

Gary Fish  
DIRECTOR PESTICIDE APPLICATOR PROGRAM

Dear Gary,

I would like to submit an application for one (1) hour of Continuing Education Units for the Turfcide Online Training Program to use towards recertification and renewal of pesticide applicator licenses.

As you will see in the attached script and outline, this program is a comprehensive stewardship based adult education program developed to help dealers, applicators and others who handle and sell Turfcide become more knowledgeable about the product they use.

The program content is designed to:

- 1) Increase participants' industry knowledge of Turfcide and its effectiveness.
- 2) Cover topics pertinent to the benefits of Turfcide. For example, stewardship and safety in handling and use.
- 3) Provide participants with up-to-date information on Turfcide's efficacy, proper usage and environmental facts.

The program is written and will be presented in a professional manner following adult learning standards and recommendations. Completion of the program is estimated to take approximately 60 minutes. The program concludes with a quiz on the topics covered. This quiz is used to test participants' aptitude and comprehension of this important information. A score of 70% or higher is required to pass. The quiz scores and other related comprehension measurement information for each participant from your state applying Turfcide products can be provided to you for your use and reference.

We appreciate your cooperation and your assistance with this application. Please let me know if you have any questions.

Rhonda

Rhonda K. Johnson  
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## TURFCIDE FUNGICIDE TUTORIAL AND QUIZ TRAINING OUTLINE

Course Name: Turfcide Fungicide Training  
Instructor: AMVAC Chemical Corporation  
Presentation time: 60 minutes

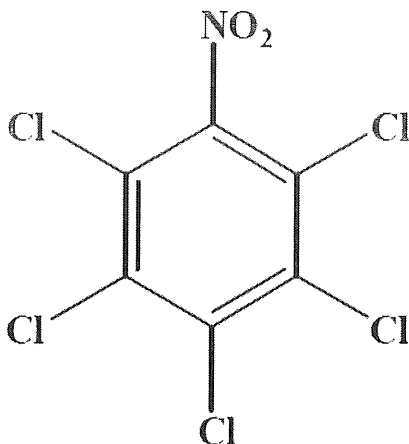
- I. Registration 5 minutes
- II. Introduction 5 minutes
  - A. Science behind Turfcide and its effectiveness
  - B. Benefits of Turfcide: excellent control of snow mold, cost-effective, resistance management
  - C. How to utilize Turfcide formulations in overall turf management programs
- III. Tutorial Presentation 35 minutes
  - A. Turfcide Products Descriptions
    - 1. Two formulations of PCNB
    - 2. Labeled for control of pink snow mold, gray snow molds, brown patch, dollar spot and leaf spots
  - B. EPA Approved
    - 1. PCNB sale and use approved by the US EPA
  - C. Golf Course Applications
    - 1. Approved application sites
  - D. Prohibited Use Areas
  - E. Turfcide Benefits
    - 1. Excellent control of snow molds
    - 2. Versatile – used alone or tankmixed
    - 3. Multi-site mode of action, less prone to resistance development
  - F. Snow Mold Control
    - 1. Pink snow mold
    - 2. Gray snow molds
      - a. Speckled snow mold
    - 3. Brown patch
    - 4. Dollar spot
    - 5. Leaf spots
  - G. Pink Snow Mold
    - 1. Causes
    - 2. Symptoms
  - H. Gray and Speckled Snow Mold
    - 1. Conditions necessary to development
    - 2. Symptoms
  - I. Pop-up Quiz Question on Snow Mold
  - J. Turfcide Application Timing
    - 1. Preventative use recommendations
    - 2. Supplemental use recommendations
  - K. Turfcide 400
    - 1. Product description
    - 2. Application rates
    - 3. Proper application
    - 4. Post-application procedures
    - 5. Tank mix compatibility
  - L. Turfcide 10G
    - 1. Product description
    - 2. Application rates
    - 3. Proper application
    - 4. Post-application procedures
  - M. Pop-up Quiz Question on Snow Mold
  - N. PCNB Proven Performance
    - 1. University of Wisconsin field trial
    - 2. Rutgers University field trial

- 3. 2013 field trials in Michigan, Montana, New Jersey, Pennsylvania, Utah and Wisconsin
- O. Turf Quality
- 1. 2013 field trials in Michigan, Montana, New Jersey, Pennsylvania, Utah and Wisconsin
- P. Turfcide Combinations
  - 1. Effective snow mold control combinations
    - a. PCNB program recommendations
    - b. BASF program recommendation
- Q. Pop-up Quiz Question on PCNB
- R. Review

IV.	Exam	10 minutes
V.	Summary and closing	5 minutes
	Total	<u>60 minutes</u>

# 2014 AMVAC Turfcide® Fungicide

Slide 1: Welcome	Voiceover
<p>Note to designer: Design welcome slide with Turfcide® 400 and Turfcide® 10G logos and a photo of the person voicing the welcome along with bullets noting the main points from the welcome.</p> <p>Turfcide®</p> <ul style="list-style-type: none"> <li>• Excellent control of snow mold</li> <li>• Cost effective</li> <li>• Valuable resistance management tool</li> </ul> <p>Three Parts</p> <ul style="list-style-type: none"> <li>• First reviews Turfcide® 400 and Turfcide® 10G, latest trial information and tank mix recommendations</li> <li>• Second is short quiz qualifying you for continuing education credit.</li> </ul> <p>Thank you</p>	<p>Hello. I'm Ron Johnson, Senior Corporate Account Manager for AMVAC. Welcome to this online training program featuring Turfcide® turf fungicide products from AMVAC.</p> <p>Turfcide®, with the active ingredient PCNB, delivers excellent control of snow mold, is cost-effective, and a very valuable resistance management tool for golf course superintendents.</p> <p>This tutorial is divided into two parts. The first reviews overall turf management information including how both formulations of Turfcide® – Turfcide® 400 and Turfcide® 10G – can be utilized in an overall turf management program. The information will include up-to-date trial performance results and tank mix recommendations.</p> <p>The second part is a short quiz that qualifies you for continuing education credits.</p> <p>Thanks for participation and involvement in this educational program.</p>
Slide 2: Turfcide® Products	Voiceover
<p>Note to designer: Show jug and bag of the two Turfcide products.</p> <p>Turfcide® brand:</p> <ul style="list-style-type: none"> <li>• Turfcide® 400 flowable turf fungicide</li> <li>• Turfcide® 10G granular turf fungicide.</li> </ul>	<p>PCNB is well recognized as the most versatile, effective and economical fungicide for controlling snow molds on golf courses.</p> <p>AMVAC sells two formulations of PCNB for turf under the Turfcide® brand. They are Turfcide® 400 flowable turf fungicide – and Turfcide® 10G, a 10 percent granular turf fungicide.</p> <p>Turfcide® products are labeled for control of pink snow mold and gray snow molds – which include gray snow mold and speckled snow mold – and also brown patch, dollar spot and leaf spots.</p> <p><u>This tutorial will focus on control of pink and gray snow molds on golf courses.</u></p>

Slide 3: EPA Approved	Voiceover
<p>Note to designer: Might include depiction of PCNB chemical from slide 3 of the AMVAC Turfcide® presentation.</p>  <p>Pentachloronitrobenzene (PCNB)</p> <p>PCNB sale and use approved by the US EPA</p> <p>AMVAC has worked with EPA to ensure PCNB product registrations continue to meet EPA requirements.</p>	<p>As noted in a previous slide, the active ingredient in Turfcide® fungicide is PCNB, which is short for pentachloronitrobenzene.</p> <p>The sale and use of PCNB is approved by the US Environmental Protection Agency. You may have heard, or read, that the EPA ordered a stop sale of PCNB. That was in 2010 and that stop-sale was short-lived as PCNB was reinstated in August 2011.</p> <p>AMVAC has worked with the EPA to amend PCNB product registrations to ensure they continue to meet EPA requirements.</p>
Slide 4: Golf Course Applications	Voiceover
<p>Designer: Following lists from slides 12 and 24.</p> <p><u>Approved Application Sites</u></p> <p>Turfcide® 400</p> <ul style="list-style-type: none"> <li>• Golf course tees, greens and fairways</li> <li>• Sod farms</li> <li>• Industrial parks</li> <li>• Professional and college athletic fields</li> </ul> <p>Turfcide® 10G</p> <ul style="list-style-type: none"> <li>• Golf course tees, greens and fairways</li> <li>• Sod farms</li> <li>• Industrial parks</li> <li>• Professional and college athletic fields</li> <li>• Non-residential ornamentals</li> </ul>	<p>Among the application sites EPA has approved for continued use of PCNB are <u>golf course tees, greens and fairways</u> – as you can see in this listing.</p>

<b>Slide 5: Prohibited Use Areas</b>	<b>Voiceover</b>
<p>Designer: Following list from slides 13 and 25.</p> <p>Sites Where use of Turfcide® 400 and Turfcide® 10G are prohibited</p> <ul style="list-style-type: none"> <li>• Golf course roughs</li> <li>• Residential sites including lawns, yards, and ornamental plants and gardens</li> <li>• Grounds around day care facilities</li> <li>• School yards</li> <li>• Parks (except industrial parks)</li> <li>• Playgrounds</li> <li>• Athletic fields (except professional and college athletic fields as described on label)</li> </ul>	<p>Turfcide® 400 and Turfcide® 10G may not be used in other areas, <u>such as on golf course roughs.</u></p> <p>This visual lists areas where application is prohibited.</p>
<b>Slide 6: Turfcide® Benefits</b>	<b>Voiceover</b>
<p>Designer: Bullets</p> <p>Turfcide®:</p> <ul style="list-style-type: none"> <li>• Excellent control of snow molds</li> <li>• Versatile <ul style="list-style-type: none"> <li>• Used alone or Turfcide® 400 may be tankmixed</li> </ul> </li> <li>• Multi-site mode of action– less prone to resistance development</li> </ul>	<p>Turfcide® fungicide delivers excellent control of snow molds, and is cost-effective and versatile. It may be applied alone – or Turfcide® 400 may be tank-mixed with other fungicides.</p> <p>A contact fungicide, Turfcide® is a Group 14 fungicide with multi-site mode of action – making it less prone to resistance development.</p> <p>In the 50 years that PCNB has been used on golf courses, there has been no evidence of resistance development by pink and gray snow molds or any other turf pathogen.</p>
<b>Slide 7: Snow Mold Control</b>	<b>Voiceover</b>
<p>Designer: Refer to slide 33 in Turfcide® presentation. Show logos plus bullets.</p> <p>Turfcide® products control:</p> <ul style="list-style-type: none"> <li>• Pink snow mold (<i>Microdochium nivale</i>)</li> <li>• Gray snow molds <ul style="list-style-type: none"> <li>• Gray snow mold (<i>Typhula incarnata</i>)</li> <li>• Speckled snow mold (<i>Typhula ishikariensis</i>)</li> </ul> </li> </ul>	<p>As stated previously, Turfcide® fungicide products are labeled for control of pink snow mold and gray snow molds, which include gray snow mold and speckled snow mold – and also brown patch, dollar spot and leaf spots.</p> <p>This tutorial will focus on control of pink snow mold and gray snow molds on golf courses.</p>

<ul style="list-style-type: none"> <li>• Brown patch</li> <li>• Dollar spot</li> <li>• Leaf spots</li> </ul>	
<p><b>Slide 8: Pink Snow Mold</b></p>	<p><b>Voiceover</b></p>
<p>Designer: Photo of pink snow mold infected turf in slide 36 in Turfcide® presentation.</p> <p>Have arrows point to the white mycelium when that is mentioned in the voiceover, and the pinkish hue when that is mentioned.</p>	<p>Pink snow mold does not require snow cover to cause disease. Rather, it's caused by prolonged periods of cool and wet conditions – and can be observed as far south as Texas and Mississippi.</p> <p>When the disease develops without snow cover, it is referred to as Microdochium patch. Microdochium patch is now becoming an important disease of ultra-dwarf bermudagrass greens in the southeastern U.S.</p> <p>What does pink snow mold look like on a green or fairway?</p> <p>Symptoms initially appear as small, water-soaked spots less than 2 inches in diameter. They can quickly develop into larger, darker or reddish-brown patches. White mycelium may be observed when the disease initially develops or after snow cover recedes.</p> <p>Eventually, the perimeter of the patches may have a pinkish hue.</p> <p>The photo on the left shows symptoms of pink snow mold on an annual bluegrass putting green.</p> <p>The center photo shows matted foliage typical of pink snow mold affected turf.</p> <p>Damage can cover large areas as can be seen in the right photo.</p>

<b>Slide 9: Gray and Speckled Snow Mold</b>	<b>Voiceover</b>
<p>Designer: Maybe show map of US and point to areas as mentioned with areas shaded by gray and speckled gray</p> <p>Gray snow mold:</p> <ul style="list-style-type: none"> <li>• Requires 60 days continuous snow cover</li> <li>• Common throughout Great Lakes region, Ohio Valley and northern New England.</li> </ul> <p>Speckled snow mold:</p> <ul style="list-style-type: none"> <li>• Requires 90 days of continual snow cover</li> <li>• Most severe of snow molds – can infect crown of turf</li> <li>• Common throughout upper Midwest and in the Rocky Mountain west</li> </ul>	<p>Gray and speckled snow mold are prevalent in areas with persistent snow cover.</p> <p>Gray snow mold requires approximately 60 days of continuous snow cover to cause disease, and is commonly seen throughout much of the Great Lakes region, Ohio Valley and northern New England.</p> <p>Speckled snow mold requires 90 days of continual snow cover and is the most severe of the snow molds because of its ability to infect the crown of the turf. It's commonly observed in the upper Midwest and in the Rocky Mountain west.</p> <p>The importance of snow cover is not related to the snow itself, rather to the ability of the snow to insulate the soil surface to a temperature slightly above freezing to allow for the fungi to grow and infect.</p> <p>If covering greens, snow mold applications are a must as covers provide a favorable environment for snow mold development. In fact, some turf pathologists actually use turf covers on their snow mold research sites to promote disease development.</p>
<b>Slide 10: Gray and Speckled Snow Mold</b>	<b>Voiceover</b>
<p>Designer: Photo of gray and speckled snow mold shown in slide 39 of the Turfcide® presentation. Maybe have arrow point to the photo or area in photo as it is discussed?</p>	<p>Gray and speckled snow mold symptoms are apparent when the snow melts in the spring. You'll see circular areas of gray or straw-colored patches. Those patches can range in size from 2 inches to 3-feet in diameter.</p> <p>The photo on the left shows gray snow mold on creeping bentgrass. The middle photo shows the ash-gray appearance of older gray snow mold patches.</p> <p>The photo at right shows mature sclerotia in infected bluegrass leaves. The sclerotia is reddish brown or dark – and is wrinkled. Speckled snow mold has much smaller sclerotia. Its sclerotia never appear red – and the mycelium appears speckled.</p>



<b>Slide 11: Take a Swing</b>	<b>Voiceover</b>
<p>Designer: Use golf course game here. The question is:</p> <p>Q: Which snow mold is most severe as it infects the crown of the turf?</p> <ul style="list-style-type: none"> <li>a. Pink</li> <li>b. Speckled</li> <li>c. Gray</li> </ul>	<p>We've just given you lots of facts about snow molds. Let's take a breather and give you a chance to swing a club. Just answer the following question. It doesn't count as far as your quiz – it's just for fun.</p>
<b>Slide 12: Turfcide® Application Timing</b>	<b>Voice Over</b>
<p>Turfcide® Application Timing</p> <ul style="list-style-type: none"> <li>• Use as preventative before diseases appear</li> <li>• Apply immediately prior to first snowfall</li> <li>• In absence of snow cover, when disease pressure is severe, make supplemental applications at 4 – 6 week intervals.</li> </ul>	<p>For best results, use Turfcide® 400 or Turfcide® 10G as a preventive application before diseases appear.</p> <p>Apply immediately prior to first snowfall or when temperatures remain below 60 degrees Fahrenheit, and extended wet conditions are expected.</p> <p>In the absence of snow cover, supplemental applications can be made at 4 to 6 week intervals to maintain control when disease pressure is severe.</p>
<b>Slide 13: Turfcide® 400</b>	<b>Voiceover</b>
<p>Designer: Consider using Turfcide® 400 logo here – or label (see slide 9). And bullets.</p> <p><u>Turfcide® 400</u></p> <ul style="list-style-type: none"> <li>• Flowable</li> <li>• a.i. PCNB</li> <li>• 4 lbs. of a.i./gal.</li> </ul>	<p>Turfcide® 400 is the flowable formulation of Turfcide® brand fungicides, with four pounds of active ingredient PCNB per gallon.</p>

Slide 14: Turfcide® 400 Application Rates	Voiceover
<p>Designer: Show table on Slide 17 here.</p>	<p>As this table shows, the application rate for Turfcide® 400 varies depending on the disease and turf type.</p> <p>For snow mold control, the labeled application rate is 12 to 16 fluid ounces of product per 1,000 square feet.</p> <p>The application rate for supplemental applications in the absence of snow cover – when disease pressure is severe – is 3 to 6 fluid ounces per 1,000 square feet.</p> <p>Recent university research has shown excellent snow mold control by tank-mixing companion snow mold fungicides with Turfcide 400 at 8 fluid ounces per 1,000 square feet. This reduced rate of Turfcide 400 is allowed under Section 2(ee) of FIFRA. Check state and local regulations before using this rate.</p> <p>Always read and follow the label.</p>
Slide 15: Turfcide® 400 Application	Voiceover
<p>Designer: Show application of Turfcide® on green or fairway using boom sprayer. Plus bullets. Be sure to use a photo taken in late fall.</p> <p><u>Turfcide® 400 Application:</u></p> <ul style="list-style-type: none"> <li>• Mix and apply Turfcide® 400 in a minimum of 1 gallon of water per 1,000 sq. ft.</li> <li>• Application must be by ground boom</li> <li>• Application using hand-held equipment is prohibited</li> <li>• Daily handling limit</li> </ul> <p>Note Following info in table on page 14 of AMVAC ppt. You may use this table and point to amounts as read.</p> <p>Using 8 fl.oz. per 1,000 square feet – 55 acres can be treated</p> <p>Using 12 fl.oz. per 1,000 square feet – 36.75 acres can be treated</p> <p>Using 16 fl.oz. per 1,000 square feet – 27.5 acres can be treated</p>	<p>After determining the desired application rate, mix the appropriate amount of Turfcide® 400 and apply in a minimum of 1 gallon of water per 1,000 square feet.</p> <p>Applications must be made using a ground boom. Use of hand-held application equipment is prohibited.</p> <p>Mixers and loaders are not allowed to handle more than 150 gallons of product per day.</p> <p>That means if one worker is mixing and/or loading Turfcide® 400 that is being applied at the 8 fluid ounces per 1,000 square feet rate, he would be able to mix and/or load enough material to treat 55 acres per day. At the 12 fluid ounces per 1,000 square feet rate, he could mix and/or load enough material to treat 36.75 acres per day – and at the 16 fluid ounces per 1,000 square feet rate, he could mix and/or load enough material to treat 27.5 acres per day.</p>

<b>Slide 16: Post-Application Procedure</b>	<b>Voice Over</b>
<p>Designer: Suggestion: show sprinklers watering green or fairway. Plus bullets.</p> <p>After applying Turfcide® 400:</p> <ul style="list-style-type: none"> <li>• Water treated areas or allow rainfall to move material down to soil/thatch layer</li> <li>• Treat again if:               <ul style="list-style-type: none"> <li>• Treated area floods or has unusually heavy rainfall, or</li> <li>• Disease pressure is severe or reappears</li> <li>• If you have to mow after application and significant clippings are removed</li> </ul> </li> </ul> <p>Application may cause temporary discoloration of grass.</p>	<p>Each application of Turfcide® 400 must be followed by one-quarter (¼) inch of irrigation water or rainfall on the day of application. That's to move the material down to the soil/thatch layer.</p> <p>If the treated area is subjected to flooding or unusually heavy rainfall, or if disease pressure is severe or reappears, treat the area again.</p> <p>If, after applying Turfcide® to putting greens, you are forced to mow because of unseasonably warm weather causing turf growth, you may need to reapply Turfcide®. Look closely at the clipping yields when making this decision. If significant clippings aren't being removed when mowing, you are not removing Turfcide®.</p> <p>Under certain growing conditions, application can cause a temporary discoloration of the grass. This causes no harm and will disappear in a short time when growth resumes. Turf colorant products have become very popular in recent years and they are useful at preventing discoloration.</p>
<b>Slide 17: Turfcide® 400 Tank mix Compatibility</b>	<b>Voiceover</b>
<p>Designer: The graph Use Slide "TS142107 SLIDE 01..." for this slide</p>	<p>Turfcide® 400 may be tank mixed with other snow mold fungicide products for enhanced snow mold control.</p> <p>Tank mixes of Turfcide® 400 applied at 8 fluid ounces per 1,000 square feet, <u>plus</u> a demethylation-inhibiting – or DMI – fungicide, have been proven to provide excellent control as you can see in this graph.</p> <p>These results are from 2013 and 2014 trials in Pennsylvania, Michigan and Montana.</p> <p>Prices shown are on a per acre basis and are derived from manufacturer's published prices for 2013 – 2014.</p> <p>When tank mixing, always follow the more restrictive labeling or precautions on the label of any tank mix product. Do not exceed label rates for any product.</p>

<p><b>Slide 18: Turfcide® 10G</b></p> <p>Designer: Consider using Turfcide® 10G logo here – or label (see slide 21). And bullets.</p> <p>Turfcide® 10G</p> <ul style="list-style-type: none"> <li>• Granular</li> <li>• a.i. PCNB</li> <li>• 10% a.i.</li> </ul>	<p><b>Voiceover</b></p> <p>Turfcide® 10G is the granular formulation of Turfcide® brand fungicides with 10 percent active ingredient PCNB by weight.</p>
<p><b>Slide 19: Turfcide® 10G Application Rates</b></p> <p>Designer: Show table on Slide 29 here. Have arrow point to rates in table as they are read.</p>	<p><b>Voiceover</b></p> <p>The application rate for Turfcide® 10G varies depending on the disease and turf type.</p> <p>As you can see in this table, for snow mold control in cool season golf course turf, the application rate is 5 to 10 pounds per 1,000 square feet for gray snow mold – and 5 to 7 ½ pounds per 1,000 square feet for pink snow mold.</p> <p>For pink snow mold control when the turf is not snow covered, apply 5 to 7 ½ pounds per 1,000 square feet at four-to-six week intervals to maintain control when disease pressure is severe.</p> <p>The Turfcide® 10G label provides spreader settings.</p> <p>Always read and follow the label.</p>
<p><b>Slide 20: Turfcide® 400 Application</b></p> <p>Designer: Show application of Turfcide® 10G on green or fairway using a tractor-drawn granular product applicator. Plus bullets.</p> <p><u>Turfcide® 10G Application:</u></p> <ul style="list-style-type: none"> <li>• Applications must be made using tractor-drawn equipment</li> <li>• Hand-held application equipment is prohibited.</li> </ul>	<p><b>Voiceover</b></p> <p>Turfcide® 10G must be applied using tractor-drawn equipment.</p> <p>Use of hand-held-application equipment is prohibited.</p>

<b>Slide 21: Post-Application Procedure</b>	<b>Voice Over</b>
<p>Designer: Suggestion: show sprinklers watering green or fairway. Plus bullets.</p> <p>After applying Turfcide® 10G:</p> <ul style="list-style-type: none"> <li>• Water treated areas or allow rainfall to move material down to soil/thatch layer.</li> <li>• Treat again if:               <ul style="list-style-type: none"> <li>• Treated area floods or has unusually heavy rainfall, or</li> <li>• disease pressure is severe or reappears</li> </ul> </li> </ul> <p>Application may cause temporary discoloration of grass.</p>	<p>Each application of Turfcide® 10G must be followed by one-quarter (¼) inch of irrigation water or rainfall on the day of application. That's to move the material down to the soil/thatch layer.</p> <p>If the treated area is subjected to flooding or unusually heavy rainfall, or if disease pressure is severe or reappears, treat the area again.</p> <p>Under certain growing conditions, application can cause a temporary discoloration of the grass. This causes no harm and will disappear in a short time when growth resumes.</p>
<b>Slide 22: Take a Swing</b>	<b>Voiceover</b>
<p>Designer: Use golf course game here. The question is:</p> <p>Q: Which snow mold doesn't require snow cover to cause disease?</p> <ol style="list-style-type: none"> <li>a. Pink (Microdochium patch)</li> <li>b. Speckled</li> <li>c. Gray</li> </ol>	<p>Let's take a breather and give you a chance to swing the club again.</p>

Slide 23: Proven Performance	Voice Over
<p>Designer: The graph for this slide is Slide "TS142107 SLIDE 02..."</p> <p>Please have arrows point to the results as the narrator mentions them.</p>	<p>Golf course superintendents have more than 50 years of experience using PCNB. Its effectiveness is well documented. And so is the fact that after 50 years there is no evidence of resistance development by pink and gray snow molds.</p> <p>Recent trials continue to show Turfcide® delivering excellent control. The trial was carried out by Washington State University researchers in Columbia Falls, Montana from November 2, 2012 to March 28, 2013.</p> <p>It evaluated Turfcide® at 8 fluid ounces alone, and as a substitute product in snow mold control programs featuring Interface® or Concert® II.</p> <p>The untreated plots in this trial were 91.3 percent infected with pink and gray snow mold.</p> <p>Turfcide® 400 at 8 fluid ounces tank-mixed with either Interface® at 3 fluid ounces, or Concert® II at 8.5 fluid ounces, provided exceptional control under intense snow mold pressure.</p>
Slide 24: Proven Performance	Voiceover
<p>Designer: The graph for this slide is slide 44 of the Turfcide® presentation. Title is:</p> <p>Turfcide® Snow Mold Control Michigan-Fall 2012/Spring 2013</p>	<p>In this University of Wisconsin trial conducted in Champion, Michigan, Turfcide® 400, Banner Maxx® II, Daconil Ultrex® and Interface® fungicides were applied alone and in separate tank mixes with Turfcide®.</p> <p>You can see the excellent snow mold control delivered by Turfcide® 400 alone and in tank mixes with the other fungicides.</p>

Slide 25: Proven Performance	Voice Over
<p>Designer: The graph for this slide is slide "TS142107 SLIDE 04..."</p>	<p>This trial was carried out by Rutgers University researchers in Denville, New Jersey, from November 16, 2013 to April 1, 2014.</p> <p>It evaluated Turfcide® at 8 fluid ounces alone and as a substitute product in snow mold control programs featuring Interface®, Concert® II or Insignia®.</p> <p>The untreated plots in this trial were 91.3 percent infected with pink snow mold.</p> <p>Turfcide® 400 at 8 fluid ounces tank-mixed with either Interface® at 3 fluid ounces, Concert® II at 8.5 fluid ounces or Insignia® at 0.7 fluid ounces provided enhanced control under intense snow mold pressure.</p>
Slide 26: Proven Performance	Voice Over
<p>Designer: The graph for this slide is slide TS142107 Slide 06.</p> <p>Titled "Snow Mold Control on Golf Course Fairways"(Average of six trials initiated in 2013)</p>	<p>Consistency across field trial locations is an important consideration when selecting a snow mold control program.</p> <p>Six field trials were initiated in the fall of 2013 to evaluate the tank-mix of Concert® II at 8.5 fluid ounces plus Turfcide® at 8 fluid ounces verses competitive programs for snow mold control.</p> <p>The trials were conducted in Michigan, Montana, New Jersey, Pennsylvania, Utah and Wisconsin. Untreated plots averaged 62.8 percent snow mold – with a range of 27.6 to 95 percent. All three major snow mold pathogens are included in this subset of data.</p> <p>The combination of Concert® II at 8.5 fluid ounces plus Turfcide® at 8 fluid ounces <u>averaged</u> 98.1 percent control in these six trials.</p>

<p><b>Slide 26-B: Turf Quality</b></p> <p>Designer: Use Slide TS142107 SLIDE 07...” Title: Turf Quality Ratings on Gold Course Fairways</p>	<p><b>Voice Over</b></p> <p>Turf quality is a concern of every superintendent. This is especially true in early spring when golfers are anxious to get on the course after a long winter of inactivity.</p> <p>This slide shows the average turf quality ratings taken in early spring for the same six field trials. Quality was rated by the researchers using the standard 1-9 rating scale where 1 signifies poor turf quality and 9 signifies excellent turf quality. A rating of 6 or greater indicates acceptable turf quality.</p> <p>The combination of Concert® II at 8.5 fluid ounces plus Turfcide® at 8 fluid ounces was the only treatment that had an average turf quality rating greater than 6 in early spring.</p> <p>As soon as the snow melted, the courses were ready for play!</p>
<p><b>Slide 27: Turfcide® Combinations</b></p> <p>Designer Fairways: Combinations with Bayer and Syngenta from slides 54 &amp; 56. Only pickup AMVAC Snow Mold Program</p>	<p><b>Voice Over</b></p> <p>So, what are some effective snow mold control combinations?</p> <p>Shown here are two fairway combinations – with Turfcide® used in combination with Interface® or Concert® II (read Concert two).</p>
<p><b>Slide 28: Turfcide® Combinations</b></p> <p>Designer: Greens: Combinations with Bayer and Syngenta from slides 55 &amp; 57. Only pickup AMVAC Snow Mold Program</p>	<p><b>Voice Over</b></p> <p>And this visual shows two “greens” snow mold combinations – with Turfcide® used in combination with Interface® or Instrata®.</p>
<p><b>Slide 29: Turfcide® Combinations</b></p> <p>Turfcide® Combinations - Selected Treatments BASF Snow Mold Program</p> <p>Designer: Pick up slide 53 showing BASF program – showing both BASF program and the AMVAC program.</p>	<p><b>Voice Over</b></p> <p>For golf courses on a BASF program, Turfcide® can be substituted for Trinity™ to add PCNB for enhanced control and resistance management.</p>



<b>Slide 30: Take a Swing</b>	<b>Voiceover</b>
<p>Designer: Use golf course game here. The question is:</p> <p>Q: A prominent turf pathologist recently wrote that there is “no single fungicide as effective as PCNB for snow mold management.” That’s a compliment for a fungicide that has been on the market many years. In what year did PCNB enter the turf market?</p> <p>a. 1964 b. 1978 c. 1987</p>	<p>Let’s take a breather and give you another chance to swing the club.</p>
<b>Slides 31: Key Points to Remember</b>	<b>Voice Over</b>
<p><b>Key Points to Remember</b></p> <ul style="list-style-type: none"> <li>• AMVAC sells two formulations of PCNB under Turfcide® brand <ul style="list-style-type: none"> <li>• Turfcide® 400 flowable turf fungicide</li> <li>• Turfcide® 10G, a 10 percent granular turf fungicide</li> </ul> </li> <li>• Turfcide® products are labeled for control of: <ul style="list-style-type: none"> <li>• Pink snow mold</li> <li>• Gray snow molds, which include gray snow mold and speckled snow mold</li> <li>• Brown patch</li> <li>• Dollar spot</li> <li>• Leaf spots</li> </ul> </li> <li>• PCNB approved for use on golf course: <ul style="list-style-type: none"> <li>• Tees</li> <li>• Greens</li> <li>• Fairways</li> </ul> </li> <li>• PCNB use on golf course roughs is prohibited</li> </ul>	<ul style="list-style-type: none"> <li>• AMVAC sells two formulations of PCNB for turf under the Turfcide® brand. They are Turfcide® 400 flowable turf fungicide – and Turfcide® 10G, a 10 percent granular turf fungicide.</li> <li>• Turfcide® products are labeled for control of pink snow mold and gray snow molds, which include gray snow mold and speckled snow mold – and also brown patch, dollar spot and leaf spots.</li> <li>• Among the application sites EPA approved for continued use of PCNB are golf course tees, greens and fairways. Use on roughs is prohibited.</li> <li>• Turfcide® delivers excellent control of snow molds, is cost-effective and versatile. It may be applied alone – or Turfcide® 400 may be tank-mixed with compatible products for enhanced snow mold control.</li> <li>• Turfcide® is a Group 14 contact fungicide with multi-site mode of action – making it less prone to resistance development.</li> <li>• In the 50 years that PCNB has been used on golf courses, there has been no evidence of resistance development by pink and gray snow molds.</li> <li>• For best results, use Turfcide® 400 or Turfcide® 10G as a</li> </ul>

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| <ul style="list-style-type: none"> <li>• Turfcide® delivers excellent control of snow molds, is cost-effective and versatile.</li> <li>• Turfcide® may be applied alone – or Turfcide® 400 may be tank-mixed with compatible products</li> <li>• Turfcide® is             <ul style="list-style-type: none"> <li>• Group 14 contact fungicide</li> <li>• Multi-site mode of action – less prone to resistance development</li> </ul> </li> <li>• Since PCNB approval 50 years ago – no evidence of resistance development by pink and gray snow molds</li> <li>• Use Turfcide® 400 or Turfcide® 10G as a preventive application before diseases appear</li> <li>• Make an application:             <ul style="list-style-type: none"> <li>• Immediately prior to first snowfall, or</li> <li>• when temperatures remain below 60 degrees F, and extended wet conditions are expected</li> </ul> </li> <li>• In absence of snow cover, supplemental applications can be applied at 4 to 6 week intervals to maintain control when disease pressure is severe</li> <li>• Application rate for Turfcide® 400 and Turfcide® 10G varies depending on the disease and turf type</li> </ul> | <p>preventive application before diseases appear.</p> <ul style="list-style-type: none"> <li>• Apply immediately prior to first snowfall or when temperatures remain below 60 degrees Fahrenheit, and extended wet conditions are expected.</li> <li>• In the absence of snow cover, supplemental applications can be applied at 4 to 6 week intervals to maintain control when disease pressure is severe.</li> <li>• The application rate for Turfcide® 400 and Turfcide® 10G varies depending on the disease and turf type.</li> <li>• Each application of Turfcide® 400 or Turfcide® 10G must be followed by one-quarter (¼) inch of irrigation water or rainfall on the day of application to move the material down to the soil/thatch layer.</li> <li>• Including Turfcide®, with active ingredient PCNB, in snow mold control programs is a valuable resistance management tool for golf course superintendents.</li> </ul> |
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<ul style="list-style-type: none"> <li>• Each application of Turfcide® 400 or Turfcide® 10G must be followed by one-quarter (¼) inch of irrigation water or rainfall on the day of application to move the material down to the soil/thatch layer</li> <li>• Use of Turfcide® in snow mold control programs is a valuable resistance management tool</li> </ul>	
<b>Slide 32: Quiz</b>	<b>Voice Over</b>
<b>Quiz</b>	We hope you have found the information on Turfcide® 400 and Turfcide® 10G turf fungicides useful and beneficial. It's now time to test your knowledge.
<b>Slide 33: Quiz Questions</b>	
<p>Q1: AMVAC sells two formulations of the active ingredient _____ for turf under the Turfcide® brand.</p> <ol style="list-style-type: none"> <li>Propiconazole</li> <li>PCNB</li> <li>Chlorothalonil</li> <li>Triticonazole</li> </ol> <p>Q2: Turfcide® products are labeled for control of _____. (Mark all that apply)</p> <ol style="list-style-type: none"> <li>Pink snow mold</li> <li>Gray snow mold</li> <li>Speckled snow mold</li> <li>Nematodes</li> <li>Brown patch</li> <li>Dollar spot</li> <li>Leaf spots</li> </ol> <p>Q3: Which of the following Turfcide® turf fungicides can be tank mixed with compatible products for broad-spectrum disease control?</p> <ol style="list-style-type: none"> <li>Turfcide 10G</li> <li>Turfcide 400</li> <li>Both of the above</li> </ol> <p>Q4: Turfcide® is a Group 14 contact fungicide with a _____ mode of action – making it less prone to resistance development.</p> <ol style="list-style-type: none"> <li>Single site</li> <li>Multi-site</li> </ol> <p>Q5: Each application of Turfcide® 10G or Turfcide® 400 must be followed by _____.</p> <ol style="list-style-type: none"> <li>A one-eighth inch of irrigation water or rainfall on day of application</li> <li>One-quarter inch of irrigation water or rainfall on day of application</li> </ol>	



c. Nothing – not need to water after application

Q6: The application rate for Turfcide® 400 and Turfcide® 10G depend on \_\_\_\_\_ (Mark all that apply).

- a. Disease
- b. Turf type
- c. Temperature

Q7: Turfcide® fungicides are labeled for use on the following golf course areas (Mark all that apply).

- a. Tees
- b. Greens
- d. Fairways
- c. Roughs

Q8: (True or False) The Turfcide® 10G and Turfcide® 400 labels do not allow application of these products using hand-held equipment.

- a. True
- b. False

Q9: True or false) In the 50 years that PCNB has been used on golf courses, there has been no evidence of resistance development by pink and gray snow molds.

- a. True
- b. False

Q10: The optimum time for making an application of Turfcide® turf fungicides for snow mold control is (Mark all that apply).

- a. Immediately prior to first snowfall or when temperatures remain below 60 degrees F and extended wet conditions are expected
- b. As a rescue after diseases have appeared

**Slide 34: Thank You**

**Voice Over (Voiced by Ron Johnson)**

**Thank You**

Thanks for taking the time to learn about Turfcide® 400 and Turfcide® 10G turf fungicides from AMVAC. Always read and follow label directions. Always read and follow label directions.

**Slide 35: Legal Disclaimers**

**No Voiceover**

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