

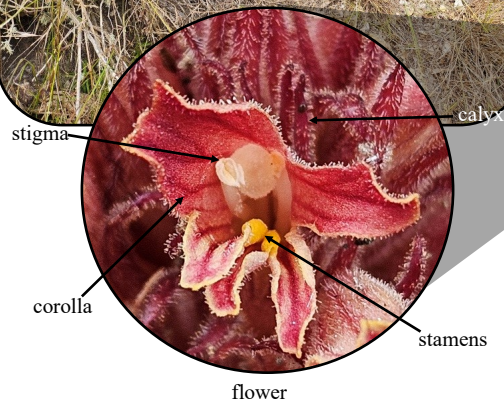
## California Orobanche (*Aphyllon californicum*)

**Order:** Lamiales

**Family:** Orobanchaceae (Broomrape Family)

**Flowers:** June - July

*Aphyllon californicum* is a perennial holoparasitic plant. This plant is extremely uncommon on the peninsula and has only been found in one location. The entire plant lacks any chlorophyll and grows off the roots of other plants (usually members of Asteraceae). There can be one stem or a cluster of stems that emerge from the soil and are reddish to creamy in color. The leaves have been reduced to small fleshy scales that alternate up the stem. The inflorescence is generally spike-like. The flowers in the inflorescence are crowded together. The flower has a calyx that is generally pink with 5 lobes (the lobes are longer than the tube of the calyx). The corolla can range in color from purple, pink to whitish. There is usually dark veins present in the corolla and the corolla can be glandular to somewhat glandular. The corolla has an upper lip with 2 lobes and a lower lip with 3 lobes. The upper lip can be erect to reflexed and is wide. The lower lip, with its lobes, is usually spreading. The stigma has 2 lobes. The fruit is a capsule.





## Indian Paintbrush (*Castilleja affinis* subsp. *affinis*)

## Order: Lamiales

**Family:** Orobanchaceae (Broomrape Family)

**Flowers:** March - June

*Castilleja affinis* subsp. *affinis* is a perennial herbaceous plant that is a root parasite. It is found in two locations on the peninsula. The plant is usually hairy and mostly nonglandular except for on the flowers. The leaves are somewhat succulent, linear with 0 to 5 lobes (tips of lobes usually rounded). The flowers are clustered together in a spike-like inflorescence that is wide (30-50 mm) and covered in bracts that have vibrant tips that are scarlet red to orangish-red. The calyx of the flower is unequally 4-lobed and colored like the bract tips. The corolla has the upper 2 lips fused which gives it a beak-like appearance and it has a yellowish-green color. The lower lip of the corolla is reduced (reddish in color) and towards its base it is 3 toothed to generally pouched. There are 4 stamens and the stigma is slightly notched. The fruit is a loculicidal capsule that is ovoid. The seed is tannish and the seed coat is deeply netted.



# Indian Paintbrush (*Castilleja affinis* subsp. *affinis*)

Order: Lamiales

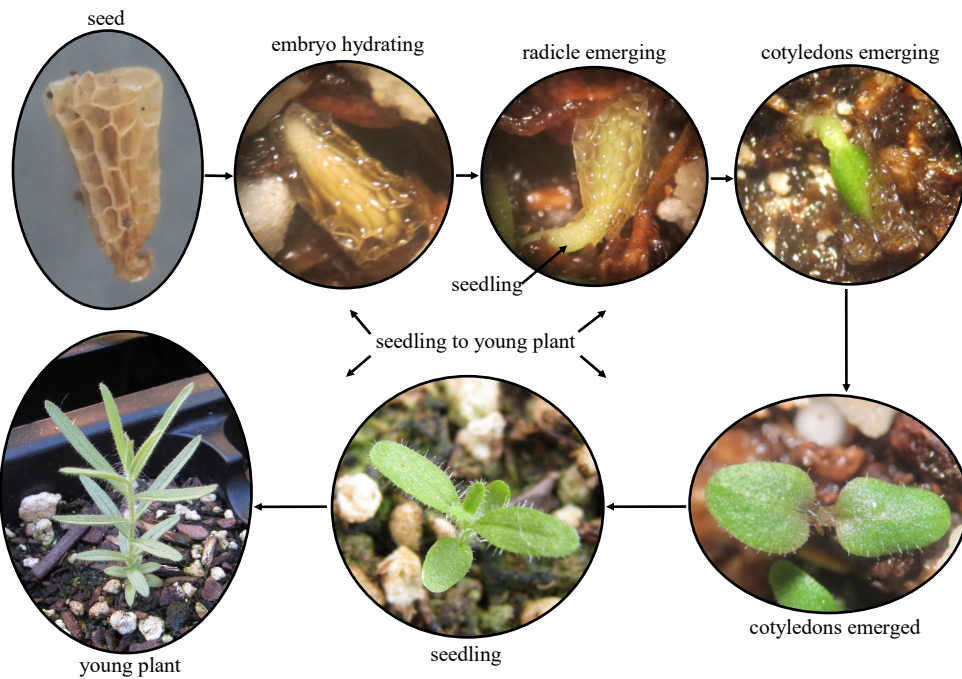
Family: Orobanchaceae (Broomrape Family)

Flowers: March - June

orangish-red flowers  
(rarer to find)



plants can usually be found  
parasitizing *Salvia mellifera* & *Stipa lepida*





## Purple Owl's Clover (*Castilleja exserta* subsp. *exserta*)

**Order:** Lamiales

**Family:** Orobanchaceae (Broomrape Family)

**Flowers:** March - May

*Castilleja exserta* subsp. *exserta* is an annual herbaceous plant. It is found in a few locations on the peninsula. The overall plant is hairy. The leaves are generally hairy adaxially and hairy abaxially, and somewhat thread-like with 5 to 9 lobes. The flowers are clustered together in a spike-like inflorescence, with distal bracts usually not that wide (< 5 mm). The tips of the bracts are can be white, light yellow, pink or light purple. The calyx of the flower is divided on all sides and is a greenish color. The corolla of the flower is made up of an upper beak and a lower lip. The upper beak is light purple, densely hairy, and the tip is hooked. The lower lip is inflated with pouches that can have white, yellow, and light purple colors to it as well as dark purple blotches. The stigma is usually included in the beak and is spherical. The fruit is a loculicidal capsule that is ovoid. The seed is tan and the seed coat is deeply netted.

