HOME GROUNDS FACT SHEET



Cornell University Cooperative Extension Nassau County



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Crabgrass Control on Long Island

The best protection against crabgrass is a vigorous and dense turf. Long-term crabgrass control depends on the use of the right grass for the right place, planting at the proper time, adequate and timely fertilization, liming, correct mowing, insect and disease control as required, and adequate watering. These steps will keep crabgrass to a reasonable minimum on most lawns. When these important steps in turf management are not observed, adequate control of crabgrass is very difficult.

Integrated Pest Management (IPM) Considerations

IPM is a common sense approach to pest control and plant care. It employs a number of measures to prevent, control or reduce plant problems. These include using resistant plant varieties, proper plant selection and placement, good aftercare and biological and/or mechanical controls. As a last resort, after all other remedies have been explored, a pesticide* that is least toxic to people and natural predators, can be considered. Prior to using any pesticides, plants should always be monitored for the degree of infestation and a sensible control measure considered.

* A pesticide is a substance that kills, or attempts to kill, a particular pest, e.g. **insect**icide, **fung**icide, **herb**icide, etc.

Pre-emergence Crabgrass Control

Preventing crabgrass pre-emergently is the most practical means of control since crabgrass germinates from early May until mid-July. Excessive rains and/or fluctuating temperatures can cause preemergent crabgrass controls to be less effective. The effectiveness of these materials can also be diminished if the chemical barrier is disrupted by either raking, aerating or thatching anytime after the application has been made.

Timing

The best time to apply pre-emergent crabgrass controls is when the forsythia flowers are fading. There is no advantage to applying these materials earlier because crabgrass doesn't germinate till then. The trick to dealing effectively with crabgrass is to treat it before **any** crabgrass has emerged in order to reduce seeds. Soil temperatures around 60°F. signal the crabgrass to emerge. Late germination of crabgrass due to sudden cooling of temperatures after you have already put down your pre-emergent barrier can lead to herbicide failure by virtue of the fact that microbes can chew up that herbicide, especially if you use the same one every year.

Unusually heavy rain just before or during a flush of crabgrass sprouting can also leach herbicides down far enough so that they are beyond the shallow regions where most crabgrass seeds are hiding. In general you can expect 8-12 weeks of residual control for spring applications of pre-emergent herbicides. Unless a late flush occurs, such as we have been seeing the last few years during drought, that initial dose should hold the crabgrass at bay for the entire season.

Fall applications of pre-emergent herbicides can also give full season control the following spring and can help you manage the spring crunch. However, remember that excessive rain can make the barrier ineffective, and if you need to re-seed for some reason in the spring, you may not be able to do so because of the herbicide that you used. If you are going to do a late fall application, wait until soil temperatures have declined to less than 55° F. and this will avoid microbial breakdown because the microbes won't be active at cold temperatures.

If you are concerned about the possibility of turf injury from your herbicide of choice, try a split application with half applied as a pre-emergent and

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the other half 6-8 weeks later. This also will help with seasons when there is excessive leaching or microbial degradation.

Natural crabgrass controls like corn gluten meal can also be helpful by boosting turfgrass density through extra nitrogen. If you are going to use corn gluten meal, apply it at the labeled rate the last week of April. A more reliable method is to make sure you apply your fertilizer properly so that the turf is as dense as possible when crab grass time rolls around again next spring.

Lawns should be fertilized 2 to possibly 3 times a year depending on grass type and desired results. The optimum times to fertilize a lawn are late May (around Memorial Day) and early September (around Labor Day). Apply one (1) pound of actual nitrogen per thousand square feet per application for a total

of two (2) pounds of actual nitrogen per thousand square feet per year. You will sometimes see the recommendation written as 1#N/1000sq.ft./applica-Use a slow or controlled release fertilizer. tion. Early spring applications at full rate are not usually recommended as this can result in excessive shoot growth at the expense of root growth. Over-fertilized spring fed lawns are more stressed going into hot, dry summers because their roots have grown On some occasions, spring fertilization is less. necessary, depending on the condition of the lawn after the winter, to promote increased turf density. An increase in turf density allows the grass to compete for space before summer weeds emerge. Ideal spring fertilization rates would be one quarter to one half full rate or 1/4-1/2 pound of actual nitrogen per 1000 square feet.