

The basic varieties – Agouti and Black

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Origin

AGOUTI -The agouti colour is the original colour of the Norway rat. In genetics it is referred to as “wild type”, basically meaning that it is the natural colour which is not mutated by any genes. Most wild rats are also agouti in colour except that their coats are duller since domesticated agoutis are selected for a richer coat colour. The first time agouti appeared at a rat show was at Cheltenham, England in 1902, shown by Douglass and Vale (Royer, 1995).



Dumbo Agouti Berkshire buck



Agouti Variegated
berkshire doe

BLACK -This colour variety is very old and is one of the first mutations to be scientifically studied. In the book “Genetics of the Norway rat” it mentions that black was already scientifically described as far back as 1877 (Robinson, 1965). Black was already shown in the very first rat show in the Aylesbury Town Show in 1901 (Royer, 1996).



Black Irish buck



Black Self doe

South African History

Both Agouti and Black have been available from at least the 1950's. It is speculated that they might be from laboratory origin together with PEW, amber and champagne, but no proof can be given if this is indeed true (Ratanooga forum post started 24 March 2015).



Dumbo Agouti Berkshire buck



Black Blazed Berkshire doe

Description of the variety

AGOUTI

“A rich ruddy brown colour evenly ticked with black guard hairs. Undercoat dark grey. Belly fur is a dark silver grey. Eye colour is black.” - S.A.R.F.C standards



Agouti Berkshire buck

If one takes a closer look at an agouti, one will notice that the individual hairs are not all the same colour. Some are banded with three different colours, while the longer guard hairs are black. The undercoat appear grey in colour and the belly is a lighter silvery grey colour. Young agouti rats are a dull grey brown colour but the coat turns a richer “redder” shade as adults.

It is considered an easy variety to breed to show quality regarding colour and if you have good quality agoutis, they are valuable to use in outcrosses to

improve some of the other colours. Agouti rats that carry the chocolate gene ($A/- B/b$) are visibly paler than other agoutis. Sometimes breeders refer to them as “pale agoutis”. Agoutis that carry blue ($A/- G/g$) have a greyer coat than agoutis that do not carry blue. Agouti rats that carry C locus alleles like Siamese and pink eyed white ($A/- C/c$ or $A/- C/c^h$) also tend to have duller coats (Foulds, 2005).



Pale agouti Berkshire doe



An Agouti Irish kitten

BLACK

“Colour is a deep solid black throughout, including base fur. Belly colour should be as black as possible. Eye colour is black.” – S.A.R.F.C. Standards



Dumbo Black Self doe

A black rat is uniformly black, both on the top coat, undercoat and the belly. The shorter belly fur can make the belly appear slightly paler than the rest of the coat. Ideally for show purposes, a black rat should be perfectly black without any white hairs or rustiness of colour. Many black rats, especially males, tend to have a few white hairs interspersed throughout the coat, but this can be selectively bred out to give a more solid black appearance. In England silver black is bred by simply selecting black rats to have more white hairs interspersed throughout the coat (NFRS Standards – Any Other varieties). In America silver

black is based upon their dalmatian rats where the mutation that causes dalmatian also results in extensive silvering of the black coat (AFRMA Standards – Silvered). Older black rats may get brownish patches of fur on their coat, called rustiness. Malnourished young black rats can also have patches of discoloured fur, especially when they are moulting, but this soon goes away when they are properly fed. Young black rats are duller in colour than adults.



An old Black Berkshire buck showing browning of coat



Silvered black Self buck

Genetics

Agouti is denoted by the symbol “A” and is located on chromosome 3. The dominant “A” causes the banding effect on the fur. The recessive non-agouti mutation “a” causes the banding effect to disappear leaving only the black colour on the hairs. Agouti rats can either be A/A or A/a (when they carry black). Often agouti is written A/- when it is not known if they carry black or not. There is no physical difference between A/A and A/a agoutis. Black rats are written as a/a. You need two copies of the recessive non-agouti gene to get a black rat.



Agouti Berkshire doe



A young Agouti
Berkshire doe



A Black Berkshire kitten



Black Hooded buck

References

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