

Pondweeds:

Potamogeton and *Stuckenia*



Pondweeds:

Potamogeton and *Stuckenia*

- Alternate, entire leaves
- Leaves broad or narrow
- Floating or not floating (often both)
- Petioles (leaf stalks) or clasping
- Lacunae present or not
- Sometimes have glands
 - Little doorknob-like structures on stem at base of leaves
- Stipules
- Winter buds and nutlets

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Alternate leaves



White-stem pondweed
P. praelongis



Fern-leaf pondweed
P. robbinsii

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Leaves broad to narrow

Leafy pondweed
P. foliosus



Large-leaf pondweed
P. amplifolius

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Floating leaves only



Floating-leaf
pondweed
P. natans

Submersed
Leaves only



Fries pondweed
P. friesii

Variable pondweed
P. gramineus



Both floating and
submersed leaves

Variable pondweed
Potamogeton gramineus



- Especially variable
- Leaves may be small or quite large
- Plant may be bushy or not

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A photograph of a stem of Clasping-leaf pondweed (P. richardsonii) against a white background. The stem is thin and green, with several pairs of opposite, lanceolate leaves. Each leaf is clasping the stem, meaning the leaf base wraps around the stem without a distinct petiole. The leaves are bright green and have a slightly wavy margin.

Clasping-leaf pondweed
P. richardsonii

Leaves Clasping

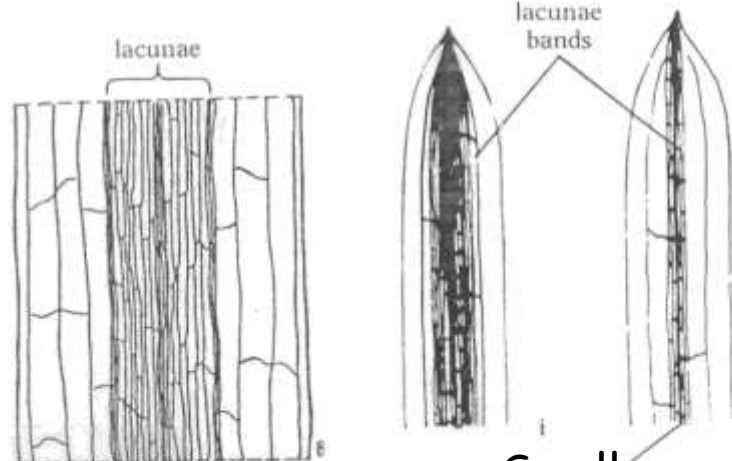


Leaves with Petiole

Pondweeds

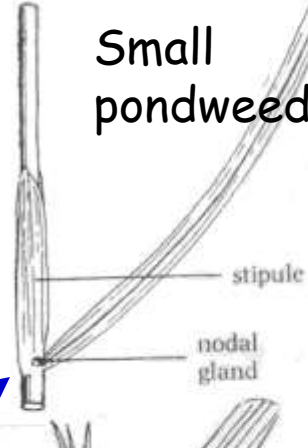
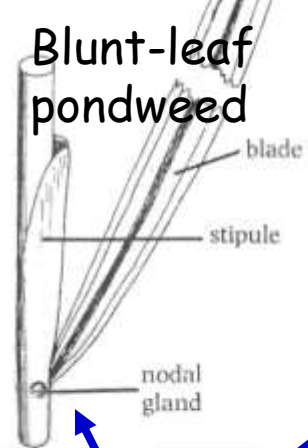
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Lacunae

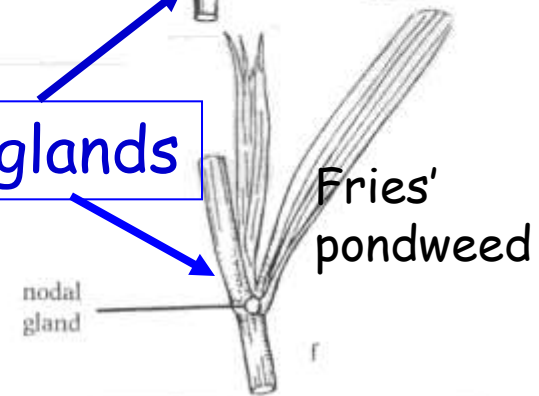


Ribbon-leaf pondweed

Small pondweed



Nodal glands



Pondweeds

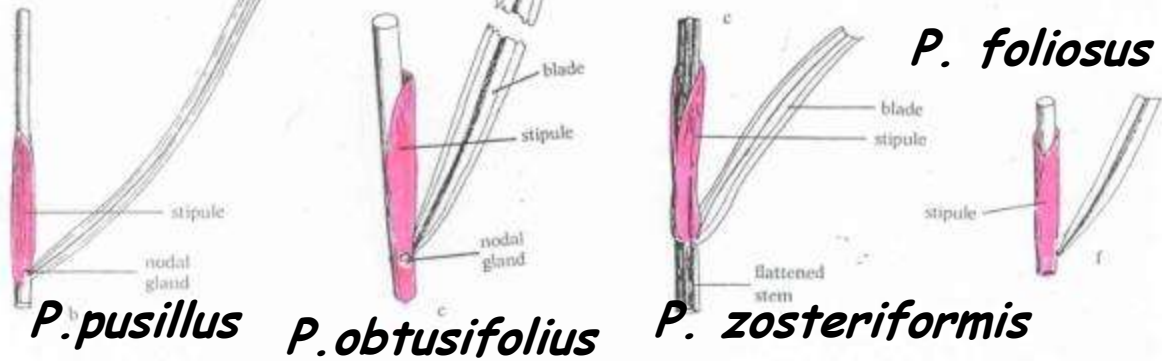
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- Sometimes have glands
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- **Stipules**
- Winter buds and nutlets

Stipules on Pondweeds

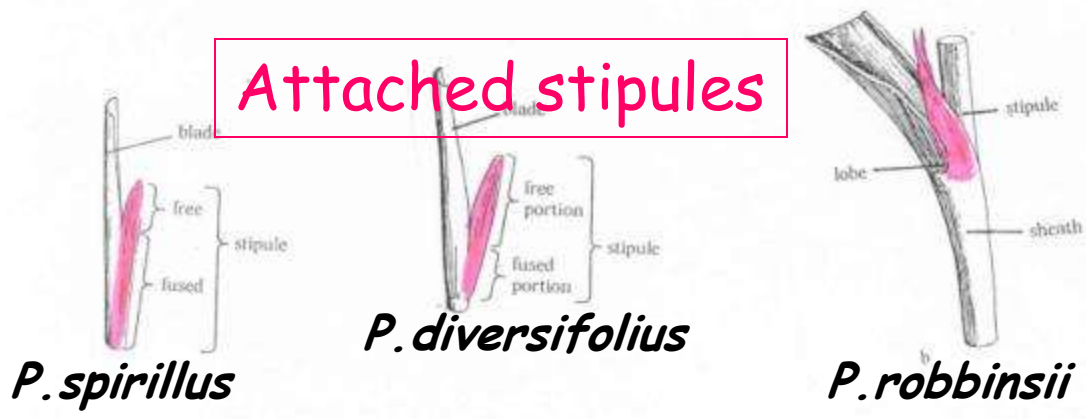
- **Stipules:** little bits of leafy tissue where leaf meets stem
 - Free: **stipule** attached to, and often hugging, stem but not attached to leaf
 - Adnate: **stipule** attached to leaf at least part of **stipule's** length
 - In a few species of *Potamogeton*, **stipule** is attached to leaf a short way
 - In *Stuckenia*, stipule attached to leaf a long way

Free stipules

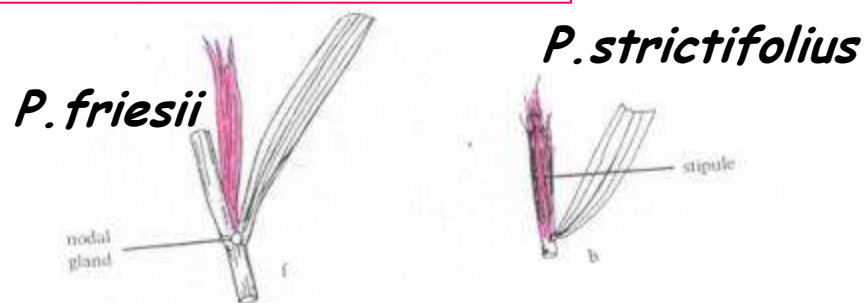
Stipules

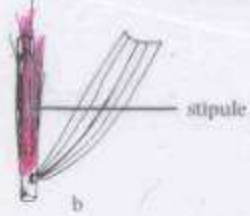


Attached stipules



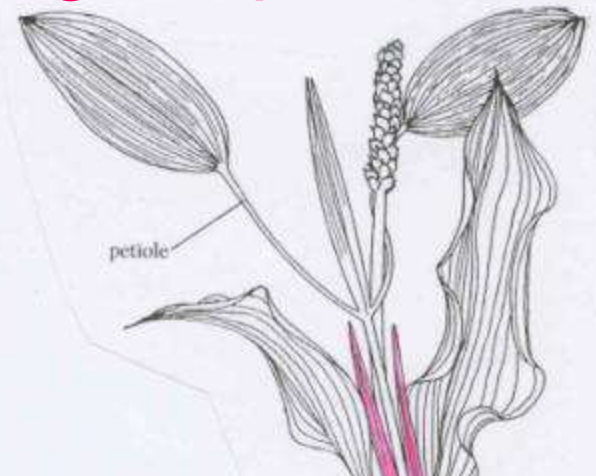
"Shreddy" stipules





Large stipules

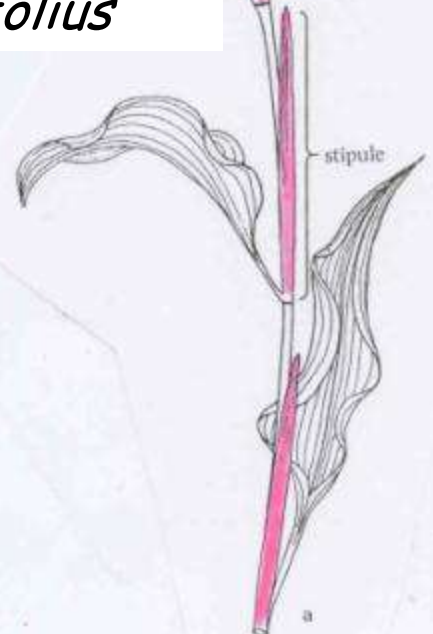
Fibrous,
shreddy
stipules

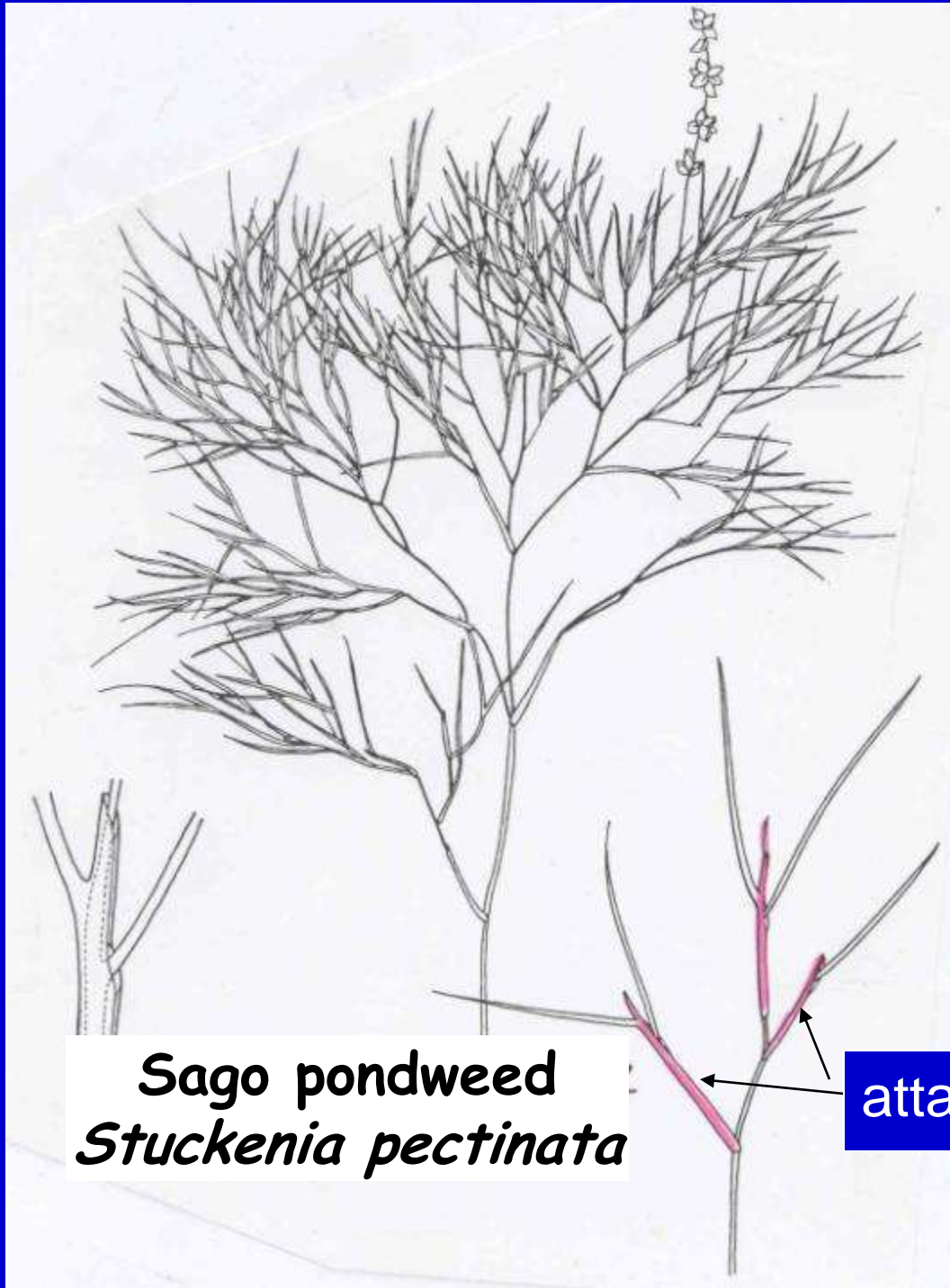


Large-leaf pondweed
P. amplifolius



Stiff Pondweed
P. strictifolius





Sago pondweed
Sargassum pectinatum

attached stipule

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Winter buds
(turions)



P. crispus



P. freisii



P. foliosus

Nutlets



P. zosteriformis



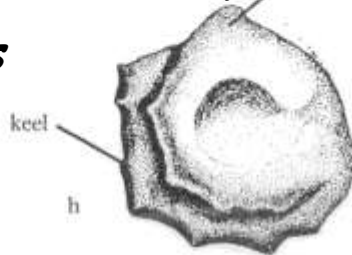
P. obtusifolius

P. bicupulatus

P. sprillus



P. foliosus



P. pusillus



Spiral-fruited pondweed
Potamogeton spirillus

- Narrow leaves
- Stipules attached a short ways
- Nutlets with ridged keel



Blunt-leaf pondweed
P. obtusifolius

- Narrow leaves
- Stipules free
- Glands present
- Leaf tips blunt



➤ Leaves somewhat broad

➤ Stipule attached a short ways

➤ Leaves stiff-ish

Fern-leaf pondweed
P. robbinsii



Flat-stem pondweed
P. zosteriformis

➤ **Narrow, ribbon-like leaves**

➤ **Stem very flat**



Illinois pondweed
P. illinoensis

- Large, stiff stipules
- Top leaves opposite
- Floating and submersed leaves

Curly-leaf pondweed
P. crispus

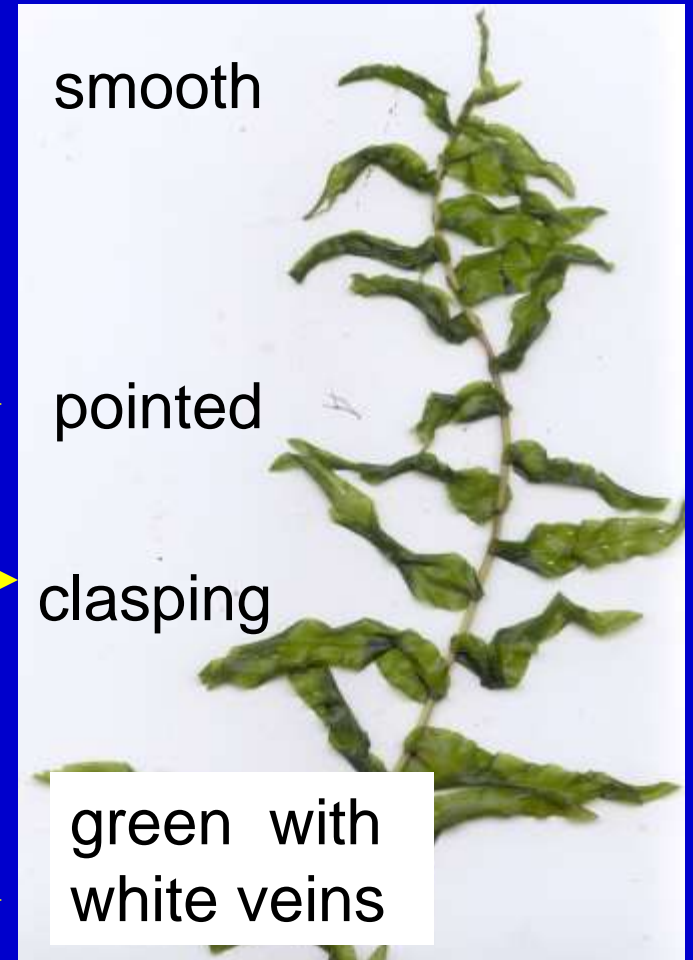


- **Leaves like mini-lasagna noodles: wavy, parallel sides**
- **Leaves serrate (like a saw blade)**
- **Often gone by mid-July**
- **Invasive Exotic**

Curly-leaf pondweed
P. crispus



Clasping-leaf pondweed
P. richardsonii



← Leaf margin →

← Leaf tip →

Leaf attachment →

← Leaf color →



Large-leaf pondweed
P. amplifolius

Illinois pondweed
P. illinoensis

Variable-leaf
pondweed
P. gramineus

Similar floating leaves

Similar submersed and floating leaves



Fries pondweed
P. friesii



Leafy pondweed
P. foliosus



Stiff pondweed
P. strictifolius



**Spiral-fruited
pondweed**
P. sprillus

**Narrow-leaved pondweeds
look much alike, but can
be distinguished by
differences in nutlets,
stipules, turions, glands
and leaf qualities**



**Blunt-leaf
pondweed**
P. obtusifolius