

### Mini data sheet on *Euphorbia davidii* (Euphorbiaceae)

Added to the EPPO Alert List in 2021 - Deleted in 2024

**Reasons for deletion:**

*Euphorbia davidii* was transferred in 2024 to the EPPO List of Invasive Alien Plants.

#### Why

*Euphorbia davidii* has been present in the EPPO region for a number of years where it occurs often in small populations along railway lines. However, *E. davidii* can also invade agricultural habitats and recently the species has been reported in new areas in Central Russia.

#### Geographical distribution

**EPPO region:** Bulgaria, France, Hungary, Italy, Moldova, Russia, Serbia, Ukraine.

**North America:** Canada, Mexico, United States: Arizona (native), Arkansas, California (native), Colorado, Connecticut, Delaware, District of Columbia, Florida, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, New Mexico (native), New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming.

**Oceania:** Australia.

#### Morphology

**Stem:** erect or ascending, 20-70 cm, both coarsely and sparsely hirsute and closely strigillose; branches usually straight, occasionally proximal branches arcuate.

**Leaves:** usually opposite, occasionally alternate at distal nodes; petiole 7-25 mm, strigose; blade usually narrowly to broadly elliptic, occasionally lance-elliptic, 10-100 × 5-35 mm, base cuneate to attenuate, margins coarsely crenate-dentate, strigose, revolute to nearly flat, apex broadly acute to acuminate, or obtuse, abaxial surface strigose with stiff, strongly tapered hairs, adaxial surface sparsely strigose-hirsute; venation pinnate, midvein prominent.

**Flowers:** 5-8. Pistillate flowers: ovary glabrous or sparsely strigose. Capsules broadly ovoid, 3-lobed, glabrous.

**Seeds** black to brown or pale grey, ovoid to triangular-ovoid, angular in cross section, 2.4-2.9 × 2.2-2.9 mm.

#### Biology and Ecology

*Euphorbia davidii* is an annual species that spreads locally by seed. In the EPPO region (Serbia) flowering occurs in August-September and fruiting in September - October.

#### Habitats

Ruderal habitats including transportation networks (rail lines and roadsides), port areas and industrial areas. Agricultural habitats (soybean and maize) and vineyards.

#### Pathways for movement

The potential pathways for entry into the EPPO region are unclear. However, it is suggested in the literature that the species may have entered as a contaminant of seed consignments.

### Impacts

*Euphorbia davidii* can form dense stands in agricultural areas. There are observations from Serbia that the presence of dense patches can have a negative effect on the size of maize plants and can initiate early ripening of sunflower heads.

### Control

Chemical control options include foliar spraying which has been assessed but with limited effectiveness.

### Sources

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