

Fabaceae: Subfamily
Papilionoideae
Oxytropis, Astragalus,
and Onobrychis

Jessica Lewis, BIOL331: Systematic Botany

Fabaceae - Papilionoideae subfamily

- ▶ Pinnately divided leaves
- ▶ 10 stamen, usually diadelphous
- ▶ Fruit a legume
- ▶ 5-merous petals
 - ▶ Standard/banner, 2 wings, keel (2 fused petals)
- ▶ 5-merous sepals, connate
- ▶ 1 carpel (rarely 2-16), superior ovary

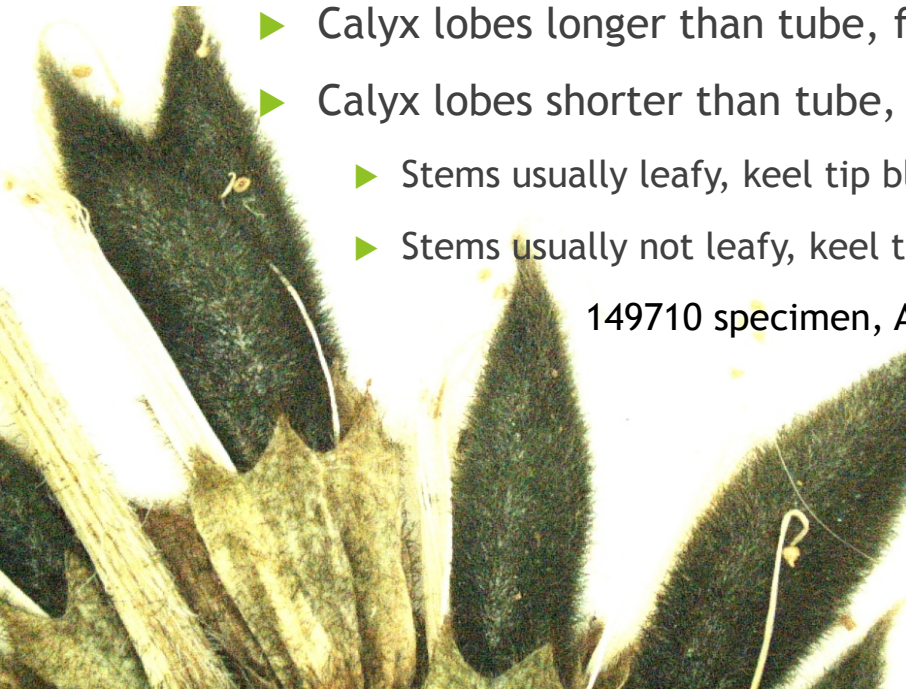


<http://www.naturalmedicinalherbs.net/pictures/wendys/onobrychis-viciifolia=sainfoin.jpg>

Key to *Oxytropis*, *Astragalus*, and *Onobrychis*

- ▶ To the couplet of *Onobrychis*, *Oxytropis*, and *Astragalus*:
- ▶ Leaves lacking tendrils, leaflets more than 3 (*Oxytropis mertensiana* is the exception), legume is not a loment, and leaves are pinnately (not palmately) pinnate.
 - ▶ Calyx lobes longer than tube, fruit round, spiny and 1-seeded (*Onobrychis*)
 - ▶ Calyx lobes shorter than tube, fruit long with no spines, more than 1 seed
 - ▶ Stems usually leafy, keel tip blunt (*Astragalus*)
 - ▶ Stems usually not leafy, keel tip pointed (*Oxytropis*)

149710 specimen, ARCTOS



To Onobrychis (Sainfoin)



1-seeded round
spiny legume

Calyx lobes long

<http://www.discoverlife.org/mp/20q>



http://effegua.myphotos.cc/Fiori/Display_foto_Web.php?foto=Onobrychis%20viciifolia%20fiori-2003%2006%2001-Lod.jpg&dir=Fagioli&lingua=italiano

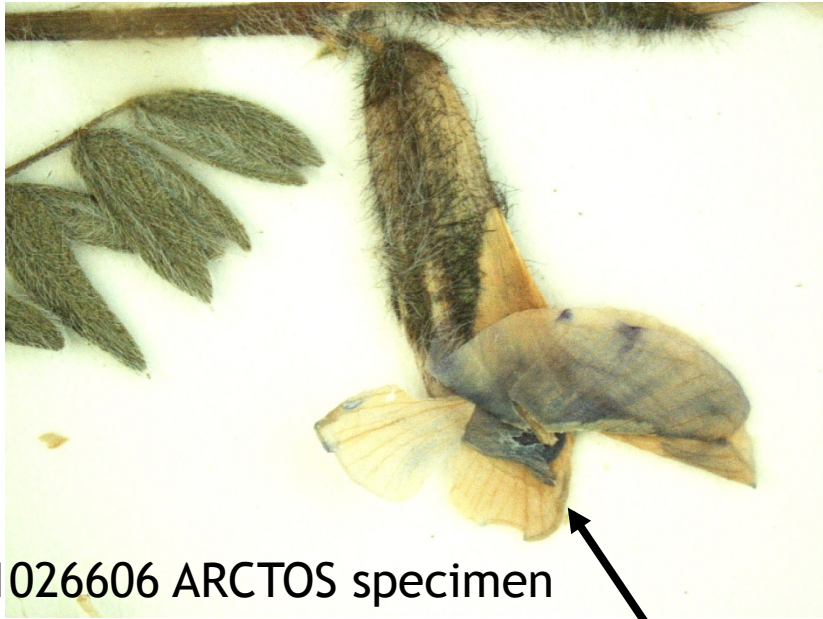
To Astragalus



Leafy stem

Blunt keel tip

To Oxytropis



H1026606 ARCTOS specimen

Pointed keel tip



V111992

Leafless stem



Photo by Glenn Lee



H1026606

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