CRDC293
Greg Parle report on CSITC meeting on 10th September 2006 in Goiania, Brazil

Ralph Schulze being a delegate on CSITC has reported on this meeting. I would like to report on CSITC results for the 2nd pilot trial and the benefits to CCAA Classing Facilities to continue in this program.

Background

Each classing facility was sent 4 samples that were tested over 5 days. Each sample was tested 6 times daily. This is a total of 30 tests on each sample.

Results

The results of the trial were discussed by the CSITC working group. It was decided to broaden the acceptable range (tolerance) for colour Rd from +/-1.0 to +/-1.5. This will bring the Rd evaluations more in line with the other properties. The CCAA use +/-1.0 for colour Rd in CCAA check test program. All other acceptable property ranges are the same as what the CCAA use. The fact that they had to broaden the Rd range highlights the difficulties in uniformity for Rd values between instruments. There were six Australian classing facilities that participated.

Attached are 3 files of results for CSITC 2nd pilot trial.

File A – Lab Evaluation.pdf Contains the laboratory evaluation results for your laboratory / instrument, based on the developed system for evaluating laboratory's capability to produce reliable test results. This represents the main aim of the CSITC Round Trial: to allow each laboratory to prove its capability of producing reliable test results.

File B – Detailed Evaluation.pdf Contains an additional, detailed evaluation of the results of your laboratory / instrument to improve testing reliability based on a detailed analysis of the given accuracy and precision.

File C – RT General.pdf Represents the overall interlaboratory and typical in-laboratory variability of the test results – independently from the specific results of your laboratory – and therefore gives an impression about the consistency/variability of testing with standardised instrument testing.

Explanation of results as follows:

File A – Lab Evaluation.pdf
This file has the results for one lab/instrument. This is the most important set of results as it evaluates an instrument for accurate/reliable results. Page 1 highlights the lab number, evaluation of combined properties, statistics and a graph so a lab can compare their results against other labs.

The second page shows instrument evaluations for all properties, statistics and graphs for all labs/instruments for comparison.

The third page is the most important of all and shows the performance of instrument. The **reference values** are the average of all properties for all 46 labs/instruments that participated. This is the average of all 30 tests for each property over the 5-day testing period. **Laboratory average of all days** is the average of this lab/instrument. **Relative distance to reference** is the difference between overall average of labs/instruments on 4 cottons tested. **Mean absolute difference to reference** is the average of the distances of the 4 cottons tested. **Scale factor** is the accepted ranges/tolerances for each property. **Summary evaluation for each property** is the mean absolute distance to reference divided by scale factor. **Summary evaluation of all properties** is the total evaluation of each property divided by total number of properties tested which are 6.

Obviously the lower the evaluation for each property the better. This lab in particular has performed very well for properties micronaire, strength, length, uniformity and colour Rd because evaluations on each property are lower than scale factors. Colour +b evaluation however is slightly higher than scale factor. Evaluation on all properties is still very good and is at the top end of evaluation results shown in graph on page 1.

File B – Detailed Evaluation.pdf

The first page is the same detail as outlined in File A. Page 2 is graphs showing accuracy for each property for lab/instrument. Page 3 is a detailed analysis of a lab/instrument for precision on all properties. A lab/instrument can compare their variation in testing compared to the overall average. The overall average on the far right shows this lab/instrument to have better average variation in general than overall average. Even on colour +b this lab/instrument has a better average than overall average. Remember this lab was outside the scale factor on accuracy for colour +b but was very precise when testing this property.

If your lab/instrument is significantly higher than the average, the precision/variation of your test results should be improved.

File C – RT General.pdf

This file represents the results of all labs/instruments for all properties.

I believe this is now the most important international instrument-testing program. This is the only program that reports instruments for evaluation, accuracy, precision, variation and reliable results. Only 46 labs participated in this trial. Australian instruments would form a fair percentage of this total.

I believe the CSITC program is of great benefit to Australia. The CCAA has worked very hard over the past 3 years or so to enhance uniformity between classing facilities. The CCAA BMP has also been of great benefit. We still have improvements to make in certain properties and are presently working on those areas.

Colour Rd is a good example. Colour is the area that CCAA members are having most problems with. The fact that CSITC had to broaden the scale for colour Rd confirms that this is a global problem and not a local problem. Results of future CSITC round

robin tests will let Australia know how they compare with HVI's across the world for colour Rd as well as all commercial properties.

Other Issues

I spoke to Axel Drieling who compiled all results. He agreed to send a copy of all Australian results to Rene van der Sluijs. As you know Rene compiles results for CCAA check tests. Rene will analyse Australian results and provide a report to the CCAA.

We have received advice of the first official quarterly CSITC round trial. I have passed this on to all CCAA classing facilities. Hopefully all will participate. The cost is US$ 75 per trial. CSITC are hopeful to have a lot more labs/instruments participating in this trial. Samples will be sent out mid December and results need to be in by 26th January 2007.

I also mentioned to Axel Drieling from Bremen Institute and Jimmy Knowlton from USDA whether they would be interested in participating in the CCAA check test program. Both were keen to participate. I will take this up at our next CCAA meeting, which is in February.

Greg Parle
20th October 2006