

CONGENITAL DISQUALIFIERS

PART VI- SUPERNUMERARY TEATS

The presence of supernumerary teats was a disqualifier for importation of our original foundation stock animals it is a disqualifier for registration now.

So first – what are they? Simply they are extra teats, otherwise known as multiple teats or supernumerary teats. They refer to any teat in excess of the normal four teats seen in llamas and alpacas and distinct from the normal four teats. They are usually located in front or behind the main teats and are usually but not always much smaller. Sometimes a small wart, mole or other swelling will cause a “round, raised lesion” on an udder. This may look like a supernumerary teat on first glance and care should be taken to try to determine if it truly is an extra teat.

Physiologically extra teats may be separate and not connected to the primary mammary gland. Conversely, they may be connected to the primary gland or thirdly they may be separate and have a functionally separate mammary gland. Most frequently however, they are vestigial and non-functional. What is not in any doubt among researchers though is the heritability of supernumerary teats. It has been conclusively shown that in goats, cattle and other livestock species that supernumerary teats are a highly heritable polygenetic trait (influenced by a combination of genes).

Over the years the question of supernumerary teats has been revisited often by various pedigree committees – and with consultation from a number of respected camelid veterinarians - none of which have recommended removal of it from our list of congenital disqualifiers although it has been slightly modified. Our breed standards as they pertain to teats now read:

“There should be four normal teats of similar size. Any protrusion from the skin, no matter what the color or texture, in the general area of the teats, that is less than 50% of the height and 50% of the diameter of the normal teats shall not be considered an extra teat, measured at time of registration.”

Having more or less than the 4 teats as defined above is a disqualifying fault.

The presence of supernumerary teats is critical in some livestock industries and unimportant in others. It is a huge issue with dairy goats – a quick view at some goat breeders chatlines reveal that few topics inflame quite so much - but a minor blip in meat or other goats. For the most part it is a non-issue in dairy cows – “fine in the parlour but not in the show ring”. Surgical (loosely defined) removal of the supernumerary teats in dairy cows is common for a couple of reasons. Firstly, simply for aesthetics but also, if extra teats get large enough they can interfere with the milking machines so removal is sometimes necessary. Secondly and perhaps most importantly – particularly as it pertains to camelids - because removal eliminates one possible site of infection, since any unused cavity is ideal for bacterial growth.

Interestingly in a 1934 paper, it was reported that in Russia and some other European countries that there was a prevailing belief among dairy cattle breeders that the presence of supernumeraries was evidence of abundant milk supply. In other words, the observations of these breeders, while milking,

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led them to believe that the genes responsible for the development of the supernumerary teat condition were closely linked with the genes for the character capacity for large amounts of milk. Supernumerary teats, if not quite actively selected for, were certainly not selected against. The paper however, did report that “When all the observations are considered, it seems that the factors for the capacity for high butterfat production are not closely linked with the character supernumerary teats. From the practical viewpoint, there is no indication that supernumeraries are external traits indicating ability to produce superior to the normal condition for butterfat production.”

Why do we list them as a registration disqualifier? Principally three reasons. One, the presence of supernumerary teats was listed as a disqualifier in the screening documents applied to llamas and alpacas originally imported into Canada – our foundation stock animals. Two, it is widely known that the presence of supernumerary teats increases the possibility of mastitis, threatens udder health and results in future problems with lactation. Mastitis is a common cause of poor milk production and low weaning weights among cria. And three, teat abnormalities may also make it difficult for a cria to nurse influencing survival or future well being of the cria.

The goal of any breed standard is to help breeders visualize characters and traits that should be included as typical of a breed. There is little doubt that what is typical of camelids is an udder consisting of four glandular quarters, each with it's own teat. The presence of supernumerary teats is outside of established breed parameters.