



Genetic Data Analysis with ASReml – Workshop, October 6-10, 2008

Location:

Contact: Dr. Fikret Isik
NC State University – Department of Forestry and Environmental Resources,
Raleigh, North Carolina, USA

Instructors:

Dr. Greg Dutkowski Dr. Richard Kerr
Greg.Dutkowski@plantplan.com Richard.Kerr@plantplan.com

Workshop Outline

The workshop is aimed primarily at forest tree breeders. This will be a moderately advanced-level workshop. The participants are expected to have some understanding of mixed model theory and some familiarity with basic ASReml syntax. The course is structured around 4 x 1.5 hour sessions per day, most with 30 minutes of lectures and 1 hour of practical sessions in groups of 2-4 using ASReml and some supporting software. Data will be drawn from a variety of data sets from tree breeding programs around the world. Opportunities for user data analysis will be provided.

All course, data and support materials will be provided, although some of the support software may have a restricted license***. ASReml is not provided, but can be obtained from <http://www.vsnl.co.uk/products/asrem/> for a free one month trial. Participants should bring their own laptop with ASReml (and preferably ConText www.contexteditor.org) loaded. A tentative workshop program is given below. The final program will depend on the interests and skill level of attendees.

Day 1

Introduction
ASReml Primer, ASReml Options
Variance/Covariance Matrices

Day 2

Additive Genetic effects and Breeding values
Breeding values with groups
CP data - SCA and pedigreed family model.
Clonal data - complete genetic model and other variations on the additive theme.
User Data analysis

Day 3

Spatial Analysis lecture
Extension - multiple blocks or sites, extraneous factors and splines
User Data analysis

Day 4

Variance-covariance modeling of multi-environment trials.
Breeding value prediction from multi-environment trials.
User Data Analysis
Evening: Option for session on PlantPlan Genetics

Day 5

Multivariate analysis,
Analysis of molecular data,
User Data Analysis

*** Course materials are copyright and may only be used by course participants and not distributed to other parties. More information will be provided at the course. PlantPlan Genetics are specialists in the analysis of tree breeding programs using our proprietary database DATAPLAN® and TREEPLAN® genetic data analysis software. For more information go to our web site <http://www.plantplan.com> (hosted by our parent company, the Southern Tree Breeding Association).

To: Tori Batista-Brooks

Fax: +

Re: Progeny Trial Analysis with ASReml - Update of Interest

From:.....

Organization:

Telephone:

Fax:

Email:

Please fax or email to Tori Batista tori_batista@ncsu.edu

Are you still planning on attending the course on "Progeny Trial Analysis with ASReml"?

<input type="checkbox"/> Yes, I am definitely coming.	Comments
<input type="checkbox"/> Probably, I am still thinking about it.	
<input type="checkbox"/> Unlikely, but keep me posted.	
<input type="checkbox"/> No, I no longer wish to come.	

Early Bird payment due soon

\$1250 USD is due on August 1, thereafter \$1500 USD.

Withdrawals before 1 September will incur a 10% non-refundable administration fee, with a further fee of 50% after 1 September, and 100% after 1 October, unless a suitable replacement attendee can be found.

Funds transfer details

Any special dietary requirements

Please fill out the questionnaire and send to Dr. Greg Dutkowski

To: Greg Dutkowski

Fax: +61 3 6226 2698

Re: Progeny Trial Analysis with ASReml – Course structure feedback

From:

Organisation:

Telephone:

Fax:

Email:

Please fax or email to Greg.Dutkowski@plantplan.com

What is your primary area of interest?

<input type="checkbox"/> Forest tree breeding	Comments
<input type="checkbox"/> Horticultural crop breeding	
<input type="checkbox"/> Crop breeding	
<input type="checkbox"/> Ecological genetics	
<input type="checkbox"/> Other:	

Please rate the following topics in terms of importance to you:

Topic	Very Important	Important	Neither important nor unimportant	Unimportant	Very Unimportant	Don't know
ASReml primer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ASReml advanced options	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Breeding value prediction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Complex genetic models	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multivariate analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spatial analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Across site analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Program wide analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Molecular genetic data analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analysis of my own data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What other areas may be of interest to you?

What do you hope to get out of the course?

Please describe your current level of expertise in mixed models for progeny trial analysis:

Please describe your current level of expertise in ASReml:

There will be opportunity for analysis of your own data with help from the instructors and other workshop participants. **Description of my own data:**

Some course material will be available beforehand through the PlantPlan Genetics on-line document management system. These are not yet complete, pending a better understanding of people's interest, but do cover some more basic preparatory material and many of the areas to be covered. This material is also copyright and may only be used by course participants and not distributed to other parties. If you wish to make use of this facility, then please fill out the following. Further login information will be provided once course payment is confirmed. Your contact information will only be used for this purpose.

I wish to have access to the PlantPlan Genetics on-line document management system to access course materials

Desired Username:_____ **Password:**_____

I acknowledge that the course materials are copyright and I will not reproduce or distribute them to any other parties.

Signed:_____ **Date:** ___/___/2008

Name:_____ **Date:** ___/___/2008