KOCHIA

Top to bottom: Mid-size kochia in May. Seedlings in March. Standing kochia in August.

Scientific name: Kochia scoparia

Identification

A warm-season annual plant that can grow between 1 and 6 feet tall with narrow, oval leaves. Kochia is sometimes mistaken for tumbleweed, but kochia's leaves are soft and hairy rather than spiky. Dead plants turn yellow or brown and can remain standing for several years.

Life cycle

As an opportunistic warm-season annual, kochia can germinate repeatedly throughout spring and summer and into fall in response to rain events.

The issue

Kochia is native to Asia. It does extremely well in the Moab area, carpeting floodplains and disturbed areas. While **kochia isn't as much of a fire risk as it appears** (as a moist plant, kochia smolders when ignited), it is still a nuisance. Plus, kochia often takes over landscapes following disturbance — for example, after the removal of large fire fuels — making it an important plant to address in the revegetation process.

Primary treatment

Much kochia in the Moab area has developed a tolerance to some herbicides. For this warm-season annual, mechanical removal generally works well. In the spring and throughout the warm season, young plants can be killed before seedset by digging or pulling.

Secondary treatment

Another effective treatment is mowing plants just as they set flowers, which can dramatically reduce seed production.

KOCHIA *Treatment*

1. For **young plants**: Pull or dig

Why we recommend it
This treatment method will remove young plants before they have a chance to flower or set seed.

Timing
Spring or anytime after plants have germinated but before they have flowered or set seed.

Materials
Tool such as grubber or hoe (optional).

Instructions

1. Using hands or a tool like a grubber or hoe, remove as many plants as possible.
2. Check for seedheads. If present, dispose of them in bags or secure containers

Considerations

- Irrigating areas a day before pulling helps loosen soil.
- Tilling or disking soil is also an option, though this prolongs soil disturbance (which aids kochia) so should be avoided if possible.

Top: In early spring, kochia germinates as tiny star-shaped plants. Bottom: Kochia is often easily hand-pulled.

2. For **flowering plants**: Mow or cut

Why we recommend it
Mowing or cutting kochia as it flowers greatly reduces seed formation. Using this treatment several years in a row has been shown to meaningfully reduce kochia infestations.

Timing
Late summer or fall when plants are releasing pollen (beware of allergies!). Mowing earlier in the season when plants are 1-2' tall can make fall mowing easier.

Materials
Mower, brush cutter, or weed whacker with brush-cutting blade.

Instructions

1. Mow or trim plants, cutting them as low as possible.
2. If there are no seedheads, material can be left on-site as mulch to help smother new seedlings.*

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**Kochia does not grow well in shade or in areas covered with 4" of mulch.*

FireBREAK