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Possibly a hypophyseal deficiency causes the dwarfness. Experiments are under way to check this hypothesis.

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A NEW CHARACTER IN THE GUINEA PIG —
"SILVERING"

W. V. LAMBERT

Silvering is a recessive character that manifests itself by the appearance of many white hairs in the fur, chiefly on the back and sides. At birth the character is not apparent, gray hairs first appearing on the posterior region of the back when an animal is about four months old. The number of gray hairs increases after this age for the next three or four months. In high grade silvers there is a progressive increase in the amount of graying until the animal is about a year old.

Much variation occurs in the degree of silvering, this varying from a trace to high grade silvers. For convenience of classification silver animals were placed in five groups, from group 1, including animals of the highest grade, to group 5; animals of group 5 show only a trace of silvering. Matings of silvers with silvers, all animals of grade 4 or above, produced 43 offspring, 37 with silvering of grade 4 or above, 4 animals of grade 5 and 2 showing no silvering. The six animals showing no silvering, or only a trace, were produced by three females of grade 4, namely with a low degree of silvering. Matings of heterozygotes with silvers of grades 1 and 4 produced 26 non-silvers, 11 with a trace of silvering and 27 silvered of grade 4 or above. Matings of heterozygotes together produced 12 non-silvered, 4 animals showing a trace of silvering and 6 silvered. These results indicate that an autosomal monogenic difference exists between silvered and non-silvered animals, although it appears that modifying factors affect the degree of silvering. The character is expressed to an equal degree in males and females.

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