



Ragweed Season Upon Us

Nearly all people have something that causes allergic reactions within them. The severity of those reactions and the number of allergens to which each of us is sensitive dictates many aspects of our health during some times of the year. One of our region's most common allergens is ragweed pollen, and that season is starting, or has recently started, throughout the area.

There are two ragweed species found in our area, common and giant. Common ragweed (*Ambrosia artemisiifolia*) is very abundant in our area and grows in nearly all soil types easily. Giant ragweed (*A. trifida*) is present, but is much less of an issue for both weed management and allergy management. Other plant species also get blamed for the effects of ragweed, particularly the goldenrods (*Solidago* spp.). Goldenrods are very abundant, their bright yellow flowers are easy to see, and they bloom at the same time as ragweed, in general. However, their pollen is extremely heavy, making it great for pollinating insects, but it does not contribute to allergies as the pollen does not float.

In contrast, ragweed plants depend on the wind for pollination, not insects. Because of this fact, their pollen is very light and floats easily. During ragweed bloom season, it is common to find 200 to 400 ragweed pollen grains in every cubic meter of air. Yes, this means that we breathe in one or more ragweed pollen grains literally every time we take a breath. The 10%, or so, of the population that is sensitive to ragweed will generally react to as few as 5 pollen grains per cubic meter of air.

If there is so much pollen in the air, can we make a difference by controlling the plant in our own areas? I believe the answer is yes. Why? Because the average common ragweed plant produces 50 million pollen grains. A really healthy common ragweed will produce more than a billion pollen grains. So, yes, cutting down the number of plants in your area will lower overall pollen load, which may help prevent someone in your family from getting sensitized to ragweed pollen, as the accumulation of pollen load over a lifetime increases an individual's likelihood of developing more intense allergies.

Even though it is a native member of the sunflower family, you won't recognize ragweed by its showy flowers, as the flower petals are very, very small and nearly the same color as the leaves. The inflorescences form at the top of the plant and ends of branches in the form of racemes – almost like a stalk of small flowers – and they do become easily recognizable after you've seen a few of them.

In agricultural settings, farms use herbicides, harvest timing, and tillage to effectively control common ragweed in their fields. It is in road ditches, field edges, garden beds, wood & yard edges, and vacant areas where ragweed proliferates. It does particularly well in road ditches, as this species can handle higher salt content than most plants, giving it a competitive advantage near asphalt.

Proper mowing timing can really cut down the pollen production, even if you don't kill all the plants. Mown areas produce smaller plants that produce less pollen, but waiting to mow road ditches, edge areas, and vacant areas until mid-August will kill a good percentage of ragweed plants and dramatically cut pollen production on the plants which survive.

In garden beds and smaller edge areas; hand pulling, hoeing, or other types of physical control are the most effective. Many broadleaf targeting herbicides will control it during seedling stages, but no homeowner available herbicides do well against it later in the year. Nonselective herbicides such as

glyphosate can control it up to 8-10 inches in height. There are no herbicides available which will kill ragweed and not harm ornamental broadleaf plants, vegetables, or fruits.

The key to long term management of ragweed is preventing seed set. Annual plants must survive by producing seed and having the seed survive winter. Ragweed seed have very hard seed coats and are fairly large compared to most weed seeds. These two features combine to allow their seeds to survive many, many years in the soil. One year of not controlling this species can create a large seed bank that persists for decades.

If you are interested in learning more about ragweed and its pollen production, a very good study done at the University of Michigan is summarized at

<https://quod.lib.umich.edu/u/umurj/images/bankowski.pdf> If you want to learn more about the plant and how to recognize it, a good series of photos are at:

<https://crops.extension.iastate.edu/encyclopedia/common-ragweed>

You can also contact Scott Reuss, Marinette County Agriculture & Horticulture Agent, at 715-732-7510 or e-mail to scott.reuss@wisc.edu to get more information on this plant or if you have any other horticultural or agricultural questions.