The following list of plants contains those found in the references that were **recommended for use in fire prone environments by at least 3 references**. All of the plants listed here were given either a high or moderate fire resistance rating in the references where a rating was assigned, or found listed in the references that categorized plants as fire resistant without assigning a degree of resistance. In most cases, the terms used in the ranking were not defined, and if they were, there is no agreed upon standard definition. For this reason, the plants are listed in this chapter without any attempt to rank them.

The list is sorted by plant form -- groundcovers, shrubs, trees, etc. Some species may appear twice (e.g. once as a groundcover and then again as a shrub) because they have properties attributed to both forms. For a complete description of the plant, including its mature characteristics, climate zones, and information on erosion control and drought tolerance, please refer to Chapter 4, the landscape vegetation database.

It is important to note that a plant's fire performance can be seriously compromised if not maintained. Plants that are not properly irrigated or pruned, or that are planted in climate areas not generally recommended for the plant, will have increased fire risk and will likely make the mature plant undesirable for landscaping in high fire hazard zones.

Table 1. Plants with a favorable fire performance rating in 3 or more references.

Some plants may have invasive (indicated as), or other negative characteristics that should be considered before being selected for use in parts of California. For more information please go to http://www.caleppc.org/.

Scientific Name	Common Name	Plant Type	Plant Form	References at bottom
Achillea millefolium white	White yarrow	perennial	shrub	25, 40,41, 53
Achillea tomentosa var. Moonshine	Woolly yarrow	<mark>perennial</mark>	groundcover	7,11,12,13,23,25,26,28, 32,35,36,37,39
Aeonium decorum	Aeonium	succulent	shrub	7,10,38,53
Aeonium simsii	Aeonium	succulent	shrub	7,10,53
Aesculus californica	California buckeye	deciduous	tree	11,15,17
Agapanthus 'Peter Pan'	Lily of the Nile, dwarf	evergreen	shrub	9,10,25
Agave americana 'Alba Picata'	Century plant	succulent	shrub	9,25,37
Agave victoriae-	Agave	succulent	shrub	7,10,53

reginae				
Ajuga reptans	Carpet bugle	perennial	groundcover	7,9,10,11,17,23,28,35, 36,40,41,53
Alnus rhombifolia	White alder	deciduous	tree	9,11,17,25,53
Aloe arborescens	Torch aloe	succulent	shrub	9,25,53
Aloe aristata	Aloe, Dwarf aloe	succulent	shrub	7,10,40,41,53
Aloe brevifolia	Aloe	succulent	shrub	7,10,40,41,53
Arbutus menziesii	Madrone	<mark>evergreen</mark>	tree	11,15,17
Arbutus unedo	Strawberry tree	<mark>evergreen</mark>	tree	8,9,11,12,17,25,30,40,41,42,53
Arctotheca calendula	Silver spreader	evergreen	groundcover	7,8,9,10,11,12,18,20,21,23,24,25,26, 28,30,31,34,35,36,37,38,40,41,42,53
Armeria maritima	Thrift, Common thrift	evergreen	groundcover	9,10,11,12,15,25,40,41
Artemisia caucasica	Silver spreader	evergreen	shrub	9,10,12,23,28,30,35,36,37,38,42,53
Artemisia pycnocephala	Sandhill sage	evergreen	shrub	6,11,16,25
Asarum caudatum	0 0	perennial	shrub	11,15,40,41
Atriplex canescens	Four-wing saltbush	evergreen	shrub	5,6,16
Atriplex lentiformis breweri	Saltbush	deciduous	shrub	5,11,19
Atriplex semibaccata	Saltbush	evergreen	shrub	7,10,11,13,21,23,24,27,28,35,36,37, 40,41,42
Callistemon viminalis	Weeping bottlebrush	evergreen	tree	26,30,37
Campsis radicans	Trumpet creeper	deciduous	vine	12,26,30,32,37
Carpobrotus edulis	Ice plant, Hottentot fig, Sea fig	succulent	groundcover	7,9,10,11,23,24,28,31,35,36,37,53
Ceanothus thyrsiflorus	Blueblossom	evergreen	shrub	11,14,15
Centranthus ruber	Red valerian, Jupiter's beard	evergreen	shrub	8,11,25,40,41
Cerastium tomentosum		evergreen	groundcover	7,10,17,24,30,37,39,40,41,53
Ceratonia siliqua	Carob, St. John's beard	evergreen		5,8,9,11,13,22,34,37,42
Cercis occidentalis				8,9,11,12,15,17,25,30,34,40,41,42,53
	Orchid rockrose, Purple rockrose	evergreen	shrub	25,30,53
Cistus villosus prostratus (C.salviifolius)	Purple rockrose, Prostrate rockrose	evergreen	groundcover	9,19,22,37
Citrus spp.	Citrus	<mark>evergreen</mark>	tree	8,12,30,34,40,41
Convolvulus	Bush morning	<mark>evergreen</mark>	shrub	8,9,11,12,30,32,39,40,41,42,53

cneorum	glory			
	Creeping coprosma	evergreen	groundcover	8,11,12,18,30 <u>.</u> 40,41,53
Cotoneaster congestus	Likiano	evergreen	shrub	40,41,53
	Bearberry cotoneaster	evergreen	groundcover	9,25,40,41
Crassula argentea	Jade plant	succulent	groundcover	9,25,33
Crassula lactea	Crassula	succulent	groundcover	7,9,10,25,36,53
Crassula multiclava	Crassula	succulent	groundcover	7,9,10,25,36,38
Crassula tetragona	Crassula	succulent	groundcover	7,10,36,53
Delosperma alba	White trailing ice plant	succulent	groundcover	7,9,10,11,18,22,23,24,26,28,35,36, 37,39,,40,41,42,53
	Wild yellow iris, African iris	evergreen	shrub	9,25,40,41
Dietes vegeta	Fortnight lily	<mark>evergreen</mark>	shrub	9,11,12,25,40,41
Diplacus Iongifolius (Mimulus sp.)	Monkey flower	perennial	shrub	11,15,17,25,40,41,42,53
	Ice plant, Rosea ice plant	perennial	groundcover	8,9,10,11,23,25,26,31,35,36,40,41, 42,53
Drosanthemum hispidum	Rosea ice plant	perennial	groundcover	7,9,10,18,23,24,25,28,36,39,40,41,53
	Drosanthemum, Dew flower	perennial	groundcover	7,38,53
Duchesnea indica	Mock strawberry	perennial	groundcover	8,9,11,12,25,40,41
Dymondia margaretae	Dymondia	evergreen	groundcover	8,9,25
J	Santa Barbara daisy, Fleabane	perennial	groundcover	9,12,17,25,40,41
trichlocalyx	Yerba santa, Hairy yerba santa		shrub	5,13,19
Eriophyllum confertiflorum	Golden yarrow	perennial	shrub	40,41,53
Eschscholzia californica	California poppy	perennial	groundcover	8,9,11,12,25,42,53
radicans	Winter creeper, Common winter creeper	evergreen	shrub	7,10,30,41
Feijoa sellowiana	Pineapple guava	<mark>evergreen</mark>	tree	89,11,12,17,25,30,40, 41,42,53
Fesilica filora	Creeping red fescue	perennial	groundcover	8,9,11,12,15,25,40,41
Fragaria chiloensis	Wild strawberry, Sand strawberry, ornamental	evergreen	groundcover	7,8,9,10,11,23,25,28,35,36,39,40, 41,53

Fraxinus spp.	Ash	<mark>deciduous</mark>	tree	18,34,40,41
Fremontodendron spp.	Fremontia, Flannel bush	<mark>evergreen</mark>	shrub	11,15,17
Galvezia speciosa	Showy Island snapdragon, Hummingbird flower	evergreen	shrub	8,11,12,15,25,30,53
Gazania ringens leucolaena (G. uniflora)	Trailing ganzania	perennial	groundcover	.7,10,11,12,23,24,25,27,28,35,36,37, 38,39,40,41,42,53
Gazania uniflora (G.ringens leucolaena)	Trailing ganzania	perennial	groundcover	7,10,11,12,23,24,25,27,28,35,36,37, 38,39,40,41,42,53
Grindelia stricta	Gum plant,Coastal wild gum	perennial	groundcover	40,41,53
Grindelia stricta venulosa	Coastal wild gum	perennial	shrub	25,40,41
Helichrysum petiolatum	Licorice plant, Curry plant	perennial	shrub	8,11,17,25,40,41
	Daylily	deciduous or evergreen	shrub	8,9,11,12,14,25,40,41
Hesperaloe parviflora	Red yucca	evergreen	shrub	9,25,40,41
Heuchera maxima	Island alum root, Coral bells	perennial	groundcover	8,12,15,25,40,41
Iberis sempervirens	Evergreen candytuft, Edging candytuft	o o	groundcover	40,41,53
Iris douglasiana	Pacific coast iris, Douglas iris	bulb	shrub	11,15,17,40,41
Isomeris arborea (Cleome isomeris)	Bladderpod, Bladderbush, Burrofat	evergreen	shrub	6,16,53
Kniphofia uvaria	Red hot poker	perennial	shrub	8,9,11,12,17,25,40,41
Lampranthus aurantiacus	Trailing ice plant, bush gold, bush ice plant	succulent	groundcover	7,9,10,22,25,39,53
Lampranthus filicaulis	Redondo creeper	succulent	groundcover	7,10,22,53
Lampranthus spectabilis	Trailing ice plant	succulent	groundcover	7 ,9,10,11,22,24,25,38,42,53
Lantana camara & cultivars	Trailing lantana, Yellow sage	evergreen or annual	groundcover	9,23,28,35,36,53
<u>Ligustrum</u>	Texas privet	<mark>evergreen</mark>		11,30,40,41

texanum				
Limonium perezii	Statice, Marsh rosemary, Sea lavender	perennial	shrub	8,9,11,12,14,25,30,40,41,53
Lippia canescens	Carnot grass	perennial	groundcover	7,41,42
Liriope gigantea	Giant turf lily	perennial	groundcover	8,25,40,41
Lonicera japonica 'Halliana'	Hall's honeysuckle	evergreen	groundcover	7,10,53
Macadamia hybrids	Macadamia nut, Queensland nut	evergreen	tree	9,11,25,40,41
Mahonia repens	manonia	evergreen	shrub	8,11,40,41
Malephora crocea	Ice plant, Croceum ice plant	succulent	groundcover	7,8,9,10,11,22,23,24,26,28,31,35, 36,40,41,42,53
Malephora luteola	Yellow trailing ice plant	succulent	groundcover	7,10,22,24,40,41,53
Metrosideros excelsus	New Zealand Christmas tree,Pohutukawa	evergreen	tree	11,12,18,30,40,41,42,53
Mimulus longiflorus (Diplacus longiflorus)	Monkey flower	perennial	shrub	11,17,15,25,40,41,42,53
Myoporum parvifolium prostrata	Creeping boobyalla, Myoporum	evergreen	groundcover	8, 9,10,11,12,21,23,24,25,28,35,36, 38,39,40,41,42,53
Myrica californica	Wax myrtle, Pacific wax myrtle, California wax myrtle	evergreen	shrub	11,15,17
Nerine masonorum	Nerine	bulb	shrub	8,9,11,25
Nerium oleander	Oleander	evergreen	shrub	5,12,13,17,11,26,27,30,32,33,42, 40,41
Oenothera berlandieri	Mexican evening primrose	perennial	groundcover	8,11,25,40,41
Osteospermum fruticosum	Trailing South African daisy, Freeway daisy	perennial	groundcover	1,5,6,7,9,10,11,13,16,22,23,24,28,30, 34,36,38,39,40,41,42
Pelargonium peltatum	J	perennial		7,9,10,11,12,23,24,25,28,36,38,40, 41,53
Phyla nodiflora Lippia	Lippia	perennial	groundcover	8,9,10,11,12,23,28,35,36,40,21,41
Pittosporum crassifolium	Dwarf karo	evergreen	shrub	25,40,41

Pittosporum tobira	Mock orange, Wheeler's mock orange	evergreen shr	rub	11,12,25,40,41
Populus spp.	Aspen, Cottonwood, Poplar	deciduous tre	ee	11,15,18
Populus tremuloides	Quaking aspen	deciduous tre	ee	9,11,15
Portulacaria afra	Purslane tree, Elephant's food	succulent gro	oundcover	7,9,10,24,40,41,53
Potentilla tabernaemontanii (P.verna)	Spring cinquefoil	evergreen gro	oundcover	7,10,37,40,41,53
Prunus ilicifolia	Holly-leaved cherry	evergreen shr	rub	8,11,12,15,26,30
Prunus Iyonii	Catalina cherry	<mark>evergreen</mark> shr	rub	5,8,9,11,12,13,25,37,40,41,53
Prunus spp.	Plum, Peach, Cherry, Apricot, Evergreen cherry	evergreen tre	ee	11,15,42
Punica granatum	Pomegranate	<mark>deciduous</mark> shr	rub	11,30,40,41,42,53
Punica granatum 'Nana'	Dwarf pomegranate	deciduous shr	rub	9,8,11,12,25
Pyracantha 'Santa Cruz'	Pyracantha, Firethorn	evergreen shr	rub	8,11,12,25,40,41
Quercus agrifolia	Encina, Coast live oak, California live oak	evergreen tre	ee	8,9,11,15,17,25,30,31,33,53
Rhamnus alaternus	Italian buckthorn	evergreen shr	rub	5,9,11,12,13,22,30,32,40,41,42,53
Rhamnus californica	Coffeeberry	<mark>evergreen</mark> shr	rub	9,11,12,15,17,25,26,30,53
Rhamnus crocea	Spiny redberry, Redberry, Hollyleaf redberry, Red- berried buckthorn	evergreen shr	rub	11,25,53
Rhododrendron occidentale	Western azalea	evergreen shr	rub	17,40,41
Rhus integrifolia	Lemonade berry	<mark>evergreen</mark> shr	rub	8,9,12,13,14,15,22,26,37,40,41,53
Rhus lancea	African sumac	<mark>evergreen</mark> tre	ee	8,11,12,26,37,40,41
Ribes viburnifolium	Evergreen currant, Catalina perfume	evergreen shr	rub	8,9,11,15,17,25,30,53
Salvia sonomensis	Sonoma sage, Creeping sage	perennial shr		7,9,10,11,15,16,21,25,27,38,40,41, 42,53
Santolina	Santolina,	evergreen shr		7,9,10,17,23,24,25,32,36,37,40,41, 42,53

<u>chamaecyparissus</u>	9			
C	lavender			
Scaevola 'Muave Clusters'	Fan flower	perennial	groundcover	8,9,11,12,25
Schinus molle	Peruvian pepper tree, California pepper tree	evergreen	tree	5,9,11,13,17,22,25,30,37,40,41,53
Schinus terebinthifolius	Brazilian pepper tree	evergreen	tree	5,9,11,12,22,40,41,42,53
Sedum acre	Goldmoss sedum	succulent	creeper	7,10,53
Sedum album	Green stonecrop	succulent	creeper	7,10,53
Sedum brevifolium	Stonecrop	succulent	<mark>groundcove</mark> r	7,9,24,25
Sedum confusum	Stonecrop, Sedum	succulent	groundcover	7,10,24,40,41,53
Sedum rubrotinctum (S. guatemalense)	Brown bean, Pork and beans	succulent	groundcover	7,10,24,38,40,41,53
Sedum spathulifolium	Stonecrop	succulent	groundcover	11,15,25
Senecio mandraliscae	Blue ice plant	succulent	shrub	9,10,25
Senecio serpens (Kleinia repens)	Senecio, Dusty miller, Blue- chalksticks	succulent	shrub	7,24,40,41,53
Simmondsia chinensis	Pignut, Jojoba, Goatnut	evergreen	shrub	9,11,15,40,41,42,53
Sisyrinchium bellum	Yellow-eyed grass, Blue-eyed grass	perennial	grass	11,15,40,41,53
Sisyrinchium californicum	Yellow-eyed grass	perennial	grass	15,25,41
Solanum jasminoides	Potato vine	evergreen or deciduous	vine	8,9,12,17,26,30,37,40,41
Solanum xanti	Purple nightshade	evergreen	shrub	17,40,41
Strelitzia reginae	Bird of paradise	perennial	shrub	27,40,41
Symphoricarpos mollis	Waxberry, Creeping snowberry, Trip vine	deciduous	groundcover	11,15,40,41
Tecomaria capensis	Cape honeysuckle	evergreen	vine	8,11,26,37,40,41,42,53
Thymus praecox articus	Mother of thyme, Creeping thyme	perennial	shrub	9,10,23,36,40,41
Thymus pseudolanuginosus	Woolly thyme, Thyme	<mark>perennial</mark>	groundcover	7,10,23,28,35,36

(T.lanuginosus)				
Trachelospermum jasminoides	Star jasmine	evergreen	groundcover	9,11,12,17,25,40,41,53
	Woolly blue curls, Romero	perennial	shrub	8,11,12,15,25,26,42,53
Trifolium fragiferum	O'Connor's legume	perennial	groundcover	40,41,53
Tulbaghia violacea		perennial		8,9,25,40,41
Vinca major	Periwinkle	perennial	groundcover	7,9,10,11,20,23,24,30,34,36,38, 39,53
Vinca minor	Dwarf periwinkle			7,10,11,23,24,28,30,36,38,39,53
<u>californica</u>	California fuschia, Hummingbird flower	perennial	shrub	9,11,17,40,41,53

Plants with an Unfavorable Fire Performance Rating

The following list of plants contains those found in the references that are definitely **not** recommended for use in fire prone environments by at least 3 references. All of the plants listed here were given either a low fire resistance rating in the references where a rating was assigned, or found listed in the references that categorized plants as being fire prone, without assigning any relative degree of resistance.

The list is sorted by plant form -- groundcovers, shrubs, trees, etc. Some species may appear twice (e.g. once as a groundcover and then again as a shrub). For a complete description of the plant, including its mature characteristics, climate zones, and information on erosion control, drought tolerance and cold tolerance, please refer to the landscape vegetation database.

Characteristics of plants not recommended for fire prone areas.

The plants in this group have some commonly shared characteristics. Most of these plants are characterized by:

- a high surface area to volume ratio.
- a low moisture content.
- a high percentage of dead matter or debris.

Plants that possess all of these characteristics are likely to have an unfavorable fire performance rating. Comparison of the general characteristics of a plant not included in this list with those listed above could result in a decent estimate of the plant's fire performance.

It is possible that a plant listed as fire resistant, but allowed to grow unchecked and poorly maintained could possess the characteristics listed above and therefore be a liability. Proper maintenance of landscaping is crucial and cannot be overlooked. Conversely, it is also possible that a plant with

an unfavorable rating could perform well with special irrigation and maintenance regimes. However this approach is not advisable since long term irrigation and maintenance cannot be guaranteed.

Table 2. Plants with an unfavorable fire performance rating in 3 or more references.

Scientific Name	Common Name	Plant Type	Plant Form	Reference #
Abies spp.		evergreen	tree	4,8,40,41
Adenostoma fasciculatum		evergreen	shrub	3,4,8,9,30,40,41,42
Adenostoma sparsifolium	Red shanks	evergreen	shrub	8,9,30,42
Coprosma pumila	Prostrate coprosma	evergreen	groundcover	9,25,53
Cortaderia selloana	Pampas grass	evergreen	grass	4,8,9,40
Eriogonum fasciculatum		perennial	shrub	4,40,41,42
Eucalyptus globulus	Eucalyptus globulus, Blue gum	evergreen	tree	4,9,8
Larix spp.	Larch	<mark>deciduous</mark>	tree	8,40,41
Lonicera japonica	J <mark>apanese</mark> honeysuckle	evergreen	vine	8,40,41
Palms	Palm	evergreen	tree	8,40,41
Picea spp.	Spruce	<mark>evergreen</mark>	tree	4,8,40,41
Pickeringia montana	Chaparral pea	evergreen	shrub	8,40,41
Pseudotsuga menziesii	Douglas-fir	evergreen	tree	4,40,41
Spartium junceum	Spanish broom	evergreen	shrub	4,40,41
Taxus spp.	Yew	<mark>evergreen</mark>	tree	4,40,41
Thuja spp.	<u>Arborvitae</u>	<mark>evergreen</mark>	tree	4,8,40,41
Tsuga spp.	Hemlock	<mark>evergreen</mark>	tree	8,40,41

List of References for Plant Fire Performance Ratings:

Ref	Author	Title	Voor	Publisher	Reference
#	Author	Title	Year	Publisher	Summary

1	California Department of Forestry	Fire Safe: Inside and Out	Date Unk.	California Department of Forestry Publication	Defines fire retardant plants as those easily maintained and pruned, drought tolerant in some cases, can be grown without accumulating dead branches, needles or leaves, have a low sap or resin content, and grow close to the ground.
2	Gaidula, Peter	Wildland Fuel Management Guidelines for the CA State Park System	1976	California Department of Parks and Recreation	This reference does
3	Tarbes, J.A.	Physical Characteristics of Chamise in Relation to Flammability and Combustibility	1980	San Francisco State University, CA	Defines fire performance characteristics of chamise species only.
4	Sunset	Big Job #1: Landscape to Fight the Fire	1992	Lane Magazine and Book Company, June	Defines highly flammable plants as those that are accumulators of fuel, not maintained or pruned periodically, and contain high oil, high resin or low moisture in leaves and branches.
5	Sunset	Brush Clearing for Fire Safety	1968	Lane Magazine and Book Company, October	Describes fire retardant plants as those that are low-

				growing shrubs, non- native brush, and well maintained and watered brush.
California State Fire Marshal Journal	Landscape for Home Fire Safety	1989	CSFM Journal, No. 2, March/April	Defines flammable vegetation as plants containing volatile resins, oils, gums and terpenes, and plants that have accumulations of dead twigs and branches on mature live plants. This reference also defines fire retardant plants as those with a high moisture content, high in ash, well irrigated, free of dead matter, and low volume shrubs.
City of Los Angeles, Department of Arboreta & Botanic Gardens	Green Belts for Brush Fire Protection and Soil Erosion Control in Hillside Residential Areas	Date Unk.	City of Los Angeles, Dept. of Arboreta & Botanic Gardens, Arcadia, CA	The term fire retardant is used to describe plants inherently less flammable than others. Rates plants as HIGH(greatest fire retardance) low-growing succulent plants with thick, fleshy leaves and/or stems. MODERATE(moderate fire retardance) low-growing herbaceous perennials and sub-shrubs not distinctly succulent. LOW(low fire retardance) low-growing shrubs and sub-shrubs with rather dry, leathery or rigid leaves and branches.
Water Conservation	Firescape: Landscaping to Reduce Fire Hazard	1995	Community Services Department and EBMUD Board of Directors	Defines flammable or hazardous vegetation as any vegetation, including ornamental, that either by it's intrinsic
	State Fire Marshal Journal City of Los Angeles, Department of Arboreta & Botanic Gardens East Bay Municipal Utility District Water	State Fire Marshal Journal City of Los Angeles, Department of Arboreta & Botanic Gardens East Bay Municipal Utility District Water Conservation City of Los Areas Green Belts for Brush Fire Protection and Soil Erosion Control in Hillside Residential Areas Firescape: Landscaping to Reduce Fire Hazard	State Fire Marshal Journal City of Los Angeles, Department of Arboreta & Botanic Control in Hillside Residential Areas East Bay Municipal Utility District Water Conservation City of Los Green Belts for Brush Fire Unk. Protection and Soil Erosion Control in Hillside Residential Areas Firescape: Landscaping to Reduce Fire Hazard	State Fire Marshal Journal City of Los Angeles, Department of Arboreta & Soil Erosion Botanic Control in Hillside Residential Areas East Bay Municipal Utility District Water Conservation City of Los Angeles, Dunk. Dept. of Arboreta & Botanic Gardens, Arcadia, CA City of Los Angeles, Unk. Dept. of Arboreta & Botanic Gardens, Arcadia, CA City of Los Angeles, Dunk. Dept. of Arboreta & Botanic Gardens, Arcadia, CA City of Los Angeles, Dunk. Dept. of Arboreta & Botanic Gardens, Arcadia, CA Control in Hillside Residential Areas Community Services Department and EBMUD Board of Directors

						characteristics, placement, or lack of care is easy to ignite, spreads fire rapidly, produces high heat, or creates fires that are difficult to suppress. Defines a fire resistant plant as less likely to burn, grows close to the ground and takes longer to ignite.
9	,	Brende and Shapiro Tree And Shrub Care	List of More and Less Fire Prone Plants		Brende and Shapiro Tree and Shrub Care, Berkeley, CA	This reference suggests that any plant can be fire-prone if not properly maintained. Arrangement, spacing, density and dryness of the vegetation is probably more crucial than what species are planted.
1	0	Gilmer, Maureen	California Wildfire Landscaping	1994	Taylor Publishing Company, Dallas, TX	Plants are grouped as the most fire retardant if they retain high levels of moisture in their leaves and stems; these plants are mostly succulents and have low-growth habits. Moderate fire retardance is given to plants that are non-succulent with leaves that retain a high moisture content. Plants with low fire retardance are those with leathery and dry leaves.
1	1	California Department of Forestry and Fire Protection	Fire-Safe Demonstration Garden	Date Unk.	Santa Clara Ranger Unit	A list of plants is offered without definition of fire retardance.
1	2	Berkeley Horticulture	Fire Resistant Plants	1991	Berkeley Horticulture	Defines fire resistant as being able to

	Nursery			3	withstand high
					temperatures for prolonged periods without igniting and does not readily support open flames.
13	Maire, Richard G.	Landscape to Prevent Fire	1962	California	Fire retardance is not defined in this publication.
14	Ridge,	Final Habitat Fire Buffer Program	1990	Southwest Diversified, INC.	This reference states that all plants will burn under the worst conditions, but some are more suitable for fire-prone areas because of one or more of the following characteristics: high mineral content, high moisture content, low volume of fuel.
15	Susan; Rice, Carol L.		Date Unk.	California Native Plant Society, Berkeley, CA	Supplies a list of California native plants to be used to establish a more fire retardant environment because of one or more of the following characteristics: high mineral content, low fuel volume, high moisture content.
16	Red Shingle & Handsplit Shake Bureau		1988	Handsplit Shake Bureau, Bellevue, WA	This references bases its recommendations of fire retardance on the following: plants with a high moisture content, low volume shrubs, and (up to a point) plants with a high ash content.
17		After the Vision Fire	1996	Action Committee of West Marin	provides a list of
18	Wendy;	Design and Siting Guidelines:	Date Unk.	Authority, Victoria	This reference suggests that the degree of fire

		Bush Fire Protection for Rural Houses			retardance of a tree or shrub depends on the amount of moisture in the leaves, the amount of oil or resin in the leaves, and/or the amount of dead matter that remains on the tree. Trees and shrubs were rated as follows: HIGH - most suitable; MODERATE - suitable. Groundcovers were rated as follows: HIGH - very succulent, MODERATE - semi-succulent.
19	Brush Fire Safety Committee	Make it Safe to Live in the Hills: Fire Resistant Plants	Date Unk.	Brush Fire Safety Committte, Los Angeles, CA	This reference explains that some plants are relatively non-flammable because they are able to withstand high temperatures for prolonged periods without igniting and do not readily support open flames.
20	Radtke, Klaus W.H.	A Homeowner's Guide to Fire and Watershed Management at the Chaparral/Urban Interface		County of Los Angeles, CA	Fire retardance was rated as follows: HIGH - very highly fire retardant. MODERATE - medium fire retardance. LOW - low very retardance.
21	Radtke, Klaus W.H.		Date Unk.	U.S. Dept. of Agriculture, Pacific Southwest Forest and Range Experimant Station, Gen.Technical Report PSW-67	Fire retardance was rated as follows: HIGH - very highly fire retardant. MODERATE - medium fire retardance. LOW - low very retardance.
22	Maire, Richard G.; Goodin, J.R.	Landscape for Fire Protection	1969	University of California Agricultural Extension Service	Refers to Los Angeles Arboretum research. Makes clear the point that the term "fire

					resistant" is used, but that there is not a plant that exists that will not burn given the right conditions. Also suggests that well-maintained and well-watered plants will not burn as readily as those left dry and unmaintained.
23	Grounds Maintenance	Flirting With Fire	1988	Grounds Maintenance, August 23(8):32,36,38,104.	Erosion control was rated as: LOW - 30% or less. MODERATE - 60%. HIGH - 60% or steeper.
24	J	Fire Retardant Plants for Hillside Areas	1970	County of Los Angeles Arboreta and Botanical Gardens, Los Angeles, CA	Bases fire retardance on relatively high moisture content and prostrate or creeping growth characteristics. Rated as follows: HIGH - succulents (90-95% moisture content). MODERATE - non-succulents (80-95% MC) or 70-80% MC. LOW - 60-75% MC.
25	-	Firescape Demonstration Garden	Date Unknown	Santa Barbara City Fire Department, Santa Barbara, CA.	This reference offers only a list of suggested fire retardant plants, no criteria are given.
26	Coate, Barrie	Water- Conserving Plants and Landscapes for the Bay Area	1990	East Bay Municipal Utility District	Only offers a list of plants considered to be more fire retardant than most plants. No criteria offered.
27	Rice, Carol	Effects of Drought on Landscaping in the Paint Fire	1991	Wildland Resource Management, Walnut Creek, CA	Lists species with the highest moisture content and therefore probably the most fire retardant. Also lists the driest plants these were classified as not being recommended for fire

					prone areas.
28	City of San Carlos	Fire Resistive Plants	1996	The City of San Carlos, CA	Gives a list of herbaceous perennials, succulents, trees and groundcovers considered to be fire retardant. No definition offered.
29	Beatty, Russell	Designing Gardens for Fire Safety	1991	Department of Landscape Architecture, University of California, Berkeley	Rates plants fire retardance based on the following: Broadleafed plants tend to be more fire retardant than those with needle-like or very fine leaves; dense compact forms and low prostrate plants are more effective at retarding fire than more open or upright plants.
30	Harlass, Sherry	How to Firescape to Reduce the Fire Hazard	1993	Nursery Manager, December	Defines a fire retardant plant as one that burns slowly.
31	Orinda Fire Protection District	Protect Your Home: Landsape For Fire Protection	Date Unk.	Orinda Fire Protection District	Offers a few fire retardant landscape plants with no criteria for classifying them as such.
32	California Department of Forestry	Fire Safe, California!	Date Unk.	California Department of Forestry and Fire Protection, Sacramento, CA	Classifies fire retardant plants as those that are hardy succulents and flat ground covering plants that are kept groomed and free of dry leaves.
33	City of Santa Barbara Fire Department	City of Santa Barbara Firescapes Demonstration Garden	Date Unk.	City of Santa Barbara Fire Department, Santa Barbara, CA	Defines fire resistant plants as those plants that can regenerate growth, despite burning and fire retardant plants as those which are less flammable than others.
34	Bowker, Mike	High Danger this Year: Preventing the	1995	Motorland/CSAA, July/August	Considers that fire retardant plants share the following

		Firestorm			characteristics: grow close to the ground, have a low sap or resin content, grow without accumulating dead matter, are easily maintained and pruned, and are often drought tolerant.
35	South County Fire	Protecting Your Home From a Brush Fire	Date Unk.	South County Fire	Offers only a list of plants, without explanation or definition.
36	Sunset	Protecting Your Home Against Brushfire	1983	Lane Publishing Company	Lists succulents as having the greatest fire retardance. Herbaceous perennials if well-watered and woody groundcovers if well-watered are also highly recommended.
37	Department of Water Resources, The Resources Agency	Plants for California Landscapes: A Catalog of Drought Tolerant Plants	1979	State of California, The Resources Agency, Department of Water Resources, Bulletin 209, September	Offers a list of recommended plants without explanation
38	LeMay, David B; Wayne G. Mitchell	Recommended Low-Fuel Volume Species for San Luis Obispo County	1978	San Luis Obispo, CA: Central Coast Fire Prevention Association	Rates species of plants as either having HIGH/MODERATE or LOW fire retardance; no explanation or definition of terms.
39	Martin- Richardson, Brenda; San Luis Obispo County Fire Department	A Homeowner's Guide to Fire Resistant Plants for the San Luis Obispo Area	Date Unk.	San Luis Obispo, CA: CA Dept. of Forestry & Fire Protection and The San Luis Obispo County Fire Dept.	Lists fire retardant plants for the San Luis Obispo area; no criteria offered.
40	Moritz, Ray; Pavel Svihra	Pyrophytic vs. Fire Resistant Plants	1996	University of California Cooperative Extension HortScript February No. 18	Defines fire resistant as: most broad leaf deciduous trees; leaves tend to be supple, moist and easily crushed; trees tend to be clean, not bushy, and have little deadwood; shrubs are low-growing

					(<2') with minimal dead material; tall shrubs are clean, not bushy; sap is waterlike and typically does not have a strong odor; and plants that will not sustain a flame when ignition is attempted.
41	Moritz, Ray	Pyrophytic vs. Fire Resistant Plants	1995	San Rafael Fire Department, FireSafe Marin. May	Defines fire resistant as: most broad leaf deciduous trees; leaves tend to be supple, moist and easily crushed; trees tend to be clean, not bushy, and have little deadwood; shrubs are low-growing (<2') with minimal dead material; tall shrubs are clean, not bushy; sap is water-like and typically does not have a strong odor; and plants that will not sustain a flame when ignition is attempted.
42	Perry, Bob	Trees and Shrubs for Dry California Landscapes	1989	Land Design Publishing, Claremont, CA	Fire retardance was rated as follows: LOW - high fire hazard species and undesirable domestic plant. MODERATE - acceptable domestic plant that requires ample amounts of water for best performance and valuable watershed species that should be thinned to reduce foliage mass, and be retained in limited numbers to prevent high intensity fires. HIGH - low-growing and high fire retarding plants and low fuel volume

	native and
Ellefson, Xeriscape 1992 Macmillia Connie Gardening Publishir Company Thomas L. Stephens; Doug Welsh, Ph.D.	1 2
	This reference was used to gather mature plant characterisitics and information on drought tolerance, climate zones and erosion control. Drought tolerance is defined as requiring little or no dry season water. Climate zones are defined for the western states, each species is listed with a list of zones that it will tolerate. The zone map for this publication was generated from Sunset Western Garden Book's climate zone information. Note is made if a plant is considered to be useful in erosion control, but further explanation is not offered.
45 U.S. Dept. of Plant Materials 1976 U.S Dep Agriculture, Soil Conservation Service, Davis, CA	ure, Soil plants suitable for
46 Deering, A Study of 1955 Davis, C Robert Drought Universit Bowman Resistant Californi Ornamental Plants	ty of with no definition of
47 International Proceedings of 1977 Seattle,	WA: The Offers species

	Erosion Control Association	International Erosion Control Association, 8th Conference		Association. Feb 24- 25, 1977, Airport Marina Hotel, Burlingame, CA.	recommended for erosion control without providing a rating or a definition.
48	Edmuson, George C.	Plant Materials Study: A Search for Drought- Tolerant Plant Materials for Erosion Control, Revegetation and Landscaping along California Highways: Final Report	1976	U.S Dept. of Agriculture, Soil Conservation Service, Davis, CA	Offers plant lists only with no definition of drought or drought tolerance.
49	Management	Windbreaks Demonstration Project: Final Report	1988	Sacramento, CA: The Office of Land Conservation, California Department of Conservation	Offers plant lists only with no definition of drought or drought tolerance.
50	Lenz, Lee W.; Dourley, John	California Native Trees And Shrubs	1981	Rancho Santa Ana Botanic Garden, Claremont, CA	Offers plant lists only with no definition of drought or drought tolerance.
51	Nehrling, Arno; Irene Nehrling	Easy Gardening with Drought- Resistant Plants	1975	New York: Dover Publications, Inc.	Defines drought as less than 1" of rainfall/week or = 20" for growing season. Plants considered drought tolerant will survive under these conditions.</th
52	Hazlewood, Walter G.	A Handbook of Trees, Shrubs, and Roses	1968	Sydney, Australia: Angus & Robertson, LTD	Defines drought tolerant plants as those recommended for "hot, dry areas where they will not get any watering."
53	Orange County Fire Department	Report of the Wildland/Urban Interface Task Force	1994	Developed by the Orange County Wildland/Urban Interface Task Force Subcommittee on Fuel Modification. July Attachment C	Defines plants that are not suitable for fire prone areas as possessing some or all of the following characteristics: are known to be especially combustible; have dry or deciduous foliage during part of

					the year; develop deciduous or shaggy bark; develop dry or dead undergrowth.
54	Perry, Bob	Landscape Plants for Western Regions: An Illustrated Guide to Plants for Water Conservation	1992	Publishing	Categorizes landscape plants based on the water needs. Also provides information on the mature characteristics of plants.
55	Hickman, James C. (editor)	The Jepson Manual: Higher Plants of California	1993	University of California Press, Berkeley and Los Angeles, CA	Provides information on plant classification and mature plant characteristics.
56	The Staff of the Liberty Hyde Bailey Hortorium, Cornell University	Hortus Third: A Concise Dictionary of Plants Cultivated in the United States and Canada	1976	MacMillan Publishing Company, Inc.	Provides detailed information on mature plant characteristics.
57	Costello, L.R.; K.A. Jones	Water Use Classification of Landscape Species: A Guide to the Water Needs of Landscape Plants	1994	University of California Cooperative Extension, San Mateo/San Francisco	Provides recommended watering for over 1200 landscapes plants based on 6 climate regions of California.