ISSN 1038-3549

International Herbage Seed Group

Newsletter

Number 38 **April 2005**

IHSG

President:
Dr. William C. Young III, PhD
Professor and Extension Seed Production Specialist,
Department of Crop & Soil Science
Crop Science Building, Room 127
Oregon State University
Corvallis, OR 97331-3002
Phone: 541-737-5859
Fax: 541-737-1589
E-mail:William.C.Young@orst.edu

Newsletter Editor:
Dr Athole H. Marshall
Institute of Grassland and Environmental Research, Plas Gogerddan
Aberystwyth, SY23 3EB
United Kingdom
Phone: +44 1970 823171
Facsimile: +44 1970 828357
E-Mail: athole.marshall@bbsrc.ac.uk

IHSG WORKSHOP

The IHSG workshop will be held in the UK in July this year, between the International Grasslands Congress in Dublin and the International Turfgrass Conference in North Wales. Details of the workshop, accomodation, programme and tours can be found inside this edition. Late registrations still welcome but please hurry!!!!!

Planning is also underway for the 6th IHSG Conference. Details of the potential conference venues are in the president's column.

****
****
****

Contents

Presidents column..... 2
Endophytes in Denmark..... 4
Survey of feed value of grass aftermath..... 5
IHSG workshop..... 8
Conference notes..... 13

President's Column

Welcome to the fourth issue (No. 38) of the electronic-only edition of the International Herbage Seed Group newsletter. Again, those reading it have received notice via e-mail that it was recently posted on the IHSG web site (http://cropandsoil.oregonstate.edu/ihsg/default.htm). Thank you for keeping your membership information current and encouraging your colleagues to do the same. Please continue to invite others to visit our web site and register as members. Presently, we have 238 members from 40 countries. This is a gain of 16 new members and three additional countries.

Again, more time has passed since our last newsletter (No. 37, July 2004) than I like to admit; however, there has been a lot organizational activity going on "behind the scenes." Foremost among these efforts has been the planning for the July 6-9 IHSG Workshop in Winchester, UK. I am certainly looking forward to seeing many of you there this summer. More details about the workshop can be found later in this newsletter. However, I would like to convey the guiding philosophy that we chose in developing the workshop program.

Firstly, it is a workshop… and there is a difference between a workshop and a conference. At a workshop, subjects are discussed – whereas at a conference one person presents a paper while the other attendees listen. Thus, in a workshop it is important that all delegates participate in the discussion, which is only possible if the arriving delegates know what is to be discussed and come prepared with ideas to contribute during the forum.

As you will see in the program described later in this newsletter, four topics (90 minutes each) have been organized for discussion during the workshop. Two main speakers for each session have been identified and have agreed to provide very brief introductory comments (each speaking for 5-7 minutes) with the goal of presenting information in a way that will stimulate discussion. Before arriving at the workshop, all persons registered will receive a 1-2 page "discussion outline" listing questions and comments that we (as workshop organizers) would like workshop participants to help us answer. Attendees will be encouraged to come prepared with an overhead or a handout sharing the results of their experience with the group. This approach will allow everyone the opportunity/responsibility to make a meaningful contribution to the program.

We will also attempt to "capture" all our discussion for a "post-workshop" summary in the form of a brief review paper. We intend to identify several persons willing to function as *rapporteurs*, who would summarize the discussion from the workshop. This would be circulated to the participants afterwards and then published in a subsequent newsletter, which would be a valuable output from the workshop.

Secondly, I would like to like to update members on the planning for the Sixth International Herbage Seed Conference (IHSC-6), which will be held during 2007. As was noted in the minutes from the last conference (IHSC-5) in Australia (in the IHSG Newsletter No. 37), two proposals were offered. The first by, Trygve Aamlid and Birte Boelt, suggested a Norway-sited conference followed by a seed production tour in Denmark. The second possibility, offered by Jean Hanson, was to hold the conference at International Livestock Research Institute in Addis Ababa, Ethiopia. Since that time, formal bids have been received for both potential sites to host the IHSC-6. Some brief details on both options are presented below.

Ethiopia

A tentative budget based on an attendance of 100 people computes a cost of US$410 per person (~•310). This includes the cost of room and board for five days. We are advised that the best time to see forages in the field would be in September-October, and that the months to avoid (heavy rain) would be from mid-June to the end of August. The organizers envision having the conference start on a Tuesday and run through Thursday with a full day field visit to see forage seed production at their research site and some on-farm forage work on Friday. This would mean 5 nights spent at the International Livestock Research Institute in Addis Ababa, Ethiopia. Although this budget is relatively inexpensive, travel costs to Ethiopia need to be considered in the final decision. In addition, we anticipate there will be options for a post-conference tour to visit some local forage seed production in other parts of Ethiopia. This could be combined with some additional days to visit historic sites.

Norway/Denmark

The proposed Norway/Denmark budget shows a per person cost (based on an attendance of 80-100 persons) of •475 for the conference plus •333 for the tour, or about •808 total. A tentative schedule would be to arrive in Norway's seed production region on Sunday, June 17, and convene the conference the next day. A two-day schedule of oral and poster presentations, with a late

afternoon visit to several seed growers and an evening barbeque on Tuesday, would be followed by a Wednesday tour of the Landvik Research Station and an excursion along the Norwegian south coast. The conference attendees would depart from Kristiansand, Norway on an overnight ferry and arrive in Hirtshal, Denmark on Thursday morning. The post-conference tour would traverse the Jutland on Thursday, and continue to Funen and Sealand on Friday and Saturday, concluding in Copenhagen by mid-afternoon on June 23. All costs for meals and lodging, plus transportation during the conference and tour are included in this proposal.

The IHSG executive committee would like to receive your input as to a preference you have for these two sites. In order to achieve that information I have set up an electronic ballot on the IHSG website to allow members to "vote" for their first choice. To do so you must go directly to this address: http://cropandsoil.oregonstate.edu/ihsg/vote06.html, as the link is not shown from the IHSG web site's home page. Only votes from members will be accepted, and you can only vote once! Please consider your vote carefully, and make your preference know before May 1 as this site will be removed after that date.

I hope you will read the remainder of this newsletter and gain something from it. I am always open to new ideas as to how our organization can be of greater value to its members. Please e-mail me any time at: william.c.young@oregonstate.edu. Thank you.

Bill Young

****

****

Endophytes in Denmark

Anne Mette Dahl Jensen

Perennial ryegrass (*Lolium perenne* L.) is an economically important pasture grass due to high productivity and high quality. Perennial ryegrass is also a major seed crop in Denmark. In addition to occurring on semi-natural grasslands as a wild type, investigations indicate that wild populations of perennial ryegrass are common hosts of the endophytic fungi *Neotyphodium lolii* Latch, Christensen and Samuels. However, this fungus also occurs in a number of commercial varieties. The presence of this fungus is known to confer drought resistance and resistance against different insect pests such as the Argentine Stem Weevil, although the occurrence is also associated with ryegrass stagger, a neurological disorder occasionally seen in livestock grazing on endophyte-infected pastures. In breeding context the benefit of this symbiotic association is of interest.

Investigations from several European countries have frequently demonstrated the occurrence of ryegrass endophytes in wild populations of perennial ryegrass. However, no experiments have been carried out in Denmark on endophytes in wild populations of perennial ryegrass, while some unpublished work has been carried out on commercial cultivars.
In the process of collecting fungal endophytes from semi-natural habitats for a biodiversity study, the occurrence of *Neotyphodium* endophytes in perennial ryegrass in Denmark was investigated.

Sixty-two Danish locations representing twelve different habitat types were investigated using tissue print immunoblot to determine the *Neotyphodium* infection-status in the perennial ryegrass. Most habitats were different types of semi-natural grassland. Endophytes were found in 77% of the locations, infection ranging from 4% to 82%. The highest infection rates were found in communities, which had been grazed upon or intensively used by the public. This can probably be explained by an enhanced survival of endophyte-infected plants in a plant community where grazing and intensive-use are environmental stress factors. Therefore the management practice of semi-natural grasslands is considered a driving force toward higher endophyte infection rates in Denmark. Anthropogenic stress might be a stress factor in favour of the endophyte. The survey presented here provides the first indication that Neotyphodium ryegrass endophytes are widely spread in semi-natural grass communities in Denmark, and that high levels of infection are not restricted to Mediterranean regions with summer drought.

In Denmark *N. lolii* infected perennial ryegrass is also grown for seed production and hay and green-yield (taken after seed harvest) is frequently used as animal fodder.
In order to follow the establishment of the perennial ryegrass endophyte in a seed crop, the infection levels of perennial ryegrass from 9 locations, in pre-basic, basic and F1 seed, and the mycelium density within the infected plants during the growing seasons 1998-2000 were investigated. This investigation of a 30% endophyte-infected seed variety (cv. Delaware) indicates that the *Neotyphodium* endophyte infection is stable in a Danish seed crop over the first years after establishment, indicating further that there is no immediate short-term selection pressure on the endophyte under Danish growing conditions. The endophyte was well established in most plants and the mycelium content within plants showed seasonal variation.

To evaluate the fodder quality of secondary products from the seed crop (such as straw and regrowth taken after seed harvest) the lolitrem B concentration was examined. The experiment was based on farm-scale results from the endophyte-infected seed crops. The lolitrem B concentration was monitored from spring to autumn. A clear seasonal variation in the lolitrem B level was observed. The highest level of lolitrem B occurred in July. At one location the concentration was sufficient to induce mild ryegrass stagger. Taking into account the fact that only 1500 hectares in Denmark were covered with endophyte-infected perennial ryegrass cultivars in 2003 the potential risk of causing ryegrass stagger in the feeding animals is not considered a large problem. However, more endophyte-infected crops might be grown in the future and the potential risk of stagger will increase. As a consequence a test centre for farmers and companies has now been established in Denmark in order to analyse for lolitrem B and other endophyte toxins.

The investigation of the production of lolitrem B in several fields of the same grass variety demonstrates a large variation in toxin content between fields and within fields under Danish growing conditions. However, due to the large variation, a qualified evaluation of straw and regrowth quality is difficult and a prediction of the lolitrem B content is impossible. Many factors influence the production. Our results only visualise the production in relation to this grass variety in these specific fields over a period of 3 years. To be able to make a qualified risk evaluation more information about production profiles in other varieties at crop level and the influence of external factors on the production is needed.

More information can be found here:

Jensen A. M. D. and Roulund N. 2004.
Occurrence of Neotyphodium endophytes in permanent grassland with perennial ryegrass (Lolium perenne) in Denmark. Agriculture, Ecosystems and Environment, 104; 419-427

Jensen A. M. D. 2005.
Endophyte persistence and toxin (lolitrem B) production in a Danish seed crop of perennial ryegrass. European Journal of Agronomy – in press, available online 10 Dec. 2004

The Danish Institute of Agricultural Sciences, Dept of Genetic and Biotechnology, 4200 Slagelse, Denmark

Survey of Feed Value of Grass Seed Aftermath

Calvin Yoder

Background: Reducing winter feeding costs while maintaining acceptable levels of beef production is the number one goal of cow/calf producers. Grass seed acres have increased substantially in Alberta over the past five years and baling the straw after harvest is a common practice used by seed growers. In most years re-growth will occur with some species such as creeping red fescue, tall fescue and meadow bromegrass. The grass seed straw and the re-growth in the fall can be cheap sources of winter feed and late fall grazing. In most cases grass seed straw should not be considered a complete ration for wintering beef cows so it is necessary to know the feed values of the straw to develop a ration.

Feeding grass seed straw to livestock is certainly nothing new to grass seed growers but we lacked information that summarized the feed quality of straws, the differences among species and the variability in feed quality from year to year. The information collected from the survey may also be included in Cow-Bytes the next time the program is updated.

Objectives: To provide information to producers on the feed value of aftermath from several different species of grass seed crops grown in Alberta.

Methods: Grass seed straw samples have been collected from fields throughout the Peace River Region over the past few years with the majority of the samples being collected in 2001 and 2002. Straw samples were collected by probing 25-30 bales/field using a hay probe. The samples were tested for protein, ADF, TDN, DE and in some cases NDF. Calcium, phosphorous, potassium and magnesium were also determined but are not included in this report. Following are brief descriptions of several feed quality terms.

Protein: The total protein contained in feeds as determined by measuring nitrogen content.

ADF: Acid Detergent is the fibrous least digestible portion of roughage. ADF consists of lignin and cellulose. ADF is used to determine digestibility and energies. As ADF levels increase, digestible energy levels decrease.

TDN: Total Digestible Nutrients includes all the digestible nutrients - protein, fat, carbohydrates and fibre. It represents the approximate energy value of feed.

DE: Digestible Energy is the amount of energy consumed minus the amount of energy lost in the feces.

NDF: Neutral Detergent Fibre is commonly referred to as the cell walls. NDF measures cellulose, hemicellulose, lignin, silica, tannins and cutins. Higher NDF levels generally lead to lower intake by the animal.

Forage Seed Specialist, Spirit River, Alberta Agriculture, Food and Rural Development

Table 1. Suggested energy and protein requirements for a beef cow at various stages of gestation (Erasmus Okine, AAFRD).

	Protein %	**ADF %**	**TDN %**	**DE Mcal/kg**
Cow-mid preg	6.9 – 8	59	50	2.2
Cow late-preg	7.7 – 9	50	54	2.4
Cow-lactation	10-12	32 – 47	56-63	2.5-3.3

The grass species sampled included creeping red fescue, tall fescue, meadow bromegrass, smooth bromegrass and timothy as these are the main seed crops grown in Alberta.

Results: Table 2 shows some average feed values of cereal straws collected in Alberta.
The values can be used as a comparison to the grass seed straws listed in the following tables.

Table 2. Average protein and energy values of cereal straws collected in Alberta.

SPECIES	**Average Protein %**	**AverageADF %**	**AverageDE Mcal/kg**	**AverageTDN %**
Barley	4.6	46.3	2.05	46.5
Oats	4.3	45.9	2.16	49.0
Wheat	4.0	49.6	1.80	40.9

Table 3. PROTEIN (%) of several different grass seed STRAWS.

SPECIES	**NUMBER ofSAMPLES**	**AVERAGE PROTEIN %**	**RANGE of PROTEIN %**
Tall fescue	26	8.2	5.3 – 11.9
Creeping red fescue	45	6.5	3.2 – 10.0
Timothy	18	5.5	2.2 – 9.7
Meadow bromegrass	19	6.5	5.2 – 9.9
Smooth bromegrass	8	4.9	3.8 – 6.1

Table 4. ADF (%) of several different grass seed STRAWS.

SPECIES	**NUMBER ofSAMPLES**	**AVERAGE ADF %**	**RANGE of ADF %**
Tall fescue	26	40.9	31.0 – 51.6
Creeping red fescue	45	43.0	34.2 – 51.9
Timothy	18	38.8	33.2 – 47.2
Meadow bromegrass	19	41.0	32.2 – 46.3
Smooth bromegrass	8	37.5	33.9 – 44.8

Table 5. DE (Mcal/kg) of several different grass seed STRAWS.

SPECIES	**NUMBER ofSAMPLES**	**AVERAGE DE Mcal/kg**	**RANGE of DE Mcal/kg**
Tall fescue	26	2.46	2.11 – 3.33
Creeping red fescue	45	2.24	1.60 – 2.84
Timothy	18	2.49	1.94 – 2.85
Meadow bromegrass	19	2.34	1.99 – 2.81
Smooth bromegrass	8	2.57	2.09 – 2.81

Table 6. NDF (%) of several different grass seed STRAWS.

SPECIES	**NUMBER ofSAMPLES**	**AVERAGE NDF%**	**RANGE of NDF %**
Tall fescue	9	65.7	56.7 – 83.9
Creeping red fescue	30	72.4	60.4 – 85.1
Timothy	18	65.5	58.6 – 72.7
Meadow bromegrass	18	66.7	57.7 – 76.1
Smooth bromegrass	8	63.2	58.0 – 71.9

Table 7. TDN (%) of several different grass seed STRAWS.

SPECIES	**NUMBER ofSAMPLES**	**AVERAGE TDN%**	**RANGE of TDN %**
Tall fescue	26	55.6	48.7 – 65.8
Creeping red fescue	45	50.8	33.1 – 64.5
Timothy	18	56.6	44.0 – 64.8
Meadow bromegrass	19	53.1	45.3 – 63.8
Smooth bromegrass	8	58.5	47.5 – 63.9

Summary: The results from the survey conducted to date, clearly show that grass seed straw is of superior quality to cereal straw although in most cases the quality of the straw cannot be used as a complete ration for wintering beef cows.

It is also quite apparent there can be large differences in feed quality of straw among grass species. Nitrogen fertility levels, size of the seed crop, age of stand, swathing height, conventional vs. rotary combines and weather conditions at harvest will also affect the quality of the straw. Also remember that some grass species/varieties such as turf-type tall fescue and perennial ryegrass can have endophytes that may cause livestock disorders if levels are high enough. This survey will be continued in the fall of 2003 to gather additional data to increase the confidence levels of the average feed values of grass seed straw. Samples are also being collected for feed analysis on re-growth in the fall on species such as meadow bromegrass, tall fescue and creeping red fescue for grazing purposes. A publication showing survey results of the feed value of grass seed straws will be prepared once the survey is completed.

****

NEWS

Final Results of UK Farm-Scale Evaluation trials Published

The final results from the Farm Scale Evaluations of herbicide-tolerant GM crops, specifically dealing with the ecological effects found in winter oilseed rape, have been published by the Scientific Steering Committee. As with the results from previous crops, the refereed findings are being published in the *Proceedings of the Royal Society B: Biological Sciences.*
The full-text is freely available at:

http://www.pubs.royalsoc.ac.uk/proc_bio_content/pdf/rspb20043049.pdf

Appendix: http://www.pubs.royalsoc.ac.uk/proc_bio_content/pdf/rspb20043049supp.pdf

The accompanying Royal Society press release can be found at:

http://www.pubs.royalsoc.ac.uk/proc_bio_bohan.shtml

Summary details of the findings can also be found in the attached Defra press release:

http://www.wired-gov.net/WGLaunch.aspx?ARTCL=30662

With an initial response from Environment Minister Elliot Morley at:

http://www.wired-gov.net/WGLaunch.aspx?ARTCL=30664

The results will now be forwarded for consideration by the Advisory Committee on Releases to the Environment (ACRE), who are scheduled to hold an open meeting to take evidence on the findings on 25 May.

N.B. A new non-technical summary of the results from all 4 FSE trials of GM crops has also been released by Defra at:

http://www.defra.gov.uk/environment/gm/fse/results/fse-summary-05.pdf

****

IHSG Workshop
6-9 July, 2005
Marwell Hotel, Winchester, UK

The IHSG workshop will be held from the 6th to 9th July at the Marwell Hotel, just outside Winchester in the South of England, approximately 90km southwest of London. The venue is in one of the most beautiful parts of England, easily reached by car (off M3 motorway) convenient for a number of major airports (Southampton and Bournemouth) and easily reached by train from London (70 minutes). It is also in the heart of the main herbage seed producing area within the UK. Further details on the area can be found at http://www.visitwinchester.co.uk.

PROGRAMME

As in previous workshops, the programme will be fairly informal, combining morning workshop sessions where some of the important topics in herbage seed production will be discussed, with afternoon tours to see different aspects of herbage seed production in this area. There are many seed growers within 1 hour of the conference location. The workshop will therefore include visits to some of the best seed growers in the area, a visit to local seed production trials and an opportunity to see some of the other aspects of seed production in the area. As many of the seed growers are also taking part in Countryside Stewardship schemes, the impact of these types of schemes on seed production and other activities will be included in the visits.

PROGRAMME

Wednesday 6th July

Arrival
Buffet dinner in the evening

Thursday 7th July

AM Workshop session 1
Nitrogen fertilisation of grassseed crops
Leaders *John Hart, Rene Gislum*

Workshop session 2
Understanding variation in response to inputs
Leaders *Bill Young, Gerard Borm*

PM Tour

Evening Informal dinner in traditional English country pub

Friday 8th July

AM Workshop session 3
Weed control/genetic integrity
Leaders *Nigel Fairey, Solvejg Mathiasson*

Workshop session 4
Alternative production systems
Leaders *Trygve Aamlid, Mario Falcinelli*

PM Tour

Evening Workshop dinner in Marwell Hotel

Saturday 9 July

Depart

The registration fee (£475) includes all accomodation costs as well as meals and transport for field visits.
Further information on the workshop venue, including their leisure facilities can be found on their web-site, **http://www.southamptonconferencing.com/marwell.html**

ACCOMPANYING PERSONS

The workshop is being held just outside the beautiful city of Winchester, which has a famous cathedral and numerous other scenic attractions. A full accompanying persons programme including tours of the city of Winchester and other local areas of interest will be provided for those who wish to attend.

Tours

The afternoons will be spent on tours of the local seed production area, visiting commercial seed growers, trials sites as well as some of the end-users of forage seed.

Thursday, 7th July

2.00 p.m. **David and James Hewetson-Brown** Ashe Warren Farm, Overton, Basingstoke

Apart from the normal crops and herbage seeds, the family has a thriving turf business. This is grown on black polythene with the seed being in compost over netting. In addition to fine turf, they also do wild flower meadow turf. One area of the farm is being converted into organic production – red clover is grown during the conversion period, cultivated out and then spring barley undersown with perennial ryegrass is drilled. This will be the first year that the ryegrass has come to seed. They clean herbage seed up to standard on the farm – into boxes or bags. A new pond is just being built as a back-up irrigation for the turf.

4.00 p.m. **TAG** (The Arable Group) Norton, near Winchester

Tea and biscuits will be available on arrival. We will be looking at a range of trials on herbage seeds including control of flea beetle, sulphur, Moddus interaction with timing and N rates, fungicide timing, control of RSMG and seedling control – we will choose the trials that are most informative on the day. Additionally, we will be visiting the herbicide screening trial where a range of products are applied with a logarithmic sprayer from full rate down to 10% on to both herbage seed crops and weed grasses. If required, it might be possible to visit one or two cereal trials if the group would like to.

We will finish the day at a traditional English pub.

Friday, 8th July

2.00 p.m. **Angus Janaway** Bidden Grange, Upton Grey, Basingstoke

Angus has a range of perennial ryegrass crops, both agricultural and amenity types. Because of his position close to a major town, he has opted for the Countryside Stewardship Scheme with access for walkers and riders. He has planted new hedges and copses to enhance the area and has machinery to resurface his farm tracks. He grows opium poppies for the pharmaceutical industry and sows flower meadows for clients. He cleans seed up to standard. We will have tea here before departing.

4.00 p.m. **Dick Hall** Corhampton Lane Farm, Corhampton, Southampton

Dick has been in the Countryside Stewardship Scheme since its inception and will be joining the Agri-Environment Scheme when it starts in March. It is hoped to have his environmental adviser with us for both these farms. He also grows winter and spring wheat and spring barley for seed. He cleans seed up to standard. They have converted a range of farm buildings into offices if this is of interest.

NOTE: people wishing to register can do so using the form on pages 10 and 11. If intending to register please contact Athole Marshall as soon as possible.

****

****

Third Announcement and Registration Form

IHSG WORKSHOP

6-9 July, 2005
Winchester, UK.

The IHSG workshop will be held from the 6th to 9th July at the Marwell Hotel, just outside Winchester in the South of England, approximately 90km southwest of London. The venue is in one of the most beautiful parts of England, easily reached by car (off M3 motorway) convenient for a number of major airports (Southampton and Bournemouth) and easily reached by train from London (70 minutes). It is also in the heart of the main herbage seed producing area within the UK. Further details on the area can be found at http://www.visitwinchester.co.uk.

PROGRAMME

As in previous workshops, the programme will be fairly informal, combining morning workshop sessions where some of the important topics in herbage seed production will be discussed, with afternoon tours to see different aspects of herbage seed production in this area. There are many seed growers within 1 hour of the conference location. The workshop will therefore include visits to some of the best seed growers in the area, a visit to local seed production trials and an opportunity to see some of the other aspects of seed production in the area. As many of the seed growers are also taking part in Countryside Stewardship schemes, the impact of these types of schemes on seed production and other activities will be included in the visits.

The registration fee includes all accomodation costs as well as meals and transport for field visits.
Further information on the workshop venue, including their leisure facilities can be found on their web-site, **http://www.southamptonconferencing.com/marwell.html**

ACCOMPANYING PERSONS

The workshop is being held just outside the beautiful city of Winchester, which has a famous cathedral and numerous other scenic attractions. A full accompanying persons programme including tours of the city of Winchester and other local areas of interest will be provided for those who wish to attend.

The Marwell hotel also has a number of family rooms which can be reserved should this be required.
REGISTRATION INFORMATION

Registrations and/or payments received now are subject to the late registration fee (£475). You will receive additional information on the workshop after receipt of your registration. One registration form per participant, photocopies are acceptable.
Please print or type

Name
Agency
Address
City
State/Country
Zip/Post code
Telephone Fax email

PAYMENT SUMMARY

_____

Fees	Amount
Registration Fee- (£475) (Includes all accomodation charges, meals and transport)	£
Day delegate (£50)	£
Accompanying persons registration (£220)	£
Total Remitted	£

Payment should be made in **pounds sterling** by bank transfer to,

National Westminster Bank plc
PO Box No.5
2 North Parade
Aberystwyth
Ceredigion, SY23 2NB

Account name: Institute of Grassland and Environmental Research
Swift code: NWBKGB2L
Sort Code: 51-61-06
Bank Account: 01797506
IBAN No.: GB41NWBK51610601/797506

PLEASE QUOTE IHSG and your surname with payment ie. IHSG MARSHALL (this will help the bank record payment).
A full refund will be available if cancellation is made before 31 March, 2005.

ROOM TYPE

I will require a single room twin room
There are a limited number of family rooms available at the hotel
I will require a family room

ADDITIONAL INFORMATION

(This will help the organisers with local planning arrangements)
I will be attending the International Grassland Congress
I will be attending the satellite meeting in Aberystwyth
I will be attending the International Turfgrass Conference

MAILING ADDRESS

Please forward the completed registration form (by post, fax or email) to
Dr. Athole H Marshall
IHSG Seed Workshop
IGER, Plas Gogerddan
Aberystwyth, SY23 3EB
UK
Fax: +44 1970 823241
Email: athole.marshall@bbsrc.ac.uk

E-mails- the enemy of time

Ever wondered where all your time goes. At a recent seminar, a colleague put up the following two slides. The first is of a memo received only 11 years ago, suggesting that email would be a very good labour and time saving development. The second is the time spent reading emails in the last year (2004), based on 1 minute per email up to 5 minutes per mail. My colleague regards himself as receiving average amounts of eamils per day, so the time involved is quite revealing (Editor).

MEMORANDUM

TO: Group and Project Leaders

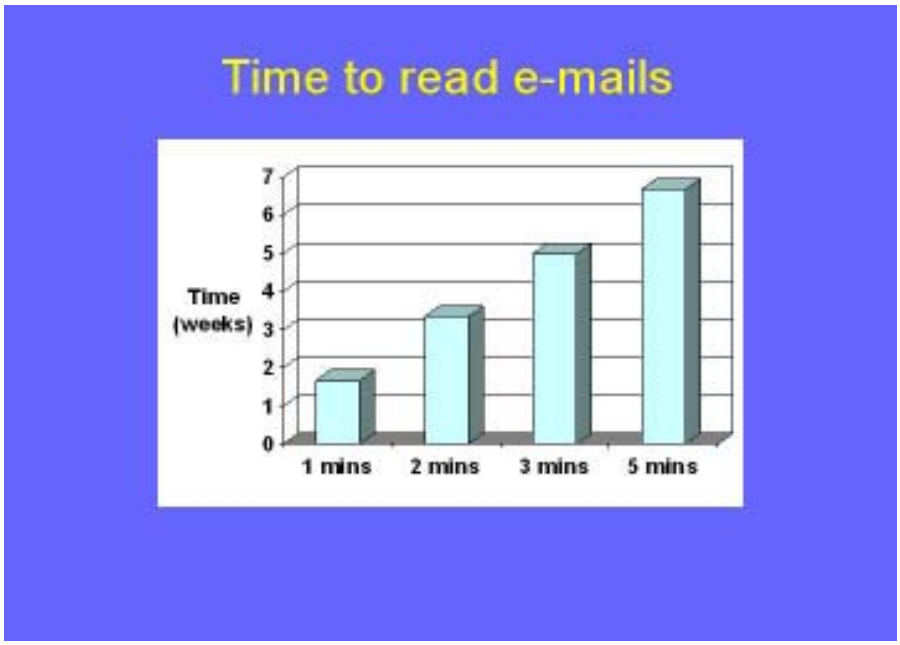
FROM: [redacted]

cc:

Date: 4 November 1994

SUBJECT: **E-Mail**

Barbara in the office is now on Email and we would like to look into the use of this facility to improve communication within the Department. How do you feel about this? If Group and Project Leaders can stay in touch with deadlines, requests for information and suchlike by regularly logging on and reading mail messages from Barbara, and if they can even send their responses by the same route, it might help to cut down on time and paper. Training can be arranged for people not familiar with the system. I'm quite keen on this, so a positive reaction would be welcome. I'd appreciate having responses to this proposal (by Email preferably, addressed to SALVONA) within a week or so.



Conference Notes

The **XX International Grassland Congress 'Grasslands- a Global Resource'** will be held from Sunday 26th June -Friday 1st July, 2005 in Dublin, Ireland. Four Pre-Congress tours are available (starting on Thursday 23 June, concluding 25 June). The opening ceremony will be on Sunday 26 June with scientific sessions on the 27, 28, 30 June and 1 July (mid - congress tour on the 29th June. There willl also be a choice of 5 post-congress satellite workshops. Further information can be obtained at www.igc2005.com or from nmeenan@conferencepartners.ie

Symposium on Plant-Pollinator Relationships-Diversity in Action

About every five years, the International Commission for Plant-Bee Relationships sponsors a Pollination Symposium, with the latest one held in Hungary in 2001. Recently, the Commission accepted a proposal to hold the next Symposium in Ames, Iowa in July of 2006.

The overarching theme of the Symposium will be "Plant-Pollinator Relationships – Diversity in Action." We have defined four sub-themes focusing on the following topics: attractions and rewards; impacts of insect-mediated pollination on gene flow; pollinator biology, conservation and protection; and pollinators in plant genetic resource conservation and enclosed production systems. If you would like more information about the Symposium, a website is now under development and can be accessed from http://www.ucs.iastate.edu/mnet/plantbee/home.html

The 13th Australasian Plant Breeding Conference is taking place in Christchurch, New Zealand from 18-21 April 2006.

The range of themes and crops covered in this conference is diverse, reflecting the breadth of research activity across Australasia. We will be highlighting the economic, sociological and environmental benefits of plant breeding in Australia, New Zealand and South-East Asia through our conference theme, "Breeding for Success: Diversity in Action".

I would like to encourage you to register your interest in attending the 13th APBC if you are involved in research or application of molecular or conventional genetics and plant breeding. The call for papers and registration brochure will be available in early March and full details will soon be available through the website on www.apbc.org.nz

Ensure you receive a brochure by registering your interest on-line.

****

The Organizing Committee warmly welcomes you to participate in the 21st General Meeting of the European Grassland Federation, which, under the theme 'Sustainable Grassland Productivity', will be held at Badajoz (Spain), from 3rd to 6th April 2006.

The objective of the General Meeting is to present and discuss the existing information on different aspects of grassland management, which will provide grassland farmers a sound basis to develop sustainablesystems, whether socioeconomic, ecologic or environmental.

Participants are invited to submit abstracts, first, and full scripts,later, for oral or poster presentations under one of the following sessions:

1. Overcoming seasonal constraints to forage production.
2. Role and potential of legumes.
3. Production and quality aspects of different animal feeds.
4. Changes in animal production systems to meet CAP reforms.
5. Grassland and climate change.

All the papers will be peer reviewed. All the accepted papers will be published in the 11th issue of the EFG series 'Grassland Science in Europe'.

Two Pre-conference Tours are offered, starting in Madrid on 30th March and ending in Badajoz on Sunday 2nd April, covering 1) Central West Spain and 2) South West Spain.

An attractive Associate Delegate's Programme is also offered to visit the more relevant historic places of Extremadura, some of which are included in the UNESCO World Heritage List.

Transport by bus will be provided to travel from Madrid to Badajoz and return. A list of Hotels in Madrid and Badajoz will be offered later.

Please visit regularly www.egf2006.com to find more detailed information on different aspects of the GM: sessions, programmes, deadlines, tours, instructions for abstracts, full papers and oral or poster presentations, transport, accommodation, etc..

Pre-registration: 16th May 2005 (Please use the registration form, which is in the web page) Title and abstract: 30th June 2005 Full length paper (3 pages): 15th September 2005 Definitive registration (early) and money transfer: 15th January 2006 Hotel reservation: 15th January 2006

e-mail: org.com.egf2006@unex.es

****

International Herbage Seed Group,
c/o Institute of Grassland and
Environmental Research,
Plas Gogerrdan, Aberystwyth,
United Kingdon SY233EB