

**Dr. George Henderson
115 Highland Place
Indianapolis, IN 26789**

October 31, 2019

Mr. John Monroe, Horticulture Specialist
Extension Service
431 Caldwell Avenue
Indianapolis, IN 26789

Dear Mr. Monroe:

My home lawn of a fescue and bluegrass mix has been beautiful until this Fall. Suddenly, the lawn developed large dead areas from 3 to 10 feet wide. These spots appeared over a couple of weeks during a relatively dry period. I saw a lot of Japanese beetles in my lawn over the summer. Could Japanese beetles have caused the damage to my lawn? It has been suggested that I might have grubs eating the roots of the grass. After digging in the area where the grass has died, I found white "C" shaped grubs in the soil.

I would like to correct this problem because a beautiful lawn adds so much value to a home. What is your recommendation? Will the grass grow back next year in the areas where it has died? I would appreciate hearing your expert recommendation as quickly as possible.

Sincerely,



George Henderson

Based on the information provided, prepare a letter to Dr. Henderson with an appropriate response. The information below may be useful in your reply.

Problem Diagnosis: White grubs in the lawn

Recommendation:

- White grubs are the problem. Grubs feed on the roots of grass.
- White grubs are the larvae of several species of beetles, with Japanese beetles being one of the most common.
- A pesticide that contains granular *Bacillus thuringiensis* will kill grubs. It is not harmful to humans and may be purchased at any garden center.
- Treatment is most effective in late summer when grubs are smaller, but treatment now (October) will reduce the population in the Spring.
- A second treatment will be needed in early Spring.
- Follow label instructions.
- The roots have been destroyed in areas with dead grass. These areas need to be replanted with seed or sod.