

# Know Your Enemy

## Crabgrass: An Organic Approach

Crabgrass is an annual weed in turf grass. It also can be found in any area where there is space to allow the seed to germinate.

Crabgrass was first introduced to the United States in the 1840's originally from Africa via European immigrants. It was used as a food source for humans as well as a forage crop for horses and purposely planted right up to the 1940's. Since then it has escaped and now infests turf in all 50 states.

As with most invasive, nonnative plants, crabgrass is a prolific, opportunistic, highly successful weed. Although it is an annual, it acts as a perennial in that it continues to grow throughout the season even after seed has been produced. One plant can produce 150,000 seeds which can lie dormant until conditions are right for germination. Those conditions include: Open space, strong sunlight, adequate water and a minimum of 60 degrees' temperature.

Control measures have typically involved toxic pre-emergent chemical herbicides which attempt to prevent the seeds from germinating. These chemicals are not reliable and can do more harm than good by disrupting soil microorganisms that healthy lawns rely on.

Corn gluten has been marketed as an organic alternative pre-emergent herbicide but it has never lived up to the hype. At best corn gluten can be slightly effective but not to be relied upon to solve the problem.

By far, the best strategy for controlling crabgrass involves a systems based approach. Knowing what the plant needs to flourish we can manipulate the system to deprive it of those requirements wherever possible.

**Light---** As a native tropical plant Crabgrass has evolved to germinate and flourish in bright sunlight. By mowing our lawns at a height of 3" we can deprive the weed of the light it needs to succeed. Although crabgrass germinates early in the season, it explodes in the hot summer when our cool season lawn grasses go dormant. Longer grass resists dormancy.

**Space---** The best strategy against crabgrass is to promote a thick, healthy lawn that leaves no space for the weed to take hold. (see over seeding in the 7 step lawn program). Do not over-fertilize especially when hot weather arrives. Any nitrogen applied in summer will feed only the crabgrass.

**Water----** Watering should be deep and infrequent. Daily watering encourages shallow growth of turf and encourages the weed.

These cultural methods will do a far better job of controlling crabgrass in the long run than the chemical approach, save money, and make your lawn a safer place.