

2024 Rule Proposal 11

Purpose: To correct the common names for various species of *Phacelia* and *Plagiobothrys* in Volume 3 of the AOSA Rules.

Current Rule and Proposed Rule: (proposed changes indicated in red text)

Volume 3. Uniform Classification of Weed and Crop Seeds (if adopted, changes will be made to all sections of Vol. 3)

Nomen #	Scientific name	Common name	Family	Spp class	CONTAMINATING CLASSIFICATION						
					A	F	H	R	S	T	V
316774	<i>Phacelia californica</i> Cham.	phacelia, California	Hydrophyllaceae [Boraginaceae]	F	W	C	W	W	W	W	W
312139	<i>Phacelia campanularia</i> A. Gray	bluebells, California; phacelia, harebell desertbells; bluebells, desert	Hydrophyllaceae [Boraginaceae]	F, R	W	C	W	C	W	W	W
463067	<i>Phacelia cicutaria</i> Greene	phacelia, caterpillar	Hydrophyllaceae [Boraginaceae]	R	W	W	W	C	W	W	W
408229	<i>Phacelia crenulata</i> Torr.	bluebells, desertbells; wildheliotrope, cleftleaf; phacelia, notch-leaved	Hydrophyllaceae [Boraginaceae]	F, R	W	C	W	C	W	W	W
455794	<i>Phacelia hastata</i> Douglas ex Lehm.	phacelia, lanceleaf; phacelia, silverleaf	Hydrophyllaceae [Boraginaceae]	R	W	W	W	C	W	W	W
316775	<i>Phacelia minor</i> (Harv.) Thell. ex F. Zimm.	phacelia, bluebell bells, wild canterbury	Hydrophyllaceae [Boraginaceae]	F	W	C	W	W	W	W	W
317088	<i>Phacelia</i> spp.	phacelia; scorpionweed	Hydrophyllaceae [Boraginaceae]	W	W	W	W	W	W	W	W
27492	<i>Phacelia tanacetifolia</i> Benth.	phacelia, tansy; phacelia, lacy	Hydrophyllaceae [Boraginaceae]	F, R	W	C	W	C	W	W	W
316916	<i>Plagiobothrys figuratus</i> (Piper) I. M. Johnst.	scorpionweed popcornflower, fragrant	Boraginaceae	W	W	W	W	W	W	W	W
317309	<i>Plagiobothrys hispidulus</i> (Greene) I. M. Johnst. = <i>Plagiobothrys scouleri</i> (Hook. & Arn.) I. M. Johnst. var. <i>hispidulus</i> (Greene) Dorn										
316969	<i>Plagiobothrys scouleri</i> (Hook. & Arn.) I. M. Johnst. var. <i>hispidulus</i> (Greene) Dorn	popcornflower, hairy; scorpionweed, small popcornflower, sleeping; popcornflower, harsh; alocarya, harsh	Boraginaceae	W	W	W	W	W	W	W	W
316999	<i>Plagiobothrys</i> spp.	popcornflower; scorpionweed	Boraginaceae	W	W	W	W	W	W	W	W

Harmonization Statement

The common names currently found in Volume 3 for *Phacelia* and *Plagiobothrys* and their species can be confusing and in some cases are misapplied. The proposal is to better align the common names in Volume 3 with those recognized in various commonly available references for native species (Calflora 2023; COSEWIC. 2008; JFP 2023; LBJWC 2023; USDA-ARS-NPGS 2023; USDA-NRCS 2023; Walden 2023; Wikipedia 2023a and 2023b)

Supporting Evidence

The common name 'scorpionweed' has been used in Volume 3 for two very different genera; *Phacelia* and *Plagiobothrys*. This fact can lead to confusion when only common names are used

in a Report of Analysis (ROA). To resolve this issue, we looked at all the species of *Phacelia* and *Plagiobothrys* currently listed in Volume 3 and the table below is a comparison of common names among commonly used references for these species (Calflora 2023; JFP 2023; LBJWC 2023; USDA-ARS-NPGS 2023; USDA-NRCS 2023; Walden 2023; Wikipedia 2023a and 2023b).

Scientific Name	Current Common Name AOSA Rules Volume 3	Common Name GRIN Database (USDA-ARS-NPGS 2023)	Common Name PLANTS Database (USDA-NRCS 2023)	Common Name Jepson eFlora (JFP 2023)	Common Name Wikipedia (2023a, 2023b)	Common Name Flora of North America Vol. 15 (Walden 2023)	Calflora (2023)	Lady Bird Johnson Wildflower Center (LBJWC 2023)
<i>Phacelia californica</i>	California phacelia	---	California phacelia	---	California phacelia	California phacelia	rock phacelia	California phacelia
<i>Phacelia campanularia</i>	California bluebells; harebell phacelia	California bluebell; desert bluebells	desertbells	desert bluebells	California bluebell; desertbells	desert blue bells	desert bells	desert bluebells; desert bells; desert canterbury bells; bluebells
<i>Phacelia cicutaria</i>	caterpillar phacelia	caterpillar phacelia	caterpillar phacelia	---	caterpillar phacelia	caterpillar phacelia	caterpillar phacelia	caterpillar phacelia; caterpillar scorpion-weed
<i>Phacelia crenulata</i>	desertbells bluebells; cleftleaf wildheliotrope	---	cleftleaf wildheliotrope	---	cleftleaf wildheliotrope; notch-leaved phacelia	wild heliotrope	notch leaved phacelia	cleftleaf wildheliotrope; heliotrope phacelia
<i>Phacelia hastata</i>	lanceleaf phacelia; silverleaf phacelia	---	silverleaf phacelia	---	silverleaf phacelia	silverleaf phacelia	white leaved phacelia	silverleaf phacelia; whiteleaf phacelia; silverleaf scorpionweed
<i>Phacelia minor</i>	bluebell phacelia	California bluebell	wild canterbury bells	wild canterbury bells	wild canterbury bells	wild canterbury bells	wild canterbury bells	wild canterbury bells; California bells
<i>Phacelia</i> spp.	phacelia; scorpionweed	---	phacelia	---	phacelia; scorpionweed	phacelia		---
<i>Phacelia tanacetifolia</i>	tansy phacelia	tansy phacelia	lacy phacelia	---	lacy phacelia	lacy phacelia; tansy phacelia	tansy leaved phacelia	lacy phacelia; lacy scorpion-weed
<i>Plagiobothrys figuratus</i>	scorpionweed	---	fragrant popcornflower	---	fragrant popcornflower		---	fragrant popcornflower; fragrant popcorn-flower; fragrant popcorn flower; fragrant allocarya
<i>Plagiobothrys hispidulus</i> = <i>Plagiobothrys scouleri</i> var. <i>hispidulus</i>	---	---	---	harsh popcornflower	Cascade popcornflower	---	harsh allocarya	
<i>Plagiobothrys scouleri</i> var. <i>hispidulus</i>	hairy popcornflower; small scorpionweed	---	sleeping popcornflower	See <i>Plagiobothrys hispidulus</i>	See <i>Plagiobothrys hispidulus</i>	---	See <i>Plagiobothrys hispidulus</i>	sleeping popcornflower; harsh popcorn-flower; harsh popcorn flower; harsh allocarya
<i>Plagiobothrys</i> spp.	popcornflower; scorpionweed	---	popcornflower	popcornflower	popcornflower	---	---	---

--- species not in the cited reference or no common name given in the cited reference.

Using the common name scorpionweed for both *Phacelia* spp. and *Plagiobothrys* spp. is not only confusing but is also a poor choice to use a common name with the imbedded term 'weed' when applying it to native plant species, some of which are rare and/or endangered. Most common names for species of *Phacelia* include terms like 'phacelia', 'bluebells', or 'bells' (USDA-NRCS 2023) and most common names for species of *Plagiobothrys* include the term 'popcornflower' (USDA-NRCS 2023); therefore, we recommend using the common name phacelia for the genus *Phacelia* and the common name popcornflower for the genus *Plagiobothrys*. The name scorpionweed should be removed from Volume 3.

The comparison table indicates that the common name California phacelia is widely recognized as applying to *Phacelia californica* (LBJWC 2023; USDA-NRCS 2023; Walden 2023; Wikipedia 2023a) and the common name caterpillar phacelia is widely recognized as applying to *Phacelia cicutaria* (Calflora 2023; LBJWC 2023; USDA-ARS-NPGS 2023; USDA-NRCS 2023; Walden 2023; Wikipedia 2023a) and these names should remain unchanged in Volume 3.

For *Phacelia campanularia* the common names California bluebell, desertbells, and desert bluebells are all widely used and should be recognized in Volume 3 (Calflora 2023; JFP 2023; LBJWC 2023; USDA-ARS-NPGS 2023; USDA-NRCS 2023; Walden 2023; Wikipedia 2023a). The common name harebell phacelia should be removed from Volume 3.

For *Phacelia crenulata* the common name cleftleaf wildheliotrope appears to be the most widely recognized common name for this species (LBJWC 2023; USDA-NRCS 2023; Wikipedia 2023a). Notch-leaved phacelia could also be used (Calflora 2023; Wikipedia 2023a). Desertbells bluebells should be removed from Volume 3 for this species as this common name could be confused with those recommended for *Phacelia campanularia* (desert bluebells and desertbells).

Silverleaf phacelia is the most widely recognized common name for *Phacelia hastata* (LBJWC 2023; USDA-NRCS 2023; Walden 2023; Wikipedia 2023a). Lanceleaf phacelia should be removed from Volume 3.

Wild canterbury bells is the most widely used common name for *Phacelia minor* (Calflora 2023; LBJWC 2023; JFP 2023; USDA-NRCS 2023; Walden 2023; Wikipedia 2023a). Bluebell phacelia should be removed from Volume 3.

For *Phacelia tanacetifolia* the common names lacy phacelia and tansy phacelia are both widely used (LBJWC 2023; USDA-ARS-NPGS 2023; USDA-NRCS 2023; Walden 2023; Wikipedia 2023a).

Fragrant popcornflower is the most widely recognized common name for *Plagiobothrys figuratus* (COSEWIC 2008; LBJWC 2023; USDA-NRCS 2023; Wikipedia 2023b). Scorpionweed should be removed from Volume 3 for this species.

For *Plagiobothrys scouleri* var. *hispidulus* [= *Plagiobothrys hispidulus*] common names used include sleeping popcornflower (LBJWC 2023; USDA-NRCS 2023), harsh popcornflower (JFP 2023; LBJWC 2023), and harsh allocarya (Calflora 2023; LBJWC 2023). The common names hairy popcornflower and small scorpionweed should be removed from Volume 3 for this taxon.

References

Calflora: Information on California plants for education, research and conservation, with data contributed by public and private institutions and individuals. [web application]. 2023. Berkeley,

California: The Calflora Database [a non-profit organization]. <https://www.calflora.org/> [Accessed October 4, 2023].

COSEWIC. 2008. COSEWIC assessment and status report on the fragrant popcornflower *Plagiobothrys figuratus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vi + 23 pp.
<https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/cosewic-assessments-status-reports/fragrant-popcornflower.html> [Accessed October 11, 2023]

Jepson Flora Project (JFP) (eds.) 2023, Jepson eFlora: Vascular Plants of California.
<https://ucjeps.berkeley.edu/eflora/> [Accessed October 4, 2023].

Lady Bird Johnson Wildflower Center (LBJWC). 2023. <https://www.wildflower.org/plants/> [Accessed October 4, 2023].

United States Department of Agriculture-Agricultural Research Service-National Plant Germplasm System (USDA-ARS-NPGS). 2022. Germplasm Resources Information Network (GRIN Taxonomy). National Germplasm Resources Laboratory, Beltsville, Maryland,
<https://npgsweb.ars-grin.gov/gringlobal/taxon/taxonomysearch?t=pnlspecies> [Accessed October 4, 2023].

United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS). 2023. Plants Database. <https://plants.usda.gov/home> [Accessed October 4, 2023].

Walden, G. 2023. *Phacelia* common names in soon to be published Flora of North America Volume 15. Personal communication via email with co-author of *Phacelia* for FNA V15, October 4, 2023.

Wikipedia. 2023a. <https://en.wikipedia.org/wiki/Phacelia> [Accessed October 4, 2023].

Wikipedia. 2023b. <https://en.wikipedia.org/wiki/Plagiobothrys> [Accessed October 4, 2023].

Submitted by: Deborah J. Lionakis Meyer and Nishit Patel, AOSA-SCST Purity Subcommittee.

Date Submitted: October 12, 2023