

# Lamb's-quarters (Common Lamb's-quarters), *Chenopodium album* L.<sup>1</sup>

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## Classification

Common Name: Lamb's-quarters (Common Lamb's-quarters)

Scientific Name: *Chenopodium album* L.

Family: Chenopodiaceae, Goosefoot Family

## Seedling

The cotyledons are narrowly elliptic, about 1.2-1.5 cm long and are dull green above and purple on the lower surface (Figure 1).

## Mature Plant

Lamb's-quarters is an erect, tap rooted, summer annual (Figure 2). The maximum height is about 2 m. The entire plant is covered with varying amounts of a waxy substance giving the plant a light green appearance. The branches are angular or ridged, ascending, and usually striped with purple, pink or yellow. The leaves are simple, arranged alternately and are variable in shape and size. They may be up to 8 cm long. The leaf blades are usually ovate to lanceolate. The margins may or may not be toothed and may appear to be 3-lobed. Occasional specimens have



Figure 1. Seedling, Lamb's-quarters (*Chenopodium album* L.).

purple- to wine-colored leaf bases. The flowers are gray to green and are arranged in spikes in the leaf axils at the ends of the branches and stems. The upper flowering portion has few leaves. The flowers are without petals. The sepals are slightly to sharply ridged, nearly covering the mature fruit. The seeds are disc shaped with a notch, glossy black, brown or brownish green, and 1.2-1.6 mm in diameter. The seeds have a thin, papery covering which often persists, giving them a dull appearance.

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Figure 2. Mature plant, Lamb's-quarters (*Chenopodium album*, L.).

## History

The Greek name *Chenopodium* means “goose” and “foot,” which refer to the shape of the leaves of some species. The Latin species name *album* means white and alludes to the waxy covering on the plant.

## Habitat

Lamb's-quarters is found throughout the world from sea level to 3,600 m in elevation and from the latitudes 70°N to 50°S except in extreme desert climates. It occurs on disturbed sites and thrives on all soil types and over a wide range of soil pH values.

## Biology

Seed germination for this plant, after evaluating seeds stored in the ground, decreased over a 5.5-year period from 96% to 1%. Seed germination was increased with the following plant growth regulants: GA3 (promoted germination to over 96%), Thiourea (promoted germination to over 95%), CEPA [(2-chlorethyl phosphonic acid) increased germination to over 86%], NAA (promoted germination to over 74%). The control used for all of the preceding growth regulators had a germination of 63%. Physical treatments have also proved to be effective promoters of germination. These are: temperature (at 40°C for 120 minutes germination increased to 92%) and sonification (using a 1.25 cm disruptor horn for 1 minute at 20 kc/sec increased germination to 82%).

## Control

### Peanuts

Common lamb's-quarters can be easily controlled preemergence with Sonalan, Prowl, Dual Magnum, Strongarm, Pursuit, or Valor. However, postemergence control is more difficult. If herbicide applications are made when common lamb's-quarters is between the 1 to 2” stage, Ultra Blazer and Cadre will provide good control. If the plant is 2 to 4” in height, Ultra Blazer and Cadre are less effective. After 6”, no herbicides will provide a satisfactory level of control. Prevention with preemergence herbicides, and early follow-up for escapes, is the most effective management option for common lamb's-quarters.

### Cotton

Common lamb's-quarters can easily be controlled by most preemergence herbicides. Although the Prowl and Treflan and generally considered the most consistent and effective, Cotoran, Staple, and Karmex all perform very well against this weed.

Postemergence control of common lamb's-quarters can be more difficult to achieve. However, glyphosate performs very well on common lamb's-quarters, if <6” in height at time of application. Staple alone does not control this weed. All postdirected herbicides, except Cobra and MSMA, consistently provide greater than 90% control.