Plant Propagation Protocol for Rhamnus ilicifolia

ESRM 412 – Native Plant Production
URL: https://courses.washington.edu/esrm412/protocols/2024/RHIL.pdf

TAXONOMY		
Plant Family		
Scientific Name	Rhamnaceae [4]	
Common Name	Buckthorn Family [4]	
Species Scientific Name		
Scientific Name	Rhamnus ilicifolia	
Varieties	Information Not Found	
Sub-species	Information Not Found	
Cultivar	No cultivars are reported. [1]	
Common Synonym(s)	Rhamnus crocea ssp. ilicifolia [10]	
	Rhamnus crocea var. ilicifolia [10]	
Common Name(s)	Evergreen buckthorn [1]	
	Hollyleaf redberry [4]	
	Holly-leaf Buckthorn [4]	
Species Code (as per USDA	RHIL [1]	
Plants database)		
GENERAL INFORMATION		
Geographical range	United States: AZ, NV, CA, OR [5]	
Ecological distribution	Rhamnus ilicifolia occurs in dry slopes, canyons, and on open hillsides. [7]	
Climate and elevation range	The plant is found in areas with precipitation between 12 and 79 inches. They are also drought tolerant. [1] The elevation range is between 2000 feet and 6500 feet. [7]	
Local habitat and abundance	Plant communities include chaparral, chaparral/desert transition, coastal sage scrub, desert scrub, foothill woodland, meadows, montane forest plant communities, riparian areas and woodlands. [1]	
Plant strategy type /	Information Not Found	
successional stage		
Plant characteristics	Leaf: Alternate, simple, evergreen, oval to round, to 1 1/2 inch long, bearing spiny teeth (holly-like, occasionally	

leaves are concave.
Flower: Plants are dioecious; small, yellow-green, 4 triangular sepals, small cluster bloom from leaf axils in midspring.

entire), leathery, shiny green above, slightly paler below;

Fruit: Shiny, bright red, round drupe, 1/4 inch in diameter, ripen in summer.

Twig: Slender and stiff, red orange, especially when young, often ends in a stiff, "thorn-like" twig; buds small, scaly. Bark: Smooth gray becomes shallowly fissured and rough on large specimens. [9]

This plant grows up to 15 feet tall and 10 feet wide. [5] Life form: shrub [7]



[3]

PROPAGATION DETAILS	
Ecotype	Grows in a diversity of situations including canyon slopes
	and bottoms, open hillsides, roadsides, rock faces, sandstone
	ridges, serpentine slopes, and stream benches. [1]
Propagation Goal	Plants [5]
Propagation Method	Seed [5]
Product Type	1-gallon container [2]
Stock Type	Information Not Found
Time to Grow	January, February, March, April, May, and June.
Target Specifications	At the end time of the nursery, in general, the shrubs are
	usually less than 4 m tall: stems ascending, gray-brown,
	glabrous to densely hairy. The leaves are evergreen,
	alternate, on petioles 2-6 mm long, blades ovate to round, 2-
	4 cm long, 1.2-3 cm wide, spinescent to spinose-dentate,
	glabrous or pubescent, concave below, undulate, apex obtuse
	to rounded. Flowers: Inflorescence of 1-10 flowers; on
	pedicels 2-4 mm long, petals absent. Fruits: Berry bright red,
	4-6 mm. [7]
Propagule Collection	Fruits should be harvested 2 weeks before the seeds are fully
Instructions	ripe, which is typically around springtime. [1]
Propagule Processing/Propagule	There is an average of 71,000 seeds/lb. [1]
Characteristics	

Pre-Planting Propagule	Fresh seed requires no pre-germination treatment, while seed
Treatments	stored in sealed containers at 41F will need a cold
	stratification treatment of 2.5 – 3 months. [1]
Growing Area Preparation /	In optimal conditions, Hollyleaf Redberry can grow from a
Annual Practices for Perennial	1-gallon container. [2]
Crops	This plant prefers rocky well drained soil. [5]
Establishment Phase Details	Information Not Found
Length of Establishment Phase	Information Not Found
Active Growth Phase	Information Not Found
Length of Active Growth Phase	Information Not Found
Hardening Phase	Information Not Found
Length of Hardening Phase	Information Not Found
Harvesting, Storage and	Information Not Found
Shipping	
Length of Storage	Information Not Found
Guidelines for Outplanting /	Container stock can be transplanted in fall, winter, or early
Performance on Typical Sites	spring, and receive water weekly initially and then monthly
	for the first summer. Once established the plant requires no
	further watering, although it will tolerate monthly summer
	watering in a garden. [1]
Other Comments	N/A
INFORMATION SOURCES	
References	See Below
Other Sources Consulted	"The Real Dirt Blog - Agriculture and Natural Resources
	Blogs." ANR Blogs, 23 Oct. 2020,
	ucanr.edu/blogs/dirt/index.cfm?tagname=hollyleaf+redberry.
Protocol Author	Natasha Bounma
Date Protocol Created or	05/30/24
Updated	

References

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- 4. "Plant Database." Lady Bird Johnson Wildflower Center The University of Texas at Austin, www.wildflower.org/plants/result.php?id_plant=rhil. Accessed 21 May 2024.
- 5. "Rhamnus Ilicifolia (Hollyleaf Redberry)." Gardenia, <u>www.gardenia.net/plant/rhamnus-ilicifolia</u>. Accessed 21 May 2024.
- 6. Rhamnus Ilicifolia Calflora, 2024, www.calflora.org/app/taxon?crn=7076.
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- 8. 2013 Bonap North American Plant Atlas. taxonmaps. (n.d.). https://bonap.net/Napa/TaxonMaps/Genus/County/Rhamnus
- 9. "Virginia Tech Dendrology." Virginia Tech Dendrology Fact Sheet, 2021, dendro.cnre.vt.edu/DENDROLOGY/SYLLABUS/factsheet.cfm?ID=1025#:~:text=Flowe r:%20Species%20is%20dioecious;%20small,twig;%20buds%20small%2C%20scaly.
- 10. "Yavapai County Native & Naturalized Plants Rhamnus Ilicifolia Hollyleaf Buckthorn." Species Detail Woody, Cacti, Succulent, 2022, cales.arizona.edu/yavapaiplants/SpeciesDetail.php?genus=Rhamnus&species=ilicifolia.