



Chlorogalum pomeridianum

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Taxonomy

- Scientific name: *Chlorogalum pomeridianum*
- Family: Liliaceae
- 5 known species of the Genus:
- *C. parviflorum*, *C. grandiflorum*, *C. Purpureum*, *C. aungustifolium*, and *C. pomeridianum*.
- No synonyms.
- Many common names: soap plant, amole plant, Indian soap root, Indian soap plant, soap lily etc.

Distribution

- Mediterranean climates of southwest corner of Oregon and in southern California
- 37-42 degree North latitude
- Dry open hills and plains below 1500m altitude

Native habitat

- ponderosa shrub forest
- Oregon oak woods
- California oakwoods
- Chaparral
- Montane chaparral
- coastal sagebrush and
- California steppe.

Taxonomy (Bulbs)

- Bulbs are 7-15 cm long.
- Bulbs are covered with thick coat of tough fibers.
- Each bulb weighs from 20-350 grams.



Chlorogalum pomeridianum
plant sprouting from its bulb
in February.

Taxonomy (Leaves)

- Leaves are 2.5 cm wide, linear up to 46 cm in length.
- Leaves are linear and all the leaves arise from the underground bulb in early winter.
- It does not have a visible stem.
- Panicle arises from the middle of leaves in early June.



Taxonomy (Flowers)

- Flowers are numerous in number with 3 white petals and sepals.
- Vespertine (one flower opens only once for few hours only)
- The rachis are thin and flowers seems to be floating in the air.



Cultivars on market

- There are three accepted varieties of *C. pomeridianum*. All of them are found in wild stages only.
- *C. pomeridianum* Var. *pomeridianum*
D.c Kunth
- *C. pomeridianum* Var. *minus* Hoover
- *C. pomeridianum* Var. *divaricatum*
(lindl) Hoover.

Early uses

- As a source of carbohydrates by Indian tribes and early settlers.
- As soap or shampoo (it produces lather)
- Leaves were used for medicinal purposes
- Raw crushed bulb scales were used for stupefying fishes.
- Studies are being made for its saponin contents now.

Propagation methods

- Vegetative : from bulbs: takes 9-10 months to produce flowers from a mature bulb
- Seed: no dormancy, difficult to maintain viability, takes 5-7 years to flower from seed.

Product specification

- Vespertine nature of the flowers
- Bulbs coated with this fibers
- 3 sepals and 3 petals, (all white in color)
- Long leafless panicle

Market niche

- Cut flowers
- Landscapes
- Flowers in late July or August (no special holidays)
- Seems unlikely to be weed or invasive.

Anticipated cultural requirements

- US hardiness zone: 8b-9a
- Not suitable in hot and humid weather
- Specially adapted to tolerate drought by being dormant as a bulb

Production Schedule

- 288 plug trays
- Light and porous medium
- Only 10% seeds were viable, and germinated
- Propagation by seed takes 5-7 years to flower
- Propagation by bulbs takes 9-10 months to flower in natural habitat.
- More researches required to set up the production schedule for this crop.

production schedule contd.



Needs for genetic improvement

- Colors development
- Alter vespertine nature of the flowers
- Reduce gestational period
- Synchronize germination

References