Ehrharta spp.: including *Ehrharta calycina* Sm. (purple veldtgrass)
Ehrharta erecta Lam. (erect veldtgrass)
Ehrharta longiflora Sm. (long-flowered veldtgrass)

Veldtgrasses

Family: Poaceae
Range: All three species are only found in California at the current time.
Habitat: Purple veldtgrass has invaded grassland, roadsides, live oak woodlands, and coastal habitats such as dunes, scrub, and chaparral. It prefers open sunlight areas. Erect veldtgrass thrives in shade and inhabits disturbed moist places, urban areas, turf, wetlands, and possibly other moist natural communities. Long-flowered veldtgrass inhabits some coastal dune habitat areas in southern California.
Origin: All three species are native to South Africa. Purple veldtgrass was imported to California from Australia, where it was introduced in the late 1920s as a potential forage grass and was later used for erosion control. Purple and long-flowered veldtgrass are now invasive in New Zealand and Australia. Erect veldtgrass was cultivated as an experimental grass in Berkeley and Davis in the mid-1900s. It is also a weed in Europe and Australia.
Impacts: These grasses can form dense stands in coastal dunes or wetlands and forests (erect veldtgrass) and reduce native plant diversity. Purple veldtgrass is the most common of the three species. It can increase the rate of organic matter accumulation and increase fire potential in shrublands and dunes. These consequences can have a dramatic effect on native plant composition. In coastal areas, native shrub seedlings are unable to compete with purple veldtgrass during periods of rain. Eventually coastal scrub and chaparral communities are converted to grassland. Type conversion to grassland can displace native wildlife, including sensitive species such as the kangaroo rat, by eliminating the open-space shrub structure and native food plants.
California Invasive Plant Council (Cal-IPC) Inventory: *Ehrharta calycina*, High Invasiveness; *Ehrharta erecta*, Moderate Invasiveness; *Ehrharta longiflora*, Moderate Invasiveness (Alert)

Purple veldtgrass is a densely tufted perennial, and erect veldtgrass is a more spreading and decumbent perennial, both to about 3 to 4 ft tall. Long-flowered veldtgrass is an erect annual to about 2 ft tall. The leaves of veldtgrasses generally lack hairs. The collar is large and often violet-tinged, often with long ciliate hairs. Ligules are membranous with a ragged tip, sometimes covered with minute hairs.

The inflorescences of all the veldtgrasses are characteristically open panicles 4 to 6 inches long that only extend out on one side of the rachis. Spikelets consist of only one fertile floret and a couple of sterile florets. Sterile and fertile florets usually detach as a unit from above the glumes. Plants primarily outcross. The seeds are the main form of reproduction and they disperse by falling near the parent plant. Florets also disperse to greater distances with human activities, water, soil movement, and possibly animals. Germination can occur nearly year round in coastal areas of California that receive moisture as either rainfall or heavy fog. Seed longevity in the field is uncertain, but in South Africa, purple veldtgrass typically forms large, persistent seedbanks.

NON-CHEMICAL CONTROL

Mechanical (pulling, cutting, disking)	Manually removing mature plants, including the buried crown, may reduce plant densities, but often stimulates seed germination. All the buried plant parts must be removed on the perennial species to prevent resprouting. Repeatedly removing seedlings as they appear for a period of 2 or more years can help to control populations. Flaming plants during the wetter, cooler season can be effective on small infestations, but works better on seedlings.
Cultural	Purple veldtgrass appears unable to tolerate continuous or heavy grazing by sheep, especially while flowering, but it can survive moderate seasonal grazing by cattle. In general, purple veldtgrass tolerates both grazing pressure and livestock trampling more than most indigenous natives. Burning usually does not kill the knotty stem bases and may increase population density by damaging or killing less fire tolerant species. Use of mulches such as black landscape fabric and rice straw may be effective in small areas.
Biological	There are no biological control agents available for the veldtgrasses.

CHEMICAL CONTROL

The following specific use information is based on 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.

LIPID SYNTHESIS INHIBITORS	
Fluazifop *Fusilade*	**Rate:** 1 to 1.5 pt product/acre (4 to 6 oz a.i./acre) **Timing:** Some applicators report that postemergence treatment to plants over 4 inches tall is much more effective compared to treating smaller plants. **Remarks:** Fluazifop is grass-selective and will not damage broadleaf species. It has no soil activity. Not all studies have found this herbicide to be effective. Include crop oil concentrate surfactant or non-ionic surfactant.
AROMATIC AMINO ACID INHIBITORS	
Glyphosate *Roundup*, *Accord XRT II*, and others	**Rate:** Broadcast foliar treatment: 1 to 2 pt product (*Roundup ProMax*)/acre (0.56 to 1.1 lb a.e./acre). Spot treatment: 2% v/v solution. Wiper treatment: 33 to 50% of concentrated product. **Timing:** Postemergence in early spring, to rapidly growing, non-stressed plants after most seedlings have emerged. **Remarks:** Glyphosate is a nonselective herbicide. It has no soil activity. Broadcast applications are best used in solid stands of veldtgrass. Wiper applications or shielded sprayers can allow for selective control. Some retreatment may be necessary. Glyphosate is likely the most effective chemical option.
BRANCHED-CHAIN AMINO ACID INHIBITORS	
Imazapyr *Arsenal*, *Habitat*, *Stalker*, *Chopper*, *Polaris*	**Rate:** 3 to 6 pt product/acre (0.75 to 1.5 lb a.e./acre) **Timing:** Postemergence to rapidly growing grasses. **Remarks:** Imazapyr is fairly nonselective. While it gives effective control alone, it may give better control when combined with glyphosate.

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.