

News Column

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Kochia, aka fireweed, tumbleweed

Kochia, also known as fireweed or tumbleweed, is native to Europe and Asia and was introduced from Europe as an ornamental in the mid- to late- 1800s. It is well adapted to the Great Plains. Kochia is related to common lambsquarters and Russian thistle and is similar to them in some ways.

Kochia has alternate, lance-shaped leaves with 3-5 prominent veins and hairs on the margins and lower surface. Small green flowers are formed at the base of leaves in late summer and early fall. Kochia is a round or pyramid-shaped plant with many branches that can grow up to 6 feet tall.

In Kansas, kochia generally emerges in March, but can emerge as early as late January. Kochia can produce more than 50,000 seeds per plant, which are spread when the matured plant breaks off at the soil surface and tumbles in the wind. Kochia seeds are viable in the soil seedbank for only 1 to 2 years.

Kochia can be grazed when it is young and is credited with helping ranchers survive droughts of the early 20th century. However, it can accumulate harmful levels of nitrates and has been linked to photosensitivity in livestock.

Management

If uncontrolled, kochia can reduce soybean yield by 30%, corn and sorghum yield by about 40%, and wheat yield by 58%. Kochia populations in Kansas have confirmed resistance to: chlorsulfuron (Group 2), dicamba and fluroxypyr (Group 4), atrazine (Group 5), and glyphosate (Group 9).

Resistance to key post-emergence herbicides coupled with early emergence makes herbicide timing critical for kochia management. Pre-emergence herbicides are highly recommended for more effective control of kochia vs. post emerge applications only. Even with an effective pre-emerge application a post application may have to follow on any of the remaining small kochia weeds. Pre-emerge applications should be applied in fall or **very early spring**. Products below are listed as examples. Always read and follow label directions.

Herbicide	Rate/acre	Group (s)	Crop	Timing
Fierce EZ	6 fl oz	14, 15	C, SB, F	PRE
Lumax EZ	2.7 qt	5, 15, 27	C, GS	PRE
Sencor	0.5 lbs	5	SB, W ¹ , F,	BD, PRE

Spartan	6 oz	14	SB	BD, PRE
StaraneNXT	27.4 fl oz	4, 6	C, GS, W	POST
Glyphosate (Several)	2 pts	9	C ² , SB ²	POST
Gramoxone SL	3 pts	22	F	BD
Laudis	3 fl oz	27	C	POST

C=corn, GS = grain sorghum, SB=soybean, W = wheat, F = fallow, BD = burndown

¹Tolerant varieties only; ²Resistant varieties only

For those wanting more information on weed control we will be offering an **“Integrated Weed Control Management of Herbicide Resistant Weeds”** program on **Wednesday, February 19th** at American Ag Credit, Great Bend. Registration will begin at 8:30 a.m. the program starts at 9 and concludes at 11:30 a.m. followed by a complimentary lunch. RSVP for the meal count by Monday, Feb. 17th by calling Cottonwood Extension District Office in Great Bend at 620-793-1910. Topics of discussion will be – the role of integrated weed management in combating difficult weeds, managing multiple herbicide-resistant palmer amaranth weeds in central KS., update on herbicides and herbicide tolerant traits for 2020, and as always there will be time for Q & A.