

SAMPLING

Correct and consistent sampling is fundamental to obtaining satisfactory test results. Discrepancies can be clearly observed at time of showing/selling and leads to issues arising – careful mid side sampling must be undertaken 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 of not less than 30 grams shall be taken at skin level and comprise full length staples.

Two inspectors are required to be present at all shearing inspections and mid side sampling, one of whom shall be a nominee of the relevant state stud Merino breeders Associations.

The nominee will carry the shearing inspection report forms and declaration of Australian Merino breeding for completion and signing.

Stud masters/Owners are **NOT** permitted to tag or sample fleece from their own sheep.

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.

One sample shall be taken from each sheep.

- 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 plus Catalogue printing.
- Samples from each stud must be kept in separate parcels and labeled with both the **STUD NAME** and the **SHOW/SALE** that they are destined for. Please note that **PROPERTY NAMES ARE NOT ACCEPTABLE as they are not unique.**
- All samples are to be mailed or consigned to the AWTA for testing as soon as practical after sampling, preferably batched, by the authorised state process.

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 (SDFD, CVFD)
- * The proportion of fibres less than 30 microns, accepted as the comfort factor (FDCF)
- * Curvature
- * Spinning Fineness (FDSF) – optional, used at ASWS.

Staple Length and Staple Strength are additional requirements of the Stud Ram Sale held in Katanning, Western Australia.

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. From the sample taken from each sheep, the sample is split and tested separately and the results averaged for publication. This will provide 2 x 1000 snippets measured. Double sampling and testing provides a 29% improvement in precision over the sampling and measurement of a single tested sample.

CHOICE OF TEST HOUSE

The test house chosen shall be an accredited laboratory that agrees to follow test procedures in accordance with the Australian Standards for Fleece Measurement testing.

Only one laboratory shall be used to avoid any between-laboratory differences. Currently this is AWTA.

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 1 to 2 microns above the fibre diameter of paddock grown fleeces, and by 1 to 2 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.”*

I authorize for fleece test results to be made available
direct from the testing house to the nominated
show/sale to ensure accurate recording/transposition
of results.

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 AND MULTI VENDOR SALES

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.

