

***OENOTHERA DELTOIDES* TORR. & FRÉM. SSP.
COGNATA (JEPS.) W. KLEIN**

COMMON NAME: BIRDCAGE EVENING PRIMROSE

FAMILY: ONAGRACEAE

GROWTH FORM: ANNUAL HERB



PLANTING

Ideally, seeds of this species would be planted during October, before the winter monsoonal period of November through March. However, we have planted the species as late as December. Seeds were hand-sown onto mounded planting beds, and a thin layer of soil was then raked over them. The seeds germinate readily without any form of pre-treatment.

PHENOLOGY

When growing in the San Joaquin Valley, *O. deltoides* germinates with winter rains and will typically begin flowering during April. The peak month for seed collection is June, but seeds can potentially be collected during July and August.

SEED HARVESTING

Fruits mature indeterminately and therefore seed collection on multiple dates is ideal. Each plant has multiple inflorescences and will likely bear flower buds, open flowers, immature fruits, and mature fruits all at the same time. Mature fruits are light brown in color, woody in texture, and will begin to peel open, thereby dispersing the seeds. Fruits cannot be easily stripped from plants. To minimize disturbance to the plants, we clipped the mature fruits off with wire cutters. It is helpful to place a container under the plants while collecting, in order to catch any seeds that may fall. When plants are nearing senescence, entire branches can potentially be collected, rather than individual fruits. It is ideal to minimize the amount of soil that is collected along with the plants; soil particles that are of a similar size and weight as the seeds can be very difficult to remove during seed processing.

SEED PROCESSING METHODS

We have only processed a small volume of plant material for this species, so we have broken open the capsules by

<http://esrp.csustan.edu/vfpc>

hand. Following this, seeds can then be separated from chaff using a Clipper Office Tester or wire mesh sieves with various screen sizes. Additionally, we have used an air separator (Seed Tech Systems, LLC.) to separate lightweight chaff from seeds.

CULTIVATION OVERVIEW

Seeds of *O. deltoides* were first planted at the nursery during the 2005-06 growing season and a seed harvest was made from approximately 50 plants. In two consecutive growing seasons, both of which had below average precipitation, several *O. deltoides* individuals germinated from the soil seed bank without being replanted. The species does not appear to be susceptible to herbivory.

ADDITIONAL INFORMATION ABOUT *OENOTHERA DELTOIDES*:

Species profile from the Ladybird Johnson Wildflower Center at the University of Texas:

http://www.wildflower.org/plants/result.php?id_plant=OEDE2

PREPARED BY

Brianna D. Borders, Restoration Botanist.

Other Contributors: Dr. Nur Ritter, Justine Kokx, Adrian Howard, and Graham Bidy.

PHOTOS



