





#### Weed Alerts and CDFA Update

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#### 2015 Additions to Section 4500 CA Noxious Weed List

Aeschynomene spp. joint-vetch Asphodelus fistulosus onionweed Brachypodium sylvaticum forest false-brome Centaurea jacea s.l. meadow & black knapweed Coincya monensis star-mustard Euphorbia dendroides tree spurge Fallopia x bohemica Bohemian knotweed Galega officinalis goatsrue Hydrocharis morsus-ranae frogbit Leptochloa chinensis Chinese sprangeltop

Limnobium laevigatum SA spongeplant Ludwigia decurrens winged water-primrose Ludwigia hexapetala water-primrose Mercurialis ambigua Spanish mercury Nymphoides peltata water shield Parthenium hysterophorus Santa Maria feverfew Rhagadiolus stellatus star endive Saccharum ravennae ravennagrass Salvinia auriculata s.l. giant salvinia Capegrass Tribolium obliterum

Volutaria tubuliflora

desert knapweed



#### Invasive Weeds in CA



- Modern economy provides many pathways for entry
- Weeds may establish many years before they invade
- •Early control much cheaper than later control

Glyphosate resistant pigweed in cotton field in GA



#### Common Weed Pathways



- Human introduction
- Horticulture escape
- Seed contamination
- Nursery stock
- Forage or straw
- Aggregate
- Natural dispersal

Pampas grass in production nursery



### Boneseed Chrysanthemoides monilifera

- Native to S. Africa
- Spreading in Orange Co.
- Bad weed in Australia
- Introduced via horticulture



# Egyptian broomrape (Orobanche aegyptiaca)

Parasite on many crop plants incl. tomato, cabbage, & carrots New find for N Am 6/14 Destroying tomato production in Israel & Turkey Most likely pathway via contaminated seed or transplants



## Desert knapweed (Volutaria tubuliflora)

- •Endemic to edge of Sahara Desert
- •Found in San Diego Co. 2011
- •Found in Orange Co. 2015
- •White-flowered form rare in wild, but also in Chile
- •Through ship container???



# Winged water-primrose Ludwigia decurrens

- Found in rice field in Butte Co. (3+ localities) where it's persisting
- Wetland plant native to SE US & S Am
- Known noxious weed in Japan
- Pathway via rice seed from Japan





### Dittrichia viscosa False yellowhead

Found late in 2014 in Solano Co.

Ballast weed in 1800s in Fl, PA, & NJ Similar ecology to stinkwort Roadside invasion From container?



### Small-Flowered Hawksbeard Crepis pulchra

- Native to S. Europe
- Mostly as waif, but spreading in Napa, Solano, CC, & Alameda Cos.
- Introduced by ?



## Hoary Cress Berteroa incana

- Native to Eurasia
- Widespread in NA
- Missing from S states& rare in CA
- Toxic to livestock
- Spreading from Nevada?



# Spanish mercury Mercurialis ambigua

- Related to dog mercury
- Native to Spain
- Often a nursery weed
- Spreads in nursery stock & mulch



### Myrtle Spurge Euphorbia myrsinites

- In a group w/many weeds
- Spread via horticulture
- Mostly in winter cold areas
- Very weedy in UT
- Not yet established in CA



#### Myrtle Spurge in Utah Euphorbia myrsinites



### Capeweed (Arctotheca calendula)

- Rosette annual w/ dark disk fls
- •Confused w/ A. prostrata that is sold as a ground cover
- Currently known from 5Counties in CA
- Introduced via grass seed from Australia



# Cotton Fireweed Senecio quadridentatus

- Native to Australia
- Known from SB, LA
- Looks native
- Coastal scrub
- Fire adapted
- Other, similar species just invading



## Capegrass Tribolium obliterum

- Native to S. Africa
- Known from Fort Ord
- Inconspicuous
- But distinctive
- Not easy to control
- Pathway through military vehicles?



## South American spongeplant (Limnobium laevigatum)

- Floating aquatic
- Propagates vegetatively& via seed
- •Grows rapidly, might surpass water hyacinth
- Introduced via aquarium& ponds

