

## Common name: Grecian Foxglove, woolly foxglove

**Scientific name:** *Digitalis lanata* Ehrh

**Related species:** *D. lamarckii* auct. balcan., *D. purpurea* L., *D. grandiflora* Mill., *D. lutea* L.

Grecian foxglove is an early detection target species. [Information on reporting Grecian foxglove infestations.](#)

Grecian foxglove is a threat to Minnesotans, yet it has both good and bad traits. Beneficial compounds derived from this species provide cardiac medicines. Unfortunately, this species is poisonous to humans, livestock and wildlife. Grecian foxglove is native to central and southern Europe. It was brought to North America as an ornamental then escaped cultivation. In Minnesota, it is invasive and displaces desirable vegetation.

### Description

Grecian foxglove is a perennial plant that forms a rosette its first year then bolts and sends up a single flowering stem its second and subsequent years. The flowering stems are unbranched and grow 2-5 feet tall with many tubular flowers arranged in an elongated cluster. Flowers are creamy white to pale yellow with brownish-purple venation inside. Leaves are simple, alternate, and oblong shaped with a pointed tip. Flowering stems and calyxes are covered with woolly hairs. Flowering occurs in the summer. The flowers are pollinated primarily by bees then oval pods containing seeds are produced. Seed production is prolific and is the only means of reproduction for this species.

The common garden foxglove, *D. purpurea*, can be distinguished by the lack of woolly hairs on the stem and calyx. The leaf shape of garden foxglove is more rounded and the flowers exhibit a wide range of colors. Garden foxglove has not been reported as invasive in Minnesota. Multiple species of *Digitalis* can hybridize, but no hybrids have been reported in Minnesota.

### Habitat

Grecian foxglove thrives in habitats ranging from hot, dry sites in the Mediterranean to cool, moist, high altitude sites in the Himalayas. Reported infestations in Minnesota and Kansas are in open sunny roadsides, residential yards, grasslands, river bluffs, and forest margins.

### Means of spread and distribution ([View Grecian foxglove distribution](#))

Not knowing its negative potential, gardeners planted Grecian foxglove as an ornamental. Established stands produce large amounts of seed that can be spread by wind, water, vehicles, humans, wildlife, and by moving soil containing seed. All reported infestations in Minnesota are in Dakota, Wabasha, and Washington Counties. [View Grecian foxglove distribution.](#)

### Impact

Grecian foxglove is toxic to humans, livestock, and wildlife. Grecian foxglove cut and dried in hay could result in livestock poisoning. This species is also invasive and displaces desirable vegetation such as forage and native plants.

### Prevention and management

Do not plant Grecian foxglove or move soil containing seed of this species. Avoid direct contact with this plant to prevent toxin absorption through skin. Wear protective clothing and rubber gloves when handling this species.

- Hand-pulling is not recommended due to concerns about exposure to toxins and disposal issues. However, repeated hand-pulling (wear protective gloves and clothing) in the spring and fall can control very small populations. Pulling larger populations may result in disturbed areas that are ideal for Grecian



Grecian foxglove drawing



Grecian foxglove seed



Grecian foxglove leaf



Grecian foxglove flower

foxglove seedlings to germinate.

- Frequent mowing during the growing season for multiple years may control this species if flowering is prevented. Grecian foxglove can flower and produce seed on a short stem after mowing. So preventing all flowering may be a challenge.
- Annual herbicide applications (in spring and/or fall) can reduce Grecian foxglove populations over time. For specific herbicide recommendations, contact the [University of Minnesota Extension](#).

For all management methods, it is important to monitor several years after treatment due to germination from the Grecian foxglove seedbank.

### Legal status

Grecian foxglove is a prohibited noxious weed on the eradicate list. This means that all of the above and below ground parts of the plant must be destroyed, as required by Minnesota Statutes, Section 18.78. Additionally, no transportation, propagation, or sale of these plants is allowed.

### Toxicity

All parts of Grecian foxglove are poisonous in both fresh and dried forms. Cardiac glycosides from Grecian foxglove include digoxin and digitoxin and primarily affect cardiovascular, neurologic, and gastrointestinal systems. Ingesting plant parts or absorbing compounds through skin in direct contact with Grecian foxglove may adversely affect humans and other mammals and could be fatal. It is possible that smoke from burning plants may be toxic.

### More information

- [Kansas Department of Agriculture's Grecian foxglove program](#)
- Minnesota Department of Transportation's [herbicide trials on Grecian foxglove](#)

Grecian foxglove rosettes



Grecian foxglove rosettes



Grecian foxglove plant



Grecian foxglove plants



Grecian foxglove flower stalk

**If you suspect you have seen this plant in Minnesota:**

"Arrest the Pest" Hotline  
1-888-545-6684 (toll free)