Winged Willow Primrose

*Ludwigia decurrens*

Cass Mutters, UCCE
Navid Khan, Butte Co. Ag Comm.
- 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!
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
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

Floating root system
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
But wait... there’s more
**Limnophila indica**

“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.

Current established distribution of 

*Limnophila indica*

*USDA*
Limnophila indica

- 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.
Indian Marshweed
(Limnophila indica)

Parrot Feather
(Myriophyllum aquaticum)
Thanks