



CRC

for

Premium

Quality

Wool

The CSIRO Fine Wool Project

Produced for the CRC for Premium Quality Wool undergraduate program by;
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Program.



Materials and methods

- **CSIRO's Fine Wool Project flock:**
 - located in Armidale, NSW
 - 9 fine-wool and 2 medium-wool studs
- **style data collected on 5100 hoggets (260 sires):**
 - subjective assessments made by CSIRO staff
 - objective measurements on midside staples
 - genetic parameters obtained using VCE

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Traits Measured

Objective wool characters

Greasy fleece weight
Yield
Clean fleece weight
Mean fibre diameter
Standard deviation of fibre diameter
CV of fibre diameter
Staple length
Staple strength
Resistance to compression
Colour
Style

Subjective wool characters

Birth coat
Handle
Dust penetration
Crimp definition
Staple size
Greasy colour
AWC wool type
Flystrike
Fleece rot
Bacterial stain
Mycotic dermatitis

Skin and wool follicle characters

No. primary follicles
No. primary fibres
Mean diameter of primaries
Standard deviation of primaries
% Primaries > 30µm diameter
No. secondary follicles
No. secondary fibres
Mean diameter of secondaries
Standard deviation of secondaries
% Secondaries > 30µm diameter
S:P Ratio
DpDs Ratio

Other

Body weight
Neck wrinkle score
Body wrinkle score

No. lambs born
No. lambs weaned

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Scoring System

- **Handle** - an assessment of the softness judged by touching the wool with the hands (1 = very soft; 5 = harsh)
- **Dust penetration** - the depth of dust penetration down the staple (1 = dust restricted to tip; 5 = dust penetrates to skin level)
- **Crimp definition** - the definition and evenness of crimp along the staples (1 = very distinct; 5 = little or no crimp)
- **Staple thickness** - thickness of the staple (1 = wire thin; 5 = very thick)
- **Greasy wool colour** - the colour and brightness of the greasy wool (1 = bright and white; 5 = dull and yellow)
Stain and yolk are scored independently of this measurement.

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