

Featured Pest: Kochia (*Kochia scoparia*)

Introduced from Eurasia Kochia is also known by a variety of names including summer cypress, mock cypress, Mexican fireweed, Mexican firebush, red belvedere and burningbush. An annual, Kochia is most common in the Prairies and the Okanagan Valley of British Columbia. It has become a common and economically important agricultural weed as well as a serious problem in right-of-ways, along rail tracks, access roads, yard sites and disturbed areas.



Figure 1. Mature Kochia along fenceline

Biology: Seedling cotyledons are pinkish on the underside. The leaves are green and elliptic to linear in shape covered with fine hairs. The tiny flowers grow in short clusters of 3 to 6 flowers, at the ends of the branches, arising from the leaf axils. Kochia is a tumble weed and a heavy seed producer and drops between 10,000 and 25,000 seeds per plant as it tumbles across the landscape.

Tips for control: The ability to germinate in cooler soils and grow rapidly means it often is not well controlled by herbicides when applications are delayed to await emergence of other weed species. Its ability to tolerate heat, drought, alkalinity and salinity allows it to compete aggressively with crops and other weeds even under tougher conditions. Kochia seeds are relatively short lived in the soil and populations can build up quickly if not controlled. Late summer and fall are the times and collect seed and have it analyzed for potential resistance if you have experienced control issues.

Effects on Crop and Forage Quality: While kochia can be used as livestock feed a number of its chemical constituents can be

toxic and cause problems in livestock when it is grazed or fed in too high a portion of the ration.

Weed Act Status: Kochia is considered a noxious weed in Manitoba, Saskatchewan and regionally noxious in the Peace River of British Columbia.



Figure 2 . Kochia Seedling

Herbicide Resistance: Herbicide resistance to Group 2 (ALS/AHAS) products is widespread and the past three years resistance to Group 9 (glyphosate) has been confirmed in all three Prairie Provinces. In other countries Kochia has also developed resistance to other herbicides including Group 4 Products such as Fluroxypyr or Dicamba and to Group 5 products such as Atrazine.

Herbicide Control Options: When selecting product it is important to condiser multiple modes of action on Kochia (MMOA) to improve control and reduce the risk of developing or spreading herbicide resistant biotypes. Products labelled for control or suppression (and group #) include Arsenal Powerline(2), Clearview(2,4), Escort(2), Esplanade (29), Navius VM(2,4), Overdrive(4), Sightline(2,4), Truvist(2,4), Telar XP(2), Vantage XRT(9).

Similar Weeds: Russian Thistle (*Salsola kali*): a tumbleweed which can be easily distinguished by stiff spines once mature and narrow leaves when immature.
Tumble Pigweed (*Amaranthus albus*): a bushy and branched tumbleweed has broad, short leaves but stems are hairless.

