

Rice Weed Identification

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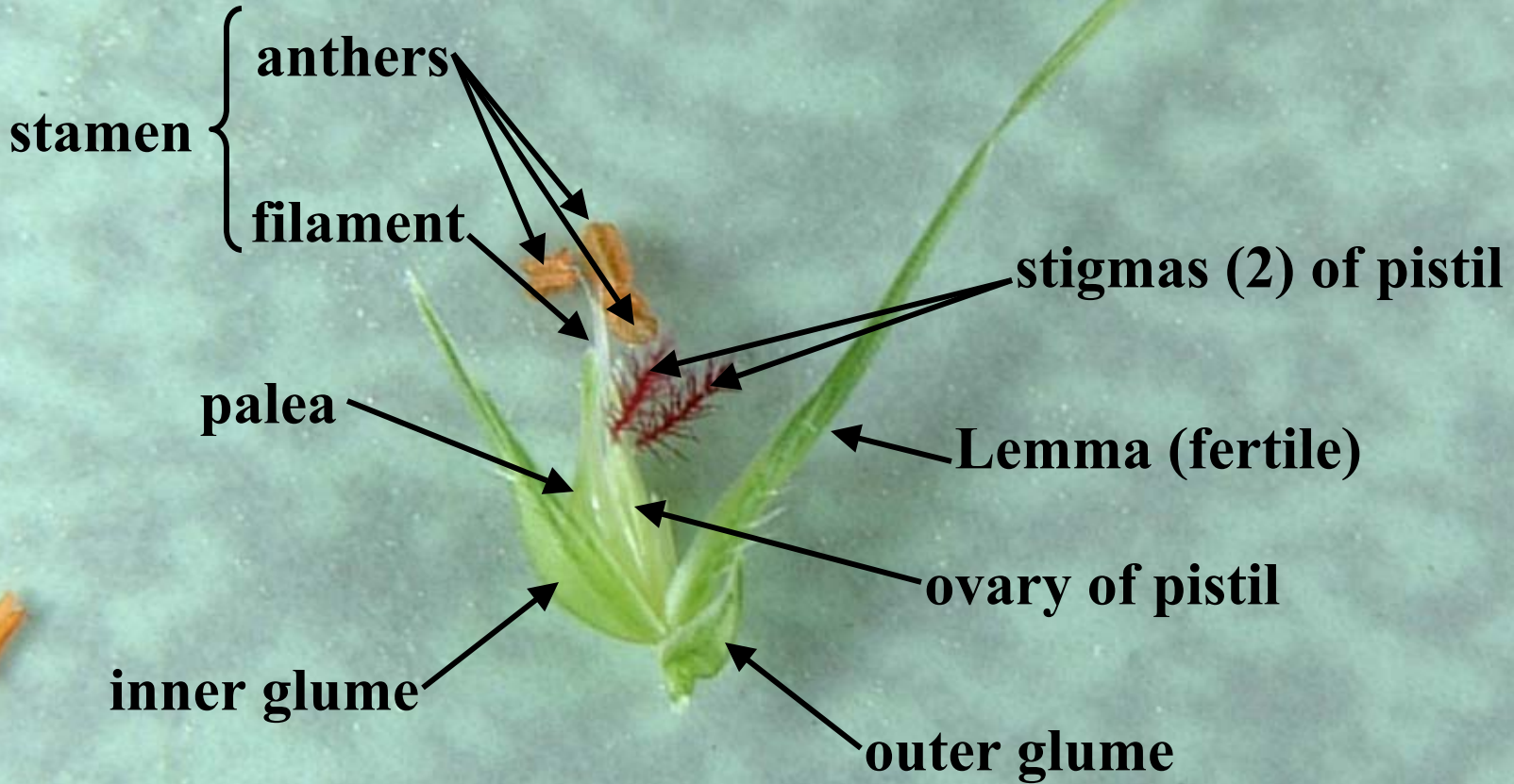


Keying Out vs Recognizing Plants

- Taxonomists use floral parts
 - Least affected by environment
 - Lots of differences
- Agriculturists use vegetative parts
 - Cannot wait until reproductive state
 - Fewer and more subtle differences
 - May be affected by environment
 - Restricted to fewer plants

Typical Grass Spikelet

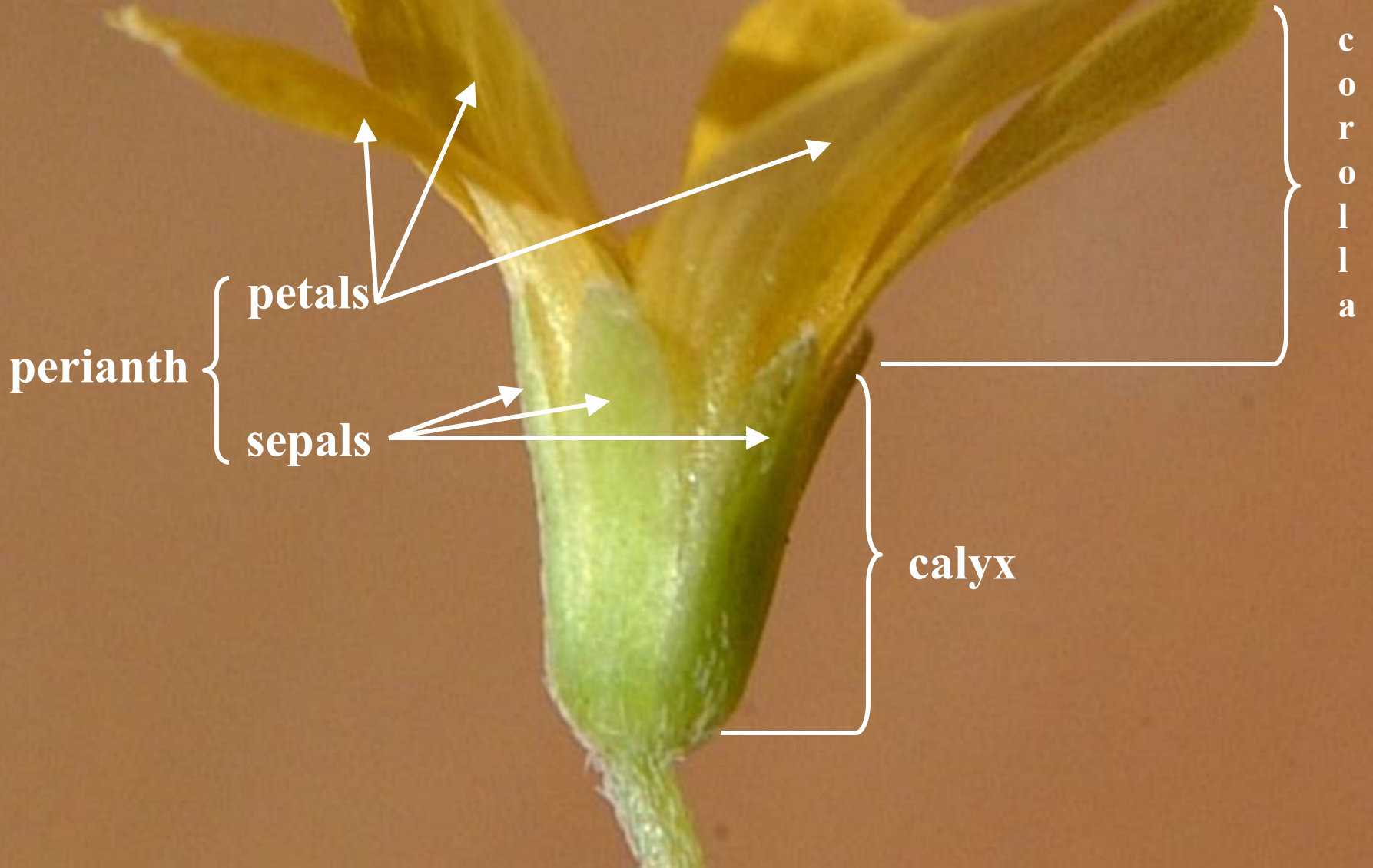
awn of lemma →



Typical Dicot Flower (1)



Typical dicot flower (2)



Diagnostic Grass Parts

- Ligules
- Auricles
- Leaf tips
- Appearance of youngest leaf
- Stolons and/or rhizomes
- Seeds

Examples of Grass Ligules



none



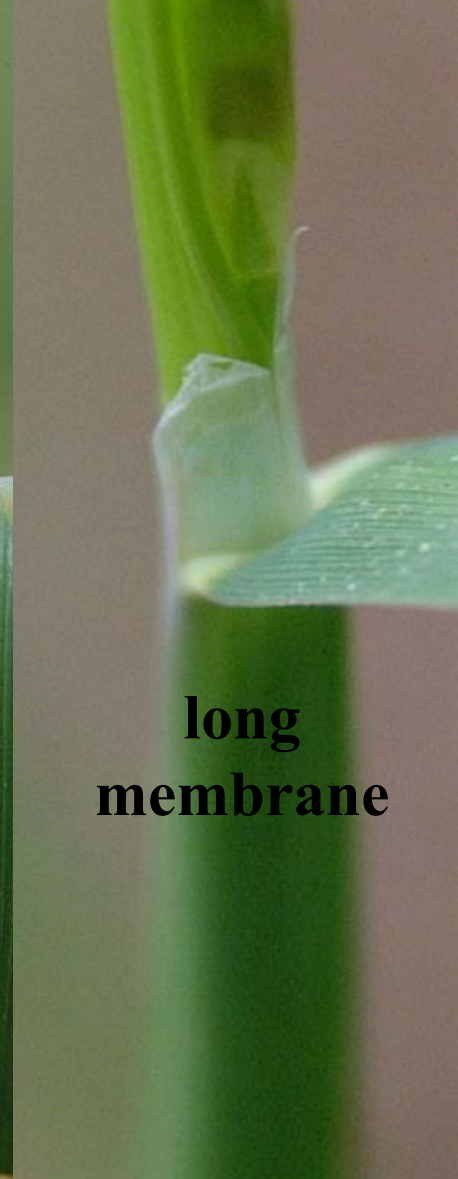
**row of
hairs**



**membrane
fringed
with hairs**

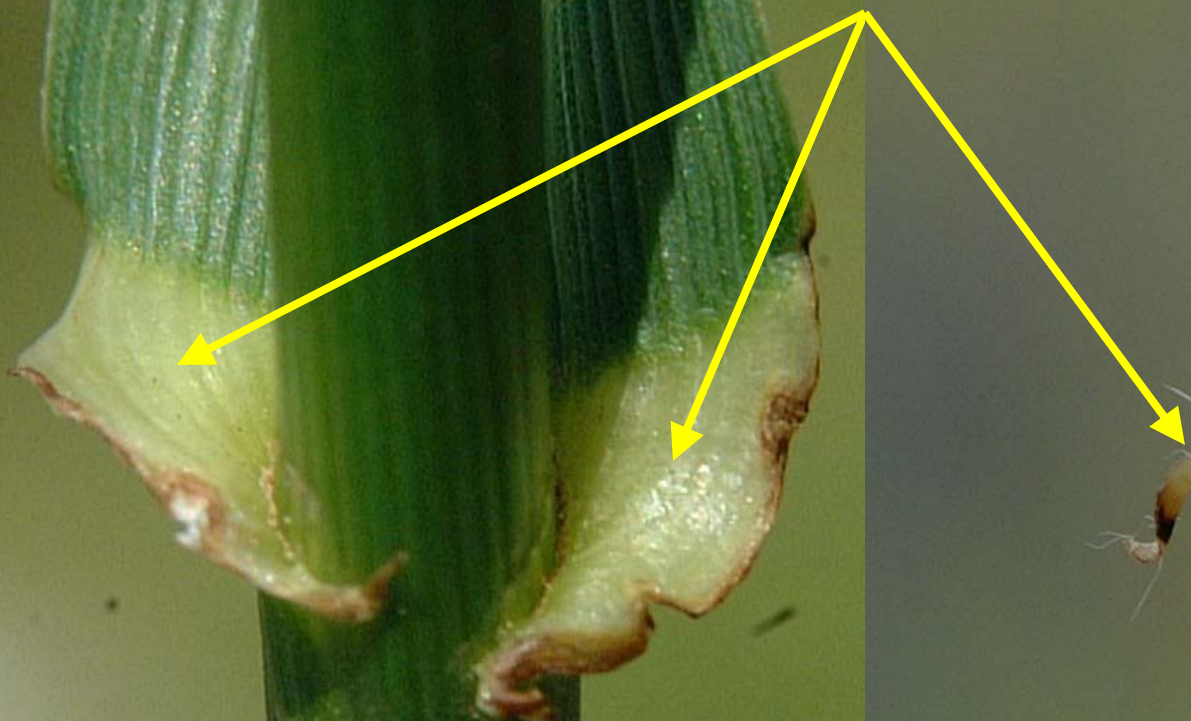


**short
membrane**



**long
membrane**

auricles



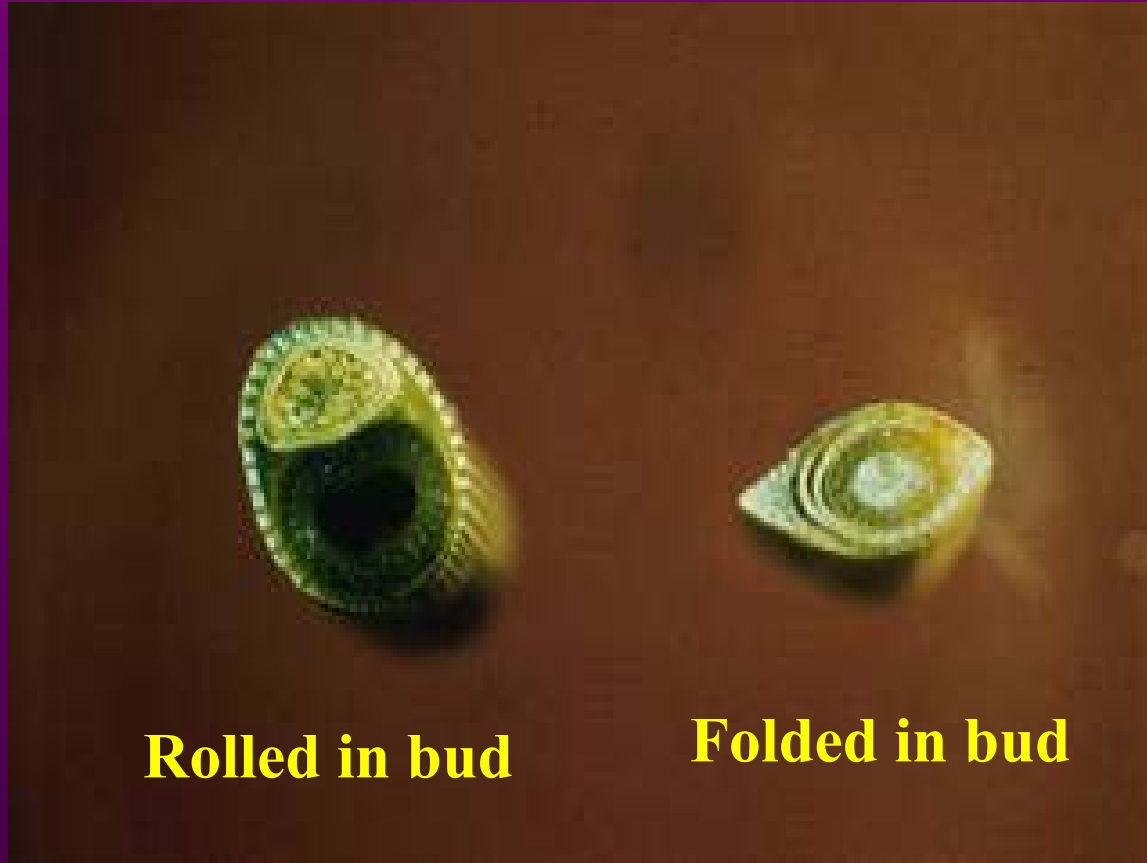
A close-up photograph of a green leaf tip that tapers to a fine point. The leaf is oriented vertically, and the background is a soft, out-of-focus green. The text 'tapered leaf tip' is written in yellow, bold, sans-serif font in the lower-left quadrant of the image.

tapered leaf tip

A close-up photograph of a green leaf tip that is blunt and rounded. The leaf is oriented diagonally from the top-left towards the bottom-right. The background is a soft, out-of-focus brownish-grey. The text 'blunt leaf tip' is written in yellow, bold, sans-serif font in the upper-right quadrant of the image.

blunt leaf tip

Appearance of Youngest Leaf



Rolled in bud

Folded in bud





**Stolon of Rice Cutgrass
(*Leersia oryzoides*)**



A close-up photograph of the root system of Torpedograss (Panicum repens). The image shows a dense network of light brown, fibrous roots and rhizomes. The rhizomes are thicker and more prominent, showing a somewhat irregular, knobby structure. The background is a blurred green, suggesting the grass is growing in a natural environment.

Rhizomes of Torpedograss
(Panicum repens)

**Crown buds of Creeping Rivergrass
(perennial barnyardgrass) – *Echinochloa
polystachya***







Echinochloa sp.



Panicum sp.



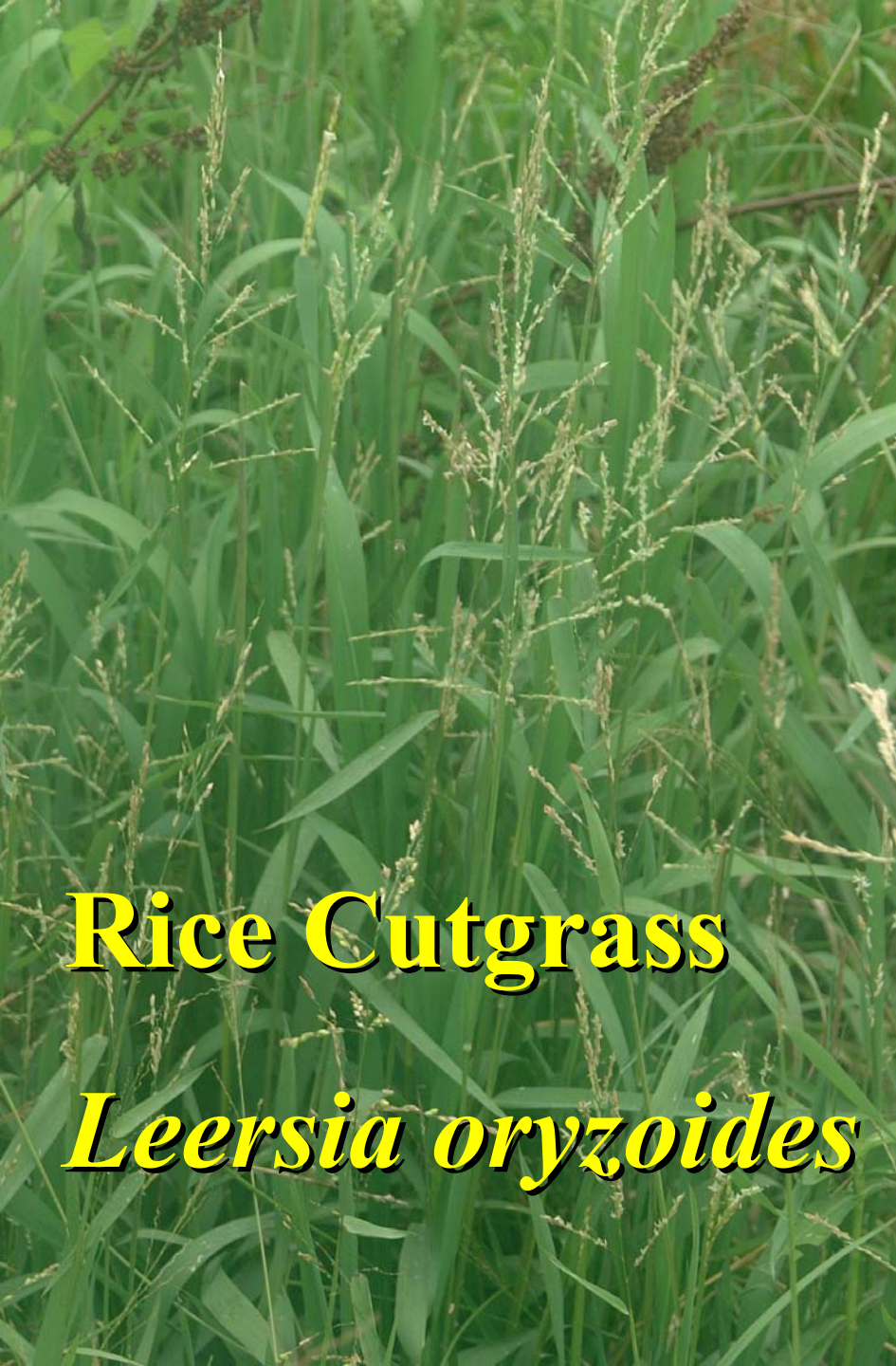
Barnyardgrass

Echinochloa crus-galli



Mannagrass

Glyceria declinata



Rice Cutgrass

Leersia oryzoides



The image shows a close-up of the inflorescence (panicle) of Neally Sprangletop grass. The panicle is a dense, elongated cluster of small, brownish-green spikelets. The central rachis is clearly visible, and the spikelets are arranged in a regular, overlapping pattern along its length. The background is a soft, out-of-focus green, suggesting a natural field setting. The text is overlaid in the upper center of the image.

Neally Sprangletop

Leptochloa nealleyi



Amazon or Tighthead Sprangletop

Leptochloa panicoides





Red Sprangletop

Leptochloa filiformis

Mexican Sprangletop

Leptochloa uninerva





Fall Panicum

Panicum dichotomiflorum





Torpedograss

Panicum repens



Brook Paspalum or Canoegrass

Paspalum acuminatum







A photograph of a wetland area. In the foreground, there is a dense patch of Knotgrass (Paspalum distichum), which is a green, grassy plant with long, narrow leaves. The grass is growing in a shallow, muddy area. In the background, there is a body of water, possibly a pond or a stream, which is surrounded by more vegetation and trees. The water is dark blue and reflects the surrounding greenery. The overall scene is a natural, outdoor setting.

Knotgrass

Paspalum distichum







Water Paspalum

Paspalum hydrophilum



Diagnostic Broadleaf Parts

- Leaf margins
- Leaf arrangement
- Leaf attachment
- Leaf shape
- Leaf types
- Stem properties
- Flower arrangement
- Specialized parts

A close-up photograph of a Texasweed leaf. The leaf is elongated and ovate, with a prominent central vein and secondary veins branching off. The leaf margin is finely serrated. The leaf is dark green and appears to be part of a stem with small, developing flower buds.

Texasweed

Caperonia palustris

serrate leaf margins

A close-up photograph of a Copperleaf plant. The image shows several bright green, ovate leaves with serrated margins. The leaves are arranged in opposite pairs along a reddish-brown stem. The venation is clearly visible, showing a central vein and secondary veins.

Copperleaf

Acalypha ostryifolia



Alligatorweed

*Alternanthera
philoxeroides*



Toothcup

Rotala ramosior



Purple Ammania

Ammania coccinea



Toothcup

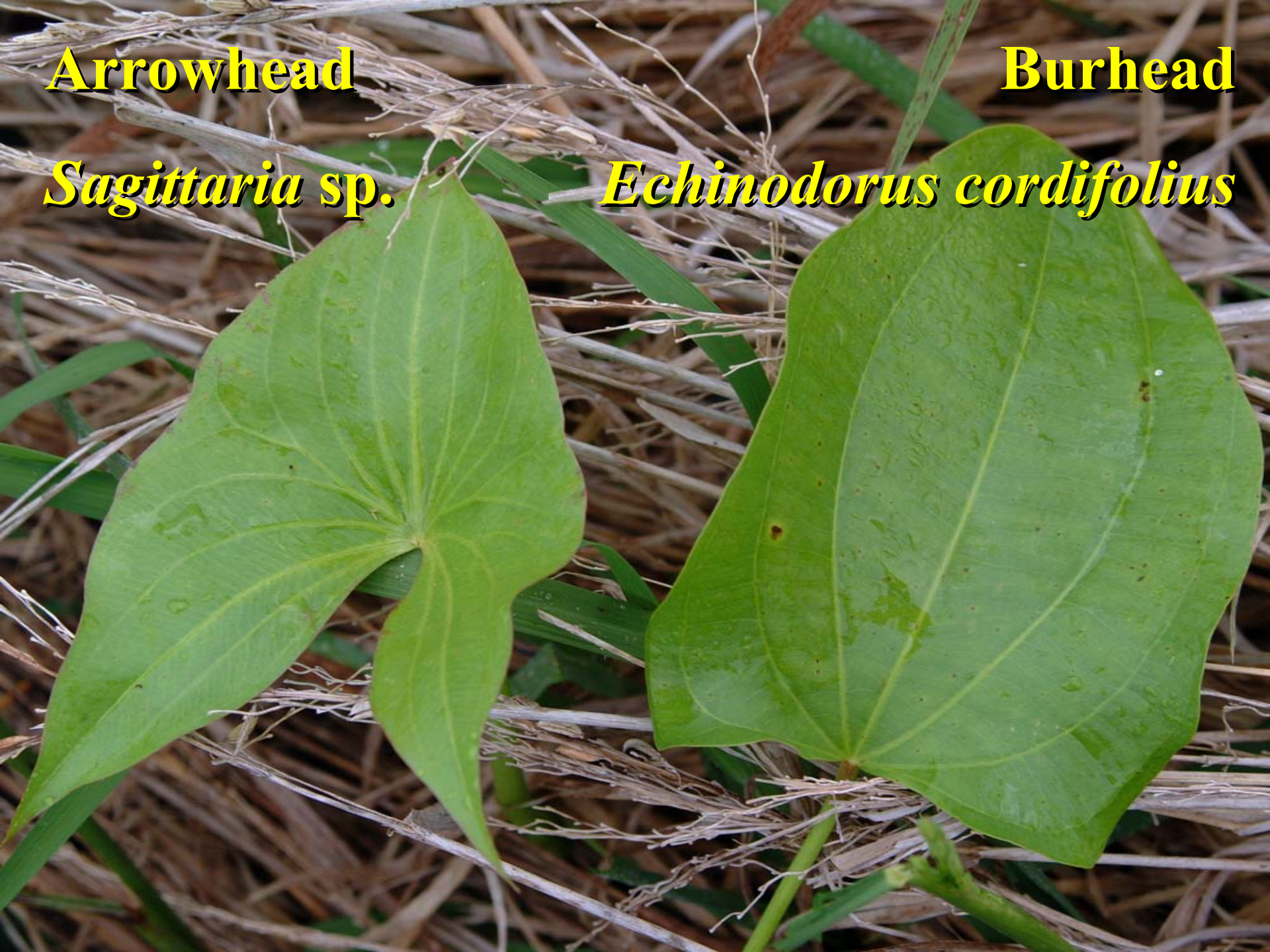
Rotala ramosior

Arrowhead

Sagittaria sp.

Burhead

Echinodorus cordifolius





Ducksalad

Heteranthera limnosa

**Roundleaf Mud
Plantain**

Heteranthera reniformis



Eclipta

Eclipta prostrata

antrose pubescence



Creeping Spotflower

Spilanthus americana

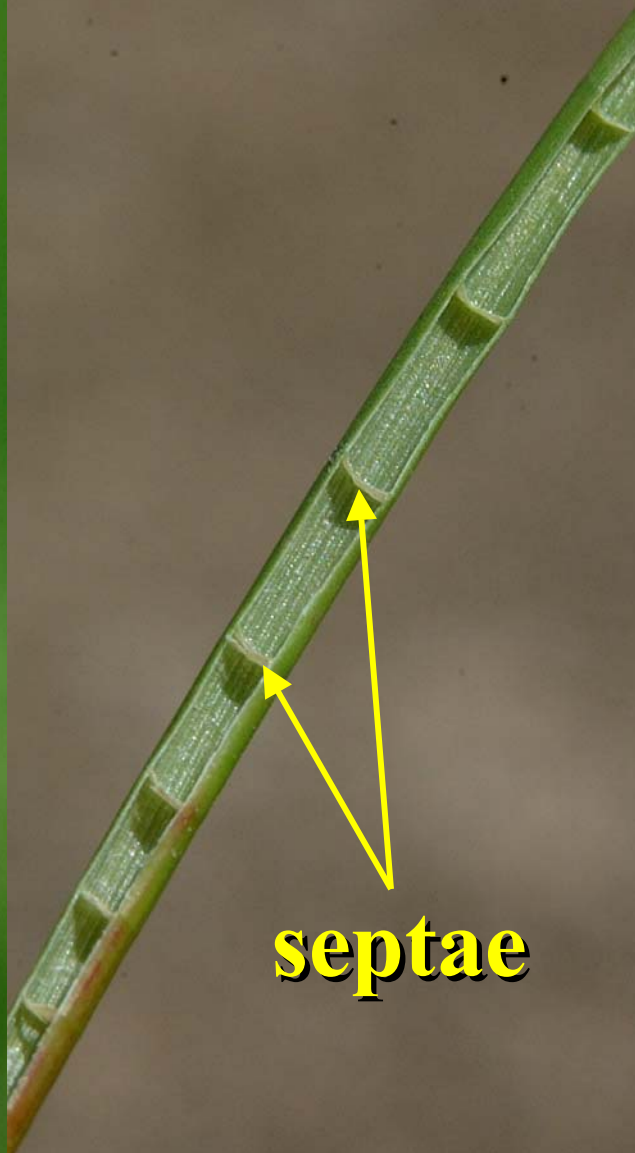
sparse pubescence





ocrea

septate stem



septae



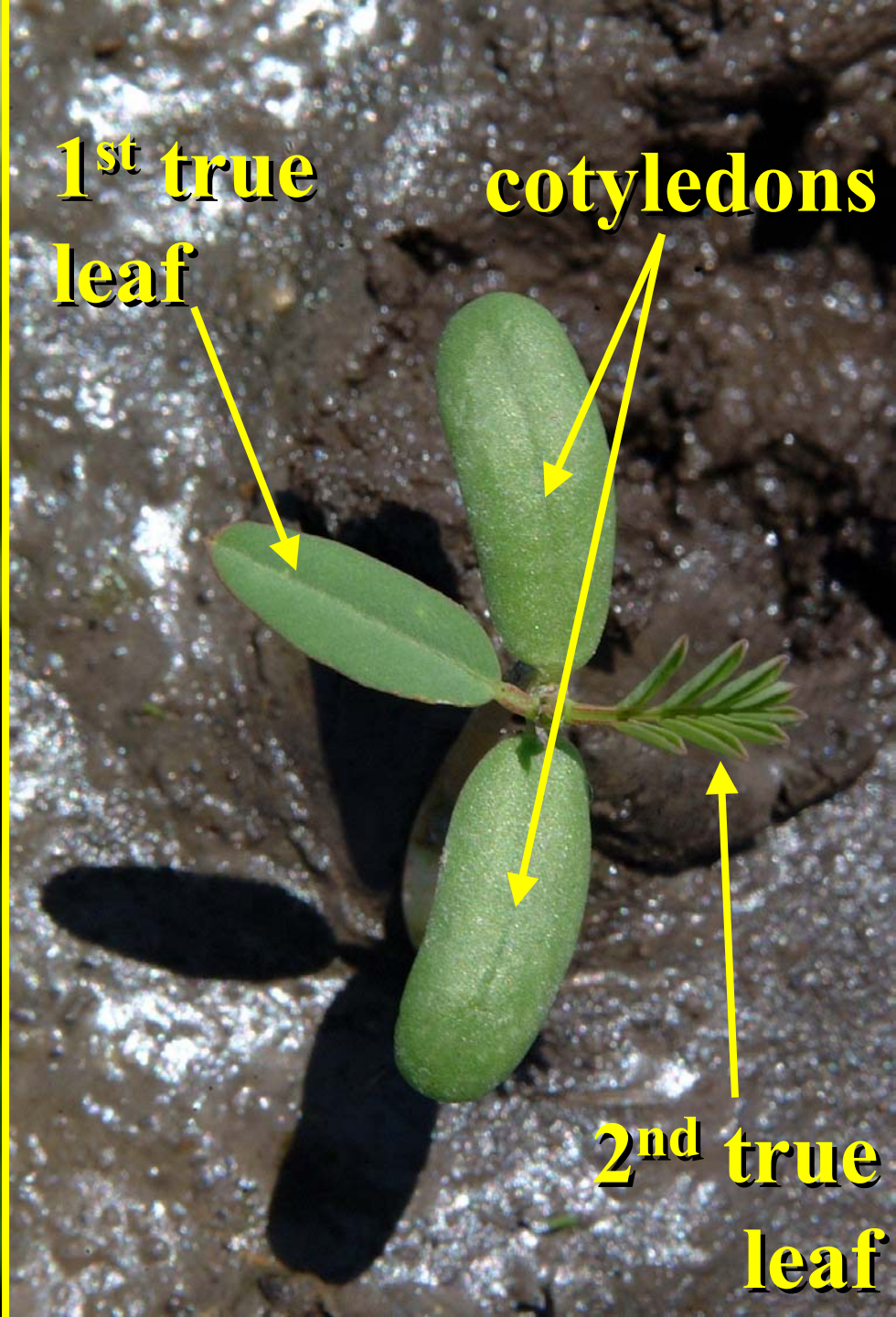
stipule

**pinnately
compound
leaf**



**1st true
leaf**

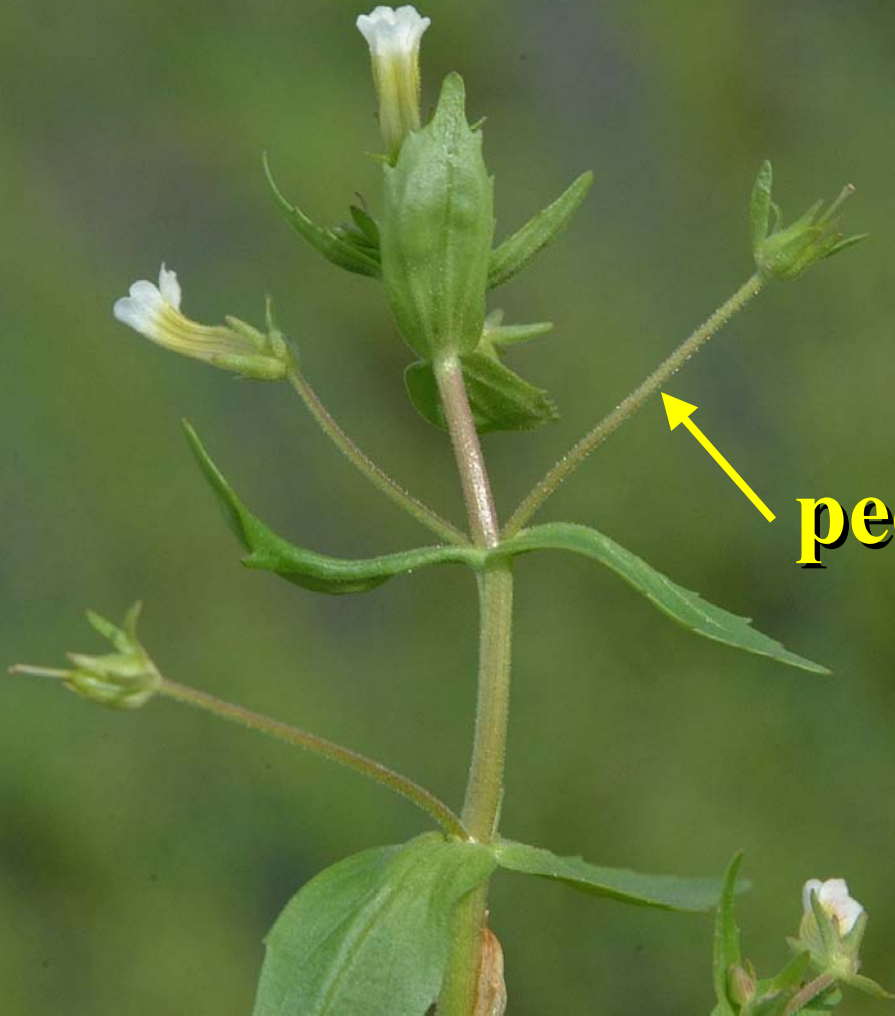
cotyledons



**2nd true
leaf**

Hedge Hyssop

Gratiola neglecta



peduncles



G. virginiana

A photograph of a pond with dark water and brown sediment. The water is filled with Water Starwort (Callitriche heterophylla). The plant has two distinct leaf types: small, rounded, green spatulate floating leaves that cluster together on the water's surface, and long, thin, green filiform submerged leaves that are scattered throughout the water column. Some brown twigs are also visible in the water.

spatulate floating leaves

filiform submersed leaves

Water Starwort *Callitriche heterophylla*

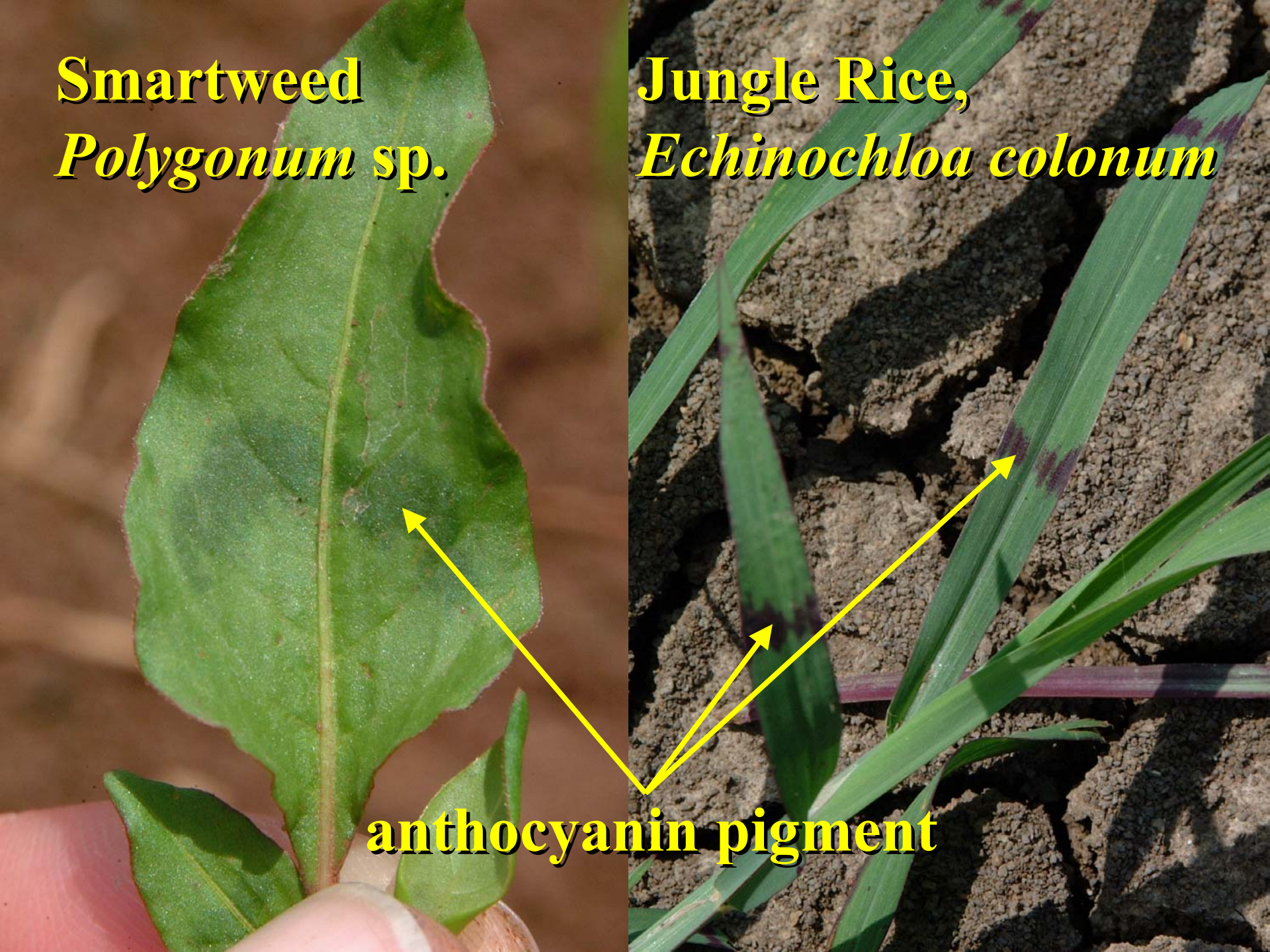
Ducksalad, *Heteranthera limnosa*



Smartweed
Polygonum sp.

Jungle Rice,
Echinochloa colonum

anthocyanin pigment



A Schematic Diagram for Seedling Weed Identification in Rice

Characteristics of Grasses

Ligules

Auricles

Mid veins

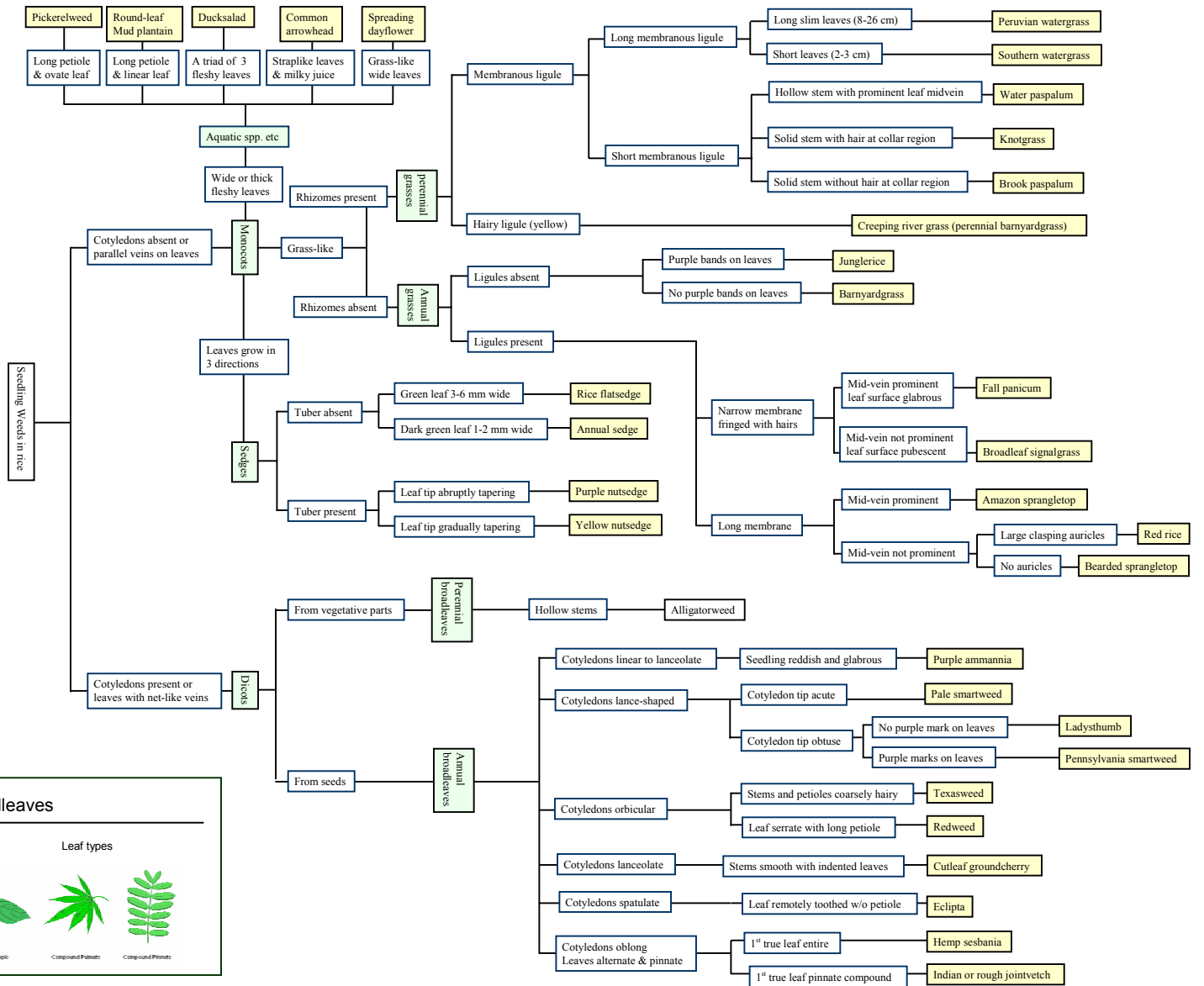
Characteristics of Sedges

Triangular stem Leaves 3-ranked

Characteristics of Broadleaves

Cotyledon shapes

Leaf types



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