

Cavy Colour Genetics

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Your basic wild cavy is a golden agouti.

Genotype is AA EE BB CC PP SS rnrn

A – agouti

E – full extension

B – black

C – full red

P – dark eyed

S – no white spotting

SiSi – no silver

rn rn – non roan

There are 4 options at the A locus – dominant A which gives agouti, ar which is next in dominance which gives solids, at also lower in dominance than A which gives the tan pattern and the recessive a which gives non-agouti. aa EE BB CC PP would be a self black.

There are 3 options at the E locus – dominant E which is full extension of colour (black, chocolate, beige, lilac), ep which is partial extension giving the tortoiseshell colour and the recessive e which is non-extension (white, cream, red, etc.)

There are 2 options at the B locus – dominant B which gives black and recessive b which gives chocolate.

C is a complex locus with 5 possibilities – dominant C full colour, cd dark dilute, ck light dilute, cr ruby eye dilute and ca Himalayan.

P has 3 options – dominant P which gives dark eyes, recessive to P is pg which is the gene that gives slate blue and recessive p which gives pink eyes.

The dominant S gives no white spotting, Ss gives an intermediate amount of white spotting and ss gives a high percentage of white spotting.

The dominant Si gives no roaning, the recessive si gives roaning.

The dominant Rn gives dalmation, RnRn is a lethal, rnrn is non-dal. Most roans in North America are Rn roans.