

September 2004 SFI E-zine

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I'm in Australia, having an absolutely grand time. The University course at Southern Cross University is finished, and the students gave us glowing feedback about the class. The chemistry was a bit overwhelming, but Dr. Graham Lancaster did a super job trying to explain the chemical aspects. Next year we will integrate the biology and chemistry even more. Graham and I give another course tomorrow together, so we'll keep improving.....

Gave four talks in Canberra and environs two days ago – phew! Non-stop talking! Had a number of CSIRO scientists in the audience. Look out, closed minds! Did you know that calcium doesn't have any soluble forms? Gosh – how is it that calcium gets inside the plant then?

The other questions asked were old news. For example, adding single species of organisms to combat diseases. One bacterial species to prevent a disease? In the lab, maybe, where conditions are very limited, but in field soil? How long did the added organism do it's job? Which week of the year was that?

And of course, as soon as I had dealt with that question, another scientist said that addition of bacteria to soil doesn't work. Bacterial cultures don't survive addition to soil.

Ah, which way do they want to have this? One CSIRO person saying a single bacterial species will work to control a disease through the whole year, while another says, addition of bacterial species to soil won't work?

Maybe they were fighting among themselves?

But the real story is that they need to pay attention to all the parameters involved. If you have a healthy soil with a good food web, additions of organisms to the soil won't do much.

But a really depauperate soil will allow added organisms to survive. Survive, not stay active very long, however.

Got a question about phosphate-solubilizing bacterial species too. Have I ever heard of microbes that do this? Yes, a fair number of papers published about this. Wonder why the person asked – are they going to try to engineer a phosphate solubilizing bacterium? Why would someone do that? So they can patent it?

Like the Rhizobium species that was supposed to improve the nitrogen fixation process? The molecular scientists forgot about how much energy is involved in fixing N. The plants were all stunted, because while fixing more N, the bacterium took much more energy out of the plant.

Recognize that changing the physiology of the microbe may well change the relationship with the plant, and with the rest of the soil community. Do some realistic testing to see what it is the GEM does before releasing it on the world.

Doubt my visit will have any effect on those scientists. Just have to hope that the growers who were in the room listening to the exchange will apply pressure on the government to make changes in the CSIRO.

We are showing, over and over, that these supposed “soils experts” who say that biology can’t possibly make any difference, that organisms are always there, no matter what, regardless of the pesticides and high levels of inorganic fertilizers used, are flat out wrong in what they say. Addition of tons and tons of salts, year after year (otherwise known as fertilizers) doesn’t fix any single problem, and instead, has caused more problems than it has solved. Food shortage? We don’t have one. And lack of clean water will kill us long before lack of food.

Time for a change.....

I’m heading out to a composting operation next week to help them learn to do the process right. I am sure I will learn things too! And I get to run the turner!!!! This is going to be fun!

Send me pictures and info on where your organisms are doing the work of improving soils and giving you benefits. And if anyone is having poor results, I’d like to know about them too. Send an explanation of what management was performed, please!

Elaine

Upcoming Events

October 1, 2004 and November 17, 2004

Light Microscope Class-SFI Corvallis

This class will give you the ability to assess your own compost teas. Discover the difference between fungal hyphae and organic matter; recognize bacteria, protozoa and nematodes.

8-Noon- classroom instruction

1-5 pm- Practical application

Cost: \$200 per person (limit 10) all supplies will be provided in the class as part of the fee, as well as the new Microscope Manual, microscopes are an additional cost. Two scopes have been recommended by Dr. Ingham. Alexis J-model \$400.00 or Leica CME-\$1200.00 (includes case).

If you want to bring your own scope please contact us at the lab to discuss the specific requirements and be prepared to “upgrade” if necessary.

To register contact Twila or Matt at (541) 752-5066 or email info@soilfoodweb.com

October 19-20, 2004

Texas Organic Farmers & Gardeners Association

Compost Tea Workshop Definition of Good Tea - Maturity, stability, E. Coli, Standards

Making Healthy Compost Tea - The brewing cycle, the right compost, extraction, aeration, water source, recipes, growing fungi, E. Coli issues

Determining Whether Plants Need Compost Tea - Rates of decomposition, smell, color - When to do organism assays, which assays to run - Does your foilage have enough of the right organisms?

Altering the Foodweb in Soil & on Plant Surfaces - The right organisms for the plant desired - Bacterial or fungal dominated tea? - The right foods for the plant desired - Commercial products

Demonstrations of Compost Tea Machines - Microbe-Brewer, Earth Tea Brewer, Compara Extraktors, KIS machines, Bob-o-Later/Bitty Bob- o- Later, Alaska Giant Earthworks, WormGold

For registration information contact Louise Placek, (877) 326-5175 or email louise@texasorganicgrowers.org

<http://www.texasorganicgrowers.org/articles/soilfoodweb.htm>

November 6, 2004

The International Compost Tea Council (ICTC) presents

Compost Tea for the 21st Century

New Practices in Landscape Sustainability

Planting Fields Historic State Park and Arboretum

Planting Fields Rd., Oyster Bay, NY

PDF [Registration form](#)

PDF [Program itinerary](#)

Exhibitors PDF [registration form](#)

2004 Acres U.S.A. Conference Details Now Available

This year's conference, "Food as Medicine, Farm as Healer," takes place Dec. 9-11, 2004 in Minneapolis, Minnesota. Pre-conference intensive study sessions will be held the prior days. Learn how to manage your farm for production of maximum crop/livestock nutrition, how to tap into growing consumer demand for truly healthy food and market to quality-conscious consumers, and find that missing profitability — and fun — in farming!

Acres U.S.A. Conference — Dec. 9-11, 2004 — Minneapolis, Minnesota

[ONLINE INFORMATION](#)

[Complete agenda](#)

[Conference registration information](#)

[Hotel reservations/flight discounts](#)

In-depth pre-conference schools —

[Improving Soil & Foliar Foodwebs](#), Arden Andersen/Elaine Ingham

[Traditional Foods Workshop](#), Sally Fallon

[Managing Subtle Energies on the Farm](#), Benson, Karbowski, Shepard, Tanio, Wheeler

December 15, 2004

Neighborhood Network presents

Sixth Annual **Fall Organic Turf Trade Show**

Smithtown Sheraton

Smithtown, NY

Contact: Beth Fiteni, Organics Program Director

516-541-4321 to be sent registration materials

1. Corruption at UC Berkeley.

I get confronted by people every once in a while that do not want to believe my experiences with academic bureaucracies. Well, here's evidence of exactly the kind of thing I have experienced.

From J. Cummins, SANET –

The report below deals with academic corruption at Berkeley. Will those who participate in blatant conflicts of interest be punished? Not very darn likely!
Nature 430, 598 (05 August 2004); doi:10.1038/430598b

Biotech funding deal judged to be 'a mistake' for Berkeley

REX DALTON

Universities should avoid large-scale partnerships with industry, says report

[SAN DIEGO] Large-scale partnerships between industry and universities ought to be avoided completely, according to the author of an external report investigating such a deal at the University of California at Berkeley. Although the arrangement provided cash that energized research, the report says, it created conflicts of interest within the university.

The report was commissioned by the university's academic senate and conducted by Lawrence Busch, an agricultural sociologist at Michigan State University, East Lansing. It looks in detail at a controversial deal struck in 1998 between the university and a Swiss firm now known as Syngenta. The five-year agreement saw Syngenta contribute US\$25 million to facilities and the funding of faculty at the university's department of plant and microbial biology, in exchange for the right to capitalize on their discoveries. The deal ended last year; Syngenta officials say it was abandoned owing to a change in company strategy.

Following their two-year review, Busch and his eight colleagues conclude that the deal did not compromise academic research as many scientists had feared. But it did produce institutional conflicts of interest, Busch says, contributing to the denial of tenure to a faculty member who was critical of the deal. It also failed to produce as many patent benefits as originally hoped.

Busch hopes the report will lead to a broader debate over academic–industrial relations at all US universities. "I think it is high time for serious discussions of what the devil we want our universities to be. Berkeley is a good place to start," says Busch. "I don't think you should hermetically insulate a university from the private sector. But this deal was a mistake." Most university–industry projects fund specific researchers or scientific groups rather than an entire academic unit, as the Berkeley pact did, notes Busch.

When the deal in question was initially announced (with Novartis, whose agriculture business became Syngenta), it was so loathed by students and scientists at the university that demonstrators threw a pie at the officials announcing it. There was a widespread perception that the Syngenta deal "compromised the mission of the university", says Busch. The academic senate pushed for and won university funding to conduct a \$225,000 analysis of the deal.

Commissioning an independent report on such an issue is an unusual move, says Sheldon Krinsky, a philosopher at Tufts University, Massachusetts, who studies academic institutions. If it were not for the academic senate's concerns, certain criticisms might never have come to light, he says. Berkeley's administrators conducted an internal review of the deal two years ago; they concluded that the Syngenta pact was a good deal.

The Busch report highlights how the money injected into the university did make a difference: 26 members of the faculty received financial support from Syngenta, with individual totals ranging from \$60,000 to \$200,000. And, during the five-year period, the department made 51 potentially patentable discoveries, 12 of which emerged from Syngenta-funded research. But, out of 20 patents produced, Syngenta is pursuing research on only six, and no licence agreements with the university have been negotiated for any of those.

The university's administrative leaders declined to be interviewed, but the provost Paul Gray issued a statement saying the report is under review. Collaborations are important to the university's mission, the statement says, but "the appropriateness and structure" of such agreements should be examined. Syngenta officials did not respond to Nature's request for an interview.

2. EPA Study Finds Mercury in Every Fish Sample from America's Lakes

Contact: Emily Figdor or Liz Hitchcock, 202-546-9707

http://www.ems.org/rls/2004/08/03/epa_study_finds_.html#top_release

EPA Study Finds Mercury in Every Fish Sample from America's Lakes: Controversial Bush Plan Would Delay Cleanup for at least 10 Years

Washington, DC—In recent U.S. EPA tests of fish caught from America's lakes, every fish sample tested was contaminated with mercury, 55 percent contained mercury levels that exceed EPA's "safe" limit for women of childbearing age, and 76 percent exceeded the safe limit for children under age three according to a new Clear the Air report released today.

"Reel Danger: Power Plant Mercury Emissions and the Fish We Eat" comes as the Bush administration prepares to finalize a highly controversial proposal to delay meaningful reductions in mercury emissions from power plants until at least 2018. The Clean Air Act calls for the maximum achievable reductions of such emissions by 2008. The Bush plan, which was written at least in part by utility industry lobbyists, has sparked unprecedented public opposition and a nationwide call for strong and timely protections from power plant mercury emissions.

"Eating mercury-contaminated fish can affect the way young children think, learn, and grow," stated Emily Figdor, author of the report and policy analyst for Clear the Air. "More than half of the fish samples EPA tested were unsafe to eat for women in their childbearing years. We simply cannot wait 10 years for energy companies to make mercury reductions that they can make today," she continued.

Power plants are the single largest source of mercury emissions, contributing 41 percent of U.S. mercury emissions. Other industrial sources have reduced their mercury emissions by more than 90 percent within a few short years, but power plants continue to emit unlimited amounts of mercury into the air.

"Clean air and clean water are absolutely critical to our health," stated Clear the Air Director Angela Ledford. "The mercury reductions in the Bush administration's plan are too little, too late. The Administration should require power companies to meet the same standard that every other industry has met," she said.

Mercury is toxic to the developing brain, and exposure in the womb can cause learning disabilities, developmental delays, and other serious health problems in children. EPA estimates that one in six U.S. women of childbearing age has enough mercury in her blood to put her child at risk. Eating contaminated fish is the primary way people are exposed to mercury.

Power plants released 90,370 pounds of mercury into the air in 2002, the most recent year for which EPA data are available. Texas, Ohio, Pennsylvania, Indiana, and Illinois lead the nation for the highest power plant mercury emissions.

The technology is available to reduce power plant mercury emissions by at least 90 percent.

"Reel Danger" is based on the first available data from EPA's ongoing National Study of Chemical Residues in Lake Fish Tissue. From 1999-2001, EPA collected approximately two composite samples of one predator fish species and one bottom-dwelling fish species at 260 lakes, for a total of 520 composite samples, or 2,547 fish.

Key findings include the following:

All of the fish samples EPA tested nationwide were contaminated with mercury. Nationwide, 55 percent of the fish samples exceeded the safe mercury limit for women of average weight who eat fish twice a week and 76 percent exceeded the safe limit for children of average weight under age three who eat fish twice a week. Predator fish, including smallmouth bass, walleye, largemouth bass, lake trout, and Northern pike, had the highest average mercury concentrations. "Mercury pollution is pervasive in America's lakes. These results underscore the need to reduce mercury emissions from power plants as much and as quickly as possible," said Figdor. "Delaying action for at least 10 years will unnecessarily expose an entire generation of children to toxic mercury pollution," she concluded.

3. "CULTURE OF FEAR" at US Interior Department

Source: Public Employees for Environmental Responsibility (PEER)
Posted by: Public Employees for Envir. Responsibility - archive
Posted on: Monday, August 2, 2004 at 12:32 PM
Contact: Chas Offutt (202) 265-7337

Agency-wide Survey Shows Wide Expectation of Retaliation & Unfairness

Washington, DC — Workers within the U.S. Department of Interior live in a "culture of fear" where "hatchet people" mete out punishment based on office politics, according to an agency-wide survey and investigative report quietly posted by the agency's Office of Inspector General (OIG) late last week.

Survey results mirror reports from Interior staff received daily at Public Employees for Environmental Responsibility (PEER) from employees ranging from rank and file staff to park superintendents and other top managers who feel that they cannot disclose problems without facing retribution.

OIG sent its survey sent out to more than 25,000 employees, including supervisors, human resource managers and lawyers in agencies such as the National Park Service, Bureau of Land Management and the Fish & Wildlife Service. Nearly 40% of those who received surveys responded, with key results including—

- More than one quarter of staff fear retaliation for reporting problems;
- A solid majority do not see the disciplinary system as being fairly administered on a consistent basis; and
- Nearly half believe that discipline is taken on the basis of whom the person knows rather than what they did.

The Department of Interior is engaged in several high-profile cases of discipline against employees who have spoken out about problems, such as U.S. Park Police Chief Teresa Chambers. Yet in his transmittal letter to Interior Secretary Gale Norton, Inspector General Earl Devaney states without explanation "many, if not most, of our findings in this report predated your tenure as Secretary." Devaney reports directly to Secretary Norton. Devaney recommends that steps be taken to reduce "the fear of reprisal" and to improve the consistency of disciplinary actions taken.

"The culture of fear in Interior starts at the top," stated PEER Executive Director Jeff Ruch whose organization's attorneys will be questioning Secretary Norton and other top Interior officials under oath later this month in the Chambers case. "The Inspector General only goes halfway with his report by finding a 'culture of fear' but refusing to name who the employees fear."

4. And now MORE about the USDA.....

PDF of the full report at this link:

www.agribusinessaccountability.org/page/325/1

<http://www.commondreams.org/news2004/0723-02.htm> FOR IMMEDIATE RELEASE

JULY 23, 2004 10:49 PM CONTACT: Organization for Competitive Markets

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USDA Hijacked by Agribusiness

OMAHA - July 23 - A new report released today finds that regulatory policy at the U.S. Department of Agriculture (USDA) has been "hijacked" by the agribusiness industry, which has seen to it that many key policymaking positions at the agency are now held by individuals who previously worked for the industry.

The report, titled USDA INC., was commissioned by the Agribusiness Accountability Initiative (AAI), a network of family-farm and public-interest groups concerned about the growing power of the big agri-food corporations. It is being released today at a conference in Omaha sponsored by the Organization for Competitive Markets. The report can be found online after 9am Eastern Time at <www.agribusinessaccountability.org/page/325/1>.

"In its early days, USDA was known as the People's Department," said Fred Stokes of the Organization for Competitive Markets, which first proposed the paper. "Today, it is, in effect, the Agribusiness Industry's Department, since its policies on issues such as food safety and fair market competition have been shaped to serve the interests of the giant corporations that now dominate food production and distribution."

"It is not surprising that USDA is slavishly following the agenda of agribusiness when you consider who holds many of the top jobs at the Department," said Philip Mattera, Director of the Corporate Research Project of Good Jobs First and author of the report. "The upper ranks of USDA are filled with industry veterans, while people formerly associated with family-farm, consumer or public-interest groups are just about nowhere to be found."

In addition to working directly for agribusiness companies such as ConAgra and Campbell Soup, top USDA officials came to the Department from industry trade associations (such as the Food Marketing Institute) and producer groups (such as the National Cattlemen's Beef Association and the National Pork Producers Council), which are closely aligned with big processing companies and are partially funded by them. Even Secretary Ann Veneman, who has spent most of her career as a public official, has a past industry connection: she served on the board of directors of Calgene Inc., a biotechnology company that was later taken over by Monsanto.

"It's difficult to avoid the conclusion that agribusiness has packed USDA with its people," said Peter O'Driscoll of the Center of Concern, coordinator and co-sponsor of AAI.

The report illustrates the hijacking of USDA policymaking through five case studies:

- USDA's refusal to adopt strict safety and testing measures for bovine spongiform encephalopathy (BSE), despite the appearance of a case in Washington State last year.
- USDA's refusal to vigorously enforce rules against anti-competitive practices in the cattle industry, despite the growing tendency of the big meatpacking companies to force independent ranchers into so-called captive supply arrangements.
- USDA's promotion of weakened slaughterhouse inspection practices in the face of a resurgence of health hazards such as E.coli bacteria and listeria. The Department also continues to promote dubious "solutions" such as irradiation.
- USDA's continuing boosterism for agricultural biotechnology, despite a lack of consumer acceptance and the plunge in exports due to international resistance to genetically modified crops.
- USDA's support for concentrated animal feeding operations (CAFOs), despite the growing evidence of serious public health effects of these factory farms. The Department has also supported the misguided policy of using conservation dollars to subsidize the futile attempts of CAFOs solve their manure problems.

In each of these cases, the report notes the presence of industry veterans among the chief officials responsible for adopting or maintaining these questionable policies.

The report concludes with a set of recommendations on how to begin loosening the grip of agribusiness on USDA's policies. These include:

- Reappraisal of ethics rules to prevent government officials from overseeing policies that directly affect the interest of their former employers;
- Enhancement of Congressional oversight over regulatory appointees;
- Evaluation of whether USDA can continue to serve both as a promoter of U.S. agricultural products and a regulator of food safety; and
- Further research on revolving-door conflicts of interest at USDA.

Progress on these measures, the report argues, will begin to turn USDA Inc. back into an arm of government that represents the public interest.

The report was commissioned by a working group of the Agribusiness Accountability Initiative. The following working group members helped research and edit the paper:

Scotty Johnson, Defenders of Wildlife

Ben Lilliston, Institute for Agriculture and Trade Policy
Patty Lovera, Public Citizen
Larry Mitchell, American Corn Growers Association
Peter O'Driscoll, Center of Concern
Mark Smith, Farm Aid
Fred Stokes, Organization for Competitive Markets

5. 'Data Quality' Law Is Nemesis Of Regulation

By Rick Weiss
Washington Post Staff Writer
Monday, August 16, 2004; Page A01

Things were not looking good a few years ago for the makers of atrazine, America's second-leading weedkiller. The company was seeking approval from the Environmental Protection Agency to keep the highly profitable product on the market. But scientists were finding it was disrupting hormones in wildlife -- in some cases turning frogs into bizarre creatures bearing both male and female sex organs.

Last October, concerns about the herbicide led the European Union to ban atrazine, starting in 2005. Yet that same month, after 10 years of contentious scientific review, the EPA decided to permit ongoing use in the United States with no new restrictions.

Herbicide approvals are complicated, and there is no one reason that atrazine passed regulatory muster in this country. But close observers give significant credit to a single sentence that was added to the EPA's final scientific assessment last year.

Hormone disruption, it read, cannot be considered a "legitimate regulatory endpoint at this time" -- that is, it is not an acceptable reason to restrict a chemical's use -- because the government had not settled on an officially accepted test for measuring such disruption.

Those words, which effectively rendered moot hundreds of pages of scientific evidence, were adopted by the EPA as a result of a petition filed by a Washington consultant working with atrazine's primary manufacturer, Syngenta Crop Protection. The petition was filed under the Data Quality Act, a little-known piece of legislation that, under President Bush's Office of Management and Budget, has become a potent tool for companies seeking to beat back regulation.

The Data Quality Act -- written by an industry lobbyist and slipped into a giant appropriations bill in 2000 without congressional discussion or debate -- is just two sentences directing the OMB to ensure that all information disseminated by the federal government is reliable. But the Bush administration's interpretation of those two sentences could tip the balance in regulatory disputes that weigh the interests of consumers and businesses.

John D. Graham, administrator of the OMB Office of Information and Regulatory Affairs (OIRA), who has directed implementation of the Data Quality Act, said the law will keep the federal government hewing to "sound science." He said the act, which allows people and companies to challenge government information they believe is inaccurate, is equally accessible

to "a wide diversity of interests, both in the business community and in the consumer, environmental and conservation communities."

But many consumers, conservationists and worker advocates say the act is inherently biased in favor of industry. By demanding that government use only data that have achieved a rare level of certainty, these critics maintain, the act dismisses scientific information that in the past would have triggered tighter regulation.

A Washington Post analysis of government records indicates that in the first 20 months since the act was fully implemented, it has been used predominantly by industry. Setting aside the many Data Quality Act petitions filed to correct narrow typographical or factual errors in government publications or Web sites, the analysis found 39 petitions with potentially broad economic, policy or regulatory impact. Of those, 32 were filed by regulated industries, business or trade organizations or their lobbyists. Seven were filed by environmental or citizen groups. Some environmental groups are boycotting the act, adding to the imbalance in its use.

Among the petitions:

- The American Chemistry Council and others challenged data used by the Consumer Product Safety Commission (CPSC) as it sought to ban wood treated with heavy metals and arsenic in playground equipment.
- Logging groups challenged Forest Service calculations used to justify restrictions on timber harvests.
- Sugar interests challenged the Agriculture Department and the Food and Drug Administration over dietary recommendations to limit sugar intake.
- The Salt Institute and the U.S. Chamber of Commerce challenged data that led the National Institutes of Health to recommend that people cut back on salt.
- The Nickel Development Institute and other nickel interests challenged a government report on the hazards of that metal.
- The Association of Home Appliance Manufacturers petitioned the CPSC to retract data that ranked the risk of lint fires in various clothes dryers.

Environmental and consumer groups say the Data Quality Act fits into a larger Bush administration agenda. In the past six months, more than 4,000 scientists, including dozens of Nobel laureates and 11 winners of the National Medal of Science, have signed statements accusing the administration of politicizing science.

6 Pesticides linked to child cancer: Pesticides crossed the placenta

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<http://news.bbc.co.uk/2/hi/health/3632002.stm>

Pesticides and other pollutants in the environment may contribute to childhood leukaemia, say UK scientists. In laboratory studies the Bristol University team showed pollutants were able to travel across the placenta to the unborn baby. The scientists presented their findings to a conference held by the Children with Leukaemia charity in London. Experts doubted pesticides were involved in most cases and said more evidence was needed.

"We know that childhood leukaemia starts in the womb and this could well be a factor." Said study author Professor Alan Preece. Leukaemia is the term used to describe a number of cancers of the blood cells. In children, about 85% of these are acute lymphoblastic leukaemia or ALL and acute myeloid leukaemia (AML) accounts for most of the rest. Dr Margaret Sanders and colleagues carried out tests on donated human placentas and pregnant guinea pigs. They found compounds used as pesticides, such as DDT and other organochlorine compounds, readily crossed the placenta.

In the guinea pigs, the compounds accumulated in different organs of the unborn baby. Co-researcher Professor Alan Preece said: "What the findings show is that if the mother takes these [pesticide compounds] in in food, they do get through to the foetus. "The exact levels are as yet unknown but we know that childhood leukaemia starts in the womb and this could well be a factor." He said more research was needed to find out how this might contribute to leukaemia. "All we can assume is that, like everything else that a foetus is exposed to, like ionising radiation, they are more sensitive because the cells are all developing and turning over rapidly." But he said this was only one of many factors that might be important in childhood leukaemia.

Professor Mel Greaves from the Institute of Cancer Research in London said: "We do not think pesticides are important for the common form of leukaemia in children. We have found a possible link with a rare form and we published a study three years ago. This was in young babies. For older children there is virtually no evidence that pesticides are a factor." He said there was a study underway in California looking at the possible link between pesticides and childhood leukaemia. He thought this might provide greater understanding when it reports over the next couple of years. Professor Greaves said available evidence pointed to genetic factors and exposure to infections during childhood as potentially important contributors.

The Leukaemia Research Fund called for more research.

7. Grower Experiences

On my sixth year of tea and compost with more organic inputs. The one thing that I have learned is that I still know very little about the whole turf system. Going totally organic on high cut grass is very easy, the tough part are the low cut grasses.

On golf courses in the US we are asking the plants to perform under unnatural circumstances. Cutting heights below 1/8", fertility programs bordering on starvation all in an effort to have "fast putting surfaces". We also now spec greens with 80% sand and 20% peat giving us cec's ranging from 1-2, perc rates from 10 to 20" per hour. Very unnatural system. With that said we are making progress, I myself have significantly lowered chemical inputs. Part of this is due to raising cutting heights and learning just what the golfers will tolerate and large amts of tea, very tough at first to change ones paradigm but well worth it (maybe need a 12 step program for us turf heads).

One of my clients has not sprayed for dollar spot on his fairways in 2 years, but still needs to spray his greens. The best advice I can give to everyone is don't make promises to superintendents, let them see for themselves and they will be a lot happier and a client for life. One other thing I did which I think helps is to start a beneficial nematode program (Dr. E has the protocol) and load the tea up with these babies, really has helped with the grub problem.

One side note - got a call from a golf course in BC the other day. They started a tea program and immediately got dollar spot 2 weeks before normal occurrence. They bought a brewer and were told just to follow the tea brewing manual. They had no idea what good compost was and wanted to add some pretty bizarre things to the brewing process. My advice was to call Paul in NY and start testing. I don't know if they are still brewing, it would be a shame if they were not.

Sorry for rambling, as far as the advisor system I feel only qualified to speak on turf and would really be doing someone a disservice to comment on other systems.

We have a local lawn care professional who has been using vermi-castings for about 3 years now and he is on the second year of using compost tea. The castings and tea are his complete nutritional program for the grass. He said that this year he is not having any trouble with chinch bug, where neighbors around are having a problem. He believes it is because the young larval stages do not like the biology. He cares for lawns not golf greens, but it does show what biology can do.

Talking with a golf superintendent the other day he said that this makes lots of sense. The lack of chinch bug trouble is most likely because there is no thatch problem. Chinch bug larvae like to live in the thatch layer.

In my view, biology is even more important than organic.

Tim Livingstone,
Jolly Farmer Products

