



Weed of The Week

Palmer Amaranth (*Amaranthus palmeri*.)

This week's weed of the week features an aggressive fast-growing weed that is native to North America. Palmer Amaranth is native to the southwest regions of the United States and eventually spread to the southeastern region of the United States and continues to march northward taking hold of crop fields as it moves. Movement of this weed has been thought to be in feed such as cotton seed hauls, forage and conservation seed mixtures, and farm equipment. Palmer Amaranth is very adaptable to many different soil types and environments. Even in Northern states where temperatures are lower doesn't seem to effect Palmer's ability to grow and reproduce. It is easy to misidentify Palmer Amaranth with other amaranth species such as red root pigweed, smooth pigweed, and Waterhemp. Palmer Amaranth has no hair present on any plant structure and the leaf is wider and ovate in shape compared to Common Waterhemp. Palmer Amaranth leaves are attached to a petiole that is long as or longer than the leaf. Bending the petiole back against the leaf and comparing the length of the petiole to the leaf is a good practice to differentiate between Palmer and Common Waterhemp. The petiole of Palmer Amaranth will be as long or longer than the leaf while common Waterhemp will have a much shorter petiole. Palmer Amaranth has an apical meristem growth pattern, this is very similar to a rosette pattern of growth, allowing the plant to capture more sunlight and compete against other plant species. Another key identifier of Palmer Amaranth is the presence of a white Chevron or v shaped watermark on the surface of the leaf. Reproduction of this plant will take place in late summer and since Palmer Amaranth is dioecious meaning there are male and female plants there will be two different type of seed head produced. Female seed heads will be long and slender, reaching lengths of 3 ft or longer. Female flower structure will have stiff and sharp bracts. One Palmer amaranth plant can produce up to 500,000 seeds making very important to control and not allow to go to seed. Some control options can be hand pulling plants and then composting or burning. Deep tillage can bury the seed deep, preventing seed germination, using cover crops such as cereal rye has shown good results in controlling this weed. Herbicides should be used properly due to the many cases of herbicide resistance that Palmer Amaranth shows. Enlist, sharpen, 2-4-D mixed with glyphosate or glufosinate has shown good results for burndown control. Remember to always read and follow the label.

