

enter the body again. These antibodies can be isolated from the blood, and the ELISA method is based on the ability of these antibodies to bind and recognize the foreign compound it was developed for. The amount of binding, and hence the amount of the compound present, can be measured through a chromogenic test (Figure 1).

Antibodies specific to each pesticide (i.e. chlorothalonil, malathion, atrazine) are harvested from a mouse, rat, or rabbit following injection of the pesticide into the animal. These antibodies are then purified and adhered to the bottom of a well plate. Though there are several types of ELISA reactions, the most straightforward is the direct ELISA method. In brief, extract containing pesticide collected from plants or water is placed into the container with the antibodies. Any pesticide present will bind to the antibodies and stick in the container even after washing the unbound solution out. Another set of antibodies specific to the pesticide is then added to the container, but this set has an enzyme attached that will cause the fluid to change colors when it comes in contact with a chromogenic reagent that is added at the end. So basically, the more fungicide present in the extract, the more fungicide-antibody complexes are formed in the container. This leads to a greater binding with the enzyme-linked antibodies, which causes a greater change in the color of the fluid. This change in color is measured using a microplate reader, and results in specific numbers that can be converted to fungicide concentrations.

### Why you should care

Admittedly, this seems like a rigorous scientific procedure that has a wide range of uses for university research. But deeper thinking about the procedure reveals a wealth of possibilities that can extend to golf course superintendents. The most obvious uses lie in the realm of pes-

ticide efficacy and especially the length of control provided. This is the basis for research currently underway at the University of Wisconsin by Paul Koch, Dr. Jim Kerns, and Dr. John Stier exploring the rate of degradation of different snow mold fungicides. Using ELISA, superintendents may someday be able to conduct a quick and affordable ELISA test to see if sufficient fungicide remains to delay another dollar spot application. This would offer more comfort and likely significant fungicide savings when compared to the calendar or feel-based

methods currently in practice.

Further possibilities include environmental contamination and governmental regulation. Possible regulations that require proof of a "need" to apply pesticides before it can actually be done is a realistic possibility in the future. For those who think this sounds ridiculous, it sounds awfully similar to the need to show a soil is deficient in phosphorus before phosphorus containing fertilizer can be applied.

These sorts of applications are several years off, and it's likely that the most applicable use of ELISA



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technology in turfgrass hasn't yet been thought of. But keep an eye out for ELISA in turfgrass, it might just do more than signal a long nine months ahead.

### The TDL thanks its supporters

Despite difficult budgets and more difficult decisions in 2010, the TDL continued to receive tremendous support from organizations and individual facilities alike in 2009. In addition to the 74 contract members listed in the November/December 2009 issue of *The Grass Roots* (Koch, 2009), several organizations offered significant support of the lab. The Wisconsin Golf Course Superintendents Association (WGCSA) offered a gift of \$1,000 in support of the lab. The WGCSA also continued to fund the fungicide degradation research ongoing at UW with \$8,000 in direct support.

The Northern Great Lakes Golf Course Superintendents Association (NGLGCSA) offered \$2,500 in support of both the fungicide degradation research and research investigating the disease resistance of several modern bentgrass cultivars.

For the third year in a row, Dennis Robinson of Horst Distributing has donated the proceeds of Aquatrols 'Turfbucks' program earmarked for research to be presented to the TDL, a gift in excess of \$900! All these gifts are instrumental in keeping diagnostic submission fees low while still maintaining the excellent quality of service that the Wisconsin turfgrass industry deserves. Please remember these organizations and companies when considering the benefits of membership or purchasing a product, for without their support our state industry would be much less vibrant.

### References:

- Anonymous. 1976. The enzyme-linked immunosorbent assay (ELISA). *Bulletin of the World Health Organization*, 54: 129-139.
- Bai, A., Lu, N., Zeng, H., Li, Z., Zhou, X., Chen, J., Liu, P., Peng, Z., Guo, Y. 2010. All-trans retinoic acid ameliorates trinitrobenzene sulfonic acid-induced colitis by shifting Th1 to Th2 profile. *J Interferon Cytokine Res*, Epub.
- Fidanza, M. A., Dernoeden, P. H. 1995. Evaluation of an enzyme-linked immunosorbent assay method for predicting brown patch infection in turf. *HortScience*, 30(6): 1263-1265.
- Fletcher, J. L. 1986. Update on pregnancy testing. *Prim Care*, 13(4): 667-677.
- Gabalton, J. A., Maquieira, A., Puchades, R. 1999. Current trends in immunoassay-based kits for pesticide analysis. *Critical Reviews in Food Science and Nutrition*, 39(6): 519-538.
- Giersch, T. 1993. A new monoclonal antibody for the sensitive detection of atrazine with immunoassay in microtiter plate and dipstick format. *Journal of Agricultural and Food Chemistry*, 41(6): 1006-1011.

- Huang, B., Wang, Z. 2005. Cultivar variation and physiological factors associated with heat tolerance for Kentucky bluegrass. *Int Turf Res Soc*, 10: 559-564.
- Kaefferlein, H. U., Marczynski, B., Mensing, T., Bruening, T. 2010. Albumin and hemoglobin adducts of benzo[a]pyrene in humans-analytical methods, exposure assessment, and recommendations for future directions. *Crit Rev Toxicol*, 40(2): 126-150.
- Koch, P. L. 2009. A TDL Year in Review: With weather like this, who needs a diagnostic lab? *The Grass Roots*, 38(6): 10-13.
- Luciani, G., Altpeter, F., Yactayo-Chang, J., Zhang, H., Gallo, M., Meagher, R. L., Wofford, D. 2007. Expression of cry1Fa in bahiagrass enhances resistance to fall armyworm. *Crop Sci*, 47: 2430-2436.
- Nameth, S. T., Shane, W. W., Stier, J. C. 1990. Development of a monoclonal antibody for detection of *Leptosphaeria korrae*, the causal agent of necrotic ring spot disease of turfgrass. *Phytopathology*, 80: 1208-1211.
- Shankle, M. W., Shaw, D. R., Boyette, M. 2001. Confirmation of an enzyme-linked immunosorbent assay to detect flumeturon in soil. *Weed Technology*, 15: 669-675.
- Watanabe, E., Miyake, S., Ito, S., Baba, K., Eun, H., Ishizaka, M., Endo, S. 2006. Reliable enzyme immunoassay detection for chlorothalonil: Fundamental evaluation for residue analysis and validation with gas chromatography. *Journal of Chromatography A*, 1129: 273-282.
- Zhang, X., Ervin, E. H. 2004. Cytokinin-containing seaweed and humic acid extracts associated with creeping bentgrass leaf cytokinins and drought resistance. *Crop Sci*, 44: 1737-1745. 🌱

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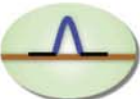
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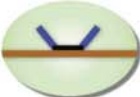
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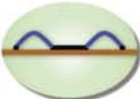
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# A Visit from the King

By **Scott Sann**, Certified Golf Course Superintendent, Greenwood Hills Country Club

The Northern Great Lakes Golf Course Superintendents Association (NGLGCSA) hosted its annual spring symposium on March 3rd, 2010 in Wausau, WI at the Best Western Midway Hotel. The NGLGCSA hosts this educational opportunity each spring for its members and guests.

President Glen Rochester from Wawonowin CC in Champion MI opened the symposium and accepted two generous donations on behalf of the NGLGCSA from Reinders and John Deere Golf. Every year the NGLGCSA awards scholarships to members, children of members, and grandchildren of members going to college. This year there were four recipients who each received a \$500.00 scholarship.

This year's speakers covered a variety of interesting topics. The "King" Dr. Joe Vargas, Professor, Department of Plant Pathology, Michigan State University gave two interesting and entertaining talks. The first was on strategies for optimizing fungicide usage and resistance management. His second was about competition between Poa. Annuua vs. Creeping Bent Grass. Both talks were very informative. I was unable to make the business meeting the evening before, but I heard that Dr. Joe Vargas's performance as Elvis Presley was far more entertaining.

Dr. Jim Kerns, Assistant Professor, Department of Plant Pathology and Dr. John Stier, Professor and Chair, Department of Horticulture at The University of Wisconsin Madison were there to report on research projects the NGLGCSA has helped support. Dr. Kerns reported his findings of snow mold research which can also be found on the web at [www.plantpath.wisc.edu/tld](http://www.plantpath.wisc.edu/tld).



Dr. Joe Vargas entertains the crowd at the pre-symposium hospitality room.

Dr. Stier reported his work about runoff and leachate content from various buffer strips. This project started in response to the new NR151 regulations. It is good to know that both are working to improve turf quality for local superintendents as well as working with legislative officials to form realistic laws that effect how we do our jobs.

The meeting ended with Bob Vavrek from the USGA with his year in review for 2009. His entertaining and informative talk dealt with ice damage and recovery as well as some architecture renovation/ regrassing strategies.

The meeting concluded with results from the silent auction and raffle.

The association started in 1981 with Charter Members John Beck, Rich Victorson, Tom Heid, John Netwal and Matt Wisniewski with Beck serving as the first President. Along with current President Glen Rochester, the board includes Dan Belland, Steve Spears, Randy Swonger, Joe Deschler, Jay Pritzl, Ken Smith, Kurt Stromquist Scott Thompson, and Rich Victorson. More information about the NGLGCSA can be found at [nglturf.org](http://nglturf.org).

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# Junior Golf Options

By **Jeremiah Hoffmann**, PGA Golf Professional, Rolling Meadows Golf Course

Do you have a Junior Golf Program at your facility? Is it any good? How about a high school team that calls your course home? If not, how come? Do you have a lot of juniors and families playing your course?

If you ask superintendents, general managers, board members and golf professionals if junior golf is important, we'd all answer yes. It's my belief that we need to do more than just saying it's important, but convey its importance through our commitment to having opportunities for juniors. Your facility may already offer fantastic programs and opportunities, but we can all do more. It's an old cliché, but it rings very true, "Juniors are our future members."

If we believe that we all need to expand our opportunities. By now I'm sure your thinking, "Okay, great, but tell the golf pro, not me." Which is very true, but with your blessing, a few of these enhancements may become reality. Believe it or not, we (golf pros) know and believe you are very busy, the last thing we want to do is give you more work.

However, if you suggest these ideas, and the work that it creates for you, we'll run with it. There are many different things that could be done to enhance your junior players' experience, but here are 2 simple ones.

- 1 - Add junior tees. You don't have to build new tee boxes, just put painted rocks at the 150 mark on par 4s, the 200 mark on par 5s and the start of the fairways on par 3s. You'll have some time invested painting rocks and moving them to mow fairways, but it'll be well worth it to see those young kids playing!
- 2 - Make your range into a 3 or 4 hole course during your junior program. Mowing a "tee," a "green" and cutting a hole will make the younger players' day! We use it for our juniors and they love it. Will doing these things automatically bring more juniors? No, but it's a start and it tells your customers that you are committed to the next generation learning the game we love!

Information on Junior Golf Programs can be found at the American Junior Golf Association at [ajga.org](http://ajga.org), the First Tee Program at [firsttee.org](http://firsttee.org) and The Junior Links Program at [Juniorlinks.com](http://Juniorlinks.com) a collaborative site sponsored by the USGA, PGA Tour, PGA of America, NGCOA, LPGA, GCSAA add the World Golf Foundation under the Golf 20/20 Vision For the Future Program. 🌱



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1. **Honesty** - the quality or state of being truthful; not deceptive  
*Golf is unique from other sports in that players regularly call penalties on themselves and report their own score.*
2. **Integrity** - strict adherence to a standard of value or conduct; personal honesty and independence  
*Golf is a game of etiquette and composure. Players are responsible for their actions and personal conduct on the golf course even at times when others may not be looking.*
3. **Sportsmanship** - observing the rules of play and winning or losing with grace  
*Players must know and abide by the rules of golf and be able to conduct themselves in a kind and respectful manner towards others even in a competitive game.*
4. **Respect** - to feel or show deferential regard for; esteem  
*In golf it is important to show respect for oneself, playing partners, fellow competitors, the golf course, and for the honor and traditions of the game.*
5. **Confidence** - reliance or trust. A feeling of self-assurance  
*Confidence plays a key role in the level of play that one achieves. Players can increase confidence in their abilities by being positive and focusing on something they are doing well regardless of the outcome.*
6. **Responsibility** - accounting for one's actions; dependable  
*Players are responsible for their actions on the golf course. It is up to them to keep score, repair divots, rake bunkers, repair ball marks on the green, and keep up with the pace of play.*
7. **Perseverance** - to persist in an idea, purpose or task despite obstacles  
*To succeed in golf, players must continue through bad breaks and their own mistakes, while learning from past experiences.*
8. **Courtesy** - considerate behavior toward others; a polite remark or gesture  
*A round of golf should begin and end with a handshake between fellow competitors. Players also should be still and quiet while others are preparing and performing a shot.*
9. **Judgment** - the ability to make a decision or form an opinion; a decision reached after consideration  
*Using good judgment is very important in golf. It comes into play when deciding on strategy, club selection, when to play safe and when to take a chance, the type of shot players consider executing, as well as making healthy choices on and off the golf course.*



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# Are Pesticides Risky?

By **Dr. Jim Kerns**, Associate Professor, Department of Pathology, University of Wisconsin - Madison

The turf industry is constantly under the microscope with regard to fertilizer and pesticide applications. This is most likely due to the fact that we cannot eat turfgrasses. If humans developed a rumen, then we might be allowed to apply chemicals to our hearts content. Another fundamental problem with the “general public” is they believe that turfgrass managers maliciously over apply fertilizers and pesticides. If they understood the business, I think it would be clear that golf course superintendents are extremely responsible pesticide and fertilizer applicators.

However, pesticides are designed to kill or inhibit the growth of a pest, i.e. fungus, weed or insect. No matter how “safe” the chemical is they still can be hazardous or risky. In order to determine how hazardous a chemical is, toxicity and exposure has to be accounted for. For example, gasoline is inherently toxic yet our exposure to gasoline is limited. A substance that has a high toxicity does not necessarily mean the product is going to kill or harm human beings. Chlorothalonil has an oral LD50 of 10,000 ppm when fed to rats, but only 3 mg of chlorothalonil applied to eyes of rabbits caused mild to severe eye irritation. Compare these values to those of aspirin, which has an oral LD50 value of 200 ppm when fed to rats! Once again the key is adding the toxicity value with the amount of exposure. Even though we commonly use aspirin as a pain reliever our exposure is still mild enough that it does not kill us. Please do take this the wrong way, we still cannot drink chlorothalonil it is not that safe!

The important question is why does chlorothalonil get such bad press? The LD50 value in rainbow trout populations is 0.25 ppm, so it is highly toxic to aquatic organisms. I’m sure you are wondering about exposure to fish and other aquatic organisms. Chlorothalonil is not very soluble in water and has a fairly high sorption coefficient, which helps to limit exposure to aquatic critters. Yet in some bodies of water, scientists have detected levels of chlorothalonil as high as 6.5 ppm. How did it get there? Chlorothalonil is a very common fungicide and recommended for controlling diseases in many different crops. For example, chlorothalonil is an integral component for managing diseases in potatoes especially late blight. Essentially enough chlorothalonil is applied throughout the world of agriculture that eventually some of the product is going to reach water bodies.

Pesticides are usually associated with cancer too. There are studies that link certain pesticides to dif-

ferent types of cancer. Many substances can be linked to cancer. Remember Bisphenol A, a product in plastic water bottles, has been associated with breast cancer. Or acetone, benzaldehyde, benzyl acetate, benzyl alcohol, camphor, ethanol, ethyl acetate, limonene, linalool, methylene chloride, apinene, gterpinene, and a-terpineol, all of these products are commonly found in cosmetics and are linked to cancer in some way. An interesting study done by researchers in Massachusetts found no link between pesticide applications in cranberry bogs near neighborhoods and increased breast cancer incidence. Their conclusion was exposure to pesticides and other carcinogenic compounds are so frequent that it is difficult to link cancer incidence to a single entity such as pesticide applications (1). Yes there are some pesticides that are known carcinogens, but exposure to these chemicals is likely minimal.

For instance, another study from Cornell University evaluated the inhalation risk to golfers of 15 commonly used pesticides. Six of these pesticides are considered as likely carcinogens which include: chlorothalonil, iprodione, mancozeb, oxadiazon, propiconazole and thiophante-methyl (3). When the researchers examined inhalation risk, they determined that long-term effects from the 15 chemicals tested were likely to be minimal. The authors came to this conclusion because the inhalation risk to adult golfers was negligible (3).

In a separate study conducted in Massachusetts, researchers examined the dermal exposure risk to golfers. In this particular study the researchers sent golfers, (probably themselves or their staff) out on a golf course at different times of the day. Then they

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