Perennial Cryptantha species are now treated in the genus Oreocarya (Hasenstab-Lehman and Simpson 2012). The genus description here has been revised to reflect that all Cryptantha species are annual. No other changes have been made to the key.

## Cryptantha Lehm. Cryptantha; White Forget-me-not

Infl terminal and axillary in a series of raceme- or spike-like cymes, tips helicoid, or the fls solitary in the axils, bracteate or not; fls radially symmetric; calyx cleft to the base or nearly so, accrescent in fr; corolla white, fornices 5 , occ vestigial or absent, often yellow, the limb gen $\pm$ rotately spreading, gen very small; filaments short, attached below midlength of corolla tube; nutlets 4 , or $1-3$ by abortion, affixed to the somewhat elongate gynobase for much of their length, the scar narrow and gen appearing as an elongate, closed to narrowly open groove that is either forked at base or opened into a basal areola (open gap); taprooted, strigose to more often hirsute or partly hispid-setose ann herbs with gen narrow lvs. (Gr kryptos, hidden, and anthos, fl, referring to the cleistogamous fls of some spp.). (Allocarya, Krynitzkia). See also Greeneocharis, Oreocarya.
Lf length in the key includes the petiole. Cryptanta recurvata Coville app our area in se OR and sw ID. Per Cryptantha spp. are treated as Oreocarya (Lehman-Haasenstab and Kelley 2012).


1a Corolla relatively large, the limb 3-8 mm wide; pls both sides Cas
2a Nutlet surface roughened, papillate; nutlets 1 or 2( -4 ), ovate; pls $1-6 \mathrm{dm}$; dry, open slopes, OM and c WA s, both sides of Cas, to Baja Cal, e to w ID and nw NV ; common c.; ours var. hendersonii (A. Nelson) Jeps. \& Hoover ( $C$. grandiflora misapplied, C. hendersonii) 1 C. intermedia (A. Gray) Greene
2b Nutlet surface smooth; nutlets 1 or 2(-3), ovate; pls $0.5-3.5 \mathrm{dm}$; grassl, open conif for, scree slopes, and volcanic-based substrates; Blue Mts of se WA and ne OR, e to SR area in w ID; large-fld c. (C. intermedia var. g.)

2 C. grandiflora Rydb.


1b Corolla small, the limb $0.5-2.5 \mathrm{~mm}$ wide; pls wholly e Cas
3a Nutlets all smooth, or finely and inconspicuously granular, not at all tuberculate or spiculate-papillate
4a Nutlets gen solitary, if $>1$ then additional nutlets poorly developed 5a Calyx hairs straight to wavy, not curved or hooked; nutlet gen 1 (rarely 2 or 3), lance-ovate, truncate at the base, margins rounded, areole absent or
 minutely triangular at base; pls 1-3.5 dm; WA to CA, e to RMS (but not MT); cotton-ball c. (C. g. var. hillmanii, C. h.)

3 C. gracilis Osterh. 5b Calyx hairs both straight and curved or hooked

6a Nutlets broadly truncate at base, the scar broadened below the middle into a definite, open areola; style reaching to the middle of the nutlet or gen beyond; dry, open places; e Cas, Yakima Co, WA to CA, uncommon; beaked c. (C. suksdorfii)

4 C. rostellata (Greene) Greene
6b Nutlets $\pm$ pointed or very narrowly truncate at base, the scar $\pm$ closed below the middle, not forming a definite areola; style scarcely reaching the middle of the nutlet; dry, open places; c WA to CA, e to w ID and c SRP; common; weak-std c. 5 C. flaccida (Douglas ex Lehm.) Greene 4b Nutlets gen 4 , in any case $>1$; hairs of the calyx $\pm$ straight
7a Nutlets obliquely compressed with a distinctly excentric scar near one of the margins; pls $0.5-3(-4) \mathrm{dm}$; open areas, foothills to mid elev in mts; s BC s, chiefly e Cas, to CA, e to Alta, MT, and WY; slender c.

6 C. affinis (A. Gray) Greene
7b Nutlets symmetrical, the scar median on the ventral face
8a Margins of nutlets prominent, sharply angled, esp above; scar opened at base to form a small areola; style nearly or fully = nutlets; dry, open places at lower elev; sc BC to CA, e to w MT, WY, CO, UT, and NV; Watson's c.

7 C. watsonii (A. Gray) Greene
$\mathbf{8 b}$ Margins of nutlets rounded or obtuse, not prominent
9a Nutlets lanceolate, $0.5-0.7 \mathrm{~mm}$ wide; scar opening at base into an
 areola; style $=$ or slightly $>$ nutlets; pls $1-5 \mathrm{dm}$; sand dunes and very sandy soil; c WA to CA, e to RMS and n Gr Pl; Fendler's c.

8 C. fendleri (A. Gray) Greene 9b Nutlets ovate, $0.8-1.2 \mathrm{~mm}$ wide; scar closed; style somewhat < nutlets; pls $0.5-4 \mathrm{dm}$; up to mid elev in mts, not in sand dunes; common and widespread, sw AK s, e Cas, to CA, e to $n$ RMS and n Gr Pl ; Torrey's c.; ours var. torreyana 9 C. torreyana (A. Gray) Greene 3b Nutlets, or some of them, rough, with evident tubercles or spiculate papillae on the dorsal surface


10a Nutlets (except 1) with conspicuously-winged margins, lanceolate to lanceoblong; pls $1-4 \mathrm{dm}$; sandy to gravelly soils in open areas gen at low elev; WA to CA, e to s RMS and TX; winged c ., wing-nut c.; ours var. pterocarya

10 C. pterocarya (Torr.) Greene
10b Nutlets not at all wing-margined, shape various
11a Nutlets distinctly heteromorphic, 1 nearly smooth, somewhat larger and more firmly attached than the other 3 , which are evidently tuberculate
12a Midrib of calyx lobes enclosing nutlets slightly thickened but not hard; fr peds $0-0.5 \mathrm{~mm}$; similar-sized nutlets $1.8-2.3 \mathrm{~mm}$, lance-ovate, attachment scar gapped in lower half; pls $0.5-2.5 \mathrm{dm}$; sagebr grassl and juniper scrub, often in sandy soil; Sask s in e ID and w MT to WY, CO, UT, AZ; Kelsey's

11 C. kelseyana Greene
12b Midrib of calyx lobes enclosing nutlets strongly thickened and hard, esp near base; fr peds $0.5-1.5 \mathrm{~mm}$; similar-sized nutlets $1.2-1.6(-1.8) \mathrm{mm}$, lance-ovate to ovate, attachment scar gapped nearly entire length; prairies, sagebr grassl, and juniper scrub where sandy or gravelly; Alta s in MT, WY, $\mathrm{CO}, \mathrm{NM}$, and AZ , e to Gr Pl ; bracteate c .

12 C. minima Rydb.
11b Nutlets all alike in size and texture when normally developed
13a Nutlets disintinctly spiculate-papillate, lanceolate or ovate in shape
14a Nutlets lanceolate, $0.5-0.7 \mathrm{~mm}$ wide; dry slopes and flats, often with sagebr; Yakima Co, WA to CA, e to Salmon R valley of c ID and SRP, s to NV and UT; des c.

13 C. scoparia A. Nelson
14b Nutlets ovate, ( $0.7-$ ) $0.9-1.5 \mathrm{~mm}$ wide; mid to rather high elev in mts; chiefly Sierran, disjunct in c ID; prickly c. 14 C. echinella Greene
13b Nutlets coarse granular to tuberculate, never spiculate-papillate, ovate in shape, ( $0.7-$ ) $0.9-1.5 \mathrm{~mm}$ wide
15a Sts and lvs closely strigose, essentially without spreading hairs; nutlets coarsely granular and with scattered low tubercles; pls $0.5-4.5 \mathrm{dm}$; openings in ponderosa pine for, often where disturbed; nc WA to CA, e to ID and NV; pine woods c.

15 C. simulans Greene
$\mathbf{1 5 b}$ Sts and lvs spreading-hirsute, at least in part; nutlets with scattered low tubercles, gen also granular; pls 1-4.5 dm; dry, open places from lowl to mid elev in mts; widespread, BC to CA, e to MT, WY, CO, and UT; obscure c.

