

CSA Newsletter

Canadian Society of Agronomy

March 2001



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President's Message

As a scientific society, one of the key functions that we have is promoting the dissemination of scientific information. While the Canadian Journal of Plant Science plays a key role in publishing agronomic research relevant to Canadian agriculture, our annual meetings provide an opportunity for presentation and discussion of current research activities. Some of the input from the CSA membership indicates a desire to strengthen the technical and scientific sessions at our annual meetings.

At last year's meetings in Winnipeg, representatives of the Canadian Society of Animal Science, the Canadian Society of Soil Science, the Canadian Society of Agrometeorology and the Canadian Society of Agronomy met to discuss the need for a national coalition of agricultural societies to serve as a united voice for agricultural science in Canada. The intent is not to replace AIC, but for the societies to cooperate to better serve the specific needs of the scientific communities that we represent. One logical function of such an umbrella organization would be to work together to organize technical meetings focussed on scientific agriculture. Such joint, science-focussed meetings could provide an ideal venue for discussion of today's multi-disciplinary research programs, which involve integration of a range of specializations. Please come to our annual meeting in Guelph prepared to discuss the potential benefits and pitfalls of creating such a cooperative alliance with the other Canadian scientific societies.

We are also exploring ways to increase our interaction with the Certified Crop Advisors (CCAs). A major part of the CCA program involves keeping current in agricultural developments through high quality training, which is certified with Continuing Education Units (CEUs). As researchers, educators, technology transfer personnel and business people involved in agronomy, we should be able to contribute significantly to the CEU needs. We would also benefit by ensuring that the information we generate makes its way to the people that will put it into practice. Some of the ideas we are considering include creation of regional "speaker's lists" of agronomists willing to make presentations on particular topics and co-sponsoring of meetings that provide CEUs. Comments and suggestions can be sent to Steve or to me.

More immediately, I'd like to encourage you to take advantage of the opportunities that CSA is currently providing for information delivery.

Our website is updated at least monthly and we are always looking for useful material to include. Emails are distributed to members monthly, with updates and recent job listings. These two resources can be used to reach a national audience of agronomists with timely information and announcements. Our newsletter comes out quarterly and submissions are always welcome. Please remember that the strength of any society lies in the participation of its membership.

*-Cindy Grant
President*

CJPS Submissions for 2000

The Canadian Journal of Plant Science received 196 manuscript submissions during the year 2000, the highest submission rate since 1995. This is good news for CJPS as the submission rate had dropped sharply back in 1997 and 1998. Peter Hicklenton succeeded Paul Jefferson as editor on January 1, 2001 and has already received seven submissions for the new year (as of January 03).

Paul Jefferson

Plans for 2001 CSA Meetings

Calls for papers and posters are out. The deadline for response is March 31, 2001. The registration brochure for the overall meeting should be on the web at www.AIC2001.com.

Two special Symposia have been organized. On Monday, July 9, the topic is Cropping Systems and Environmental Quality. This is joint with CSAM. Martin Entz is one of the featured speakers.

On Wednesday, July 11, there is a special symposium on Genomics and Biotechnology. This is joint with Can. Soc. Animal Science. The CSA part of this is a first Canadian symposium on crop genomics. Participants include Dr. Nick Tinker, recently hired full-time by ECORC (AAFC, Ottawa) to work on genomics; Dr. Manish Raizada (Dept. of Plant Agric., U of G, recently hired to work on crop genomics and one of the few Canadian crops researchers to get Genome Canada support; and Dr. Mark Gijzen, AAFC, London, who has been working for several years on genomics of disease resistance. The CSAS part will delve into Animal Biotechnology, including Dr. Cecil

Forsberg's work on the herd of "Enviropigs" which secrete phytase in their saliva to make plant P more available.

A third special program is for CCA-Continuing Education Units. The topic is N Fixation and N Use. Speakers include Dave Hume and Don Smith on the practical aspects of inoculants and N fixation, Dr. John MacLeod (AAFC, Charlottetown) on the use of legumes to reduce N fertilizer requirements, and Dr. Eric Beauchamp (U of G) on reducing N fertilizer requirements through efficient use of manure and better N management. Thanks to the CSA members for supporting this initiative.

The technical session papers and posters will be on Tuesday, July 10. The Call for Papers and Posters is on the CSA website. SeCan has agreed to support graduate student awards. Syngenta has agreed to support graduate student registrations which should allow us to hold graduate student registration at \$50.00.

The local organizing committee (all young scientists, Drs. Liz Lee, Istvan Rajcan and Bill Deen, except one old guy, me!) is working hard to encourage cutting edge science in the papers and posters. Please help by getting yours in before the March 31 deadline.

Two last things. Lots of tours on Sunday. Ours is joint with Engineers and visits First Line Seeds (breeding food grade and conventional soybeans), a visit to Mennonite Country, with lunch in St. Jacobs, the organic dairy farm and ice cream store of Martin de Groot and family, and a stop with Bruce and Debbie Whale at their broiler and dairy setup. Bruce is the past chair of the Ontario Forage Crop Committee and Debbie is an agricultural lobbyist, President of the Poultry Industry Council in Ontario (and George Jones' daughter).

Tuesday night's banquet, again joint with CSAM, will be at the Elora Research Station, complete with tours, and dinner by Janet and Brian Horner, Ontario's best rural catering service.

So come on down (or up)!

- Dave Hume

Interviews with Retirees and Students

The CSA newsletter features interviews with retired CSA members and with student members. The interviews highlight aspirations and accomplishments of those who have spent much time in their pursuits in agronomy as well as those who are just embarking on a career in agronomy. This newsletter features...

George Chemining'wa

So when you arrive in Manitoba in the middle of winter, straight from Kenya, you're bound to find things a bit different. George Chemining'wa describes it succinctly. "The first winter was brutal."

After getting his masters in agronomy at the University of Nairobi, George was working as an assistant lecturer when he saw the ad for a Canadian Commonwealth Fellowship. He applied, was successful and came to the University of Manitoba where he is now a Ph.D. student studying the abundance of rhizobia, their efficiency and genetic origins particularly as they relate to pea and lentil crops in Southern Manitoba.

Currently, farmers are told to inoculate their pea and lentil crops with good quality commercial inoculants at every planting time. If farmers can reduce the amount of inoculant they need to apply, they can cut down on their labour and costs as well as benefit the environment. The knowledge gained may also allow similar research in Kenya where study results will be even more useful as farmers there can't easily afford to buy fertilizer. George's research included 21 Manitoba sites in 1998, and 5 in 1999 and 2000.

Preliminary results suggest that pea/lentil rhizobia are abundant in areas previously planted to peas/lentils, but not in areas that had not seen peas/lentils before. The efficiency of the indigenous rhizobia compared to commercial inoculants varied from one site to another. DNA fingerprinting suggests there is a lot of genetic diversity and that the bacteria previously introduced may not remain genetically stable.

George was raised on a 25 acre farm in western Kenya in a polygamous family that included three wives and 18 children. They grew coffee, maize, sweet potatoes, bananas, plantain, cassava, arrowroot, sugar cane, onions, tomatoes, cabbages, kale, dry beans and cow peas. Although his father was not well educated, some of his friends were and they did well, so George's father impressed on the children how important it was that they study hard. George has a brother with a Ph.D. in engineering from Leeds and a number of sisters who are high school teachers including one who now lives in the US.

One thing George won't forget about Manitoba is curling. He says he got so excited while he was sweeping hard that he fell on the ice just before he was done. He also likes hockey, but has only tried it while wearing his running shoes. "I wouldn't even try skates; I'm not all that daring" he explains.

When George returns to Kenya he will teach and do further work on rhizobia. The students will then be able to go and teach the farmers which will help them farm more efficiently. George feels that teaching to impart knowledge and sharing what you know with these future specialists brings joy. He will get joy from something else in Kenya, too, rejoining his wife and three young children who have remained there while he came to Manitoba.

Orla Nazarko

The saying is you can take the girl out of the country but you can't take the country out of the girl but this time it's a case of putting the girl in the country. Orla Nazarko, who is doing her masters in the Department of Plant Science at the University of Manitoba is a city girl born and raised in Winnipeg.

She didn't intend to study agriculture, but after starting out in food science, her exposure to some of the agriculture courses had her hooked. She now has an undergrad degree in agronomy and is working on her masters, doing an on-farm case study of pesticide free production (PFP). Orla explains that PFP is a certification concept developed in late 1999. It's an idea based on trying to respond to the challenges prairie farmers are

facing which are resulting in what she says appears to be a mass exodus of farmers, especially from the smaller family farms. PFP has all kinds of benefits to both the environment and consumers, and unlike organic certification, which is a permanent one, PFP certification is annual. Orla says that one advantage of PFP is that there is no transition period although there are some restrictions on what you can use before hand. It is designed to be flexible, can be a stepping stone to organic certification and allows for conventional application of fertilizer. She says PFP can also be used with zero tillage and is enthusiastic about its potential, saying “It appeals to a wide range of farmers and is more main stream so it has the potential to make a bigger impact than organic.” The study covers two seasons, with one complete.

Once Orla finishes her masters she doesn't expect

Quote:

Timing has an awful lot to do with the outcome of a rain dance.

-Author Unknown

to pursue a Ph.D. but hasn't decided what she will do. Options she's considering include writing or education. She feels strongly that “It is important for urban people to know what is going on in the agricultural area.” Orla thinks the problem of farmers not getting the ear of government is that the majority of the population is urban, they don't understand the importance of farmers and they have no interest in what is happening on farms.

Orla says that attending an all girls school with a very strong math and science program provided a positive environment and encouragement to continue in science. She notes that sometimes she is sensitive to the fact that not only is she a female but she also has an urban background which makes her a bit unusual in her program.

Whatever she does when she gets her masters, the family farm will have a supporter in Orla. “Farmers are not just about producing food,” she says “but also about preserving and acting as stewards of the

land.”

-Ingrid Ostick, Interviewer

From the CSA Office

Membership campaign: Special thanks to all of you who have helped with the recruitment of new members. There is absolutely no doubt that the best people to interest new members are the people who already understand the importance of CSA. It is also nice to see that quite a few people have taken advantage to the rebate offer. It is still in place, so you can still get your rebate! You get a \$30 rebate when you bring in one new full member, and a \$60 rebate (equivalent to your membership fee) when you bring in two. If you know of someone who might be interested in joining, see what you can do! Hopefully by next newsletter, I'll be able to list the members who have helped in this way to recruit new members.

Posters: I need some ideas for the distribution of our new CSA posters. They are quite attractive, or at least I think so, maybe because I like field plots! The ideal would be to have copies on display in agronomy-related offices and laboratories. It is important to all of us to promote our profession. They are fairly small, on light paper. I will send some to obvious places, but if you have an idea, I'm happy to send one to you.

Corporate Sponsorships: The annual corporate sponsorships of the CSA are available now. The program is relatively new, and so we have the flexibility to match the returns for the sponsorship to a variety of levels of support. If your corporation is interested, send me an email at sheppards@ecomatters.com.

Canadian Journal of Plant Science – Papers in the April 2001 Issue

P00-023 Physical sod suppression as an alternative to herbicide use in pasture renovation with clovers
P. Seguin, P. R. Peterson, C. C. Sheaffer, and D. L. Smith

P00-072 A novel technique for evaluation of apple (*Malus x domestica* Borkh.) cultivars for susceptibility to powdery mildew
P. L. Sholberg, W. D. Lane, P. Haag, K. Bedford, and L. Lashuk

P00-073 Maize kernel moisture, carbon and nitrogen concentrations from silking to physiological maturity
B. L. Ma and L. M. Dwyer

P00-090 AC Helena spring wheat
H. G. Nass, L. P. Shugar, and M. J. Etienne

P00-093 The importance of early season phosphorus nutrition
C. A. Grant, D. N. Flaten, D. J. Tomasiewicz, and S. C. Sheppard

P00-100 DS Stalwarth field pea
L. Andersen, T. Warkentin, O. Philipp, A. Xue, and A. Sloan

P00-102 Survey of yield losses due to weeds in central Alberta
K. N. Harker

P00-118 CO430, CO431 and CO432 corn inbred lines
L. M. Reid, G. McDiarmid, A. J. Parker, T. Woldemariam, and R. I. Hamilton

P00-106 Fertilizer responses of dry bean in southern Alberta
R. H. McKenzie, A. B. Middleton, K. W. Seward, R. Gaudiel, C. Wildschut, and E. Bremer

P00-065 Yield stability indices of primocane-fruiting red raspberry (*Rubus idaeus* L.)
J. A. Sullivan and J. P. Privé

99-128 The biology of Canadian weeds. 1--. *Ulex*

europaeus L.

D. R. Clements, D. J. Peterson, and R. Prasad

99-180 Differential performance of pinto bean under varying levels of soil moisture
T. M. Nleya, A. E. Slinkard, and A. Vandenberg

P00-021 Effect of seeding rate on seed production of perennial ryegrass after establishment with a grain companion crop in the Peace River region of north-western Canada
N. A. Fairey and L. P. Lefkovitch

P00-048 Comparing weed composition in natural and planted hedgerows and in herbaceous field margins adjacent to crop fields
C. Boutin, B. Jobin, L. Bélanger, and L. Choinière

P00-062 Evaluation of coated seeds as a Rhizobium deliver system for field pea
W. A. Rice, G. W. Clayton, N. Z. Lupwayi, and P. E. Olsen

P00-107 AC Sungold summer turnip rape
D. L. Woods and K. C. Falk

P00-064 Effects of day and night air temperature in early season on growth, productivity and energy use of spring tomato
A. P. Papadopoulos and X. Hao

P00-068 A re-evaluation of controlled freeze-tests and controlled environment hardening conditions to estimate the winter survival potential of hardy winter wheats
L. V. Gusta, B. J. O'Connor, Y.-P. Gao, and S. Jana

P00-089 Crop yield and soil nutrient status on 14 organic farms in the eastern portion of the Northern Great Plains
M. H. Entz, R. Guilford, and R. Gulden

P00-105 Availability of late-season heat and water resources for relay and double cropping with winter wheat in prairie Canada
J. R. Thiessen Martens and M. H. Entz

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