

# SPECIES BOUNDARIES

# *Fritillaria affinis*

Royal Horticultural Society Plant & Art Fair  
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www.fritillariaicones.com

The North American *Fritillaria affinis* shows great variability across its geographic distribution. To highlight the taxonomic complexity, these portraits show just six examples from Oregon and Northern California.

*Fritillaria affinis* can appear locally distinct and several sub-populations have been named, although later reduced to synonym. Specific character combinations are frequently found in geographically disjunctive sub-populations and many characters appear polymorphic at particular locations. This natural variation in wild species strongly contrast the everyday horticultural experience of more uniformed plants.

*Fritillaria affinis* (Schultes) Sealy in Hooker 's Icon. Pl., 39(1-2): t. 3847 (1980), Type: On the headwaters of the Missouri and Columbia Rivers.

Synonyms:

- Amblirion lanceolatum* Sweet in Hort. Brit. (Sweet), ed. 2. 538. (1830), Type: I.c.
- Fritillaria esculenta* Nutt. ex Baker in Journ. Linn. Soc. 14: 271 (1875 publ. 1874), Columbia Gorge
- Fritillaria eximia* Eastw. in Leaf. West. Bot. 2: 112. (1938). Type: Butte Co., CA
- Fritillaria lanceolata* Pursh in Fl. Amer. Sept. (Pursh) 1: 230. (1814) [Dec 1813], Type: I.c.
- Fritillaria lanceolata* Pursh var. *floribunda* Benth. in Pl. Hartw. 338 (1857). Type: San Francisco, CA
- Fritillaria lanceolata* Pursh var. *gracilis* S. Watson in Proc. Amer. Acad. Arts 14: 259 (1879), Type: Corte Madera, San Francisco, CA
- Fritillaria lanceolata* Pursh var. *tristulis*. A. L. Grant in Jeps. Fl. Calif. 1: 308. (1922), Type: Marin Co., CA
- Fritillaria lunellii* A.Nelson in Proc. Biol. Soc. Washington 20: 35 (1907). Type: Foothills of Mt. Hood, Wasco Co., OR
- Fritillaria mutica* Lindl. in Bot. Reg. sub t. 1663 (1834). Type: California
- Fritillaria mutica* var. *gracilis* (S.Watson) in Jeps. Fl. W. Calif. 108. (1901), Type: I.c.
- Fritillaria phaeanthera* Purdy in Lily Year –Book 1932, 97: (1932), Type: Lake Co., CA
- Lilium affine* Schultes & Schultes f. in J. J. Roemer et al., Syst. Veg. 7(1): 400 (1829), Type: I.c.

Bulb: 1-2(-5.5) cm, main scale large disc shaped with raised centre surrounded by several smaller scales fused to the main scale; small scales 15-30(-100) very loosely attached to main scale. Stem 10–120 cm. Leaves in 1–4 whorls of 2–8 per node proximally, alternate distally, 4–11(-16) cm long, 5-16(-30) mm wide, usually shorter than inflorescence; blade linear-lanceolate to ovate; distal leaves usually equaling proximalmost leaf; one bract leaf at the base of each pedicel. Flowers nodding, odor not unpleasant; tepals complete or crenulated, brownish purple to pale yellowish green, clearly mottled yellow or purple, or unmottled, oblong to ovate, 4–11(-15) mm, apex not recurved; nectaries yellow, dotted purple, lanceolate, 1/2–2/3 tepal length; style obviously branched for 1/2 its length, branches longer than 1.5 mm; filaments smooth, elliptic in cross section 5.5-15 mm long; anthers yellow, orange, bright pink or dark red 4.0-9.5 mm long, 1.5-2.5 mm wide. Capsules widely winged 1.5-2.5 cm tall, 2-3 cm diameter. Chromosome Number: 2n = 24, 36, 48. Flowering February--Jun. Oak or pine scrub, grasslands. Altitude: 0--1800 m. Distribution: Canada: British Columbia; USA: California, Idaho, Oregon, Washington

All images are life-size including the tepal outlines in the key. Each of the six 20x60 cm portraits were photographed digitally using focus stacking, then layer stacked and retouched in Adobe Photoshop.

The schematic landscape image of Oregon and Northern California was created using Adobe Illustrator and Photoshop.

Exhibited at the RHS London Plant & Art Fair Show 2018 as part of the Portfolio Category of the RHS Photographic Competition 2018.

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*Fritillaria affinis* (Schultes) Sealy  
Location: Government Camp, SW slopes of Mt. Hood, Clackamas Co., Oregon, USA  
Altitude: 1200 m  
Collector: Jane McGary

*Fritillaria affinis* (Schultes) Sealy  
Location: Point Reyes Station, Marin Co., California, USA, 37m  
Altitude: 37 m  
Collector: Laurence Hill

*Fritillaria affinis* (Schultes) Sealy  
Location: Mud Creek, Richardson Spring, Chico, Butte Co., California, USA, 198m  
Altitude: 198 m  
Collector: Laurence Hill

*Fritillaria affinis* (Schultes) Sealy  
Location: Ukiah, Mendocino Co., California, USA, 284m  
Altitude: 284 m  
Collector: Laurence Hill

*Fritillaria affinis* (Schultes) Sealy  
Location: Nicasio Reservoir, Marin Co., California, USA, 59m  
Altitude: 59 m  
Collector: Wayne Roderick

*Fritillaria affinis* (Schultes) Sealy  
Location: Point Reyes Peninsula, Marin Co., California, USA, 149m  
Altitude: 149 m  
Collector: Laurence Hill