

This WEED REPORT does not constitute a formal recommendation. When using herbicides always read the label, and when in doubt consult your farm advisor or county agent.

This WEED REPORT is an excerpt from the book *Weed Control in Natural Areas in the Western United States* and is available wholesale through the UC Weed Research & Information Center (wric.ucdavis.edu) or retail through the Western Society of Weed Science (wsweedscience.org) or the California Invasive Species Council (cal-ipc.org).

Pennisetum clandestinum Hochst. ex Chiov.

Kikuyugrass



Family: Poaceae

Range: California, especially the central coast, and Hawaii.

Habitat: Disturbed sites, roadsides, urban places, gardens, landscaped areas, orchards, cropland, turf, forested sites, and occasionally wetland areas. Grows best in areas with mild winters that receive some summer moisture. Tolerates periods of drought, light shade, and most soil types, but does not survive prolonged periods of freezing temperatures.

Origin: Native to tropical Africa. Kikuyugrass was introduced to California as an erosion-controlling ground cover but now is a noxious weed in many agricultural and landscape situations.

Impacts: May be able to act as a cover crop and smother native vegetation. Under certain conditions, kikuyugrass can accumulate high levels of nitrates and soluble oxalates that are toxic to livestock when ingested in quantity.

Western states listed as Noxious Weed: California, Oregon, Utah; also on Federal Noxious Weed list
California Invasive Plant Council (Cal-IPC) Inventory: Limited Invasiveness

Kikuyugrass is a warm-climate perennial grass which has escaped cultivation in the mild coastal and warm arid areas of California. It is tough, low-growing to 20 inches tall, with an extensive network of coarse, creeping stolons and rhizomes and flowerheads that remain mostly hidden within the upper leaf sheaths. The branched rhizomes develop an extensive network within the top 10 cm of soil. Kikuyugrass has flat or folded leaves, smooth to sparsely hairy, with a pronounced midvein on the underside. The ligules consist of a fringe of white hairs, and the collar margins have long white hairs. Kikuyugrass usually goes dormant and turns brown during the cool season where nighttime frosts are common.

Flowers are on short racemes of 2 to 4 spikelets which are hidden within the upper leaf sheaths, usually with only the long white stigmas protruding. Spikelets are 0.5 to 1 inch long. This plant can reproduce by seed, but most reproduction is vegetative by rhizomes and stolons. Seeds are probably only a minor mechanism of dispersal compared to rhizome and stolon fragments, which can readily root and generate new plants. Rhizomes, stolon fragments and seeds disperse with landscape maintenance and agricultural machinery, hand tools, soil movement, water, and other human activities.

NON-CHEMICAL CONTROL

Mechanical (pulling, cutting, disking)	Small patches can be pulled by hand. Avoid disking or cultivating kikuyugrass, as this will spread stem fragments.
Cultural	Burning is not effective in controlling this species. Before bringing in soil, sod, or planting stock, make sure they are clean of kikuyugrass.
Biological	There are no known biocontrol agents available for kikuyugrass.

CHEMICAL CONTROL

The following specific use information is based on published papers and reports by researchers and land managers. Other trade names may be available, and other compounds also are labeled for this weed. Directions for use may vary between brands; see label before use. Herbicides are listed by mode of action and then alphabetically. The order of herbicide listing is not reflective of the order of efficacy or preference.

GROWTH REGULATORS	
Triclopyr <i>Garlon 3A, Garlon 4 Ultra</i>	<p>Rate: 0.67 to 1.33 qt <i>Garlon 3A</i> /acre or 0.5 to 1 qt <i>Garlon 4 Ultra</i>/acre of (0.5 to 1 lb a.e./acre)</p> <p>Timing: Apply to rapidly growing plants.</p> <p>Remarks: Triclopyr is safe on most grasses, but appears to have some activity on kikuyugrass. It has very little soil residual activity. This is a suppression treatment; complete control will require repeat treatments at 1-month intervals.</p>
LIPID SYNTHESIS INHIBITORS	
Clethodim <i>Select, Envoy</i>	<p>Rate: 1 pt product (<i>Select</i>)/acre (4 oz a.i./acre); 0.25% to 0.5% product v/v in spot treatment.</p> <p>Timing: Postemergence before runners are 6 inches long. It is less effective if applied after mowing and may require repeat treatments.</p> <p>Remarks: Clethodim is grass-selective and is safe on broadleaf species. To select in favor of other perennial grasses, apply before they emerge. It has no soil activity. Use a crop oil surfactant. Registered for fallow and non-crop areas, not generally for rangeland/natural areas, but has specific-use supplemental labels. Rates are based on those reported for bermudagrass. Note that <i>Envoy</i> formulation is 1 lb a.i./gallon, <i>Select</i> is 2 lb a.i./gallon.</p>
Fluazifop <i>Fusilade</i>	<p>Rate: 1 to 1.5 pt product/acre (4 to 6 oz a.i./acre)</p> <p>Timing: Postemergence when runners are less than 8 inches long. For good control, repeat treatments may be necessary.</p> <p>Remarks: Fluazifop is grass-selective and is safe on broadleaf species. To select in favor of other perennial grasses, apply before they emerge. It has no soil activity. Use a crop oil surfactant. This chemical is registered for fallow and non-crop areas, not for rangeland/natural areas.</p>
AROMATIC AMINO ACID INHIBITORS	
Glyphosate <i>Roundup, Accord XRT II, and others</i>	<p>Rate: 1.5 to 2 qt product (<i>Roundup ProMax</i>)/acre (1.7 to 2.25 lb a.e./acre); 1.5% v/v solution as a spot treatment.</p> <p>Timing: Apply to rapidly growing, non-stressed plants after most seedlings have emerged.</p> <p>Remarks: Glyphosate has no soil activity and is a nonselective herbicide.</p>
BRANCHED-CHAIN AMINO ACID INHIBITORS	
Imazapyr <i>Arsenal, Habitat, Chopper, Stalker, Polaris</i>	<p>Rate: 4 to 6 pt product/acre (1 to 1.5 lb a.e./acre)</p> <p>Timing: Preemergence or postemergence.</p> <p>Remarks: Imazapyr has a fairly long soil residual. It is a nonselective herbicide. Rates are based on those reported for bermudagrass.</p>

RECOMMENDED CITATION: DiTomaso, J.M., G.B. Kyser et al. 2013. *Weed Control in Natural Areas in the Western United States*. Weed Research and Information Center, University of California. 544 pp.