## Plant Propagation Protocol for [Insert Species] ESRM 412 – Native Plant Production

## North America Distribution:



Image: USDA Plants Database.

	TAXONOMY	
Family Names		
Family Scientific Name:	Saururaceae	
Family Common Name:	Lizard's-tail family	
Scientific Names		
Genus:	Anemopsis	
Species:	californica	
Species Authority:	(PFAF) Hook. & Arn.	
Variety:		
Sub-species:		
Cultivar:		
Authority for Variety/Sub-species:		
Common Synonym(s) (include full scientific names (e.g., <i>Elymus glaucus</i> Buckley), including variety or subspecies information)	Houttuynia californica	
Common Name(s):	Yerba Mansa	
Species Code (as per USDA Plants database):	ANCA10	
GENERAL INFORMATION		
Geographical range (distribution maps for North America and Washington state)	South-western North America- California, Mexico (PFAF) Central America, and Asia (Buddell).	
Ecological distribution (ecosystems it occurs in, etc):	Wet, especially somewhat alkaline or saline marshy places, below 2000 meters (PFAF)	
Climate and elevation range		
Local habitat and abundance; may	Pond, BogRequires shallow water or a wet muddy	
include commonly associated	site in a humus-rich alkaline medium (Huxley).	
species	Requires a warm position (Phillips). Plants are hardy to	

Plant strategy type / successional stage (stress-tolerator, competitor, weedy/colonizer, seral, late successional)	about -5 to -10°c, and are probably hardiest when the rootstock is submerged (Huxley). Another report says that they are hardy to about -15°c (Phillips).  An.Ca. prefers sandy, loamy or clay soil with basic alkaline structures (PFAF). It requires semi-to-no shade and wet soil. Common in saline or alkaline soil (Baldwin).  Hardy to -10 degrees Celcius (PFAF)	
Plant characteristics (life form (shrub, grass, forb), longevity, key characteristics, etc)	Perennial herb (Buddell). A <i>californica</i> has a thick, woody rhizome. <b>Stem:</b> 8-80 cm, hollow glabrous or hairy. <b>Leaf:</b> Basal growth pattern, with several bladelike (elliptic to oblong, 3-20cm) Base cordate (or not). The petiole is usually between 2-40 cm, cauline< basal, 1-few, generally subsessile to clasping, subtending with 1-3 short petioles if existent. <b>Inflorescence:</b> 1-4cm, conical involucre bracts 4-9, up to 3.5 cm, petal-like, white tinged with red bracts. Aromatic (Baldwin).  Flowers are hermaphroditic (PFAF)  The New Royal Horticultural Society says that it has a fleshy rhizome. It adds, that the leaves are a dark glossy green, petioles are dilated and membranous at side below, and that there are 2 carpels which are sessile and free and many ovules.	
PROPAGATION DETAILS		
Ecotype (this is meant primarily for experimentally derived protocols, and is a description of where the seed that was tested came from):	Seed - best sown in a greenhouse as soon as it is ripe in the summer. Stand the pots in about 3cm of water and germination should take place in about 5 weeks (Diggs). Sow stored seed in a cold frame in the spring (Sanders). When large enough to handle, prick the seedlings out into individual pots and grow them on in the greenhouse for their first winter. Make sure you keep the compost wet to simulate natural habitat. Plant them out in late spring or early summer. Divide in the spring (PFAF).  For outdoor planting, plant in damp, cool, leafy soils in a woodland area, or the drier reaches of a bog garden ( <i>RHS</i> ).	
Propagation Goal (Options: Plants, Cuttings, Seeds, Bulbs, Somatic	Seeds	

Embryos, and/or Other Propagules):	
Propagation Method (Options: Seed	seed
or Vegetative):	Secu
Product Type (options: Container	
7 1 · 1	
(plug), Bareroot (field grown), Plug	
+ (container-field grown hybrids,	
and/or Propagules (seeds, cuttings,	
poles, etc.))	
Stock Type:	Tr: (11 1 1 1 4 C 1
Time to Grow (from seeding until	Time till adult not found.
plants are ready to be outplanted):	
Target Specifications (size or	Grows to .5 m (PFAF)
characteristics of target plants to be	
produced):	
Propagule Collection (how, when,	
etc):	
Propagule Processing/Propagule	
Characteristics (including seed	
density (# per pound), seed	
longevity, etc):	
Pre-Planting Propagule Treatments	
(cleaning, dormancy treatments,	
etc):	
Growing Area Preparation / Annual	Wet, muddy, alkaline rich medium such as light sand,
Growing Area Preparation / Annual Practices for Perennial Crops	Wet, muddy, alkaline rich medium such as light sand, medium loam or heavy clay (
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Practices for Perennial Crops	=
Practices for Perennial Crops (growing media, type and size of containers, etc):	medium loam or heavy clay (
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percent survival, height or diameter growth, elapsed time before flowering):	Plant is hardy up to -15 degrees celcius ( <i>RHS</i> ).
Other Comments (including collection restrictions or guidelines, if available):	This plant was originally used by native people for medicinal purposes. While there is abundant information on its traditional medicinal properties, it is rarely used in modern herbalism (Coffey).
INFORMATION SOURCES	
References (full citations):	See Below
Other Sources Consulted (but that	See Below
contained no pertinent information)	
(full citations):	
Protocol Author (First and last name):	Zarah Hitner
Date Protocol Created or Updated	04/18/12
(MM/DD/YY):	

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## Unhelpful:

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