also contamination of the combine with weed seed that can then be dispersed in other fields. So consider: 1) not harvesting areas of the field infested with Palmer amaranth or waterhemp, and instead mowing several times to prevent seed production, and 2) harvesting the infested field(s) after all other fields have been harvested, and cleaning the combine thoroughly before further use. This also applies to any infestations that are discovered while harvesting.

- Scout field borders and adjacent roadsides, and also CREP/wildlife area seedings, which can be infested due to contaminated seed produced in states where Palmer amaranth is endemic and not considered noxious. Reminder - ODA will test any seed used for these purposes for the presence of Palmer amaranth.

- Feel free to contact OSU weed science for help with identification or management of Palmer amaranth. Mark Loux – 614-292-9081, loux.1@osu.edu.

## **Dates to Remember**

| Aug. 24  | Beef and Forage Field Night at OARDC Research Farm in Jackson.  |
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| Aug. 24  | Blueberry, Bramble and Wine Grape Field Night at OSU South Centers.   |
| Sept. 14 | Fertilizer Certification opportunity at North Adams High School starting at 5:30 p.m. in the Round Room. Call to pre-register at least one week prior at the Adams Co. OSU Extension office, 937-544-2339 and ask for Barbie. |