Growth, Flowering, and Cold Hardiness of Rockrose in Western Oregon

Rockroses are genera of evergreen, woody shrubs of the family Cistaceae, native principally to the Mediterranean basin. Western Oregon is characterized by a climate with a mild, wet winter and a pronounced summer drought and is comparable to the cool humid Mediterranean climate. However, very few rockroses are grown or incorporated in landscapes in western Oregon. The objective of our study was to determine the growth and relative hardiness of rockrose species and cultivars under western Oregon conditions.

Ninety-three species, cultivars, and hybrid selections of rockrose (Cistus spp., Halimium spp., and xHalimiocistus spp.) were evaluated for growth, flowering, and cold hardiness in a landscape trial in Aurora, OR, from 2004 to 2009. Plants were irrigated to establishment when planted in summer 2004, thereafter were not watered, fertilized, or pruned throughout the trial. Cold damage was recorded following freezing events in Feb. 2006 and Dec. 2008 in which low temperatures were 20 and 17 °F, respectively.

Those plants that consistently suffered the most cold damage were Halimium atriplicifolium, Cistus creticus ssp. creticus 'Tania Compton', Cistus xpauranthus, and

Cistus albidus forma albus. Other plants showed cold damage related to poor vigor. The length of the flowering period and foliage quality varied widely among plants in the evaluation. The plants with the longest flowering period were Halimium xpauanum (Fig. 1), Cistus inflatus, Cistus xpulverulentus 'Sunset', and xHalimiocistus 'Ingwersenii', all of which flowered for more than 55 days. Plant form and foliage quality declined drastically for some plants during the evaluation. Those that retained the best foliage quality included Cistus xobtusifolius, Cistus xlaxus, Cistus salviifolius 'Gold Star', Cistus 'Gordon Cooper', Halimium lasianthum 'Sandling' (Table 1), Halimium 'Susan' (Table 1), and xHalimiocistus sahucii. Based on ratings of foliage and bloom time, as well as hardiness, several Cistus are recommended as drought tolerant groundcovers, including Cistus xgardianus and xobtusifolius. Cistus xlaxus, C. inflatus, Cistus 'Gordon Cooper', Cistus 'Ruby Cluster', and Cistus 'Snow Fire' are suggested as tall groundcovers or landscape specimens. Several Halimium are recommended for landscape use, including H. lasianthum 'Sandling', Halimium 'Susan', H. xpauanum, and xHalimiocistus 'Ingwersenii'.

Table 1. Plant size, foliage rating, and cold injury rating for yellow-flowered rockrose grown in Aurora, OR, from 2004-09.

Plant name	Plant size [mean ± SD (cm)] ^z		[mean ± sD (1-5 scale)] ^y		[mean ± SD (0-5 scale)] ^x	
	Ht	Width	2006	2007	2006	2009
Halimium atriplicifolium	64 ± 14	70 ± 16	2.1 ± 0.6	1.9 ± 0.4	1.5 ± 0.8	2.1 ± 0.6
Halimium calycinum	46 ± 5	106 ± 11	4.3 ± 0.5	3.5 ± 0.6	0.5 ± 1.0	0.0 ± 0.0
H. calycinum (CA clone)	66 ± 13	138 ± 28	3.5 ± 0.6	2.8 ± 0.5	0.3 ± 0.5	2.3 ± 1.9
Halimium halimifolium						
forma maculatum	93 ± 21	138 ± 13	3.0 ± 0.0	2.3 ± 0.6	0.3 ± 0.6	2.0 ± 0.0
Halimium lasianthum	58 ± 8	170 ± 10	4.3 ± 0.8	3.8 ± 0.8	0.0 ± 0.0	0.0 ± 0.0
H. lasianthum 'Concolor'	60 ± 14	103 ± 4	4.0 ± 0.0	3.5 ± 0.7	0.0 ± 0.0	0.0 ± 0.0
H. lasianthum 'Formosum'	50 ± 10	154 ± 18	4.0 ± 0.8	3.5 ± 0.6	0.0 ± 0.0	0.0 ± 0.0
H. lasianthum 'Hannay Silver'	126 ± 9	158 ± 18	4.0 ± 0.8	3.3 ± 0.5	0.0 ± 0.0	0.5 ± 0.6
H. lasianthum 'Sandling'	66 ± 8	151 ± 12	4.5 ± 0.6	4.0 ± 0.0	0.0 ± 0.0	0.3 ± 0.5
H. lasianthum ssp. alyssoides 'Farrall'	58 ± 10	110 ± 17	3.3 ± 0.5	3.3 ± 0.5	0.0 ± 0.0	0.0 ± 0.0
Halimium ocymoides	86 ± 8	166 ± 44	3.5 ± 0.5	2.5 ± 0.6	0.0 ± 0.0	1.0 ± 1.2
Halimium 'Sarah'	101 ± 15	175 ± 19	4.3 ± 0.5	3.3 ± 0.5	0.0 ± 0.0	0.5 ± 1.0
Halimium 'Susan'	45 ± 5	118 ± 24	4.3 ± 0.6	24.0 ± 0.0	0.0 ± 0.0	1.3 ± 1.2
Halimium×pauanum	151 ± 15	154 ± 20	4.0 ± 0.0	4.3 ± 0.6	0.0 ± 0.0	0.3 ± 0.6
Halimium×santae	133 ± 5	167 ± 27	3.3 ± 0.5	2.3 ± 1.0	0.0 ± 0.0	2.0 ± 1.4

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^{*0 =} no injury, 5 = complete plant death.

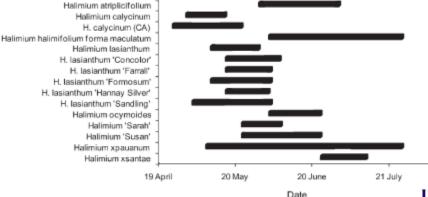


Fig. 1. Average flowering time and duration of yellow-flowered rockrose grown in a landscape evaluation at Aurora, OR, in 2005-06. Plants were considered in bloom when several open

Cold in hor



flowers were distributed through the shrub.

²Plant size measured in Sept. 2006 after 2 years of growth; 1 cm = 0.3937 inch.

y1 = sparse foliage and dieback, 5 = full canopy with no irregularities.