

## SAMPLING

Correct sampling is fundamental to obtaining satisfactory test results. The sample shall be taken from the mid-side, which is defined in the Australian Standard as:

*“centered on the third last rib, halfway between the mid-line of the back and the mid-line of the belly on the left hand side of the animal”.*

The sample shall be taken at skin level and comprise full length staples.

If Yield results are required, approximately 50 grams, and not less than 30 grams, is required. If Diameter results only are required, 20 to 30 grams is adequate.

Samples, preferably, should be taken by an independent person, such as a sheep classer or Department of Agriculture employee. **The sampling details shall be declared by the owner/manager on the attached vendor declaration, as follows:**

- \* the samples have been taken in accordance with the Australian Standard, AS/NZ 4492.1;
- \* the date of sampling;
- \* the age of the sheep at the time of sampling;
- \* period of wool growth; and
- \* person taking the samples.

The declaration is returned to the organising committee.

Two samples shall be taken from each sheep, one from each mid-side (see under measurements).

Samples shall be taken at the same time and as close as possible to the time of showing. Three to four weeks should be allowed for dispatch of samples, testing and return of results. Catalogue printing time should be added to that.

## MEASUREMENTS

The measurements to be conducted on each sample are:

- \* Yield, (if required);
- \* Mean Fibre Diameter as measured by LASERSCAN or OFDA;
- \* Diameter Variation expressed as Coefficient of Variation and displayed graphically in a histogram; and
- \* The proportion of fibres greater than 30 microns.

Note, Histogram data must be presented as the percentage of fibres in each diameter category to avoid possible problems in interpretation.

All testing procedures and calculations shall be done in accordance with the Australian Standards for Fleece Measurement.

## NUMBER OF SAMPLES MEASURED

The precision of any test result is influenced by the amount of sampling and testing conducted.

Two samples shall be taken, tested and the results averaged for publication, because of the importance of the results. This will provide a minimum of 2000 snippets measured. Note, double sampling and testing provides a 29% improvement in precision over the sampling and measurement of a single sample.

## CHOICE OF TEST HOUSE

The test house chosen shall be a laboratory which agrees to follow test procedures in accordance with the Australian Standards for Fleece Measurement testing and participates in Interwoollabs round trials.

Only one laboratory shall be used to avoid any between-laboratory differences.

## INTERPRETATION OF RESULTS

The following statement will be included in catalogues for the information of buyers and other interested persons:

*“The fleece measurement data included in this catalogue have been measured on samples collected from the current fleece. Sample collection and measurements have been taken according to a protocol established by the Australian Association of Stud Merino Breeders and conforms to Australian Standard for fleece measurement sampling and testing (AS/NZ 4492). These samples accurately describe some aspects of the current fleece on these rams.*

*Caution should be exercised in using these measurements to judge the relative merit of different rams.*

*The genetic merit of rams from different studs cannot be accurately determined on the basis of these measurements – different feeding and management regimes at different studs can strongly influence the fleece measurements. Notably, ram shed feeding may increase average fibre diameter by 3 to 5 microns above the fibre diameter of paddock grown fleeces, and by 4 to 6 microns above the paddock grown fleeces of the commercial progeny of these rams.*

*The best indicators of the genetic merit for fleece characteristics of rams in this catalogue are:*

- \* *The long-term average values for fleece characteristics (average fibre diameter, coefficient of variation, yield, fleece weight etc) for fleeces grown under paddock conditions by adult ewes on the stud where each ram was bred.*
- \* *The estimated breeding values or phenotypic deviation of these rams relative to other rams bred in the stud.*

# AUTHORISED RAM SHOWS AND SALES MID-SIDE SAMPLING DECLARATION

I.....

of.....  
(Stud)

do solemnly declare that the samples taken from  
animals presented for show and/or sale at the

.....  
(Show/Sale)

were sampled in accordance with the Australian  
Standard for Fleece Testing and Measurement,  
Method 1, Weighing and Sampling Greasy Wool for  
Fleece Measurement and Testing, and described  
below.

*“Samples are taken from an area centred on  
the third last rib, halfway between the mid-line  
of the back and the mid-line of the belly on the  
left hand side of the animal.*

*Samples, which are to be taken at skin level,  
must be at least 30 grams if Yield and Fibre  
Diameter are to be measured, or 20 to 30  
grams if Fibre Diameter only is to be  
measured.”*

NUMBER OF SAMPLES:.....

AGE OF SHEEP:.....

SAMPLING DATE:.....

WOOL GROWTH:.....  
(Months)

SAMPLES TAKEN BY:  
.....

FROM:.....  
(Organisation)

SIGNED:.....  
(Owner/Manager)

DATE:.....



## REQUIREMENTS FOR SAMPLING AND TESTING RAMS AT SHOWS

This brochure provides a background to the requirements  
for the collection and testing of fleece samples for rams on  
display at shows and sales authorised by the Australian  
Association of Stud Merino Breeders.

The main requirements when testing rams for show and  
sale are:

- \* the mid-side samples are taken in a consistent  
manner and at a similar period (4 to 8 weeks) before  
the rams are shown;
- \* the age of the animals at the time of sampling, the  
date of sampling and the period of wool growth are  
declared;
- \* the results are accurate and precise within the limits  
of the Australian Standards for Fleece Measurement  
testing;
- \* the results are delivered in a timely and professional  
manner; and
- \* the results can be easily interpreted by the vendor,  
agents, potential buyers and other interested people.

