There are approximately 28 species of goldenrods (*Solidago* spp.) in South Carolina, and they all produce masses of bright, golden flowers which light up old fields and the sides of our rural roads. Blooming typically begins in mid- to late-August and often lasts into early October. The Native American’s referred to the goldenrod as “Sun Medicine” because of its bright color and medicinal qualities. The intense color of their flower pigments have long been used to dye yarn.

The appreciation for these spectacular plants has grown in recent years. In 2003 Governor Mark Sanford signed legislation making tall goldenrod the official South Carolina state wildflower. In recent years, many new cultivars of goldenrods have appeared in the nursery trade, each with even more showy golden blooms. These combine especially well in the garden with the lavender, fall-blooming asters.

Goldenrods have heavier and stickier pollen that has been well-adapted for insect pollination. The bright goldenrod flowers are quite attractive to numerous pollen gathering insects, such as bees, butterflies, wasps and beetles.

Goldenrod & Ragweed Characteristics

Unfortunately, the goldenrods share their bloom time with the inconspicuous ragweeds. It is the ragweed pollen that aggravates so many hay-fever sufferers, as ragweed pollen is wind-disseminated. Ragweeds (*Ambrosia* spp.) have greenish flowers on tall spikes and are not showy for attracting pollinating insects. They rely on vast amounts of pollen to be wind-blown to female flowers on nearby plants for their seed production.
To better distinguish between the developing goldenrod and ragweed plants, there are major differences in plant structure, leaf shape and plant longevity. Goldenrods are perennials, which are typically single-stemmed or somewhat branched near the top of the plant, whereas ragweed plants are annuals and highly branched from the bottom upward. Goldenrods have foliage that is not divided or dissected, as with ragweed.

Ragweed Species
There are two species of ragweed that occur in South Carolina, common ragweed (Ambrosia artemisiifolia) and giant ragweed (A. trifida), and as the name indicates, common ragweed does appear to be the most prevalent of the two. Common ragweed has purplish branching stems and highly dissected leaves, much like the garden perennial Artemisia or wormwood. In fact the species name artemisiifolia means “leaves like Artemisia.” These plants grow to about 4 to 6 feet tall. The second most prevalent ragweed is giant ragweed, and its species name means that the leaves are dissected into only three parts. Giant ragweed may grow to 6 or 8 feet tall. Both ragweed species have greenish, staminate (male) flowers on spikes at the top of every branch, and each may release an abundance of wind-blown pollen.

Ragweed Control
One may wish to remove any ragweed plants on the property when their growth is first noticed and before they begin making pollen. However, be aware that ragweed plants may cause dermatitis or rash if handled without gloves. Continued mowing will also prevent the pollen-releasing flower heads from forming.

Although ragweed sensitivity to herbicides may vary, initially apply glyphosate for ragweed control. Better control is obtained when the ragweed plants are small (less than 12 inches tall). Follow label directions for mixing a 1% solution of glyphosate. If additional spray applications are required, reapply at 3 to 4 weeks after the initial application. Do not allow glyphosate spray to get on desirable plants. Examples of glyphosate products in homeowner sizes are:

- Roundup Original
- Martin’s Eraser Systemic Weed & Grass Killer
- Tiger Brand Quick Kill Grass & Weed Killer
- Ultra Kill Weed & Grass Killer Concentrate
- Ace Concentrate Weed & Grass Killer
- Bonide Kleen-up Grass & Weed Killer
- Bonide Green Thumb 41% Super Concentrate Weed & Grass Killer
- Gordon’s Groundwork Concentrate 50% Super Weed & Grass Killer
- Monterey Renuda Full Strength 41% Glyphosate
- Hi-Yield Super Concentrate Killzall Weed & Grass Killer
- Southern States Grass & Weed Killer Concentrate
- Zep Enforcer Weed Defeat III
- Eliminator Weed & Grass Killer Super Concentrate

Other herbicides may also control ragweed, but if the treated area will be a vegetable garden or ornamental bed, glyphosate is the safest to use.
Other herbicides may harm the subsequently planted vegetable or ornamentals plants.

**Ornamental Goldenrods**

Recently, many shorter and showier goldenrods have been bred, such as ‘Fireworks’, ‘Solar Cascade’, ‘Golden Fleece’, ‘Lynn Lowery’, and ‘Gold Rush’. Most of these are less tall and spread less aggressively than most species of goldenrod, and this makes them more adaptable within any sunny perennial garden.

![Fireworks goldenrod in bloom (Solidago rugosa ‘Fireworks’).](image)

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Pesticides updated by Joey Williamson HGIC Horticulture Extension Agent, Clemson University, 11/15. Prepared by Joey Williamson HGIC Horticulture Extension Agent, Clemson University, 02/14.

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