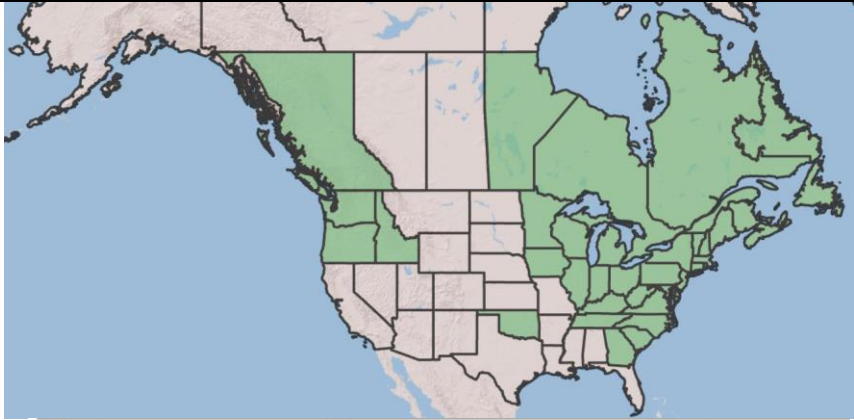


Plant Propagation Protocol for *Lysimachia terrestris*

ESRM 412 – Native Plant Production

TAXONOMY	
Plant Family	
Scientific Name	Primulaceae
Common Name	Primrose family
Species Scientific Name	
Scientific Name	<i>Lysimachia terrestris</i> (L.) Britton, Sterns & Poggenb.
Varieties ¹	None
Sub-species	None
Cultivar	None
Common Synonym(s)	<i>Viscum terrestre</i> Linnaeus, <i>Lysimachia bulbifera</i> Curtis, <i>L. racemosa</i> Lamarck, <i>L. stricta</i> Aiton, <i>L. terrestris</i> var. <i>ovata</i> (E. L. Rand & Redfield) Fernald. ¹
Common Name(s)	Earth loosestrife, Swamp candles, bog or bulblet loosestrife, lysimaque terrestre
Species Code (as per USDA Plants database)	LYTE2
GENERAL INFORMATION	
Geographical range ²	 <p><i>Lysimachia terrestris</i> has been introduced in cranberry bogs and is occasionally found on muddy lake shores of the Pacific Northwest (British Columbia, Oregon, Washington).</p>

<p>Distribution through the Pacific Northwest^{7,8}</p>	<div data-bbox="534 197 862 581"> </div> <div data-bbox="980 197 1432 546"> </div> <div data-bbox="1019 590 1328 617"> <p>● <i>Lysimachia terrestris</i> distribution</p> </div>
<p>Ecological distribution</p>	<p><i>Lysimachia terrestris</i> grows in swamps and at the edges of ponds and lakes in the Eastern United States and in Eastern Canada. It is classified as an obligate wetland (OBL) plant, meaning that it almost always occurs in wetlands⁵. It is also found in the U.S. states of Oregon, Washington, and Idaho, and in British Columbia. It is listed as endangered in Tennessee and Kentucky.</p>
<p>Climate and elevation range</p>	<p>It grows in humid climate with an elevation range of 0-1000 m.¹</p>
<p>Local habitat and abundance</p>	<p>Marshes, meadows and fields, shores of rivers or lakes, swamps, wetland margins (edges of wetlands).³</p>
<p>Plant strategy type / successional stage</p>	<p>Perennial, herbaceous.</p>
<p>Plant characteristics^{1,9,10}</p>	<div data-bbox="487 1268 930 1646"> </div> <div data-bbox="954 1268 1240 1646"> </div> <div data-bbox="1252 1268 1523 1646"> </div> <p><i>Lysimachia terrestris</i> is a perennial herbaceous plant with opposite, simple leaves, and erect stems. The flowers are produced in a raceme, 10–30 cm (4–12 in) long, at the top of the plant. The flowers are star-shaped with five yellow</p>

	petals, and appear in mid-summer. Each petal has two red dots at its base forming a circle of ten red dots in the center of the flower. Late in the summer, reddish bulblets form in the leaf axils.
PROPAGATION DETAILS	
Ecotype	N/A
Propagation Goal	Plants
Propagation Method	bulblets or rhizomes
Product Type	N/A
Stock Type	N/A
Time to Grow	Summer is the best time to propagate them by the rhizomes/bulblets. ⁴
Target Specifications	N/A
Propagule Collection Instructions	<p>The easiest method of propagation is by bulblets or the division of rhizomes, rather than seeds. ⁴</p> <p>Flowers usually bloom during early to mid-summer, lasting about 2-4 weeks for a colony of plants. Sometimes, instead of flowers, it produces aerial bulblets in the axils of the upper leaves during the summer. ⁴</p>
Propagule Processing/Propagule Characteristics ⁴	<p>Seed capsules are ovoid measuring upto 3-4 mm long. Each capsule contains few seeds. Individual seeds are quite small (about 1–1.5 mm. in length).</p> <p>The root system is rhizomatous. Clonal plants are produced from either the rhizomes or bulblets. The bulblets are up 0.5 inches long, ovoid in shape, and reddish brown. The bulblets detach from the mother plant and fall to the ground.</p>
Pre-Planting Propagule Treatments	Not known
Growing Area Preparation	<p>This species prefers poorly-drained soil in mostly sunny or partly sunny sites. The preference is full or partial sun and wet to moist conditions. It can tolerate and grow in different kinds of soils. ⁴</p>
Establishment Phase Details	<p>If grown outside, they should be planted maintaining the distance of 40-50 cm between the plants. These plants grow and spread quickly and provide rapidly growing groundcover.</p> <p>For potted plants, peaty soil should be used. If the soil is low-yielding and poor, 20 g of complex fertilizer per bucket is added to the water for irrigation every 2 weeks.</p>

Length of Establishment Phase	Propagules should be planted in early autumn (in cold climates) or in the spring followed by biweekly irrigation in May-June.
Active Growth Phase	Spring and Summer.
Hardening Phase	Unknown
Length of Hardening Phase	Unknown
Harvesting, Storage and Shipping	Swamp Candles' rhizomes can be collected once they have developed a good root system. Imbedding the brown bulbils in wet sand in the fall results in new plants that can be set out in the bog garden in spring. ⁶
Length of Storage	N/A
Guidelines for Outplanting /Performance on Typical Sites	It is resistant to both low and high temperatures.
Other Comments	No edible or medicinal uses for Swamp Candles could be found. According to folklore, Swamp Candles and other members of the loosestrife genus were said to have soothing powers over animals, leading people to tie a branch of the plant to the yoke of oxen to make them easier to handle. ¹¹
Protocol Author	Shubroto Kumar Sarkar
Date Protocol Created or Updated	05/24/2023

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