

## TECHNICAL PUBLICATIONS

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## LENGTH

### OFDA4000

- L12 Proposed amendments to IWTO-17 to remove reference to manual grip, clarify sampling regime, and update precision statistics, P Baxter, IWTO SG Sub 01, Biella, Nov 05
- L13 Performance of OFDA4000 instruments in three mill laboratories, P Baxter & M Brims, IWTO SG Sub 01, Beijing, Apr 2008
- L11 Report on the 2004/05 OFDA4000 and Almeter/OFDA100/Laserscan round trial, P. Baxter, IWTO SG02, Hobart, Apr 2005
- L10 Experience with the OFDA4000 in two mills - comparisons with other instruments, M. Brims & P. Baxter, IWTO SG 01, Evian, May 2004

### STAPLE LENGTH & STRENGTH

- L9 Results of an international round trial using Agritest SB2 instruments to measure staple length and strength in accordance with IWTO-30. B.P. Baxter, IWTO raw wool group, Dresden, Jun 1998
- L8 Staple length and strength: Short staples and second cuts, effects on coefficient of variation of length (CvL). B.P. Baxter, IWTO raw wool group, Dresden, Jun 1998
- L5 Proposed addition to Appendix A of IWTO-30 (Description of Agritest Staple Breaker Model 2), B.P. Baxter, IWTO raw wool group, Boston, May 1997
- L4 Description and performance of the Agritest Staple Breaker model 2, B.P. Baxter, Wool Technology & Sheep Breeding, Vol 44, 1996, pp 119-137
- L3 Repeatability data on length and strength (IWTO-30) determined by the Agritest Staple Length and Staple Breaker model 2 instruments, B.P. Baxter, IWTO raw wool group, Capetown, May 1996
- L2 Comparative data on length and strength (IWTO-30) determined by ATLAS and by the Agritest Staple Length and Staple Breaker instruments, B.P. Baxter, IWTO raw wool group, Nice, Dec. 1995

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- L6 Comparison of 3 methods of predicting combing performance from raw wool test results. B.P. Baxter & J.L. Wear, IWTO tech. report 5, Nice, Dec 1997

### SINGLE FIBRE LENGTH

- L1 Method of determining wool fibre length distribution using the single fibre length measuring machine - IWTO-5-60: Precision statistics, B.P. Baxter, IWTO Sliver group, Punta del Este, April 1992.

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- C4 Stability of wool colour, P. Baxter, 2001 Massey Wool Association Conference, Napier, Aug 2001 (subsequently published in Wool, 2000/2001, 28-32, under the title "Wool colour in the eye of the beholder")
- C3 Amendment to IWTO-31 - Tristimulus value combinations, B.P. Baxter & P.J. Sommerville, IWTO RWG submission, Shanghai, May 2001
- C2 The effects of the use of different CIE illuminants and observers in IWTO-56 on the combination formulae in IWTO-31, B.P. Baxter, IWTO RWG App. 02, Nice, Nov 1999
- C1 Some notes on the influence of colour on the measurement of medullation by OFDA, B.P. Baxter, IWTO SG report 01, Nice, Dec 1998

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- D1 A simple method for improving within-laboratory precision in the airflow test for mean fibre diameter. B.P. Baxter, Raw wool certification sub-committee report, IWTO, Paris, Dec. 1989

**OFDA 100**

(diameter measurement only - see [Miscellaneous](#) for application of OFDA 100 to curvature, medullation, fibre type discrimination and fibre cleanliness measurements)

- D28 An evaluation of the performance of the OFDA2000 instrument operating in OFDA 100 mode, B.P. Baxter, IWTO RWG report 03, Barcelona, May 2002
- D26 Technical note: 5 micron fibres found in an ultrafine grower lot - implications for diameter distribution measurement, B.P. Baxter, IWTO RWG report 02, Shanghai, May 2001 (subsequently published in an amended form in Wool Tech. & Sheep Breed., 2001, 49(2), 97-109)
- D18 Fibre diameter distribution characteristics of midside (fleece) samples and their use in sheep breeding, B.P. Baxter and D.J. Cottle, IWTO tech. report 12, Boston, May 1997, subsequently published in an updated version in Wool Tech. & sheep Breeding, 1998, V46(2), 154-17
- D17 Precision of OFDA fibre diameter measurements of midside wool samples, D.J. Cottle, C.D. Almeida, B.P. Baxter, & D.J. Petrie, IWTO tech. report 8, Nice, Dec 1996 (subsequently publ. in Wool Tech. Sheep Breed., 1996, 44 (4), 295-302)
- D14 1994 OFDA round trials on sliver samples, B.P. Baxter & M.A. Brims, IWTO tech. report 6 and supplement 6R, Nice, Dec. 1994
- D13 1994 OFDA round trials on greasy wool core samples, B.P. Baxter & M.A. Brims, IWTO tech. report 5 and supplement 5R, Nice, Dec. 1994
- D11 Review of the suitability of the 1993 series of Interwoollabs IH tops for calibration of the OFDA, B.P. Baxter, IWTO tech. report 14, New Delhi, Mar. 1994
- D8 The Optical Fibre Diameter Analyser (OFDA) - New technology for the Wool Industry, B.P. Baxter, M.A. Brims & D.C. Teasdale, Wool Technology & Sheep Breeding, Dec. 1992
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- D6 Linearity and focus independence of the OFDA, B.P. Baxter & M.A. Brims, IWTO tech. report 9, Nice, Dec. 1992
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- D4 Further studies on the performance of the OFDA, B.P. Baxter, M.A. Brims & T.B. Taylor, IWTO tech. report 8, Punta del Este, April 1992
- D3 Measurement of the mean and distribution of fibre diameter of wool using an image analyser, (first draft), Test Method under Examination presented to the Sliver group of IWTO, Nice, Dec. 1991, and accepted after amendment in Punta del Este, Uruguay in April 1992. (now IWTO test method 47)
- D2 Description and performance of the Optical Fibre Diameter Analyser (OFDA), B.P. Baxter, M.A. Brims & T.B. Taylor, Jnl. Text. Inst., 1992, v 83, no. 8, pp 507 - 526 (based on IWTO tech. report 8, Nice, Dec. 1991)

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- D33 The 2003 Australian Wool Innovation On-farm fibre measurement instrument evaluation trial. Part 2: Performance in objective classing and ranking for animal selection, P. Baxter & J.W. Marler, IWTO CTF 02, Evian, May 2004
- D32 The 2003 Australian Wool Innovation On-farm fibre measurement instrument evaluation trial. Part 1: Accuracy and Precision trials, J.W. Marler & P. Baxter, IWTO CTF 01, Evian, May 2004
- D30 OFDA2000 proficiency trials, P. Baxter & W.L. Johnston, IWTO CTF 01, Nice, Nov 2002
- D28 An evaluation of the performance of the OFDA2000 instrument operating in OFDA 100 mode, B.P. Baxter, IWTO RWG report 03, Barcelona, May 2002
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- D25 Precision of measurement of diameter, and diameter-length profile, of greasy wool staples on-farm, using the OFDA2000 instrument, P. Baxter, 10th Intl. Text. Res. Conf., Aachen, Dec. 2000

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- D20 Examination of the differences between OFDA and Laserscan on ultrafine wools. B.P. Baxter, IWTO tech. report 6, Nice, Dec 1997, subsequently published in Wool tech. & sheep Breeding, 1997, V45(4), 267

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- D24 The effects of calibration errors on between-laboratory and between-instrument diameter comparisons, B.P. Baxter, IWTO SG report 01, Nice, Nov 1999
- D23 Additional comments on the measurement of superfine wools by OFDA, airflow and Laserscan. B.P. Baxter, IWTO RWG report 03, Nice, Dec 1998
- D22 Comparison of Laserscan, OFDA and airflow on raw wool samples. B.P. Baxter, IWTO RWG report 02, Nice, Dec 1998
- D21 An initial investigation into the effects of medullation on comparisons between Airflow, OFDA and Laserscan. P. Baxter, IWTO tech. report 16, Dresden, Jun 1998
- D19 Some notes on the effects of relaxation on mean fibre diameter measurement. B.P. Baxter, IWTO sliver group, Boston, May 1997
- D16 Report of the 1995 IWTO round trial: Part 2: Wool tops - Addendum: Confidence limits for measurements made on tops, B.P. Baxter & J.W. Marler, IWTO tech. report 16 Addendum, Harrogate, Jun. 1995
- D15 Report of the 1995 IWTO round trial: Part 1: Raw wool - Addendum: Confidence limits for measurements made on raw wool, J.W. Marler & B.P. Baxter, IWTO tech. report 15 Addendum, Harrogate, Jun. 1995
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- Y5 The use of NIR to predict residual ash in the IWTO-19 yield test, J.L. Wear, IWTO raw wool group paper RWG02, Nice, Dec 2001
- Y4 Proposed amendment to IWTO-19, clause 6.2.3, B.P. Baxter, IWTO raw wool group, Nice, Dec 1996
- Y3 Proposed amendments to IWTO-19 & IWTO-33 - determination of oven-dry mass, B.P. Baxter, IWTO raw wool group, Nice, Dec 1996
- Y2 Proposal to upgrade draft test method Appendix E of IWTO-19 (test method for ethanol extractables by NIRA), B.P. Baxter & J. Wear, IWTO raw wool group, Nice, Dec. 1995
- M5 Commercial data on the variability of 7000 kg sublots of NZ scoured wools, B.P. Baxter, IWTO raw wool group, Harrogate, Jun. 1995
- Y1 Range errors in yield testing and the influence of wool type, B.P. Baxter & T. Taylor, IWTO RWCS paper, Cavtat, Yugoslavia, Jun. 1990

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- M18 A new criterion for "time to condition" with data on rapid conditioning of opened fibre assemblies, P. Baxter, IWTO SG report 05, ChCh, May 2000
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- M21 Proposal for calibrating laboratory preparation systems and instruments to measure curvature on raw wool, P. Baxter, IWTO RWG 04, Nice, Nov 2002
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- M8 Preliminary investigations into the use of OFDA for estimating bulk, B.P. Baxter, IWTO tech. report 13, Capetown, May 1996

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- M25 Microscope analysis of animal fibre blends – training of operators, WD Ainsworth & L Zhang, Cashmere Seminar, 'The Production, The Market, The Quality', Prato, Italy, 11th Nov 2005
- M14 Continued investigation of the use of OFDA for fibre type differentiation, B.P. Baxter, IWTO STG report 01, Nice, Dec 1998
- M13 Preliminary results on using the OFDA to discriminate between wool, cashmere, and mohair. B. P. Baxter, IWTO tech. report 17, Dresden, Jun 1998, subsequently published in Wool Tech. & Sheep Breeding, 1998, V46 (1), 24

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- M1 Comparative extraction tests on tops using ethyl alcohol, acetone, dichloromethane, and t-butylmethylether, B.P. Baxter, IWTO tech. report 1, Paris, Dec. 1989

## STATISTICAL TECHNIQUES

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- M17 Analyses of alkali solubility trial data published during the development of IWTO-4-60, P. Baxter & W. Ainsworth, IWTO STG App. 01, ChCh, May 2000
- M11 Review of Appendix B of IWTO-0, G.H. Brown, J.W. Marler & B.P. Baxter, IWTO Technology and Standards Committee, Nice, Dec 1996
- D21 An initial investigation into the effects of medullation on comparisons between Airflow, OFDA and Laserscan. P. Baxter, IWTO tech. report 16, Dresden, Jun 1998
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- M5 Commercial data on the variability of 7000 kg sublots of NZ scoured wools, B.P. Baxter, IWTO raw wool group, Harrogate, Jun. 1995
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- M2 Guide to risks in batching blends and interlots, B.P. Baxter, Tech. information document for trade circulation, Mar. 1990

### GENERAL WOOL METROLOGY ISSUES

- M26 A comparison of New Zealand scoured wool test results 2003 to 2007, J Wear, IWTO RWG 02, Beijing, Apr 2008
- M20 Raw wool metrology: Recent developments and future directions, P. Baxter, Proceedings of the Wool Industry Science and Technology Conference CD-ROM, Oct 2002
- M7 Raw wool measurements: Specification or quality assurance?, B.P. Baxter, 9th Intl. Wool Text. Res. Conf., Biella, Jul. 1995 (subsequently published in Wool Technology & Sheep Breeding, Vol 44, No 1, 1996, pp 29-38)
- M4 Current advanced technologies in raw wool testing, Yao Liu & Peter Baxter, First China International Wool Conference, Xi'an, P. R. China, Apr. 1994

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- o Maximising the benefits from on-farm fibre measurement, Atkins et al, [www.publish.csiro.au/nid/197/paper/SA0401003.htm](http://www.publish.csiro.au/nid/197/paper/SA0401003.htm)

### SHEEP CRC

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