

## Identify premium animals for greater profitability

GeneSTAR<sup>®</sup> Black tests coat colour and is primarily used to identify if a black animal is homozygous or heterozygous for black coat colour. Homozygous Black animals often return greater profits in local markets.

- Homozygous animals are carriers of two alleles for the black coat gene.
- Heterozygous animals are carriers of one allele for the black coat gene and one allele that can either be for “red” coat colour or a “wild type.”

Animals that are Homozygous Black will also pass one pair of their black alleles to their progeny, producing a higher percentage of black offspring and the potential for greater profitability.

### Mating decisions with GeneSTAR Black

With test results from GeneSTAR Black, you can make informed breeding decisions to produce animals with colour best suited to your operation.

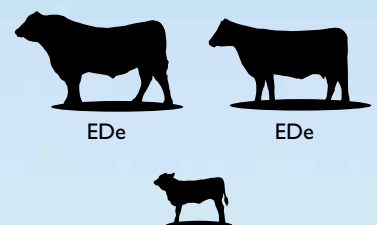
GeneSTAR Black tests for the coat colour gene, which can be expressed in three possible forms:

ED	Black
e	Red
E+	Wild type

Black is the dominant allele, resulting in these possible combinations for coat colour:

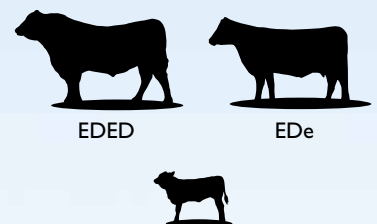
EDED	Homozygous Black
EDe	Black-hided Animal, Red carrier
ee	Red-hided Animal, double Red carrier
E+ED	Most Likely Black-hided Animal, Wild Type carrier
E+e	Most Likely Red-hided Animal, Wild Type carrier
E+E+	Wild Type carrier, any colour possible

### The Following Mating Schemes Will Produce A Homozygous Black Animal With The Frequency Shown.



#### Offspring

- 25% EDED (Homozygous Black)
- 50% Ede (Black-hided Animal, Red carrier)
- 25% ee (Red-hided Animal, double Red carrier)



#### Offspring

- 50% EDED (Homozygous Black)
- 50% Ede (Black-hided Animal, Red carrier)