

Black Turfgrass Ataenius: Some Observations

Black turfgrass ataenius grubs reappeared on the scene in 1973 as a pest of golf course fairways. This grub was different in its life history, habits and host plants than the typical white grub, whether the annual or the 3-year grub species. There was good life history information available 15 years ago, including timing of adult activity to tree and shrub phenology. Greenskeepers hear horror stories of 100, 200 or even 400+ grubs per square foot on some fairways of other courses.

Briefly, the life history can be described as follows: the ¼ inch adult black beetles overwinter in wooded swamp areas adjacent to the golf course. The shiny beetles begin to migrate to golf courses in April when crocus are in bloom. Egg laying peaks when "bridal wreath" spirea and Washington hawthorns are in bloom. At Urbana, this is usually about May 15 and a week later each 100 miles north or May 22-24 in South Cook County and much later in Lake and North Cook Counties with the cool lake effect. It is common to observe black ataenious beetles in the greens mower baskets at this time. Egg hatch and small grubs begin to feed on the roots of annual bluegrass and sometimes bentgrass. Wilted turf caused by grub feeding will appear about three to four weeks after egg laying.

Monitoring for ataenius grubs requires someone checking low areas in the fairways, especially where damage occurred in previous years. Check for wilted areas, loose sod or presence of grubs. A cup cutter is a good tool to sample for ataenius grubs in non-wilted sod. The grubs, if present, will be feeding at the soil surface. Cut only through the first inch of soil with the cutter. The threshold for ataenius grubs to cause damage is 50 per square foot. Sample many sites in fairways with a history of grub infestations. Pie-shaped cuts with a pocket knife will also expose grubs, if present.

Effective grub control products labeled for use of golf courses include trichlorfos (Proxol or Dylox), Turcaim, and Triumph. There are other labeled products for grub control but are not suggested. For the best results after detecting a grub infestation, follow the following steps: (1) Determine the size of the infestation—how many fairways are involved. (2) Water the infested area. (3) Apply the product according to labeled rate and directions. (4) Immediately water the treatment into the soil surface. (5) Evaluate product performance every 4 to 6 days.

Most materials will cause grubs to cease feeding in 3 or 4 days. Do not expect eradication of the grub population; 90 percent control is outstanding. Also, in case you have forgotten, there is the possibility of a second generation in August. It is unusual for this generation to be a problem, but it can happen. Adult beetles migrate back to the swampy area in late September to overwinter as adults.

During the past 17 seasons since 1973 there have been some interesting occurrences with black turfgrass ataenius grubs. Numbers of infested golf courses increased in the 1970s and declined after the mid 1980s. The drought years of 1987 and 1988 reduced favorable overwintering sites and this reduced overall populations. This effect can reverse during the early 1990s. Some growing seasons were warmer than others. 1987 was usually warm; therefore, the heat units accumulated caused the season to be 14 to 18 days ahead of normal. Ataenius eggs

were laid in early May and then damage appeared in early June in the Chicago area.

In summary then, ataenius grubs can be a pest insect on some golf course fairways. It can be effectively monitored or scouted by one of the superintendents. If there is a sufficient number of grubs to cause damage, treatments can be applied for control. The days of treating the entire course with a preventive insecticide are over. We should be more professional than to use this outdated practice. And finally, I wish someone would have come up with a better common name for this grub pest!

MEMBERSHIP REPORT

NEW MEMBERS—JULY 8, 1991

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Brian Ellefsen	Bentcreek Golf Club		C
Thomas Kientzle	Birch Bay Golf Club		A
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GREEN CLIPPINGS

The U.S. Supreme Court has ruled unanimously that a local government may enact pesticide rules more stringent than federal requirements.

The June 21 decision overturned the Wisconsin Supreme Court's ruling

that an ordinance adopted by the town of Casey, Wis., was illegal because it preempted the Federal Insecticide, Fungicide and Rodenticide Act.

The 1985 ordinance requires a town permit to use pesticides on public lands or to perform aerial pesticide applications on private land.

* * * *

Greg Hubbard, MGCSA Secretary and Head Superintendent at Manitou Ridge, is developing an association

brochure that will be used to send to prospective members.

* * * *

Several golf courses have been inspected by the Minnesota Department of Agriculture. Take the time now to use your MGCSA Environmental Booklet and bring your facility up to snuff.

* * * *

GCSAA's 1991-92 academic year is jammed with more interesting and useful seminars than ever before. A record 19 regional seminars will be held in U.S. and Canadian cities through next April. Call the GCSAA education department at 913/832-4444 to request additional information or to register.

* * * *

NK Medalist will conduct its first Midwest Field Day on August 13 at its research farm in Stanton, Minn.

Dr. Eric Nelson, director of turfgrass research, and Mark Grundman, senior turf specialist, will host the event.

Registration begins at 8:30 a.m., followed by the tours of the research farm, NK turf plots, NTEP trials and management trials, a barbecue lunch and casual talk and tours.

* * * *

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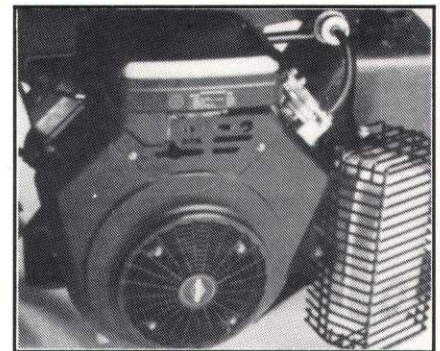
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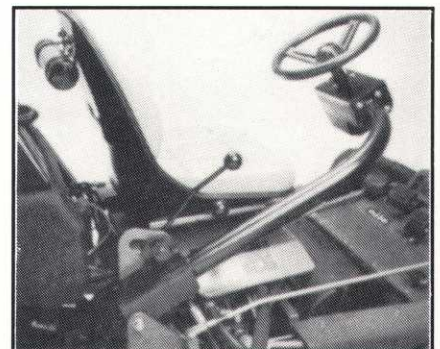
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Anthracnose

Anthracnose is a warm weather disease that can cause serious damage to annual bluegrass greens and fairways. Recently this disease has also been found on creeping bentgrass in isolated instances. Disease symptoms appear as irregular patches of yellow-bronze turf ranging in size from a few inches to several feet. Leaf lesions initially appear as elongated reddish-brown spots.

Anthracnose is caused by the pathogen *Colletotrichum graminicola*. This fungus infects the plant via spores that are small curved and hyaline (transparent). In the presence of water, these spores germinate and produce an appressoria which allows the fungus to penetrate the leaf epidermis. The fungus then proceeds to grow and develop, culminating in the formation of a fruiting structure called an acervulus (plural spelling is acervuli). The acervulus erupts through the leaf epidermis, releasing numerous spores, thus continuing the infection cycle. A characteristic of acervuli is the presence of spiny structures called setae. The diagnostic key for this pathogen is the observation of acervuli.

Disease occurrence is most severe when night-time temperatures are warm, moisture is present (i.e., rainy period) which is then followed by warm, drier weather. Anthracnose has also been reported to occur under cool temperatures during the spring. The fungus that causes warm weather anthracnose also causes the cool weather anthracnose. Symptoms are the same, but one difference between the two is the location of the acervuli. With warm weather anthracnose the acervuli appear on the leaf blade, while on cool weather anthracnose the acervuli form in or around the crown region.

It may appear that this disease has no pattern—occurring both in cool and warm weather—but the one common thread is that the turf plants are under some sort of stress. *Colletotrichum graminicola* is very effective in killing annual bluegrass if it is under an environmental stress.

No cultural practices exist that will completely control anthracnose. Moderate nitrogen applications ($\frac{1}{2}$ lb./1000 sq. ft.) monthly during June, July, and August, however, have proven effective for reducing the amount of disease.

Fungicide applications are effective for controlling anthracnose. The sterol inhibiting (Bayleton, Banner and Rubigan) and the benzimidazole (Tersan 1991, Fungo 50 and Cleary's 3336) fungicides have performed well. Daconil 2787 has been effective only through preventative applications. I have found that the first fungicide application to be the most critical. If the application can be made at or just before the first infection, this pathogen can be easily controlled. If damage occurs, control through curative treatments is more difficult.

In using fungicides for controlling *Colletotrichum graminicola*, especially with the benzimidazoles, thought should be given to how best to use them. As previously mentioned, the benzimidazoles are effective, but we have found resistance in the field to these fungicides with repeated use. Alternating or mixing the benzimidazoles with a fungicide with a different mode of action would be advisable.

—Karl Dannenherger, Ph.D.

Research Agronomist, The Ohio State University

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M E M O

To: Golf Course Superintendent

From: Experienced Memo Writer

Date: Today

Re: Tips on Writing Memos

Some of you may sweat over writing memorandums. Others may find it a delight. Whatever, the more effective you can make them, the better it will be for yourself as well as the recipient of your memos.

Often, a well-written memo can be the difference in persuading someone to your viewpoint or in edging out someone for a new job.

Here are some tips:

1. Know why you're writing a memo. Write a purpose statement to yourself that tells you what *you* expect your readers to do or know when they finish reading your memo. Refer to your purpose statement as you write to be certain you're staying on track.

2. Quickly let your readers know the reason for your memo. Get to the point. Keeping people in suspense is for mystery novels.

3. Anticipate reactions. Chances are your memo should or will be read by anyone interested in the topic it addresses. . . or you shouldn't be writing the memo. Consider the perspectives of all the possible readers.

4. Answer the questions they may have. . . clearly. If your memo shows that you are sensitive to others' needs and interests, your credibility will be enhanced.

5. Does your memo appear to be too long? Take time to revise it. Be certain you say exactly what you *want* to say. Extra words dilute the strength of your message.

6. Polish your memo. Once you are comfortable with its organization, look at the memo's finer points.

7. Keep the tone of your memo natural. Read it aloud; listen to the language. Does anything sound awkward? Depending upon the readers of your memo, you may use an informal tone. . . or a more formal one.

8. Be courteous.

9. Be factual.

10. Be specific.

11. Be brief.

12. Don't write anything you wouldn't say publicly. Privacy isn't guaranteed, even if you mark a document "personal" or "confidential." (*Often, sensitive issues are best dealt with face-to-face.*)

13. If you write a negative memo, wait a day before sending it. Should you reconsider, shred the memo. . . Wastebaskets aren't private property.

Strong writing skills can gain you visibility and respect. If you find writing difficult, obtain a good writing handbook. Some diligent effort can improve your spelling and grammar.

All types of writers continually seek to improve their skills. Developing your memo technique is an excellent step toward a good, clear writing style that will benefit you in many ways.

You Can Get A Lot of Help From Suppliers

Obviously your choice of suppliers is a factor in the productivity of your own operation—but that's not all! Perhaps most importantly, your **PROCESS** of choosing suppliers can contribute to your own productivity.

Increases in productive work methods are available to you, frequently just for the asking. Many times, even before the initial purchase, just the investigation and planning necessary to a decision will yield benefits to you. In such cases, the expertise of a competent supplier, freely offered, may unlock the secret to another growth step.

Value-added suppliers generally have customer support systems to assist the business customer in choosing the right product or service.

The "value-added" supplier offers additional help to customers by analyzing their particular needs and then recommending the best product or service solution. A "value added" supplier may even send trained staff to the customer to ensure that the new product or service is being used correctly.

Such companies will actually take responsibility to determine, by measurement and documentation, that productivity or volume growth actually occurs as planned.

This additional support may make the difference between a profit or a loss for your operation.

Grass Clippings

Question: Our landfill will not accept grass clippings, so we have decided to return clippings to the fairways. Will this cause a thatch problem? (Michigan)

Answer: University studies have failed to link the return of turf clippings with thatch accumulation. When fairway mowing removes no more than 1/3 of the grass blade, the clippings are small and decompose rapidly. Many superintendents drag a chain or hose across the fairways to disperse clumps of clippings that result from infrequent mowing or mowing of wet turf. You could also use manure spreaders to disperse clippings into rough areas (see the March/April 1989 *Green Section Record*). A third possibility would be to start a compost area and use the organic material on the golf course. —USGA *Green Section Record*

EDITOR'S CORNER

By John Harris
The Lafayette Club



Izaty's Lodge provided us with a wonderful northern Minnesota outing. The weather was magnificent and my self-guided tour of the course revealed a very interesting layout. Steve Schumacher and his staff are to be commended on a superb job of upkeep on one of Minnesota's premier resort courses. It was apparently so for Scott Weltzin, Pheasant Run Golf Club, as he aced the 16th hole (I think his ball hit a deerfly).

* * * *

It has come to the attention of our directors, through Bob Mugaas, that his extension office may be eliminated due to budget cuts. As you know, Bob writes a monthly column for our *Hole Notes*, therefore providing a valuable service to our association and many other horticultural businesses in Minnesota. I urge you to take the time to write the extension committee chair and express your views on why this office should be preserved. The address is as follows:

Marvin Johnson
Extension Committee Chair
c/o Minnesota Extension Service
Hennepin County
701 Decatur Ave. N. #105
Golden Valley, MN 55427-4346

* * * *

It has come to my attention that a number of you have received blurred issues of *Hole Notes*. My apologies to those that have them. The MGCSA office has taken the necessary steps to rectify the situation by switching printers and a reduced payment to the previous printer.

* * * *

Lastly, I encourage you to take the time to write an article concerning an experience that pertains to our industry. The MGCSA office has an excellent questionnaire that may be of great help in producing an article. If you are pressed for time, simply fill it out and the article will be edited for you. There are a number of outside resources that contribute to our publication regularly. I would like to see a number of member-generated articles to help round out *Hole Notes*. It's *your* publication. Help us out. Please write.

— John Harris
Editor

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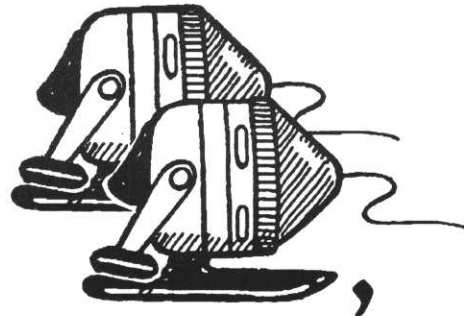
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