

Supplementary File S1. Germination of target species in soil collected from six origin habitats in southern California (Mustard and California Sage Scrub habitat at three nature reserves). 20 seeds of each target species (*P. distans*, *S. apiana*, and *E. fasciculatum*) were planted in each of six soil origin habitats. Overall, germination was <5%.

Germinated target species	Soil origin		Germination Date*	Height (5 Aug 2022) (cm)
	Site	Habitat		
<i>P. distans</i>	Bonelli Park	CSS	8 June	23.41
<i>P. distans</i>	Voorhis Reserve	CSS	9 June	16.22
<i>P. distans</i>	Bonelli Park	CSS	9 June	7.51
<i>P. distans</i>	Bonelli Park	CSS	10 June	3.97
<i>P. distans</i>	Bernard Field Station	CSS	10 June	3.23
<i>P. distans</i>	Voorhis Reserve	Mustard	10 June	10.47
<i>P. distans</i>	Bernard Field Station	Mustard	9 June	5.22
<i>P. distans</i>	Voorhis Reserve	Mustard	8 June	7.60
<i>P. distans</i>	Voorhis Reserve	Mustard	8 June	15.53
<i>P. distans</i>	Bernard Field Station	Mustard	10 June	7.39
<i>S. apiana</i>	Bernard Field Station	CSS	11 June	2.42
<i>S. apiana</i>	Bonelli Park	Mustard	10 June	2.63
<i>E. fasciculatum</i>	Bernard Field Station	CSS	9 June	3.81

CSS, California Sage Scrub

*Seeds were obtained from Theodore Payne Foundation and planted on June 3-4.