worm (Alabama argillacea Hubn.), it may be worth while to place on record the fact that this insect has been very abundant in parts of the south this year. Here at least, and if one may judge from observations from a car window, in northern Alabama as well, the cotton has suffered also complete defoliation.

J. R. WATSON

FLORIDA AGRICULTURAL EXPERIMENT STATION

## TRANSPLANTATION OF OVARIES

To THE EDITOR OF SCIENCE: May I have space in your columns to say a few final words regarding the results of transplantation of ovaries?<sup>1</sup>

Professor Castle has objected to my application of the term mongrel to guinea-pigs used by him in experiments which he claims overthrow my results on chickens.<sup>2</sup> My authority for the use of this term is the following extracts from his paper.<sup>3</sup>

The ovaries were removed from an albino guinea-pig and in their stead were placed two ovaries, one from each of two black guinea-pigs. The female bearing the engrafted ovaries was subsequently bred to an albino male and of the resulting six young, all were black and red, and one had a white foot. In explanation of this white foot, it is stated that "Spotting characterized the race from which the father came. He was himself born in a litter which contained spotted young. . . . "4" Therefore the male was a mongrel.

- <sup>1</sup> Science, N. S., 1911, XXXIII.
- <sup>2</sup> Science, N. S., 1911, XXXIII.
- <sup>3</sup> Publication No. 144, Carnegie Institution, pp. 9-10.
  - 4 Italics mine.

\*In an article by Professor Castle appearing in The Popular Science Monthly under date of May, 1910, it is stated that in such an experiment six young resulted and they were "all black" (italics mine). From the data in my hands it is impossible to conclude whether this is the same experiment as that quoted above, and to which it bears a striking similarity. If it is the identical experiment, and this I assume in view of his more recent statement (Publication No. 144, Carnegie Institution, 1911, p. 8) that but two of his successfully operated animals had borne young, the article in The Popular Science Monthly must be inaccurate.

In the other instance, an albino female was spayed and her ovaries replaced by the ovaries of a brown-eyed cream guinea-pig. The albino female was then bred to an albino male and two albino and one brown-eyed cream offspring resulted. In attempting to explain this result, it is stated that "albinism occurred as a recessive character in the particular brown-eyed cream stock used..." So it follows that at least one of the females used in this experiment was a mongrel, and was therefore, as in the first experiment, entirely unsuited to furnish any reliable information from the standpoint of foster-mother influence.

C. C. GUTHRIE

PHYSIOLOGICAL LABORATORY, UNIVERSITY OF PITTSBURGH

## MOULTING AND CHANGE OF COLOR OF COAT IN MICE

Mr. C. C. LITTLE has, in a recent number of Science (October 27, 1911), taken exception to certain statements that I made in an article on the inheritance of coat colors in mice. He believes that the unusual patterns that I have described, especially in black mice, which I attributed in part to a heterogeneous condition, are only temporary effects and are due to moulting. That the coat may appear spotted at times of moulting is too familiar to any one keeping these animals to call for comment. But that the patterns that I described are not due to this was shown by the fact, stated in my paper, that the fully grown hair was in all cases studied under the microscope and the pigments in the hair recorded. Moreover, the cases described were not incidental to the coat-changing period, for the pattern remained for several months until, in fact, a new moult appeared.

It is well known that black mice contain both black and chocolate in the hair, even when they produce only black mice. Hence the opportunity is furnished for the local excess of one or of the other pigment to become apparent. That such effects are due to some "physiological conditions" present at the time of moulting is very probable, and was mentioned in my paper. Furthermore, in