Notes on Pigs with Unusual Coat Colour Appeared in the Yorkshire Breed

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The modern type Yorkshire is a breed of very large size of an entirely white colour, with erect ears. The distribution of the Yorkshire pig is, at present, very widespread in the world. It has generally been accepted that the Yorkshire pig of to-day was originated from a native breed of large white pigs with very large ears hanging over their eyes, which were common in many parts of Yorkshire, England. The old type of Yorkshire, according to PLUMB ('20),[1] had a strong coat of white hair, some blackish or bluish skin spots, a large, long head, big pendent ears and strong bones. It was also described that the first improvement of the native Yorkshire pig was due to the use of Berkshire blood. In view of these considerations, therefore, it is likely that the Yorkshire pigs had various colour patterns in their ancestral forms.

In one of the litters out of the Yorkshire breed which were purely bred in our University Experimental Farm, there were produced four pigs (♀. 2. ♂. 2.) with unusual coat colour, together with five usual young of white colour. The colour of these unusual pigs is apparently a black background, over which are scattered irregular, reddish brown markings of varying size and shape (Fig. 1).

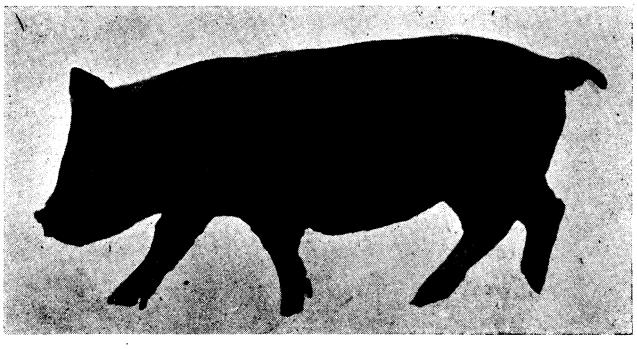

Fig. 1. The Yorkshire pig with an unusual colour.

1) PLUMB, CH. S. 1920. Types and breeds of farm animals. (Boston).

The general bodily form and other characteristics are not entirely different from those of the normal animals. The sporadical occurrence of these animals with unusual colour type in the Yorkshire strain is of interest when we consider the ancestral forms of this breed as above noted.

An attempt at a crossing experiment was made by the author with one of these unusual pigs. One of the sows of unusual spotted colour was back-crossed to the parental boar of normal white colour. The scheme of crossing is shown in Fig. 2. In this cross were produced 20 young which consisted of 12 normal

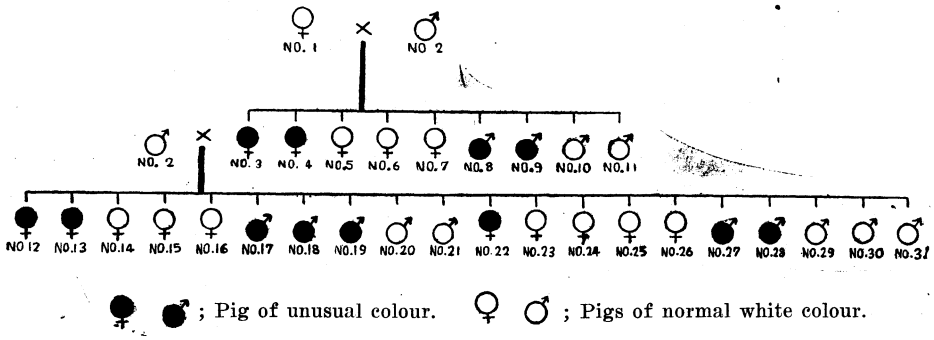

Fig. 2. Scheme of the crossing experiment.

white and 8 unusual spotted animals. This ratio of segregation nearely approximate 1:1, so far as the coat colour is concerned. Though nothing definite can be said, this evidence is very suggestive of that the unusual colour pattern is probably due to a recessive gene.

Since the genetical investigation of the swine is still in a very incomplete status, such fragmental data as presented in this paper may contribute to some extent in this field of study. KRONACHER and OGRIZEK ('32)[2] described the genetical evidence of the pig with stripes like a tiger and reported that the inheritance of the tiger-stripe in the pig is due to several multiple factors. Though no definite statement can be made at present, the case in question seems to be a single Mendelian character, so far as the data obtained in this study show.

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2) KRONACHER, C. u. A. OGRIZEK. 1932. Vererbungsversuche und Beobachtungen an Schwein. Zeits. Tierz. Züchtungsbiol. 25.