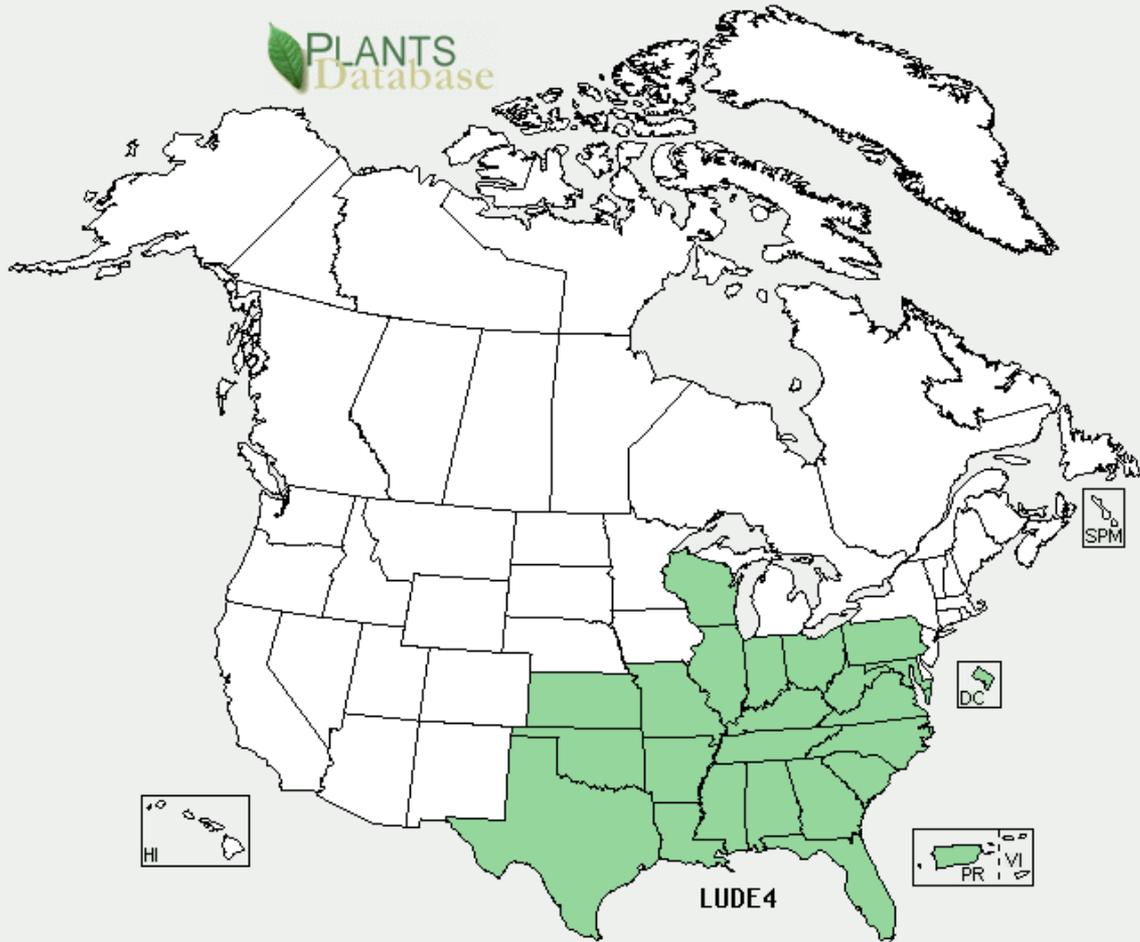


Winged Willow Primrose

Ludwigia decurrens



Cass Mutters, UCCE



- *Native to Eastern U.S.*
- *Listed as rare or endangered in some states*
- *Discovered in Butte Co. in 2011*
- *“Q” rated pest*
- *Active outreach*
- *Multi-agency & farm community effort*

“A rated pest”

An organism of known economic importance subject to state (or commissioner when acting as a state agent) enforced action involving: eradication, quarantine regulation, containment, rejection, or other holding action.

“Q rated pest”

An organism or disorder requiring a temporary “A” action pending determination of a permanent rating. The organism is suspected to be of economic importance but its status is uncertain because of incomplete identification or inadequate information.

Tallest water primrose; 3-6 feet tall- stands upright





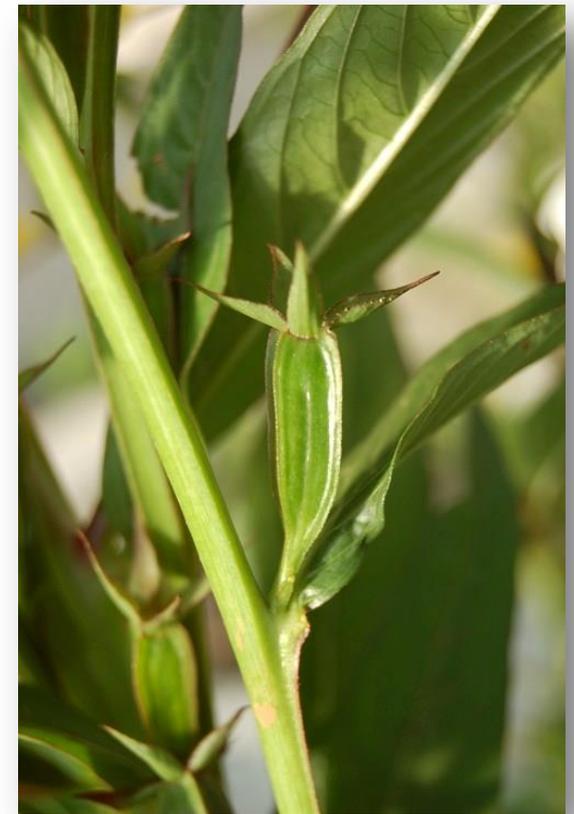
Leaves are linear



Yellow flowers
(typically 4 petals)



Seed capsule at
each node



Winged stem



Abundant seed
production





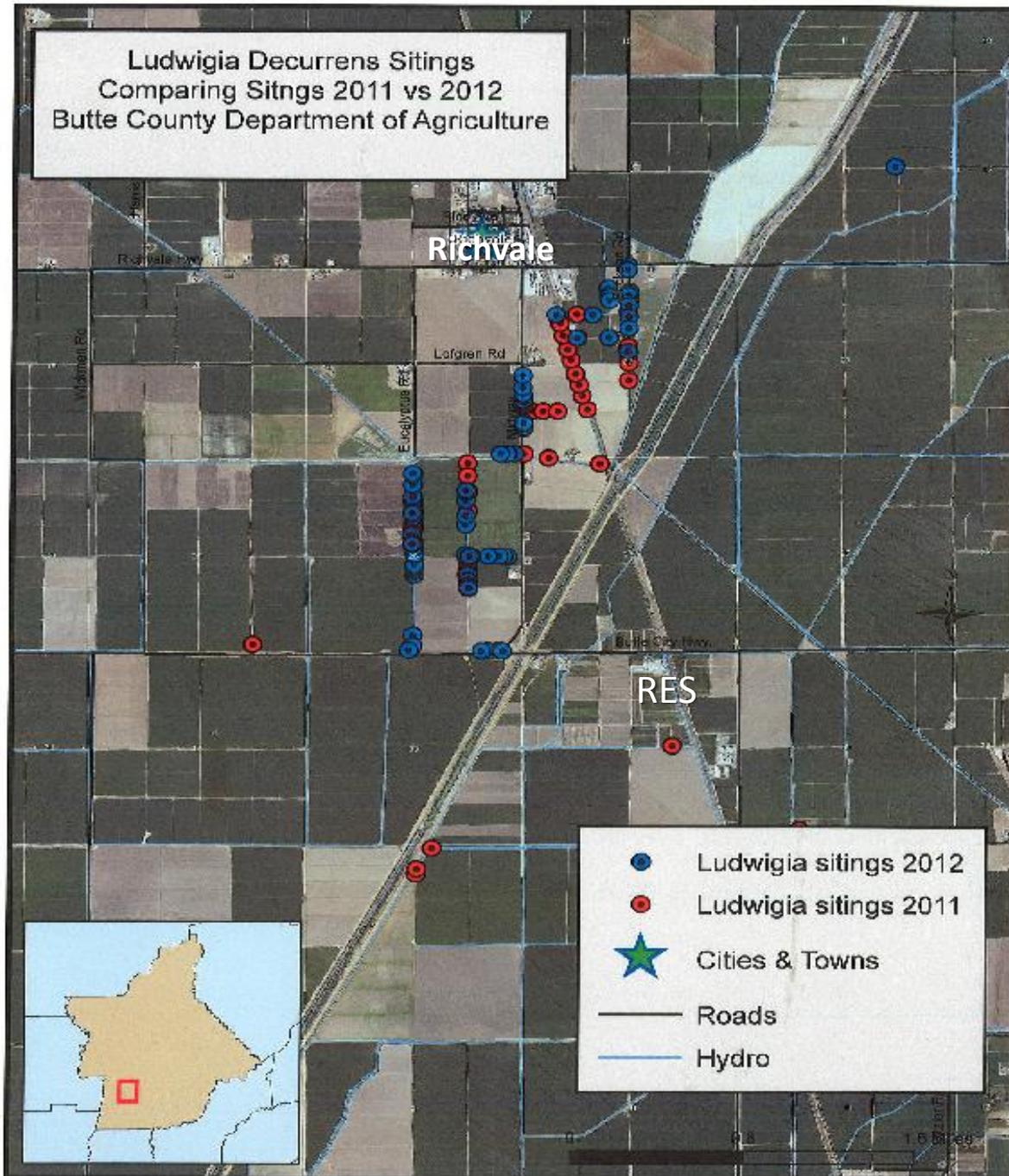




Do not confuse with common water primrose!



Ludwigia Decurrens Sitings
Comparing Sitings 2011 vs 2012
Butte County Department of Agriculture



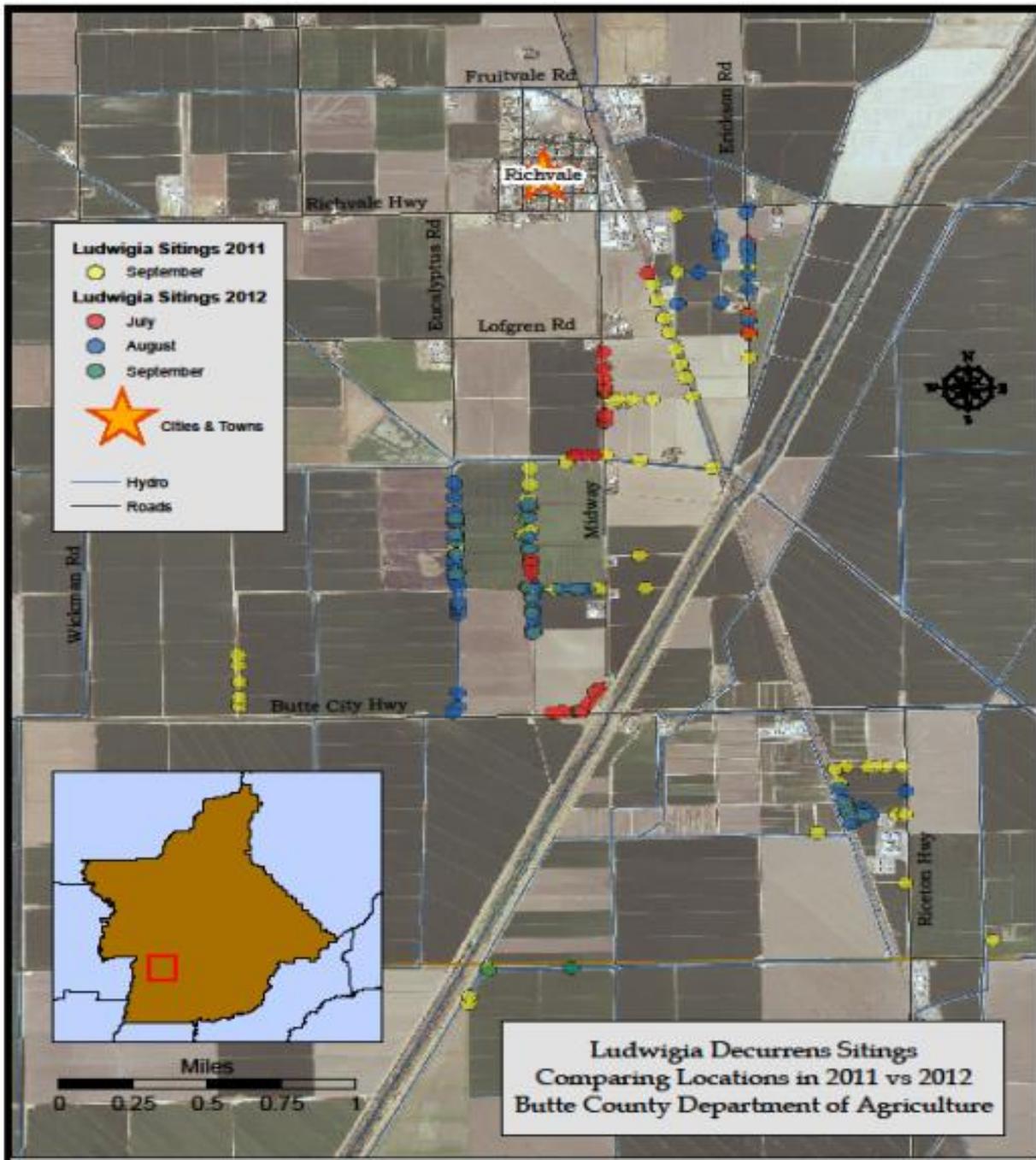
Distribution in 2011 & 2012

Eradication Efforts: 2011 & 2012

1. Sprayed primrose around right of ways & ditches with help from irrigation districts and growers (glyphosate)
2. Rogued plants from fields & borders
3. Burned fields with verified primrose presence

In-field Control

Fischer & Eckert, UCD

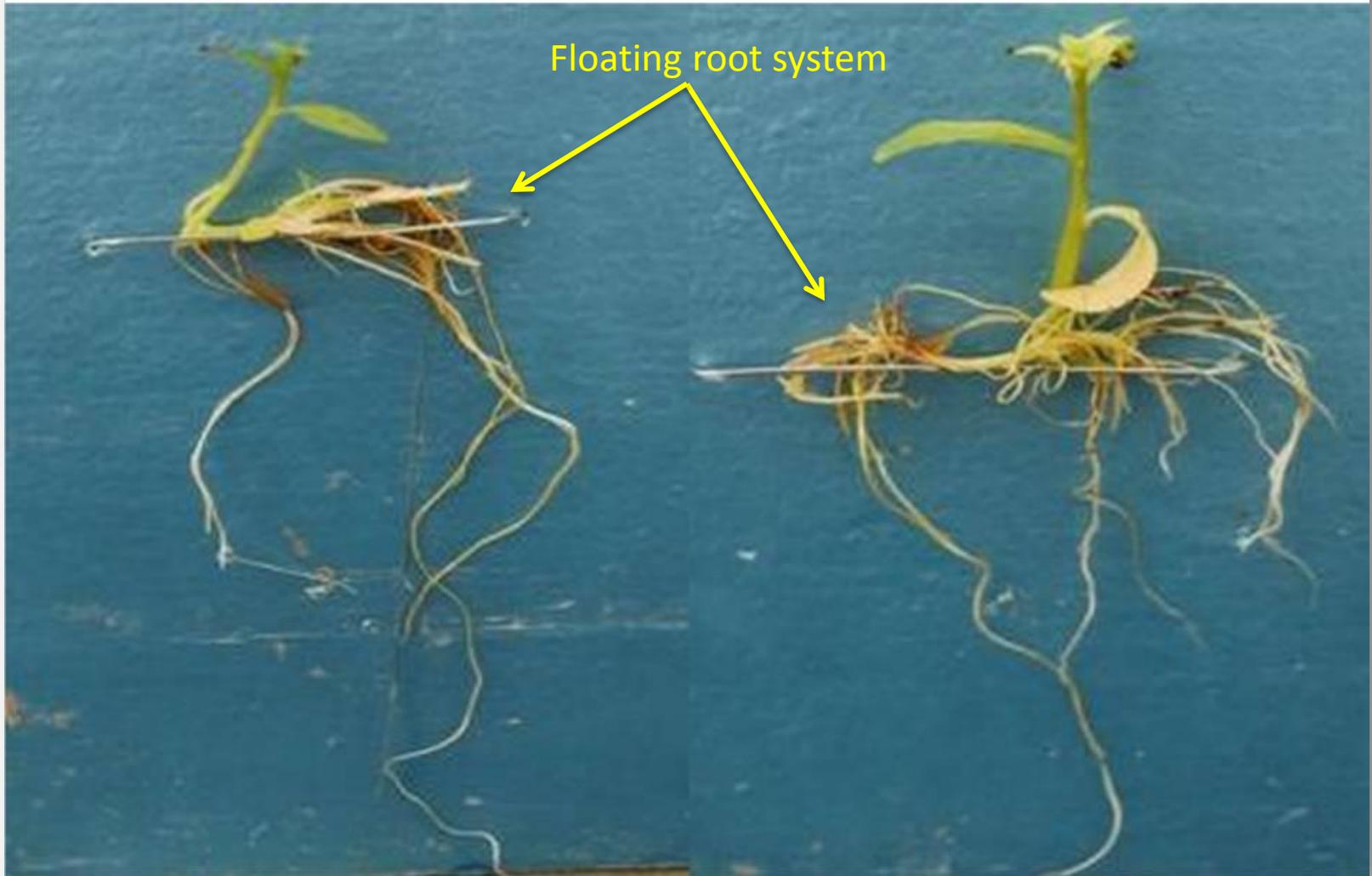


- Sept 2011
- July 2012
- August 2012
- Sept 2012

On-going emergence

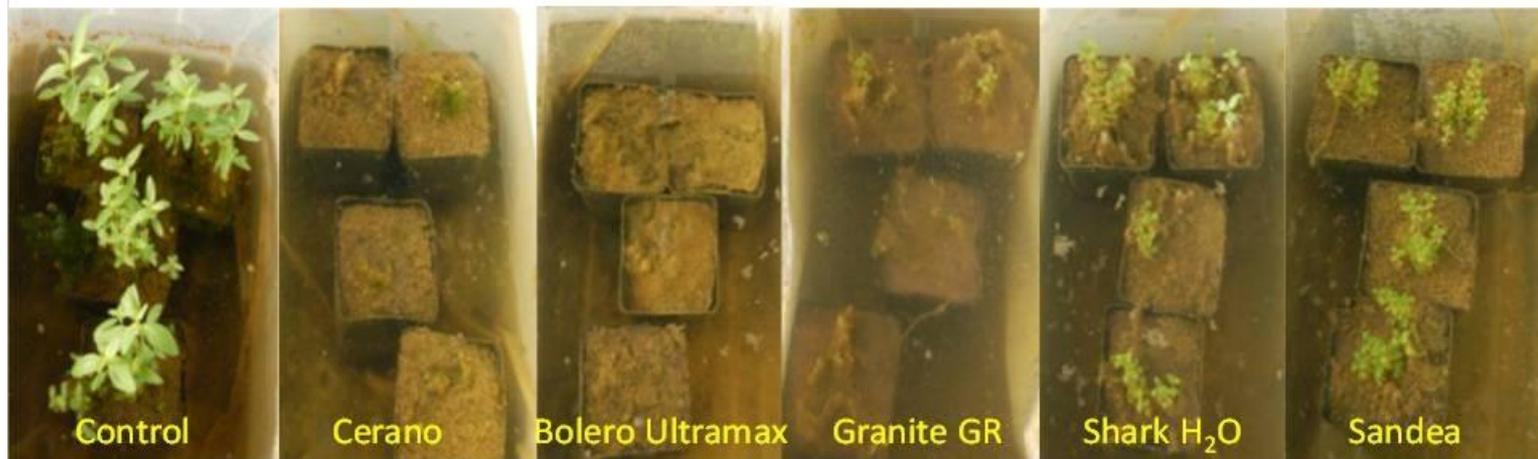
1. First observed July 12
2. Emerged at late as Sept.
3. Predominately along canal banks
4. After propanil application

Ludwigia decurrens
Portion of plant dropped into water

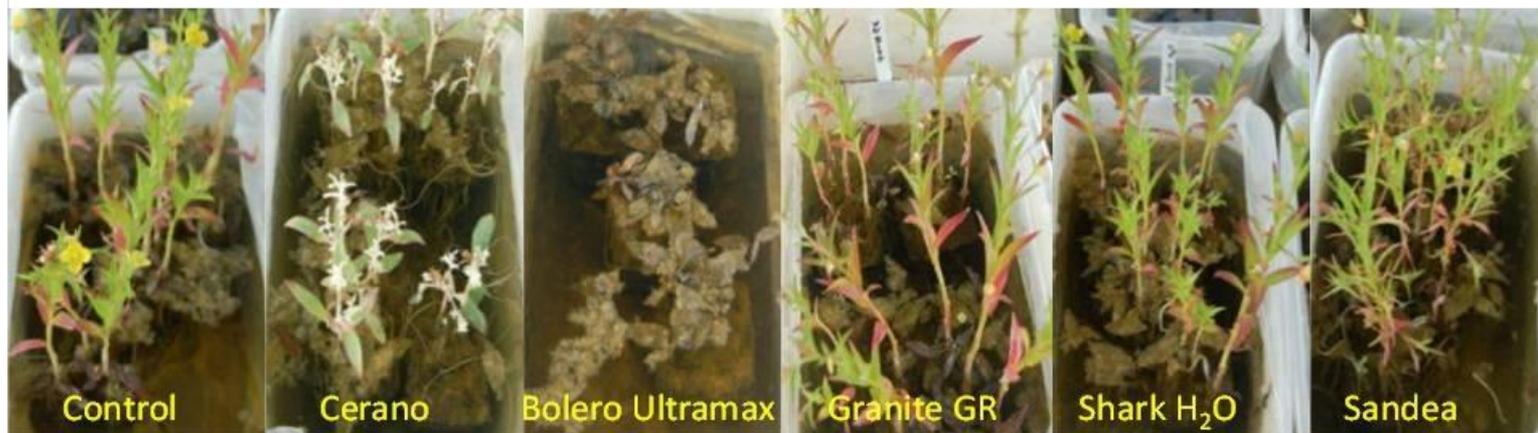


Water active herbicide effects on *Ludwigia decurrens*

Early flood and treatment

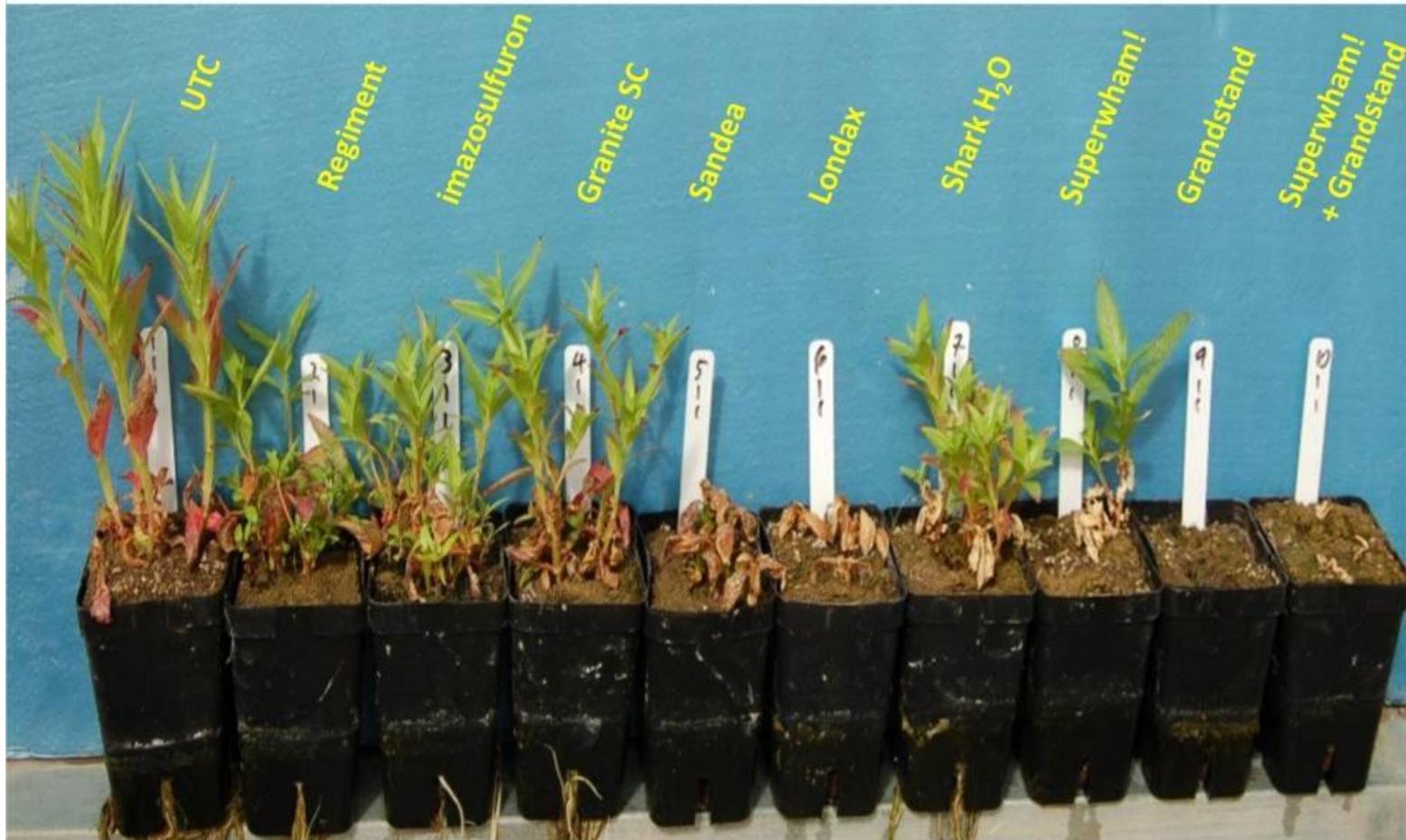


Late flood after weed establishment, then treatment



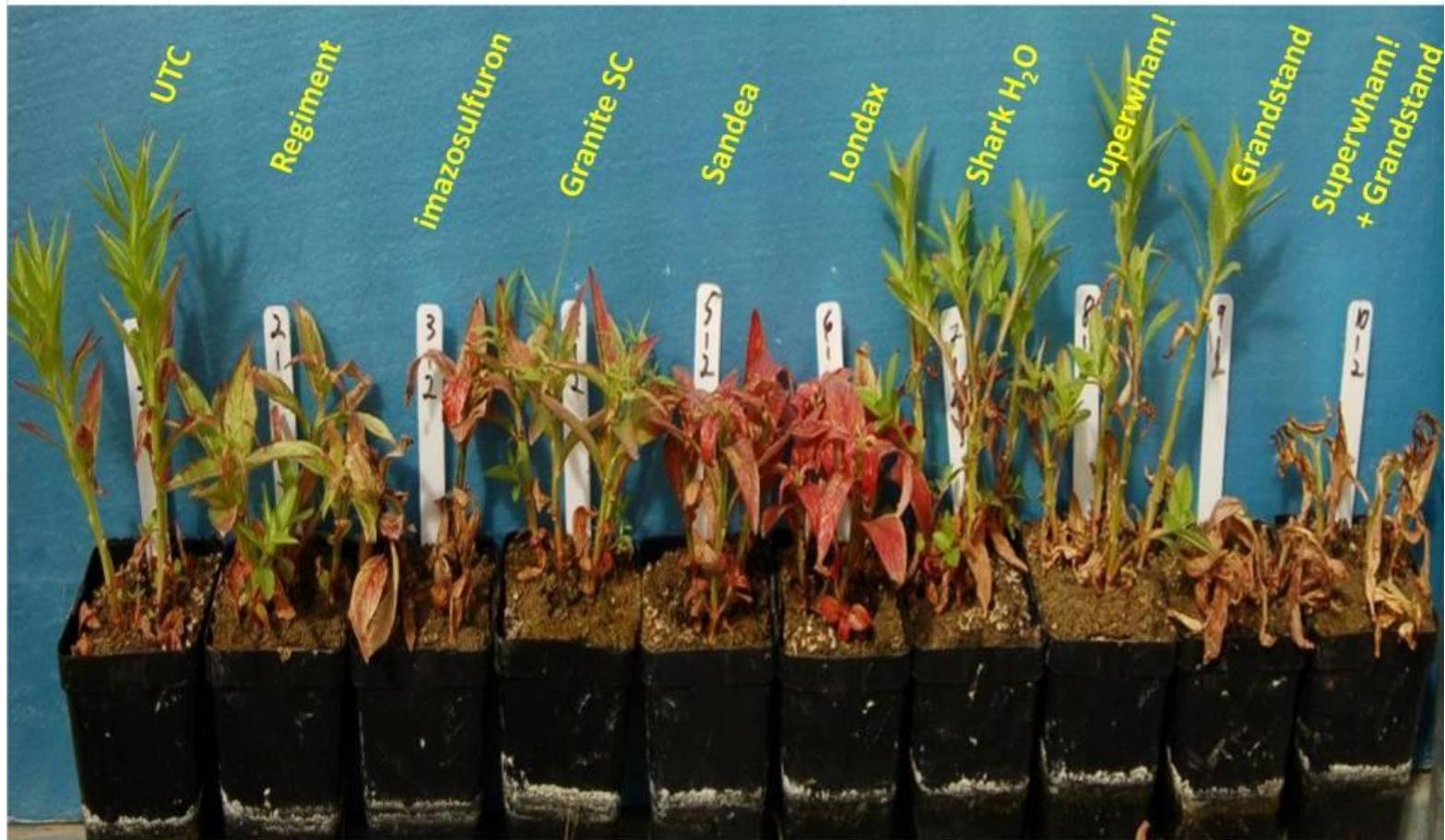
Foliar active herbicide effects on *Ludwigia decurrens*

Early growth stage treatment



Foliar active herbicide effects on *Ludwigia decurrens*

More established weed prior to treatment



Suggested Control Options

1. Early water active herbicides

Boloro ultramax, Cerano, Granite GR

2. Follow-up foliar

Early: Sandea, Londax

Late: Grandstand or Grandstand/propanil mix

2013

- Spring to fall
- Continue to eradicate with industry's help
- Maintain database and map locations
- Continue interaction with stakeholders



There's more ...

Limnophila ludoviciana

“Indian Marshweed”

Geography and Habitat

- Native: South Asia
- Freshwater submerged aquatic
- Habitat:
 - Mountain streams, warm subtropical rivers
 - Tolerates temperatures of 59° — 77° F
 - Grows in low light conditions Invasion Pathways

This species is on the Federal Noxious Weed List – (7 CFR 360). No person may move a Federal noxious weed into or through the United States, or interstate, without a federal permit.

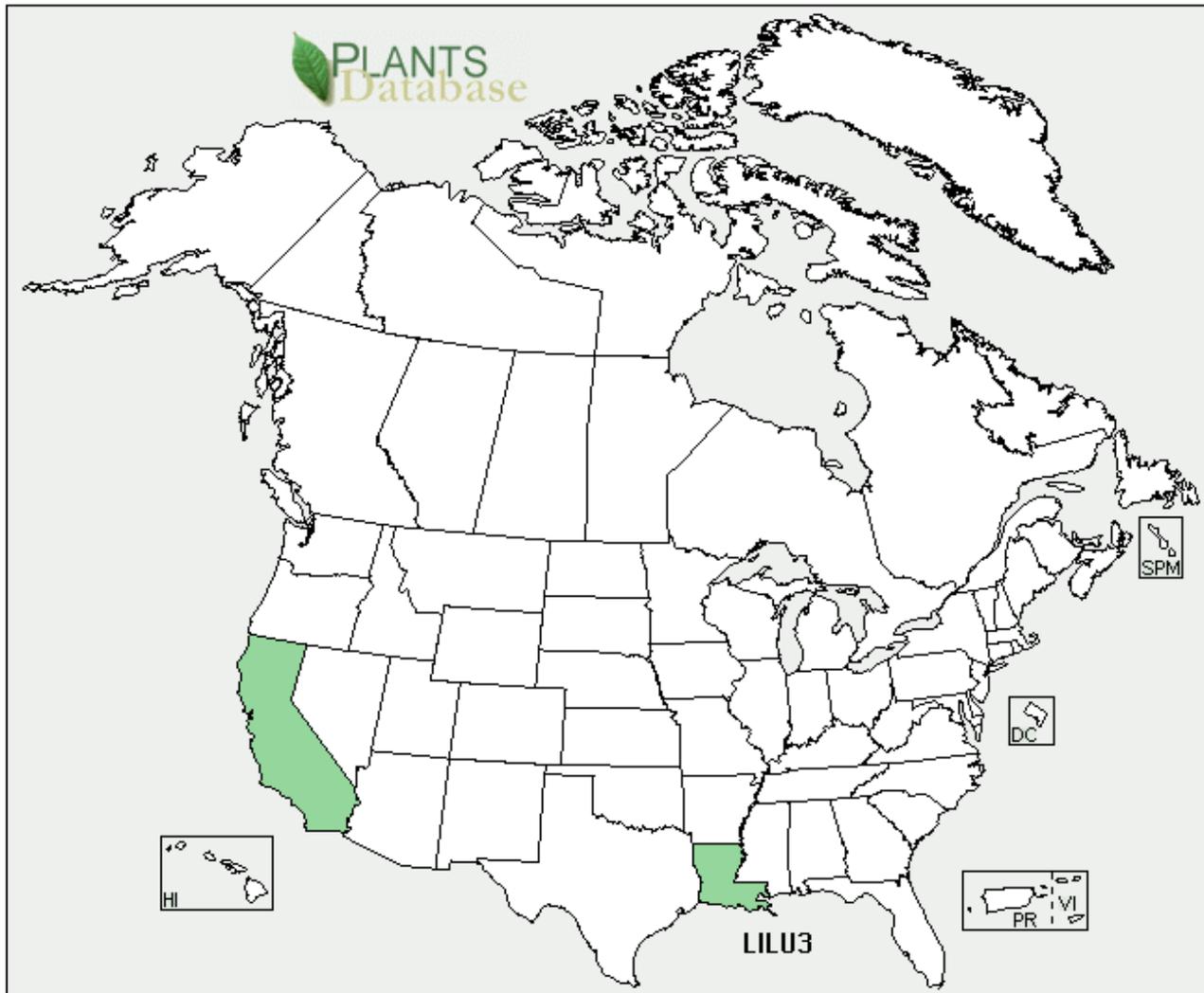
See [7 CFR 360](#) for more information.

Limnophila ludoviciana

- First discovered in Yuba County in 1977.
- Found in Butte county in the Riceton & Hamilton roads area in 1999.
- Nelson & Aguas Frias Rd in 2012 is the third confirmed location in California.

Distribution:

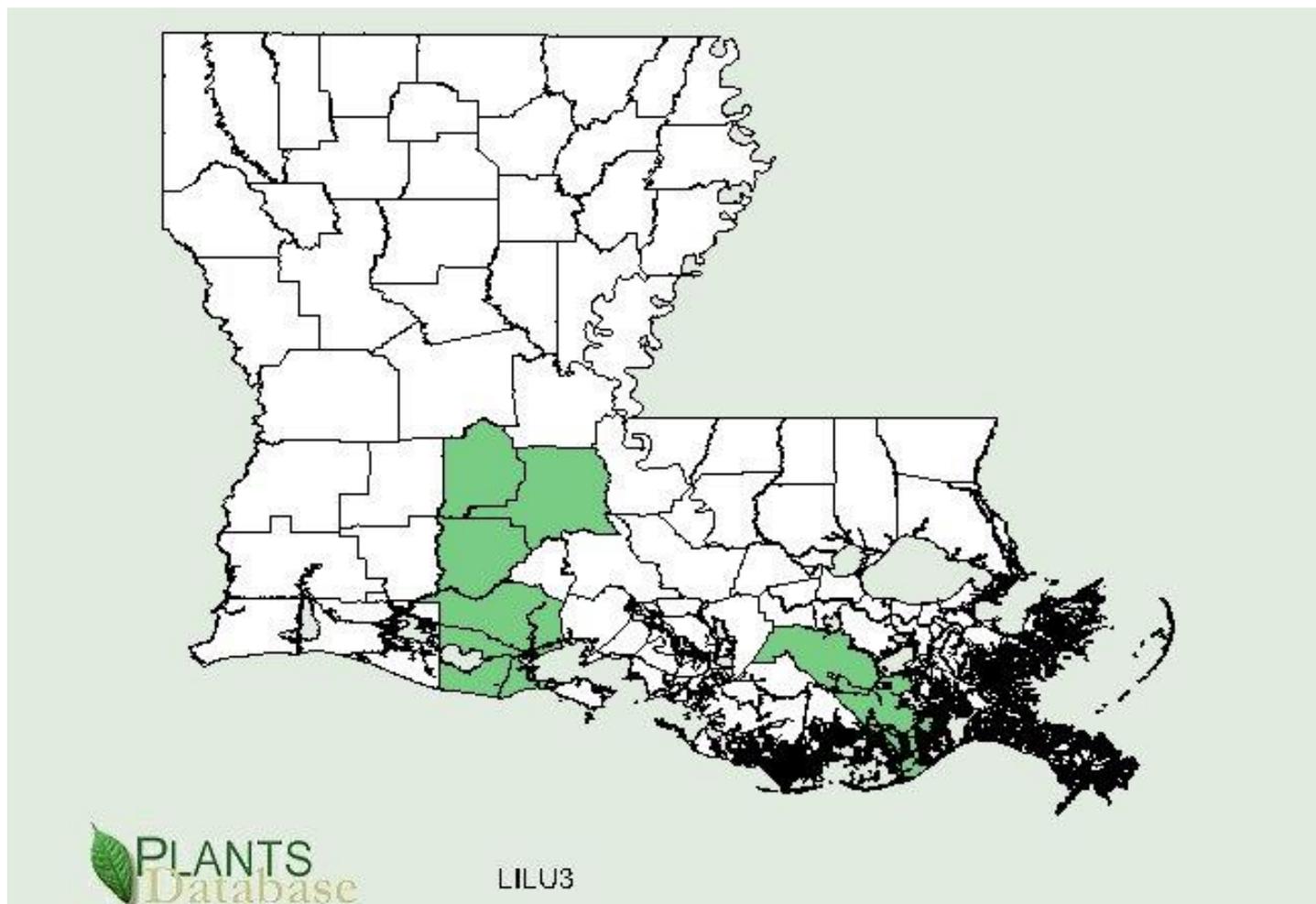
Limnophila × *ludoviciana* Thieret [*indica* × *sessiliflora*]



[View Native Status](#)

■ Present □ Absent

Distribution of Indian Marshweed (*Limnophila ludoviciana*)









Indian Marshweed

(Limnophila indica)



Parrot Feather

(Myriophyllum aquaticum)

Thanks





Current established
distribution of

Limnophila indica

USDA



Distribution of *Limnophila sessiliflora*

