Mediterranean sage

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Mediterranean sage Identification and Management

Identification and Impacts

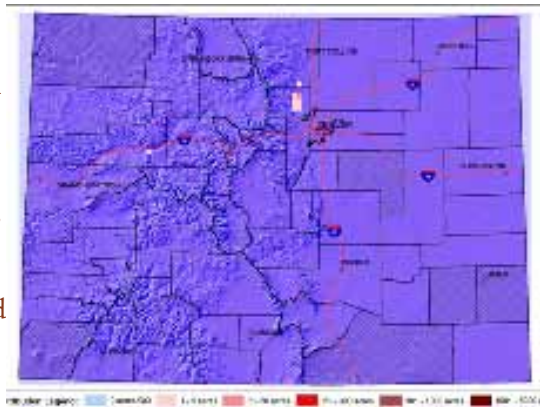
Mediterranean sage *(Salvia aethiopis)* is a biennial that is an erect, coarse biennial or short-lived perennial, with a stout taproot. First year rosettes are blue-green, and are covered with woolly white hairs. Second year plants produce more leaves with a flowering stem. Leaves have a pungent odor when crushed. The flower stem can grow 2 to 3 feet tall and branch 2 to 3 feet wide resembling a candalabra. The stem breaks off in the fall and forms a tumbleweed dispersing thousands of seeds. Mature plants can produce 100,000 seeds each. The flowers are white to yellowish-white and appear in clusters.

Mediterranean sage is native to the Mediterranean region and northern Africa. Mediterranean sage invades primarily rangeland, but will easily invade riparian areas, forests, roadsides, and dry pastures. This invasive ornamental plant prefers south-facing slopes in loose, gravelly, well drained soils. Mediterranean sage initially invades disturbed sites, but quickly spreads to non-disturbed and natural sites. It adapts to a wide variety of environmental conditions and quickly displaces native vegetation. The plant is unpalatable to most grazing animals and is capable of forming dense monocultures. The seed viability for Mediterranean sage is unknown. The site must be monitored for at least 10 years after the last flowering adult plants have been eliminated and treatments repeated when necessary.

The key to effective control of Mediterranean sage is preventing the establishment of plant communities through the use of sound land management practices. Maintain healthy pastures and rangeland and continually monitor your property for new infestations, especially near current known infestations since tumbleweed mobility of this plant can spread the seeds far and wide. Details on the back of this sheet can help to create a management plan compatible with your site ecology.

Mediterranean sage is designated as a "List A" species in the Colorado Noxious Weed Act. It is required to be eradicated wherever found in the State. For more information visit www.colorado.gov/ag/weeds and click on the Noxious Weed Management Program. Or call the State Weed Coordinator at the Colorado Department of Agriculture, Conservation Services Division, 303-239-4100.

Map of Mediterranean sage infestation.



Key ID Points

1. Leaves have a pungent odor when crushed.
2. Leaves are very hairy.
3. White to yellowish-white flower clusters.

Updated on:
01/09

Salvia aethiopis

Management Recommendations

CULTURAL
Preventing overgrazing and promoting healthy plant communities is crucial. Disturbed, bare ground areas are prime habitat for weed invasions. Contact your local Natural Resource Conservation District for seed mix recommendations for your area.

BIOLOGICAL
Biocontrol agents are not included in the prescribed management plans by the State for List A Species. Eradication is the management objective of all List A's. For information on biocontrol in Colorado, please contact the Palisade Insectary of the Colorado Department of Agriculture at 970-464-7916.

MECHANICAL
Hand pull or shovel when soil is moist. Make certain to pull up all the roots or sever at least 2 to 3 inches of taproot with a shovel. Shake excess soil from specimens and turn over to dry out. Bag specimens carefully so as to not scatter seeds if flowering.

Integrated Weed Management:

Since Mediterranean sage reproduces solely by seed, it is imperative to prevent seeds from producing as well as depleting the soil seed bank. Combining mechanical and herbicide treatments to rosettes or bolting plants can be very effective. If flowering, mechanically remove plants and bag them. Survey properties on the perimeter of known infestations to detect new infestations early.

HERBICIDES

NOTE: The following are recommendations for herbicides that can be applied to range and pasturelands. Rates are approximate and based on equipment with an output of 30 gal/acre. Please read label for exact rates. **Always read, understand, and follow the label directions. The herbicide label is the LAW!**

HERBICIDE	RATE	APPLICATION TIMING
Tordon + Telar (Tordon or Picloram 22K - restricted use herbicides & Telar - general use)	1 quart product/acre (Tordon) + 1 oz product/acre (Telar) + plus 0.25% v/v non-ionic surfactant	Apply in spring during rosette to bolting (early flowring) growth stages
Metsulfuron + 2,4-D (Escort or Cimarron + 2,4-D - general use)	1 oz + 1 qt product/acre plus 0.25% v/v non-ionic surfactant	Apply in spring during rosette to bolting (early flowering) growth stages
Metsulfuron (Escort or Cimarron - general use)	1 oz product/acre plus 0.25% v/v non-ionic surfactant	Apply in spring during rosette to bolting (early flowering) growth stages

Top to bottom photos, © A. Murray, Univ. of Florida; USDA ARS Archives.

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Colorado State University

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