So far insufficient mating data have been obtained to postulate genetic control, but it seems probable, by analogy with cattle and human results, that the various phenotypes will prove to be inherited.

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Giant Compound Hair Follicles in the Skin of the Rabbit

THE hair of the rabbit grows from a compound follicle¹ which contains one large outercoat hair, a few smaller outercoat hairs of intermediate morphology and numerous fine undercoat hairs. The true compound nature of the follicle is best seen during the growth-phase, when the follicles extend into the dermis forming distinctive groups at their deepest level (Fig. 1). As the hair shafts reach the surface the compound follicle is subdivided by fibrous septa into smaller groups which surround the large outercoat hair. Each of these smaller groups of undercoat hairs penetrate the skin through a common follicle opening, whereas the outercoat hair has a separate opening.

If the hair is plucked out in the quiescent phase it can easily be separated into tufts that correspond to the pattern of the compound follicle (Fig. 2). This act of plucking out the hair initiates its regrowth cycle, and in the pigmented rabbit evidence of regeneration is first observed on about the seventh day, when the skin begins to darken as a result of the formation of pigment in developing follicles². Between this period and the time the hair penetrates the skin on about the fourteenth day, the skin surface shows small discrete elevations uniformly distributed about 0.5–1.0 cm. apart (Fig. 3). Serial sections

Fig. 1. Section, cut across the slope of the hair, of rabbit skin in the twelfth day of the regrowth cycle showing one giant follicle and several normal compound follicles. The subdivision of the follicle with the single isolated outercoat hair is seen as the hair shafts near the surface. ($\times c. 30$)

Fig. 2. Drawing of a tuft of rabbit hair showing the large black outercoat hair

Fig. 3. Photograph of the skin of the rabbit on the twelfth day of the cycle showing nodular elevations caused by the giant follicles. ($\times 1\frac{1}{2}$)

through the skin at this time show that these elevations are caused by giant compound follicles (Fig. 1) which contain several outercoat hairs and many more undercoat hairs than the normal follicle. In the chinchilla rabbit the central hair is large, thick and uniformly black in contrast to the banded black-and-white outercoat hair of the normal follicle.

These giant follicles have always been seen in the chinchilla rabbit when the hair is regenerating, and observations indicate that they are present in many other types of rabbit, including the agouti, albino, rex and angora strains.

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