

## COAT COLOUR MATTERS

Coat colour has fascinated animal breeders and geneticists for many years. Only in the last few years have the underlying genes been discovered. Many are yet unknown.

The following information is provided for the benefit of cattle breeders who are trying to utilize coat colour as one of the goals in their breeding program. Coat colour was very variable in early domesticated stocks. In many breeds, colour became one of the traits under intense selection and ultimately colour became part of the identity of many breeds.

MURRAY GREYS come in 3 colours, silver, grey and black. The base body colour of MURRAY GREYS is black which is modified by a diluting gene. The diluting gene reduces the amount of pigment in the hair. One diluent (grey) gene produces grey coat colour and two diluents (grey) genes produces silver coat colour. Black animals have no grey genes. Grey is dominant to black so when crossed with another breed that coat colour is grey or silver.

The dark skin pigmentation helps prevent eye cancer photosensitivity reaction and sunburned udders.

MURRAY GREYS performed well in a trial which was undertaken at a commercial feedlot to determine the effect of high heat on performance and carcass characteristics. In this heat stress trial MURRAY GREYS outperformed the other trialled breeds by producing the highest average daily weight gains. Their superior performance in this trial was attributed to their lighter coat colour.

*“Effects of Genotype on Performance and Carcass Characteristics of Summer-Induced Feedlot Cattle” by Y Sakaguchi and JB Gaughan.*

Murray Greys have an increased tolerance to heat. An interesting article on, ‘... does coat colour matter in summer’, by Jon Condon, 17 Dec 2012 can be read at

<http://www.beefcentral.com/production/cattle-productivity-does-pen-shade-coat-colour-matter-in-summer/>

The findings of the impact of coat colour in the trial showed lighter coloured cattle do not suffer from high heat load to the same extent that black cattle do.

A large commercial beef industry stakeholder, S Kidman & Co., have been heavily influenced by coat colour in selecting the genetic building blocks for their composite program. On Kidman’s northern country, much of which is treeless plains, they are trialling a breeding program using Tuli, Murray Grey, Charolais and Grey Brahman.

