

SURIS



SOMERSET PERU INCA TREASURE



GENERATION I

by CATHY PROCTOR – WALLABY RIDGE SURIS

EVERY NOW AND THEN, ON AN ALPACA FARM SOMEWHERE IN AUSTRALIA, THE DAY BRINGS AN UNEXPECTED ARRIVAL, A NEW SURI CRIA ... WITH SPOTS! WHEN THAT CRIA HAS TWO SOLID COLOURED PARENTS, IT IS MORE OF A SURPRISE.

THE MYSTERY COULD BE quickly explained by those breeders amongst us who are aware of the influence of one great suri herdsire. They would say let's examine the pedigrees of both parents and look for Treasure, that is Somerset Peru Inca Treasure.

Inca Treasure has been the most influential suri sire for transmission of the Appaloosa gene. Whether this gene should be named the Appaloosa gene is debated by some experts. Dr Phillip Sponenberg (DVM PhD, Professor of Pathology & Genetics, Virginia

Maryland Regional College of Veterinary Medicine) and author of books on equine colour genetics stated in his article 'Some Educated Guesses on Colour Genetics of Alpacas' that this pattern would be more suitably termed Harlequin as the transmission is different.

Harlequin or Appaloosa, the genes that control these patterns in other species (horses etc) are not clearly understood, although some patterns are dominant and others recessive.

It appears from all the records and evidence that Inca Treasure possesses a dominant gene

for this pattern. There are generational intervals where his progeny and their descendants are to all visual inspections solid coloured or, if not, have no evidence of spots. If these solid coloured suris breed and produce a harlequin/appaloosa cria, they must be carrying a hidden copy of this dominant gene.

If Inca Treasure had a recessive gene and that was passed onto his progeny who then in turn were bred, for the pattern to be expressed the union would require both parents to carry a recessive gene and statistically this would be very unlikely.

Another really interesting outcome from Inca Treasure's family line is that in the majority of these spotty individuals the pattern is expressed on alpacas that are grey or rosegrey.

This colouration should be most correctly characterised as the colour roan concluded Dr Phillip Sponenberg in the aforementioned article.

He stated that "The pattern that is called grey by most alpaca breeders is probably what a geneticist would call roan."

WITH spots

following the trail of treasure



GENERATION 2

GENERATION 3

And secondly that: –

“Roan is likely a dominant gene” but most interesting of all – “On a fawn background the roan can be difficult to appreciate and is likely to be missed ...”

This brings me to believe that not only is Inca Treasure carrying a dominant gene for the appaloosa pattern but is most probably carrying a dominant gene for roan (he is fawn and perhaps the roan expression is minimal?).

There is one more puzzle I often ponder on.

Under what colour pattern /category do we place the alpacas that start off fawn and

turn a warm subtle grey or rosegrey at the skin? There seems to be a recurring incidence of this in the Inca Treasure family tree and these alpacas start life light and darken with age.

I think there must be a genetic explanation ... a gene that intensifies colour? Is this gene co-linked in some way with Inca Treasure’s suspected roan and appaloosa genes?

The Inca Treasure line has many examples of this and one on our farm ... our stud male Inca Gold started life as golden brown and is now dark grey and guess what? he has thrown several appaloosas. Inca Treasure has left his mark on the Australian suri herd.

Disclaimer: – This article is based on only my observations, I am not a geneticist but am interested in the unusual.

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