

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).

Cotoneaster franchetii Boiss.; orange cotoneaster
Cotoneaster lacteus W.W. Smith; Parney's cotoneaster
Cotoneaster pannosus Franch.; silverleaf cotoneaster

Cotoneasters

Family: Rosaceae

Range: Coastal areas of California, Oregon, and Washington.

Habitat: Disturbed places, mixed evergreen forest, coastal scrub, and grassland, often near residential areas.

Origin: Introduced as ornamental plants from China and escaped to become invasive in coastal regions.

Impacts: On occasion, populations can become dense and crowd out native species. However, fruit likely provide a food source for some bird species.

California Invasive Plant Council (Cal-IPC) Inventory: All three species are Moderate Invasiveness

Cotoneasters are evergreen to semi-evergreen shrubs usually less than 10 ft tall, but occasionally taller. All species have simple alternate leaves and distinctive orange or red berry-like fruits. The upper surfaces of the leaves are generally dull with few or no hairs. The lower surface is usually covered with woolly hairs, but can lack hairs.

Flowers are white in both Parney's and silverleaf cotoneaster, but pink to rose in orange cotoneaster. All species have five petals. In some species, such as Parney's cotoneaster, the flower clusters are large. In others, including orange and silverleaf cotoneaster, the flower clusters are smaller and clustered more tightly. The fruit (pomes) are berry-like and red in both Parney's and silverleaf cotoneaster, but orange-red in orange cotoneaster. Plants reproduce by seed that are dispersed primarily by animals, particularly birds. Seeds require scarification and cold temperatures to germinate, so ingestion by animals is important to facilitate seed germination.



NON-CHEMICAL CONTROL

Mechanical (pulling, cutting, disking)	Seedlings and small plants can be hand pulled. Manually removing individual shrubs when discovered can help prevent the spread of cotoneaster species in natural areas. However, stumps and roots can resprout, necessitating follow-up control. Roots need to be completely removed to prevent resprouting.
Cultural	There are no known cultural control strategies developed for any species of cotoneaster.
Biological	There are many species of cultivated cotoneaster. As such, there has not been any effort to develop biological control agents for their management.

CHEMICAL CONTROL

There is little information on the control of cotoneaster species. 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.

GROWTH REGULATORS	
Picloram <i>Tordon 22K</i>	<p>Rate: Undiluted concentrate for cut stump treatments</p> <p>Timing: Treat cut stumps in late summer or fall for most effective translocation of herbicide to below-ground tissues.</p> <p>Remarks: Picloram is nonselective on most broadleaf species. Cut stump applications can provide selectivity, especially where plants are mixed with native species. Picloram is a restricted use herbicide. Picloram is not registered for use in California.</p>
Triclopyr <i>Garlon 4 Ultra</i>	<p>Rate: Basal bark treatment: 25% solution v/v for (<i>Garlon 4 Ultra</i>). Cut stump treatment: undiluted concentrate of either ester or amine formulation</p> <p>Timing: Treat cut stumps or basal stems in late summer or fall for most effective translocation of herbicide to below-ground tissues.</p> <p>Remarks: It is likely that foliar treatment with triclopyr would also be effective, but there is no data to demonstrate this. Triclopyr is considered the most effective chemical control option for cut stump treatment.</p>
AROMATIC AMINO ACID INHIBITORS	
Glyphosate <i>Roundup, Accord XRT II, and others</i>	<p>Rate: Spot foliar treatment: 5% v/v <i>Roundup ProMax</i> solution. Cut stump treatment: 40 to 100% of concentrate.</p> <p>Timing: Postemergence later in the season when translocation of carbohydrates is downward towards the below-ground tissues.</p> <p>Remarks: Glyphosate is a nonselective herbicide.</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.