

Phrymaceae – the Lopseed Family



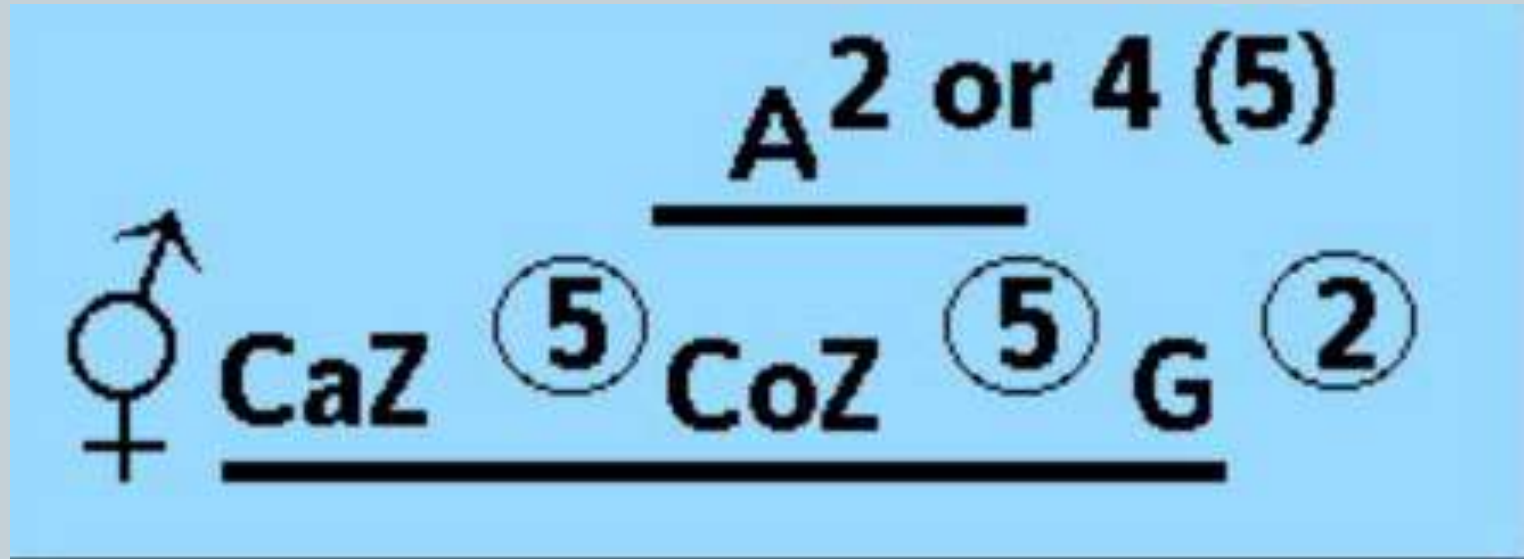
**What happened to
Scrophulariaceae?**

Phrymaceae



- Flowers +/- bisexual
- Generally bilaterally symmetrical
- Sepals, fused into a 5 lobed tube
- Petals, fused 2+3 lobes
- Stamens 2+2, attached to petals
- 1 style, 2 stigmas
- Ovary superior, 1-2 chamber
- Fruit a capsule

Phrymaceae



Phrymaceae – 3 genera in ElDoCo



- All 33 species have the common name “monkey flower”
- Most are annual herbs – 2 shrub
- *Diplacus* 16 (used to be *Mimulus*)
- *Erythranthe* 15 (used to be *Mimulus*)
- *Mimetanthe* 1 (used to be *Mimulus*)

Phrymaceae – *Diplacus*



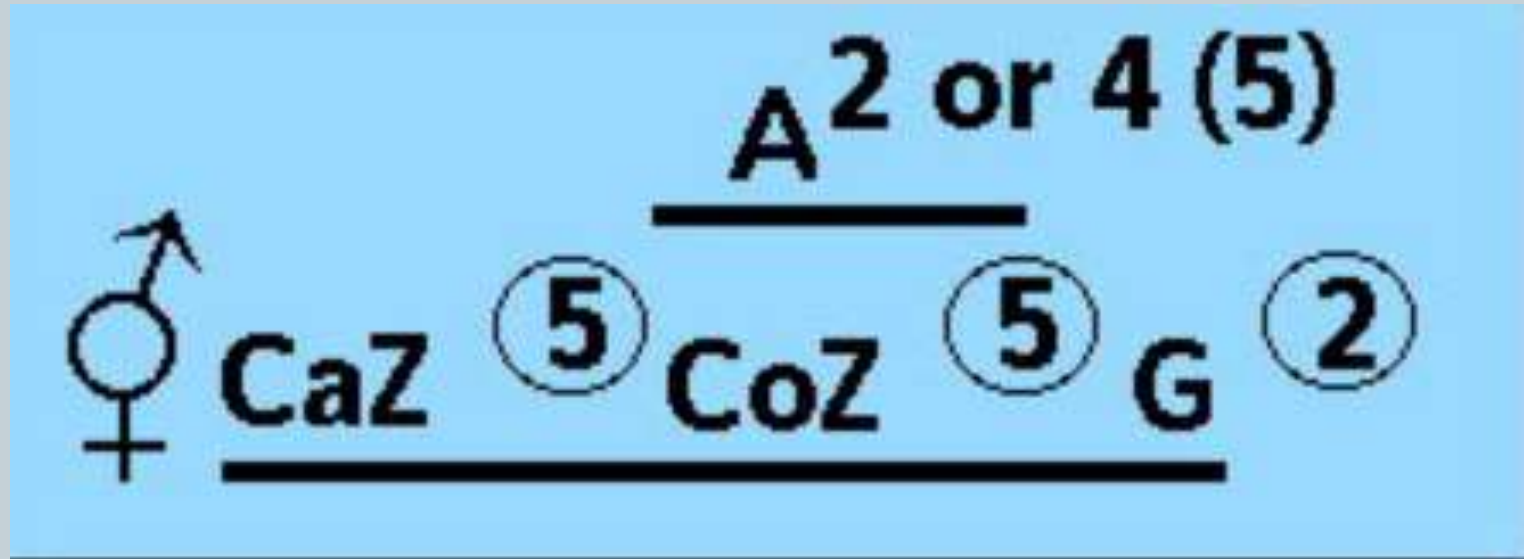
Phrymaceae – *Erythranthe*



Phrymaceae – *Mimetanthe pilosa*



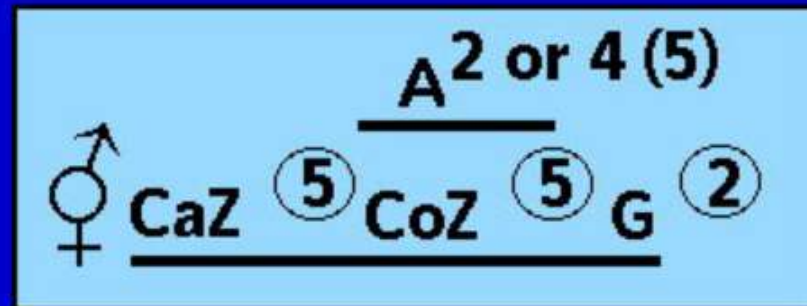
Phrymaceae



What happened to Scrophulariaceae?



Scrophulariaceae Figwort Family



Scrophulariaceae



Am J Bot. 2001 Feb;88(2):348-61.

Disintegration of the scrophulariaceae.

Olmstead RG¹, Depamphilis CW, Wolfe AD,
Young ND, Elisons WJ, Reeves PA.

Scrophulariaceae



“The Figwort family got gutted in the taxonomic name game. This was a magnificent family with fairly intuitive patterns for identification, but most Figwort genera have been reclassified according to genetic evidence into the closely related [Plantain](#), [Lopseed](#), and [Broomrape families](#).”

https://www.wildflowers-and-weeds.com/Plant_Families/Scrophulariaceae.htm

Scrophulariaceae



Other taxa moved to (Jepson):

Plantaginaceae (*Antirrhinum*, *Bacopa*, *Collinsia*, *Cymbalaria*, *Digitalis*, *Dopatrium*, *Gambelia*, *Gratiola*, *Hebe*, *Holmgrenanthe*, *Keckiella*, *Kickxia*, *Limnophila*, *Linaria*, *Lindernia*, *Maurandella*, *Mohavea*, *Nothochelone*, *Penstemon*, *Pseudorontium*, *Stemodia*, *Synthyris*, *Tonella*, *Veronica*),

Orobanchaceae (*Bellardia*, *Castilleja*, *Cordylanthus*, *Orthocarpus*, *Parentucellia*, *Pedicularis*, *Triphysaria*),

Phrymaceae (*Diplacus*, *Erythranthe*, *Mimetanthe*, *Mimulus* – Not in ElDoCo, 6 in California).

Scrophulariaceae



3 species in 2 genera left in El Dorado County:

Nuttallanthus canadensis Canada toadflax



Scrophularia californica California bee plant



Scrophularia desertorum Desert figwort