

Noxious Weed IPM

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Noxious Weed Program Regional Districts 2008

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Integrated Pest Control Branch
Map Produced By: Colleen Murphy-Vierra

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CDFA Action Oriented Pest Rating System

- “A” An organism of known economic importance subject to state (or commissioner when acting as a state agent) enforced action involving: eradication, quarantine, containment, rejection, or other holding action.
- “B” An organism of known economic importance subject to: eradication, containment, control or other holding action at the discretion of the individual county agricultural commissioner.
- OR
- An organism of known economic importance subject to state endorsed holding action and eradication only when found in a nursery.
- “C” An organism subject to no state enforced action outside of nurseries except to retard spread. At the discretion of the commissioner.
- OR
- An organism subject to no state enforced action except to provide for pest cleanliness in nurseries.
- “Q” An organism or disorder requiring 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. In the case of an established infestation, at the discretion of the Assistant Director for Plant Industry, the Department will conduct surveys and will convene the Division Pest Study Team to determine a permanent rating.
- “D” No action. (Parasites, predators, and organisms of little or no economic importance).

CA Code of Regulation

Sec. 4500 Noxious Weed

It has been determined that the following species of plants are noxious weeds within the meaning of Section 5004 of the Food and Agricultural Code:

- *Acacia paradoxa* (Kangaroo thorn)
- *Acaena anserinifolia* (bidly bidly)
- *Acaena novae-zelandiae* (bidly bidly)
- *Acaena pallida* (bidly bidly)
- *Achnatherum brachychaetum* (punagrass)
- *Acroptilon repens* (Russian knapweed)
- *Aegilops cylindrica* (jointed goatgrass)
- *Aegilops ovata* (ovate goatgrass)
- ...
- *Zygophyllum fabago* (Syrian beancaper)

This regulation shall in no way restrict the designation of a weed pest to those species listed herein.

Note: Authority cited: Sections 407 and 5004, Food and Agricultural Code.

Reference: Section 5004, Food and Agricultural Code.

Hoary Alyssum, *Berteroa incana*



Photo – Michigan State

Extremely toxic to horses.
Lassen and El Dorado Counties

Hoary Alyssum, *Berteroa incana*



Photo – Michigan State

Stinkwort, *Dittrichia graveolens*



Stinkwort, *Dittrichia graveolens*



False Yellowhead, *Dittrichia viscosa*



Photo by Zoya Akulova

Found recently near Napa, CA
Reportedly tolerant of wetter conditions

False Yellowhead, *Dittrichia viscosa*



Photo by Zoya Akulova



Photo by Zoya Akulova

Goat's Rue, *Galega officinalis*

2' – 6' tall

Purple to white pea-like
flowers

Displaces native
wetland/riparian plants

Toxic to sheep and cattle



California Department of Food and Agriculture
Terrestrial Weed Identification



Broomrape, *Orobanche ramosa*

**CDEFA A-Rated, Sec. 4500 Noxious
Weed**

Orobanchaceae –Broomrape Family
Parasitic

California Department of Food and Agriculture
Terrestrial Weed Identification



Branched
broomrape attached
to the roots of a
tomato plant

California Department of Food and Agriculture
Terrestrial Weed Identification



California Department of Food and Agriculture
Terrestrial Weed Identification



Japanese Dodder, *Cuscuta japonica*
CDFG A-rated, Sec. 4500 Noxious Weed (*Cuscuta* spp.)

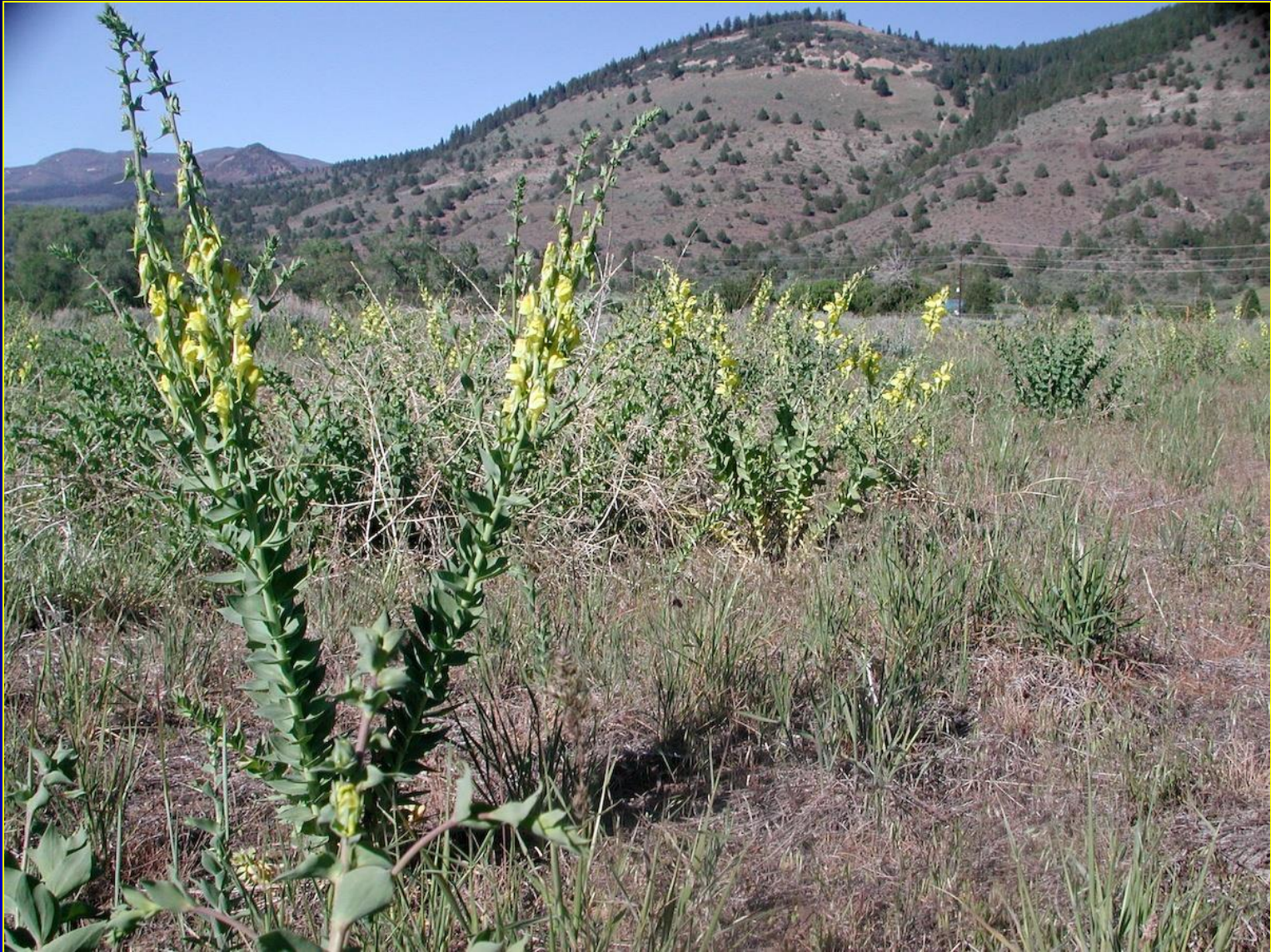
Convolvulaceae – Bindweed Family
Parasitic

California Department of Food and Agriculture
Terrestrial Weed Identification



Japanese Dodder infertile flowers

California Department of Food and Agriculture
Terrestrial Weed Identification



Branches near base

Dalmation Toadflax, *Linaria genistifolia* ssp. *dalmatica*

California Department of Food and Agriculture
Terrestrial Weed Identification



Leaves “clasp” stem
Dalmation Toadflax, *Linaria genistifolia* ssp. *dalmatica*

California Department of Food and Agriculture
Terrestrial Weed Identification



Yellow snap-dragon flower
Dalmation Toadflax, *Linaria genistifolia* ssp. *dalmatica*



If Dalmatian Toadflax is cut or chopped without removing ALL of the root system, the plant will develop hundreds of new plants at the crown. Plant populations may increase dramatically following incomplete removal projects.

DO NOT CHOP THIS PLANT!

California Department of Food and Agriculture
Terrestrial Weed Identification

- Spotted Knapweed, *Centaurea maculosa*

- Squarrose Knapweed, *Centaurea squarrosa*

- Diffuse Knapweed, *Centaurea diffusa*

- Meadow Knapweed, *Centaurea X monktonii*



California Department of Food and Agriculture
Terrestrial Weed Identification



Spotted Knapweed, *Centaurea maculosa*

California Department of Food and Agriculture
Terrestrial Weed Identification



Large urn shaped heads, dark tipped bracts without spines
Spotted Knapweed, *Centaurea maculosa*

California Department of Food and Agriculture
Terrestrial Weed Identification



Persistent dark “spots” on tips of bracts
Spotted Knapweed, *Centaurea maculosa*

California Department of Food and Agriculture
Terrestrial Weed Identification



Recurved bracts

Squarrose Knapweed, *Centaurea squarrosa*

California Department of Food and Agriculture
Terrestrial Weed Identification



Meadow Knapweed, *Centaurea X monktonii*

California Department of Food and Agriculture
Terrestrial Weed Identification



Meadow Knapweed, *Centaurea X monktonii*

California Department of Food and Agriculture
Terrestrial Weed Identification

Iberian Starthistle, *Centaurea iberica*

CDFG A-rated, Sec. 4500 Noxious Weed

Purple Starthistle, *Centaurea calcitrapa*

CDFG B-rated, Sec. 4500 Noxious Weed

- Differentiated by presence/absence of pappus on seeds.



California Department of Food and Agriculture
Terrestrial Weed Identification



Large central “star” prior to bolting
Iberian Starthistle, *Centaurea iberica*

California Department of Food and Agriculture
Terrestrial Weed Identification



Very large straw colored bracts
Purple Starthistle, *Centaurea calcitrapa*

California Department of Food and Agriculture
Terrestrial Weed Identification

Fertile Capeweed, *Arctotheca*
calendula

**CDEFA A-Rated, Sec. 4500 Noxious
Weed**

Asteraceae – Sunflower Family
Perennial



California Department of Food and Agriculture
Terrestrial Weed Identification



Grey hairs on underside of leaf
Fertile Capeweed, *Arctotheca calendula*

California Department of Food and Agriculture
Terrestrial Weed Identification



Brown “wooly” pappus on seeds
Fertile Capeweed, *Arctotheca calendula*

California Department of Food and Agriculture
Terrestrial Weed Identification

Yellow petals with black center.
Potentially toxic to sheep, cattle and
horses.

Fertile Capeweed, *Arctotheca*
calendula



California Department of Food and Agriculture
Terrestrial Weed Identification

Scotch Thistle, *Onopordum acanthium*

**CDEFA A-rated, Sec. 4500 Noxious
Weed (*Onopordum* spp.)**

Asteraceae – Sunflower Family

Biennial to short lived perennial



California Department of Food and Agriculture
Terrestrial Weed Identification

Numerous branching stems to 8' tall
Scotch Thistle, *Onopordum acanthium*



California Department of Food and Agriculture
Terrestrial Weed Identification



Woolly gray hairs on foliage “Old Man Thistle”
Scotch Thistle, *Onopordum acanthium*

California Department of Food and Agriculture
Terrestrial Weed Identification



Leaf margin slightly lobed, single yellow spine, prominent veins
Scotch Thistle, *Onopordum acanthium*

California Department of Food and Agriculture
Terrestrial Weed Identification



Spiny winged stem all the way to flowerhead
Scotch Thistle, *Onopordum acanthium*

California Department of Food and Agriculture
Terrestrial Weed Identification

Musk Thistle, *Carduus nutans*
CDEFA A-rated, Sec. 4500 Noxious Weed

Asteraceae – Sunflower Family
Biennial to short lived perennial



California Department of Food and Agriculture
Terrestrial Weed Identification



3-5 spines per lobe
Musk Thistle, *Carduus nutans*

California Department of Food and Agriculture
Terrestrial Weed Identification



Flower head “nods” 90 degrees
Musk Thistle, *Carduus nutans*

California Department of Food and Agriculture
Terrestrial Weed Identification



Plumeless Thistle, *Carduus acanthoides*
CDEFA A-Rated, Sec, 4500 Noxious Weed

Plumeless thistle is a biennial which spreads by rhizomatous roots and wind-blown seed to quickly cover any available soil area. Dense stands of this thistle often reach 12-15 feet in height and can form very thick “impenetrable” monocultures.

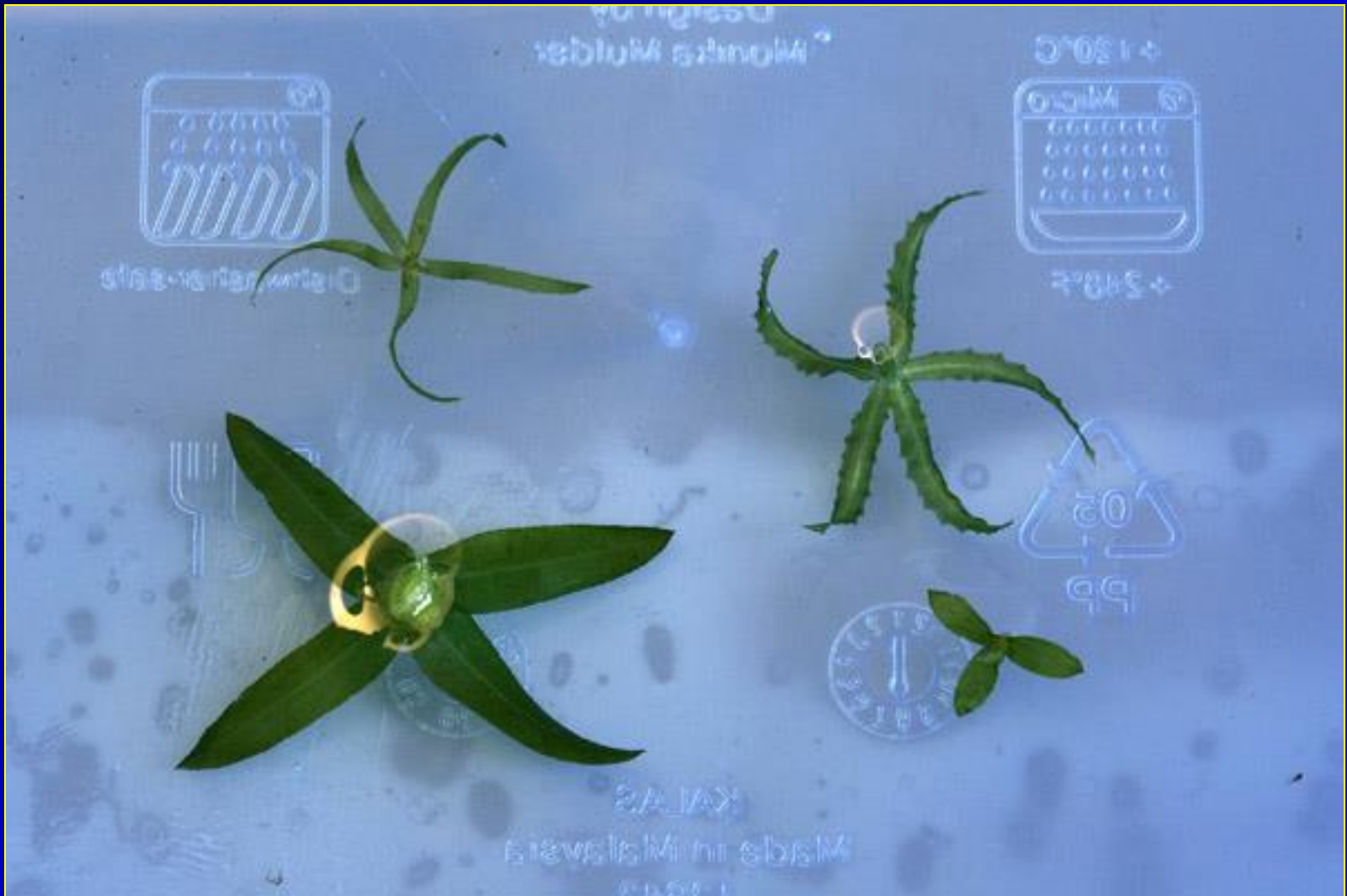
California Department of Food and Agriculture
Terrestrial Weed Identification



Plumeless thistle has distinctive clasping bracts on long slender stems and usually very few terminal soft pink flower heads. Bracts on the flower heads are developed into very sharp single spines, often tinged with red.

Aquatic Plant ID

Submerged Plants with Whorls



Hydrilla, *Hydrilla verticillata*
CDFR A-RATED, Sec. 4500 Noxious Weed,
Food and Ag. Code Sec. 6048-6049
Hydrocharitaceae – Tape-grasses
Perennial



Hydrilla, *Hydrilla verticillata*

CDEFA A-RATED



Leaf margin serrated, raised spicules on midvein

Hydrilla, *Hydrilla verticillata*

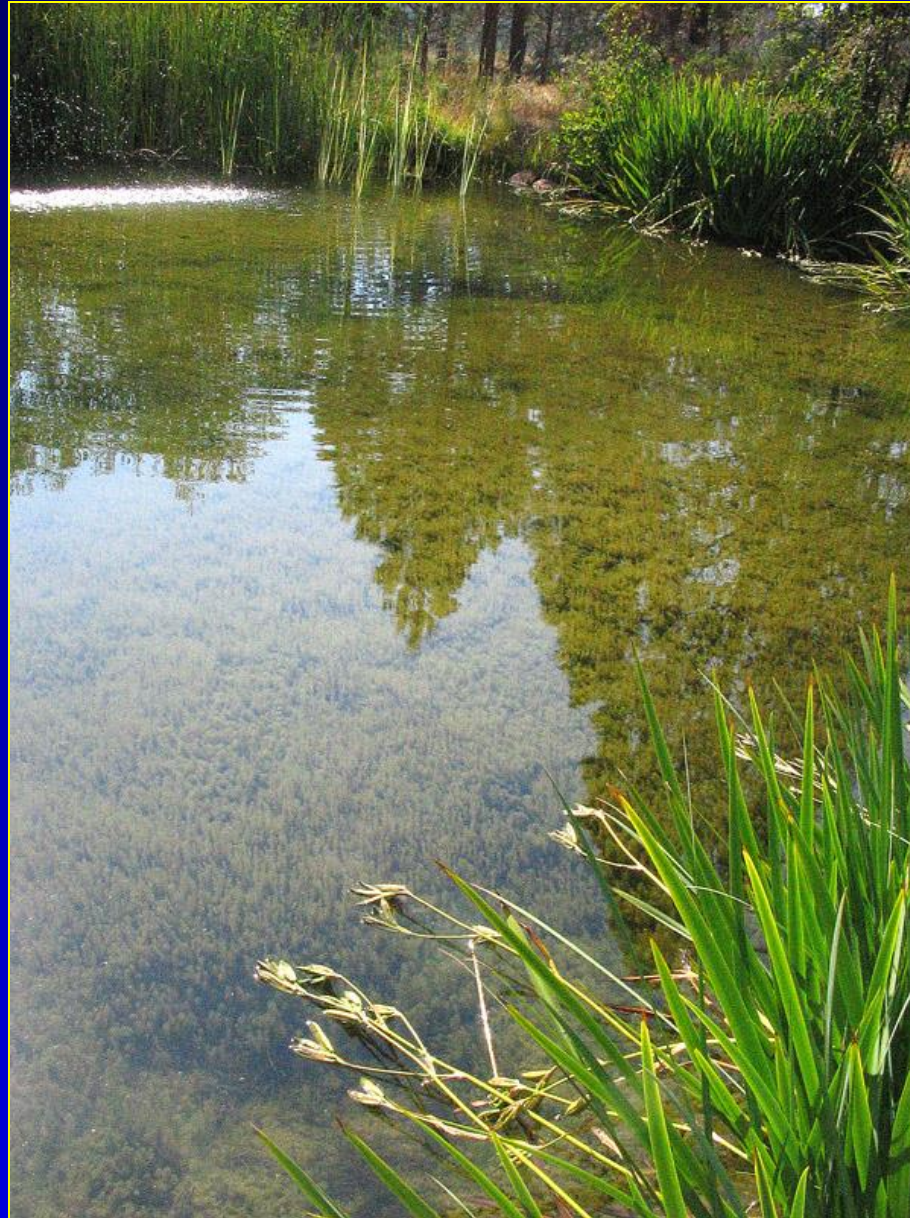
CDEFA A-RATED



Five leaves per whorl

Hydrilla, *Hydrilla verticillata*

CDEFA A-RATED



Hydrilla, *Hydrilla verticillata*

CDFG A-RATED



Only aquatic plant with whorled leaves that forms tubers and turions

South American Spongeplant,
Limnobium laevigatum

CDEFA A-RATED, Sec. 4500
Noxious Weed

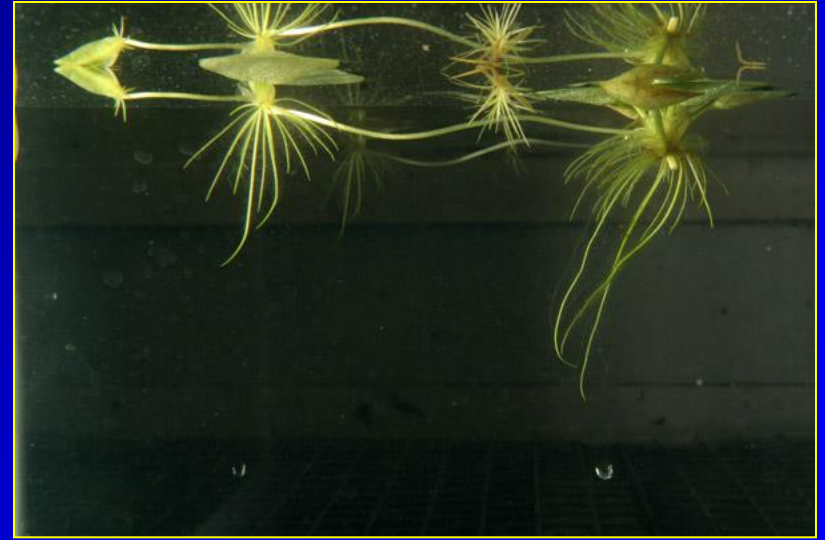
Hydrocharitaceae –
Tape-grasses

Perennial

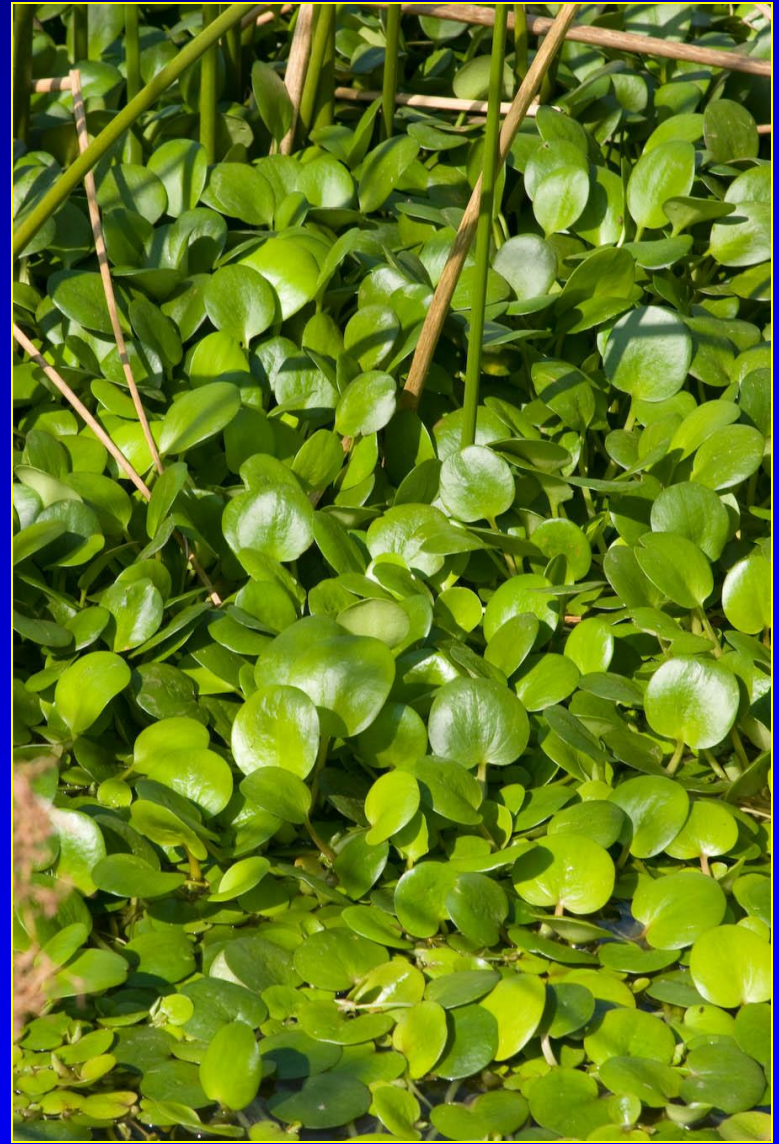
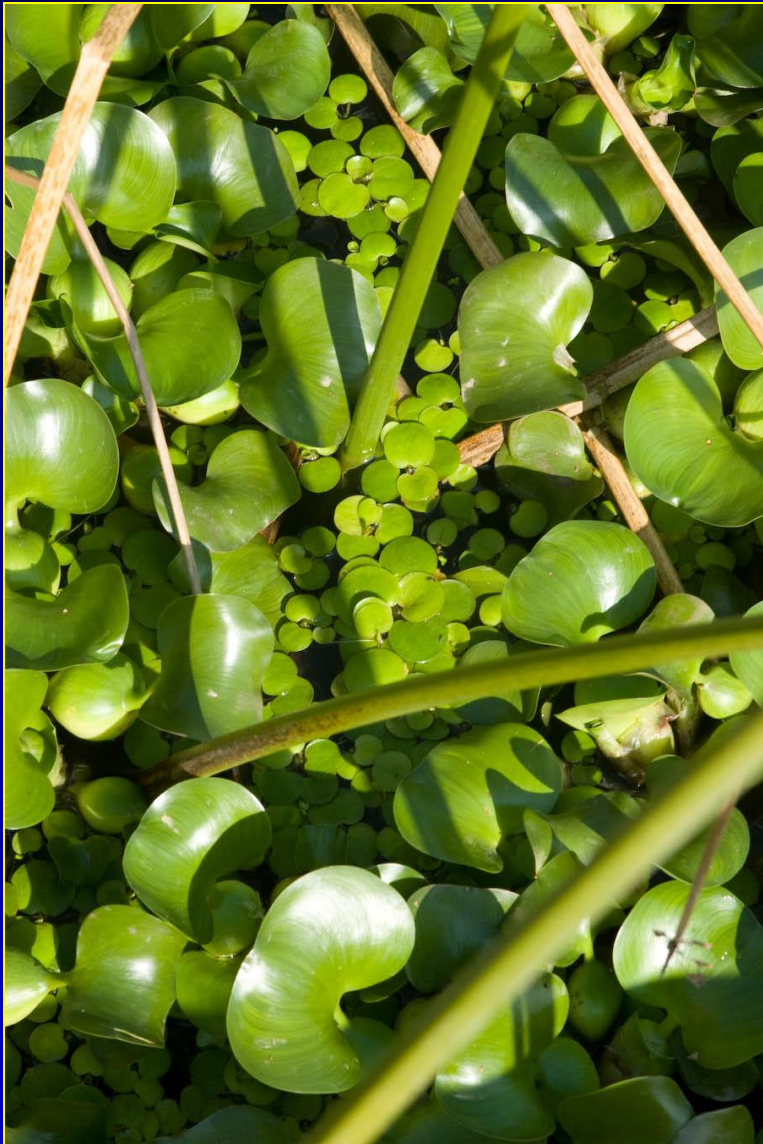


Sponge-like air chambers on underside of
leaf provide floatation

South American Spongeplant, *Limnobium laevigatum*
CDEFA A-RATED



South American Spongeplant, *Limnobium laevigatum*
CDEFA A-RATED



South American Spongeplant, *Limnobium laevigatum*
CDEFA A-RATED



South American Spongeplant, *Limnobium laevigatum*
CDEFA A-RATED



South American Spongeplant, *Limnobium laevigatum*
CDEFA A-RATED



South American Spongeplant, *Limnobium laevigatum*
CDEFA A-RATED

