

Seedling Identification Guide for Pollinator Hedgerow Forbs of California's Central Valley

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This technical note provides a photo identification guide to seedlings of ten flowering species of native forbs and legumes commonly used in pollinator hedgerow plantings in the Sacramento and San Joaquin Valleys of California. The guide is intended for use by land owners and managers in order to monitor germination from direct seedings and plan timing of appropriate weed control measures. Additional information on these and other hedgerow species can be found on the PLANTS web site <<http://plants.usda.gov>> and Calflora web site <<http://www.calflora.org>>.

Baby blue eyes – *Nemophila menziesii*



- Alternative Names: Menzies baby blue eyes
- Mature Height: 15 cm (6 inches)
- Growth Form: erect annual forb
- Drought Tolerance: moderate
- Flower Color: blue
- Blooms: Feb.–June
- Attracts: native & honey bees, parasitic wasps, pirate bugs



Clockwise from top left:
seedlings at 20, 30, 75 and 60
days after planting.

California phacelia – *Phacelia californica*



- Alternative Names: California scorpion-weed
- Mature Height: 15–100 cm (0.5–3 ft)
- Growth Form: decumbent to erect biennial to perennial forb
- Drought Tolerance: moderate
- Flower Color: lavender, blue or white
- Blooms: Mar.–Nov. (July–Aug. w/ irrigation)
- Attracts: native (bumble, digger, small carpenter, leafcutter, mason, sweat, plasterer, Andrenid) & honey bees, syrphid flies



Clockwise from top left:
seedlings at 8, 20, 60 and 30
days after planting.

Lacy phacelia – *Phacelia tanacetifolia*



- Alternative Names: lacy scorpion-weed
- Mature Height: 30–120 cm (1–4 ft)
- Growth Form: erect annual forb
- Drought Tolerance: moderate
- Flower Color: purple to blue
- Blooms: Mar.–June (2nd bloom Sept.–Nov. with irrigation)
- Attracts: native (bumble, digger, small carpenter, leafcutter, mason, sweat, plasterer, Andrenid) & honey bees, syrphid flies

Clockwise from top left:
seedlings at 14, 21 and 30
days after planting.



California poppy – *Eschscholzia californica*



- Alternative Names: California gold poppy
- Mature Height: 15–60 cm (0.5–2 ft)
- Growth Form: erect annual to short-lived perennial forb
- Drought Tolerance: moderate to high
- Flower Color: orange
- Blooms: Feb.–Nov.
- Attracts: native (bumble, striped hairy belly, striped sweat, Andrenid) & honey bees, beetles

Counter-clockwise from top left: seedlings at 20, 30 and 50 days after planting.



Great Valley gumweed – *Grindelia camporum*



- Alternative Names: gumplant
- Mature Height: 6–25 dm (2–8 ft)
- Growth Form: erect perennial forb to subshrub
- Drought Tolerance: high
- Flower Color: yellow
- Blooms: May–Nov.
- Attracts: native (striped hairy belly, tiny dark, hairy leg, striped sweat, green sweat) & honey bees

Clockwise from top left:
seedlings at 7, 30, 70 and 14
days after planting.



Vinegarweed – *Trichostema lanceolatum*



- Alternative Names: bluecurls, camphor weed
- Mature Height: 10–100 cm (0.5–3 ft)
- Growth Form: erect annual forb
- Drought Tolerance: high
- Flower Color: pale blue to lavender
- Blooms: late June–Nov.
- Attracts: native & honey bees

Counter-clockwise from top left: seedlings at 35, 45, 50 and 56 days after planting.



Bull clover – *Trifolium fucatum*



- Alternative Names: fucate clover, puffy clover
- Mature Height: 30 cm (1 ft)
- Growth Form: decumbent–erect annual legume
- Drought Tolerance: low
- Flower Color: white/yellow, tips red/purple
- Blooms: Apr.–June
- Attracts: native (digger & Andrenid) & honey bees, butterflies

Counter-clockwise from top left: seedlings at 8, 14 and 60 days after planting.



Clammy clover – *Trifolium obtusiflorum*



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- Alternative Names: creek clover
- Mature Height: 30 cm (1 ft)
- Growth Form: erect annual legume
- Drought Tolerance: low
- Flower Color: lavender/pink, tips white
- Blooms: Apr.–July
- Attracts: native (digger & Andrenid) & honey bees, butterflies

Counter-clockwise from top left: seedlings at 7, 14, 100 and 60 days after planting.



Hollowleaf annual lupine – *Lupinus succulentus*



- Alternative Names: arroyo or succulent lupine
- Mature Height: 20–100 cm (0.5–3 ft)
- Growth Form: erect annual legume
- Drought Tolerance: moderate
- Flower Color: blue-purple, banner spot white, becoming magenta
- Blooms: Feb.–May
- Attracts: native (esp. bumble) & honey bees, hoverflies, butterflies

Counter-clockwise from top left: seedlings at 6, 14 and 30 days after planting.



Whitewhorl lupine – *Lupinus densiflorus*



- Alternative Names: golden lupine
- Mature Height: 10–80 cm (0.3–2.5 ft)
- Growth Form: erect annual legume
- Drought Tolerance: moderate
- Flower Color: white to yellow
- Blooms: Apr.–June
- Attracts: native (esp. bumble) & honey bees, hoverflies, butterflies

Counter-clockwise from top left: seedlings at 10, 20 and 30 days after planting.



Summer lupine – *Lupinus formosus*



- Alternative Names: late lupine
- Mature Height: 20–80 cm (0.5–2.5 ft)
- Growth Habit: spreading to erect perennial legume
- Drought Tolerance: moderate
- Flower Color: purple
- Blooms: May–Sept.
- Attracts: native (esp. bumble) & honey bees, hoverflies, butterflies

Counter-clockwise from top left: seedlings at 8, 20 and 30 days after planting.



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Photos

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