

Cutleaf evening primrose

(Oenothera laciniata Hill)

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Cutleaf evening primrose *Oenothera laciniata Hill*

Also known as: evening primrose, weedy evening primrose, sundrops

Classification and Description:

Cutleaf evening primrose is a member of the Onagraceae or evening primrose family. The descriptive name evening primrose describes the tendency of plants in this family to completely or partially close their flowers in the day. It is an herbaceous winter annual. It is native to the eastern United States and occurs throughout the Southeastern states.

The cotyledons of newly emerged cutleaf evening primrose are kidney- or egg-shaped and have petioles. The hypocotyl is very short, making the seedling small and flat. Seedlings develop as basal rosettes. Leaves are alternate, oblong to lanceolate in shape, up to 3.25 inches long and smaller upward. Leaf margins are coarsely toothed and can be deeply indented. Leaves are dull green and have hairs on the top but not the underside. Leaves can have a prominent white midvein. Stems can be either prostrate or weakly ascending and often are reddish, red in cross-section. Cutleaf evening primrose can grow to almost 3 feet tall when

growing upright. Stems are simple or branched from the base and are hairy. Flowers occur singly and are sessile without petioles in the leaf axis. Flowers are made up of four broad petals and are yellow or red. Cutleaf evening primrose produces many seeds that are enclosed in .75 to 1.5 inch long cylindrical, narrow capsules that can be straight or curved. Capsules are hairy when younger, then become smooth. Seeds are pale brown, sharply angled and the shape varies. Seeds can remain viable in the soil for decades. Cutleaf evening primrose has a fibrous taproot system.

Weed Status and Injury:

Cutleaf evening primrose is very competitive and can be found throughout Tennessee in agronomic row crops. It can particularly be found in fallow ground prior to spring burndown, but also can be found in roadsides, new forest plantations, landscapes and nurseries.

Interesting Facts:

Evening primrose is a wild host for clouded and tarnished plant bugs, common pests of Tennessee cotton. Evening primrose seeds are consumed by bobwhite quails and mourning doves, as well as some seed-eating songbirds like the American goldfinch. Various moths and butterflies visit the flowers for a



Cutleaf evening primrose in the overwintering rosette stage



Cutleaf evening primrose in the flowering stage

nectar source. Evening primrose is consumed by deer, though it makes poor forage. Leaves of *Oenothera* species were often mixed with greens and eaten by the Native American Cherokee tribe. The Navajo used a compound made with these plants as a wash for sore skin. The Ojibwa tribe soaked the whole plant and applied to bruises. The Potawatomi used the tiny seeds as a valuable medicine for unspecified ailments and the Lakota burned the seeds to use as incense.

Management Considerations:

In no-till crop production systems, it has become a more prevalent weed. This is in part due to glyphosate being the primary herbicide for weed control prior to planting, but glyphosate has never been very effective on the primroses. Once it becomes established and produces seed, it is hard to control, as it has an exceptionally long-lived seed. Please refer to the **Weed Control Manual for Tennessee (PB 1580)** for management recommendations.

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