

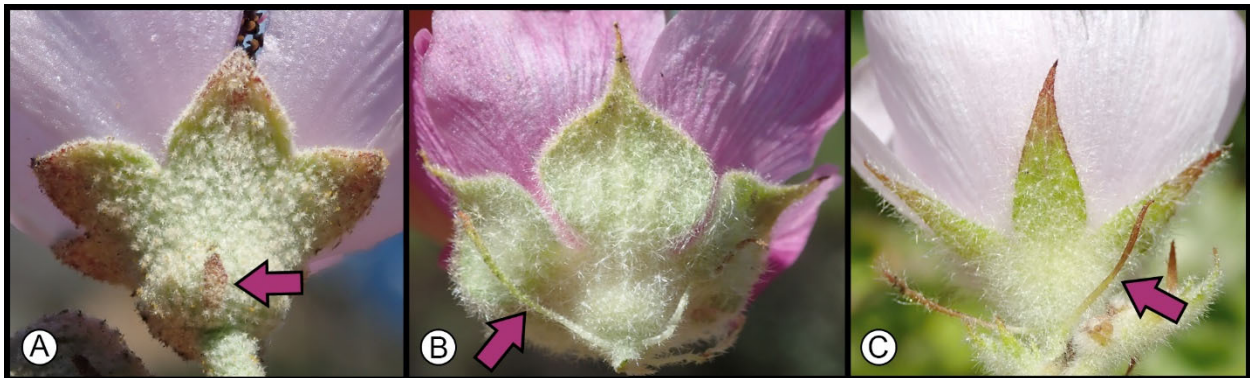
**Draft Key to the *Malacothamnus* (Malvaceae) of  
Kern, Los Angeles, San Bernardino, and Ventura Counties, CA  
excluding the Channel Islands  
by Keir Morse  
Updated Mar. 9, 2023**

Comments, corrections, and questions welcome at [kmorse@rsabg.org](mailto:kmorse@rsabg.org)

1. Calyx lobes 3–9.5 [3.5–11.5] mm wide, lobe width at widest 1–6x width at lobe base; known in this region only from Aliso Canyon Park in Los Angeles County. .... *M. foliosus*
- 1' Calyx lobes 1.5–4 [2–5] mm wide, lobe width at widest 1–1.5x width at lobe base. .... **2**
  
2. Calyx bracts  $\leq$  1/2 calyx length; rays of stellate trichomes on both the stem and calyx average 0.1–0.2 mm. .... **3**
- 2' At least one of the above measures is not true. .... **4**
  
3. Leaves pale grey-green to light green adaxially and not to slightly paler abaxially; adaxial leaf stellate trichome rays 0.1–0.2 mm and even in size; mostly north and west of the Santa Clara River and west of Santa Paula, commonly planted elsewhere. ....  
..... *M. fasciculatus* var. *nuttallii*
- 3' Leaves generally bright green adaxially (occasionally grey-green), paler abaxially; adaxial leaf stellate trichome rays 0.1–0.4 mm and uneven in size with scattered trichomes having longer rays than most; mostly south of the Santa Clara River and/or east of Santa Paula, one presumably planted population to the west near Lake Casitas .....  
..... *M. fasciculatus* var. *laxiflorus*
  
4. Calyx bracts 6–14(18) [7–17[21.5]] mm long,  $\geq$  0.6x calyx; flower buds clearly pointed; most stellate trichomes without stipes; leaves and inflorescence often somewhat sticky due to glandular trichomes; leaves truncate to cordate at base..... *M. marrubioides*
- 4' Calyx bracts 1.5–8 [2–9.5] mm long,  $\leq$  0.8x calyx; flower buds generally rounded to slightly pointed; many stellate trichomes with stipes; leaves and inflorescence generally not sticky; leaves generally cordate at base. .... **5**
  
5. Calyx bracts 1.5–4.5 [2–5.5] mm long; calyx lobe length generally 1–2.3x width; plants generally 1–5 m tall; San Fernando Valley, nearby southern slopes of the San Gabriel Mountains, and the Verdugo Mountains. .... *M. davidsonii*
- 5' Calyx bracts 2.5–8 [3–9.5] mm long; calyx lobe length generally 1.4–4x width; plants rarely > 2 m tall; northern slopes of the San Gabriel Mountains and northwards. .... *M. orbiculatus*

Notes:

- Primary measurements in the key are for dry specimens. Estimated measurements for fresh material is included in [square brackets].
- Calyx bracts are a whorl of three bracts beneath each calyx. See figure below.
- Stipular bracts are stipule-like bracts between the calyx bracts and leaves.
- Glandular trichomes are simple, multicellular, and often with exudate at the tip. The exudate from these trichomes is sometimes seen on the stellate trichomes.
- Stellate trichomes are nonglandular and branched from a central point. Each branch is called a ray. When stalked, the stalk is called a stipe.
- Stem trichomes are best measured from the internode just below the inflorescence.
- Superscript indicates number of places this taxon comes out in the key if greater than 1
- See photos of all taxa on Calphotos website:  
<https://calphotos.berkeley.edu/flora/sci-M.html>



Fig\_calyx\_and\_calyx\_bracts. Some calyx and calyx bract variation. Arrows point to calyx bracts.