

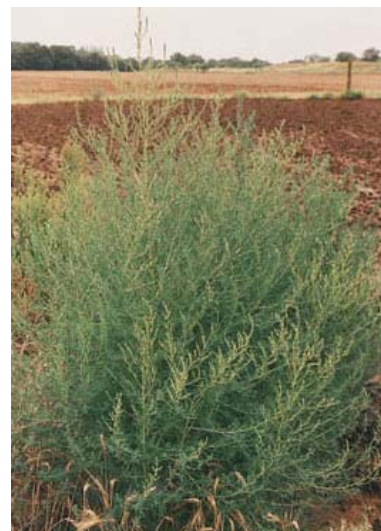


# Kochia *Kochia scoparia* (L.) Schrad.

**Common Names:** Mexican-fireweed, kochia, common kochia, burning bush, summer-cypress

**Native Origin:** Native to southern and eastern Russia, kochia was introduced to North America from Europe. It was grown as an ornamental hedge around gardens, or used as a backdrop planting because of its dense, conical shape and attractive red color in the late fall.

**Description:** Kochia (*Kochia scoparia*) is an annual plant in the Goosefoot family (Chenopodiaceae) with erect, much-branched stems that grow up to 7 feet tall. Plants growing on dry or infertile sites typically average 2 feet tall. The simple, alternate, linear to lanceolate leaves, 1 to 2 inches long, are pubescent beneath and glabrous above. Leaves are generally green, but change to yellow, red and brown as the plant ages and dies.



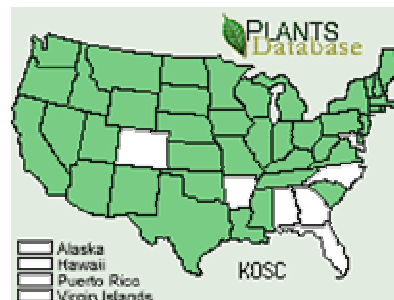
The small green flowers lack petals and are found in clusters in the axils of



the upper leaves and in terminal spikes. It reproduces from single brown flattened seeds that are about 1/16 inch long and contained in a star-shaped fruit. One plant can produce over 50,000 seeds per year under favorable conditions. It has a main taproot and a network of finer roots. Dead plants break off at the base and are blown by the wind as tumbleweeds that scatter seeds. Kochia and common ragweed look very similar from a distance, and the two sometimes occur together. Common ragweed is distinguished by its much dissected leaves.

**Habitat:** Kochia is highly adaptable. Because it is extremely efficient at using water, it can thrive in warm, low rainfall environments such as the cereal-growing regions. Plants have a wide tolerance of soil types and are often found on saline/alkaline soils. Plants grow on grasslands, pastures, prairies, roadsides, ditch banks, wastelands, floodplains, riparian habitats, and cultivated fields.

**Distribution:** This species is reported from states shaded on Plants Database map. It is frequently sold by seed companies. It has become naturalized in the Great Plains and the western states. It is also found in New England and the Midwest.



**Ecological Impacts:** Kochia is able to spread long distances very rapidly. It is a competitor for light, nutrients, and soil moisture, and can reduce crop yield. It can contaminate crops and suppress the growth of nearby plants by releasing chemicals into the soil. Additionally, kochia contains high levels of oxalates, alkaloids and nitrates that can be toxic to a variety of grazing animals if large amounts are consumed.



### Control and Management:

- **Manual-** Till seedlings early in spring. Mow or slash plants before flowering to reduce seed production.
- **Chemical-** Kochia can be effectively controlled with a variety of herbicides; but is not controlled by phenoxy herbicides. It has been documented to be resistant to two groups of herbicides, the sulfonyleureas and triazines, in the United States and Canada.

### References:

www.fs.fed.us/database/feis/plants/forb/kocscsco/all.html, www.plants.usda.gov, www.nwcb.wa.gov/weed\_info/Written\_findings/Kochia\_scoparia.html, www.deh.gov.au/biodiversity/invasive/publications, http://tncweeds.ucdavis.edu/esadocs/kochscop.html, www.noble.org/imagegallery/Forbhtml/Kochia.html