

will also be used to convey competency levels to employers, whereby an employer can "require" a certain level of accomplishment in the superintendent they propose to hire for their respective operation. Franklin Covey also introduced its [HR Web] ability to verify a superintendent's competency and verify their work towards improving that incompetence.

Franklin Covey then began to "preach" the importance of allowing the membership to "buy in" to the reclassification system by letting them (us) establish a few of the details, whereby enhancing the buy-in effect by having the members become "stakeholders" in the initiative and support it as a needed improvement. The cost for Franklin Covey's HR Web development and reclassification structuring through June, 2000: \$432,000.00.

The cost for the MSRSG meetings, Cross Committee meetings (Education, Standards, Certification, Career Development and Membership) and Focus Groups (employers and other Superintendents) to the GCSAA: \$233,000.00.

So, with over \$1 million spent (not including Mullen's work) to come up with a way to reclassify its members, the GCSAA now feels confident that PDI will bring increased awareness to its members and improve its position in the industry (with the PGA and the USGA) and in the eyes of employers, the general public and influential golfers. Besides the development of the HR Web, nothing else, to date, has been spent on educational programming or new delivery systems for that education. In fact, of the \$2.5 million initiative, not even half is slated for curriculum development by 2004.

Reclassification (What You Haven't Heard)

Under the guise of what has

been named the PDI, the BOD of the GCSAA is now proposing to regulate who can be considered a Class A member of their (our) association. Background, experience, professionalism, integrity, work ethics and passion for the profession are not viable components for being considered a Class A Superintendent anymore. The GCSAA will only consider a superintendent with a four-year degree (in any field) or a two-year turf degree as a candidate for their new "branded" Class A status. Once Class A status is achieved, you will be allowed to remain Class A only if the new, continuing, requirements are fulfilled every three years. And if not fulfilled, for whatever reason, you will no longer be considered class A material and will be demoted back to Class B status.

The GCSAA will no longer promote or market all Superintendent members. They will only promote their "branded" Class A superintendent and CGCS programs. The GCSAA is proposing that all current Class A members be grandfathered into the new "branded" Class A. They will only have to fulfill the new, ongoing, requirements to maintain their status. So, why worry about the requirements for entering class A? Think it will not effect you? If you are unable, financially, to fulfill the never ending requirement for CEUs and PDUs, you will be demoted to Class B, considered second rate and not worth marketing.

The GCSAA intends to inform employers that "branded" Class A and CGCS are the only superintendents that should be hired. Another concern is the requirement that you must be employed as a superintendent at the time of renewal. If you are not, for whatever reason, let's say you are in between jobs, you may be demoted back to Class B status. With the grandfathering clause, you should

also be aware that if, for any reason, a superintendent without the proper degree (no 400 hour turf certificates allowed) loses their class A status, he or she will never be allowed to return to Class A unless the proper degree is obtained by going back to college, **period.**

The most obvious objection to the degree requirement is the exclusion of many excellent superintendents who will never be con-

We'll make
you see
green.



Perfect Partners

HJCT-2 + HJCT-2

Coated Nitrogen Technology Coated Potassium Technology



HJCT-2

Tee it up with Reinders
Turf & Irrigation

Phone: 800-785-3301

sidered equal, or even qualified for Class A status. The superintendent without a degree (or the proper degree), no matter how successful, or how many years of experience, will never be considered for Class A status. We know the value of experience in this profession and the importance of learning from each other, so why should it matter to the GCSAA where or how superintendents acquire their knowledge, whether its a formal education or from "the school of hard knocks?" Knowledge is knowledge. I was fortunate to learn under two excellent superintendents - Dick Craig of Jack Nicklaus Sports Center in Cincinnati (now, The Golf Courses at Kings Island) and Bob Erdahl of North Shore Country Club in the Milwaukee area. Thanks to these men and their belief in me, I was provided with the opportunity to succeed in this profession. There are others (without degrees) who deserve the chance to succeed, as well. This association has never, in the past, excluded a superintendent from excelling and it should not start now.

Another requirement to qualify for Class A is mandatory self assessment using the HR Web. Superintendents will be required to assess their competencies and at least "meet" the established minimal requirement level. The base level of competency is unknown at this time. Your self assessment must then be validated by someone (boss, peer, club official, Franklin Covey staff or the GCSAA itself, yet to be determined) before you can be considered Class A material.

The scariest part of the initiative is the mandatory self assessment required every three years in order to maintain your Class A status. Franklin Covey has developed an assessment chart with five levels of competencies that relate to the many different skills that a superintendent must possess. Every Class A

member will be required to assess their competencies in each category every three years. Classes will be available to help improve your competency levels. The GCSAA wants to inform employers about the HR Web tool so that your employer can assist you in determining your competency levels and recommend courses the employer thinks are necessary for your improvement. The GCSAA also wants employers to use this information as a guide for deciding what level of competencies an applicant should possess in their quest to hire a superintendent. Just think, one day you will carry your competency profile into an interview and may or may not be considered for the position, depending upon your levels in each category. Of course, once you are a Class A member, there is no validation of the self assessments. So, you can have your competency levels read whatever you need.

How about the possibility that GCSAA might decide to "help out" employers? Rather than employers having to wade through 200 resumes, they might fill out a com-

petency profile questionnaire, have GCSAA input the data into the HR Web system and then, just like that, provide the employer with five or six names. You will never hear about the job opening and, if you are not one of the people on the "list", your name will never come up in front of the potential employer. Whether mandatory or voluntary, there will be problems that arise from the use, misuse, and/or access to the data in the HR Web.

The next requirement for maintaining your "branded" Class A status is to acquire a certain number of CEU and PDU credits during a three year period. The GCSAA education department is supposed to make education more affordable and accessible, but has no idea of what the cost will be, or exactly how they will make it more accessible. Nor have they given a time frame for the implementation of their plans. This requirement should not be voted on before GCSAA has proven to the members that they can, in fact, produce affordable and accessible education. Yet a vote on reclassification



" YOU HEARD THE 6:30 WEATHER REPORT?
WELL, THAT EXPLAINS IT.
I LISTENED AT 6:45. "

is scheduled for the Dallas Conference and Show in less than a year. We will be running the risk of losing good members just because they (or their clubs) lack the financial wherewithal that others, with larger maintenance budgets, enjoy. Many superintendents cannot afford to go to the GCSAA Conference and Show where most of the educational programs are offered. Most superintendents are attending as many seminars and meetings as they can afford or have time for and many of these are sponsored by organizations other than the GCSAA. I do not think that this requirement should even be discussed until the GCSAA has their programs in place and the costs are known. Only then can we make a fair, knowledgeable decision about the amount of credits to require or not require.

The GCSAA's purpose, since its inception, was to support and help educate "all" its members, and now they want to regulate and qualify who they represent. The membership has no right to act as judge and jury of their peer's qualifications. Our association should be encouraging superintendents to join and participate, but only 45% of the courses in the US have a Class A (or higher) member. If this initiative passes, the GCSAA stands to represent even fewer courses. Superintendents may drop their membership because of the education requirements, a lack of financing or time, a lack of interest or simply because they disagree, in principle, with the new requirements. Both the WGCSA and GCSAA (dual membership) will suffer financially, but worst of all, both associations will lose quality members.

The internet now provides unlimited access to educational materials and data. There are other options such as joining the WTA, or on-line associations like TurfNet and the new Golfsat.com program for fast access to information and products, etc., but many would miss the cam-

aderie from being associated with the WGCSA over the years. The most beneficial educational opportunity we have is the willingness of superintendents to help each other and share their knowledge and expertise. Will the passing of PDI affect this special relationship among superintendents? I think it will and in some cases it already has.

The majority of our members have been apathetic as to how their vote has been cast in the past. I know I have been. We gave our votes to the WGCSA's BOD to cast as they saw fit. But then, on the whole, we have not been informed or even asked how they should vote. The communication between members and the BOD has been poor in this regard. It is very likely that the dual membership would not have passed if the national membership had not been apathetic and if the local BODs had really been interested in member opinions. We are all accountable for the lack of communication and interest in the policies of the GCSAA and the WGCSA. This must change now!

PDI has already cost over one million dollars (and it is still in the developmental stage) and will affect every current and potential member for

years to come. It is the member's responsibility to become informed, express opinions, and vote on this issue. We, the members, must make certain that the WGCSA's BOD casts our vote exactly the way we want. If not, we will have to reclaim our vote and vote individually, or proxy it to someone who will. The PDI issue is much too important to allow only a few BOD members and delegates to decide the fate of current and up-and-coming superintendents in the future. Please, get involved, whether you are for or against the Professional Development Initiative. Take responsibility for the direction of both of your associations.

And finally, remember: PDI, in any form, can be implemented without a vote from the general membership. All it needs is for the BOD of the national GCSAA to pass it. The only vote we, the membership can influence, is on reclassification, which will take 2/3 of the members to pass it. So, not only is it important for you to use your vote wisely in Dallas, in 2001, it is doubly important that you become involved in the process of developing an initiative that you and your sons and daughters can live with for decades. ♣



PENDELTON TURF SUPPLY

Ed Witkowski
Mike Kozlowski

Full Line of Turf Products
Chemicals
Competitive Pricing
New Product Information
Satisfaction Gauranteed

805 Ela Avenue
Waterford, WI 53185
262-534-3334 • Fax 262-534-2990



Alternative Weed Controls for the 21st Century

By Dr. John Stier, Department of Horticulture, University of Wisconsin - Madison

Label restrictions for turf and ornamental pesticides are increasing due to the Food Quality Protection Act of 1996. In the near future (in some cases now!) certain products will no longer be available for use on turf and ornamentals. The good news is FQPA has streamlined the registration process for new compounds based on natural products or organisms. The big questions are who will develop these new compounds, will they be developed in time to replace conventional chemicals, and how effective will the new compounds be? A good herbicide should have the following characteristics: 1) Be effective, 2) Specific for the target pest(s), 3) Degradation to innocuous products following a finite lifetime, and 4) Be safe for humans and the environment.

The potential for biological weed controls is seemingly endless. Numerous viruses are known to infect

specific plant species. Bacteria, which can multiply nearly as quickly as viruses, can be devastating to certain plants, including woody species. Fungi are a group of plant pathogens well known to superintendents who battle turf diseases caused by a relative few fungal species. Worldwide, including the U.S., insects and animals have been released for biological control of weeds in environments ranging from dry, semi-desert rangeland to aquatic habitats. Plant products offer another line of potential weed control agents.

Unfortunately the realistic potential of many biological pesticides is at best challenging. Turf, unlike crops, rangeland, or forests, requires at or near 100% weed control since we grow it for quality and not quantity. Weed-eating insects are unlikely to be effective. Insects are difficult to rear, to ship, and tend to wander off when they are released. Animals such as

Get the Fungicide of your Choice

at **ProGreen Plus**  **LLC**
A WISCONSIN COMPANY

Alamo	Chipco 26 GT	Daconil	Heritage
Aliette Signature	Cleary's 3336 F	Weatherstik	Rubigan A.S.
Arbotect 20 S	Cleary's 3336	Daconil Zn	Spotrete F
Banner Maxx	WSB	Eagle WSP	Subdue Maxx
Banol	Compass	Echo 720	Subdue G
Bayleton G	Curalan EG	Fore T & O	Teremec SP
Bayleton 50	Daconil Ultrex	Fore 80 WSP	

Toll Free

1-888-PRO-GREEN

7 7 6 - 4 7 3 3

Mequon

11020 Buntrock Ave.

(262) **242-9100**

Fax: (262) 242-2117

New Berlin

16680 W. Cleveland Ave.

(262) **789-9550**

Fax: (262) 789-9509

geese are used in certain crops to eat offending weeds, but a golf course fairway or green is hardly the place for a vertebrate animal (humans excepted). In some cases the animal may find it prefers turf: I once watched a muskrat eat turf on our plots; going down the line, he chewed a bit from each of the low N turf, then the low N turf with Primo, and then the high N turf. He apparently liked the high N and Primo plots the best, because by the time I got there to catch him he had eaten most of the turf on the plot!

Fungi typically require free water and moderately warm temperatures for infection. If superintendents provide these conditions for mycoherbicides (fungi are the active ingredient), they risk more turf diseases as these environmental conditions are also favored by turf-pathogenic fungi. Furthermore, most of the weed-controlling fungi would also be susceptible to the same fungicides used to control turf diseases. Viruses are an unlikely source for weed control in turf because they typically require a vector, i.e., an insect, to transmit them into susceptible weed hosts. Bacteria require openings in the plant, such as wounds, for infection. In turf, frequent mowing provides the opportunity for bacterial infections. The bacteria are

fastidious little creatures, though, and require high concentrations to cause lethal infections. They also have to be able to compete with and supplant microbes already on or in the plants. Moreover, only certain species of bacteria are capable of forming spores. Bacteria experience rapidly rising and falling populations, making it difficult to keep non-spore-forming bacteria alive in sufficient concentrations to be effective. Bacteria can also be degraded by UV light (sunlight), suggesting a nighttime application would be more effective than during the day.

Even with all the pitfalls, microorganisms may yet play an important role in weed control. In non-turf systems, several fungi have been developed for weed control. One example is *Colletotrichum gloeosporoides* f. sp. *aeshynomene*. It is sold as Collego for control of northern jointvetch in rice. A *Phytophthora* spp. (distantly related to *Pythium* spp.) is sold as DeVine for control of strangler vine in Florida citrus crops. A third one which could eventually be used on turf is BioMal, another *Colletotrichum* subspecies which controls round-leaved, or dwarf, mallow (*Malva rotundifolia*).

During the 1990's a bacterium (*Xanthomonas*

North Star

Turf Supply

The Power of the Team



Eagan, MN 55121
651.454.3106 • Fax 651.454.7884
www.northstarturf.com

*Supporting the
status and recognition
of the
Wisconsin
Turfgrass Industry
through
Education, Research,
Products and Services*

*Dale Parske
Agronomist*

*Golf Course
Construction,
Renovation
and Restoration*

GOLF CREATIONS
18250 Beck Road Marengo, IL 60152
Phone 815.923.1868 Fax 815.923.3662

There's No Mistaking an Original.



The outstanding performance of a reliable,
economical, multi-site fungicide.

The only broad-spectrum
systemic strobilurin fungicide.

The two top selling fungicides in golf,
HERITAGE® and **DACONIL®**

Jim Shone
Mobile/Pager: (708) 217-8509

www.zenecaprofprod.com



ZENECA Professional Products

Always read and follow label directions carefully.

DACONIL® and HERITAGE® are registered trademarks of a Zeneca company.

© 2000 Zeneca Ag Products Inc. Zeneca Professional Products is a business of Zeneca Ag Products Inc.

ZPP-TRF-020

campestris pv. *poaannua*) was assessed for its potential to control annual bluegrass in turf. This bacterium causes a wilt disease by clogging the vascular system of infected plants. Weekly inoculations controlled 92% of *P. annua* var. *annua* and 82% *P. annua* var. *reptans* in growth chamber conditions (Zhou and Neal, 1995). Unfortunately, control was less than 15% in field tests. *P. annua* control in the field was increased to 40% when the bacterium was applied three times weekly, but the *P. annua* population recovered within two to five weeks after applications were stopped. It is unlikely very many superintendents in Wisconsin will care that *X. campestris* pv. *poaannua* isn't likely to be registered as a *P. annua* control agent. Due to the predominance of *P. annua* on golf courses, its utility as a putting surface, and good management practices, *P. annua* is now often considered a desirable turfgrass in Wisconsin.

Natural plant products may be the best option for turf weeds. Several cool-season turfgrass species may produce allelotoxins (plant-produced toxins) which inhibit germination or establishment of other plants

(Hagin, 1991; Hisle and Powell, 1993; King et al., 1994; Lickfeldt and Voigt, 1999). To date, none have been marketed for weed control.

Corn gluten meal is the first plant product to have any real utility for weed control in turf. Hailed as a cure-all by some environmentalists, corn gluten meal does have some efficacy as a pre-emergent herbicide. In addition to its herbicidal properties, corn gluten contains approximately 10% slowly available nitrogen which is useful for turf growth. The properties of corn gluten meal were discovered and developed at Iowa State University. Unlike many alternative pesticides corn gluten meal is supported by research data.

Research shows nearly 60% weed control can be achieved in the first year when applied at 20 lb per 1000 ft². Weed control may improve with continued use over several years. Corn gluten is sold as a dry product under various trade names, including Dynaweed, Safe 'N Simple, Earth Friendly, W.O.W.!, Corn Gluten Meal Herbicide, and Propac. Until recently it was only offered in powder form. A granular form is now available which can be more easily be applied



**Our fertilizer has absolutely no effect on ball roll.
Sorry.**



Step up to an improved level of play by contacting one of our golf greens professionals. Make a toll-free call to 1-800-635-2123 today.

SPRING VALLEY®

with Vicon, rotary and drop spreaders. Suggested application rates vary from 12 to 20 lbs per 1000 ft² depending on the intended use. For crabgrass control in turf, two applications are recommended at 12 lb/1000 ft², once in early to mid-spring and another in early to mid-August. Since the corn gluten meal is about 10% nitrogen, this strategy catches two flushes of crabgrass and spreads out the nitrogen effect. Two applications at 12 lb/1000 ft² will provide nearly 2.5 lb N/1000 ft² per year. The nitrogen is in a slow release form so there is little to no potential for foliar burn.

Pre-packaged corn gluten is relatively expensive. It can be purchased in bulk from feed mills where it is sold as animal feed. Some users have reported odor problems and it may attract rodents during storage. Some users report dissatisfaction with weed control at the recommended rates, and indeed the data indicate weed control is significantly enhanced at rates of 40-60 lb/1000 ft² (Table 1). These rates become cost-prohibitive and provide what is now viewed as excessive nitrogen (4 to 6 lb N per application).

What is good could be made better. The herbicidal activity of corn gluten meal is due to at least two peptides (protein fragments). These peptides inhibit cell division of roots, which can stop a germinating weed seedling dead in its tracks. Many conventional pre-

emergent herbicides also stop cell division in roots of germinating weed seedlings. Research shows the peptides can be extracted from the raw product (corn gluten hydrolysate) and are considerably more efficacious (Table 2). The hydrolysate form could be packaged, sold, and used in a manner similar to conventional pesticides, facilitating its entry into the professional market. Raw corn gluten does not require an EPA registration to be used as an herbicide. However, since the hydrolysate is a derived-product, it requires an EPA registration to be labeled as an herbicide. Therein lies the kicker: until a company steps forth to develop the hydrolysate form, we are unlikely to see a more usable product. To be fair a company would be risking much; the development costs are unknown but likely to be high, and recovery of marketing costs is not guaranteed.

That which supports us can also strangle us. While government restrictions begin to remove conventional chemistries from turf and ornamentals, the lack of funding for alternative products in turf and ornamentals does not provide industry or university researchers with support to develop new products. Government regulations, at times seemingly excessive, stifle industry's initiative to develop new products. Much of the governmental and private funding

Table 1. Crabgrass reduction using corn gluten meal in field trials on Kentucky bluegrass turf.†

1998 (4 weeks pre-emerge)		1991 (1 week pre-emerge)	
Rate (lb/M)	% control	Rate (lb/M)	% control
0	0	0	0
40	50	20	58
81	65	40	86
122	80	61	97
162	95	122	87
203	92	201	79

† Adapted from Christians, N.E. 1993. The use of corn gluten meal as a natural preemergent weed control in turf. p. 284-290. Proc. 7th International Turfgrass Society Research Conference, Palm Beach, FL, USA, 18-24 July, 1993. International Turfgrass Society, No. 7. Intertec Publishing Corp., Overland Park, KS.

Table 2. Comparison of raw corn gluten meal to corn gluten hydrolysate as an herbicide for germinating grass seedlings.†

Treatment	Application rate		
	0.6 lb/1000 ft ²	1.2 lb/1000 ft ²	4.5 lb/1000 ft ²
Corn gluten meal	100	100	50
Corn gluten hydrolysate	12	0	0
LSD (0.05)	12		

† Adapted from Liu, D.L., N.E. Christians, and J.T. Garbutt. 1994. Herbicidal activities of hydrolyzed corn gluten meal on three grass species under controlled environments. J. Plant Growth Regul. 13:221-226.

these days is devoted to biotechnology, with dwindling support for applied research and researchers.

As conventional herbicides are "lost" during the next few years some companies will undoubtedly develop alternative control measures. New alternative chemicals are likely to cost more and be less efficacious, though safer, than conventional compounds. In all likelihood we are headed toward a system of reduced reliance on pesticides, whether natural or synthetic. In some cropping systems, the research is steering away from chemical control and back towards manipulation of cultural practices for weed control. On the farm we used a field cultivator to rip out weeds between the corn rows. As turf managers, we will have to develop something a bit more creative.

Christians, N.E. 1993. The use of corn gluten meal as a natural preemergent weed control in turf. p. 284-290. Proc. 7th International Turfgrass Society Research Conference, Palm Beach, FL, USA, 18-24 July, 1993. International Turfgrass Society, No. 7. Intertec Publishing Corp., Overland Park, KS.

Hagin, R.D. 1991. Allelopathic effects of killed Kentucky bluegrass on sod seeded birdsfoot trefoil. p. 145. *In* 1991 Agronomy abstracts. ASA, Madison, WI.

Hisle, D., Jr., and A.J. Powell, Jr. 1993. Renovation of weak ryegrass turf. p. 32-34. *Kentucky Turfgrass Res.* 1992-1993.

King, J.W., b.W. Skulman, and T.L. Lavy. 1994. Allelopathy of selected turf-type tall fescue cultivars. p. 186. *In* 1994 Agronomy abstracts. ASA, Madison, WI.

Lickfeldt, D.W., and T.B. Voigt. 1999. Allelopathy in fine-leaf turfgrass. p. 131. *In* 1999 Agronomy abstracts. ASA, Madison, WI.

Liu, D.L., N.E. Christians, and J.T. Garbutt. 1994. Herbicidal activities of hydrolyzed corn gluten meal on three grass species under controlled environments. *J. Plant Growth Regul.* 13:221-226.

Zhou, T., and J.C. Neal. 1995. Annual bluegrass (*Poa annua*) control with *Xanthomonas campestris* pv. *poannua* in New York State. *Weed Tech.* 9:173-177. ♣



Construction Services to the Golf Industry

Your source for Golf Course Construction, Reconstruction & Improvement.

You have the Projects, Ideas & Needs. We have the Experience & Equipment to do the job Right the First time.

Many Trucks
Equipped with
High Floatation
Tires to
Minimize
Damage to your
Golf Course



- Water Control Structures •
- Pond Cleaning •
- New Ponds •
- Pond Lining •
- Cart Paths •

CALL US TODAY!!

- New Construction
- Remodelling
- Irrigation
- Drainage
- Feature Shaping
- Trap Sand Replacement



*Specialized
Equipment
suited to
Cleaning your
existing Golf
Course
Water
Features.*

Lee Bruce (608) 836-7041 Dave Weber

Established 1953



Give Your Greens an Electrifying Cut!

Ransomes® E-Plex™ II

Mow up to 20 greens on one charge with the E-Plex II riding electric greens mower. The ultra-quiet E-Plex II is perfect for residential areas and early morning cutting. With fewer moving parts than its combustion-driven competitors, the E-Plex II is easier to maintain. This economical unit features an easy-to-service, swing-out center reel and quick-attach reels. And to ensure a precise cut, the E-Plex II allows you to control the clip rate by the ground speed. To make a big impact with little noise, come in or call today.



444 N. Madison Street
Chilton, Wisconsin 53014

800-279-2341

RANSOMES

TEXTRON
TURF CARE AND SPECIALTY PRODUCTS



www.ttssp.textron.com
ASRA-EPLEX-0599 © 1999 Textron Turf Care And Specialty Products
All rights reserved. Printed in the U.S.A.