



For Immediate Release

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Weed Scientists Offer New Definition for “Superweed”

LAWRENCE, KANSAS – APRIL 28, 2015 –Today the Weed Science Society of America (WSSA) joined with six sister organizations to recommend a new definition for superweed – a catchall term used by many to describe weeds that are perceived to be more invasive and to grow more aggressively after developing resistance to herbicides.

Use of superweed has snowballed in recent years, along with considerable misinformation that isn’t supported by scientific facts. Most online dictionaries, for example, associate superweeds with herbicide resistance caused by the suspected transfer of resistance genes from crops to weeds. To date, there is no scientific evidence to indicate that crop to weed gene transfer is contributing to the herbicide resistance issues faced by farmers.

“Since superweed is now clearly part of the public vernacular, we decided to offer a definition that more clearly reflects the true source of herbicide resistance,” says Lee Van Wychen, Ph.D., WSSA science policy director.

The science-based definition developed by WSSA focuses on the ability of weeds to develop resistance to virtually any treatment method that is used repeatedly – and exclusively.

Superweed: Slang used to describe a weed that has evolved characteristics that make it more difficult to manage due to repeated use of the same management tactic. Over-dependence on a single tactic as opposed to using diverse approaches can lead to such adaptations.

The most common use of the slang refers to a weed that has become resistant to one or more herbicide mechanisms of action (www.weedscience.org) due to their repeated use in the absence of more diverse control measures. Dependence on a single mechanical, biological, or cultural management tactic has led to similar adaptations (e.g. hand-weeded barnyardgrass

mimicking rice morphology, dandelion seed production in a regularly mowed lawn, knapweed resiliency to gall fly biocontrol).

Two common misconceptions about a superweed are that they are the result of gene transfer from genetically altered crops and that they have superior competitive characteristics. Both of these myths have been addressed by the Weed Science Society of America (WSSA) at www.wssa.net/weed/wssa-fact-sheets. WSSA has also created a variety of free educational materials and recommendations concerning herbicide resistance and how to avoid it, available at www.wssa.net/weed/resistance.

Though the term superweed is most often associated with weeds resistant to one or more herbicides, scientists point out that resistance can result from overdependence on mechanical, biological or cultural management tactics as well. Repeated hand-weeding of barnyardgrass growing in rice fields, for example, has led to weeds that escape control by mimicking the appearance of rice plants. Similarly, spotted knapweed has become increasingly resilient to the gall flies used repeatedly as a biological control. Even dandelions growing in a regularly mowed lawn can evolve to avoid the mower, produce seeds and spread.

WSSA's new definition has been endorsed by the Aquatic Plant Management Society, Canadian Weed Science Society, North Central Weed Science Society, Northeastern Weed Science Society, Southern Weed Science Society and the Western Society of Weed Science.

About the Weed Science Society of America

The Weed Science Society of America, a nonprofit scientific society, was founded in 1956 to encourage and promote the development of knowledge concerning weeds and their impact on the environment. The Society promotes research, education and extension outreach activities related to weeds, provides science-based information to the public and policy makers, fosters awareness of weeds and their impact on managed and natural ecosystems, and promotes cooperation among weed science organizations across the nation and around the world. For more information, visit www.wssa.net.