Referate.

Die Weismanni, unter sich gepaart, spalten in fere-nigra (18), Weismanni (31) und melaina (17), im Verhältnis 1:2:1. Fere-nigra und melaina sind nunmehr homocygotisch und ergeben bei Kreuzung miteinander ausschließlich Weismanni. Interessanterweise ließen sich diese sämtlichen Formen mit dem sog. "Subcaeca"-Typus kombinieren. Bei demselben handelt es sich um eine Verschleierung und Verdüsterung gewisser Zeichnungselemente, besonders auch des weißen Nagelflecks in den Augenspiegeln. Es gelang eine Falterform von rein melanotischem Typus zu erhalten, die Aberratio Weismanni in dem "Subcaeca-Kleide". M. Daiber (Zürich).

Castle, W. E., and Little. On a modified Mendelian Ratio among Yellow Mice. Science, N. S. vol. 32. 1910. p. 868.

Durham, L. M. Further Experiments on the Inheritance of Coat Colour in Mice. Journal of Genetics, Vol. I. 1911. p. 159.

Several years ago Cuénot shewed that yellow mice are always heterozygous, even when bred from the mating of yellow × yellow. In explanation of this curious fact two possibilities have been suggested:

- (1) That there exists some form of repulsion between the yellow-bearing ovum and the yellow-bearing spermatozoon such that these cannot fertilise one another.
- (2) That fertilisation between the yellow gametes can occur, but that the resulting zygotes are non-viable.

On the former of these two possibilities the ratio of yellows: non-yellows from the mating of yellows \times yellow should be 3: I. For all the yellow ova would be fertilised by non-yellow sperm, while of the non-yellow ova half would be fertilised by non-yellow and half by yellow sperms. According to the latter possibility however the homozygous yellows would be formed but would fail to develope, and the ratio of yellow: non-yellow would be 2: I.

Cuénot's own numbers failed to provide a decisive criterion between these two ratios, but this has now been done by Castle and Little, and also by Miss Durham. From the table here given, which shews the results of the mating yellow \times yellow

	yellows	non-yellows
Cuénot	263	100
Castle & Little	800	435
Durham	448	232
	1511	767

there can be little doubt that the ratio 2:I is the true one and that the homozygous yellow is formed but soon perishes for some reason at present unknown. In support of this conclusion Castle and Little find that the litters produced from yellow \times yellow are somewhat smaller than those produced from yellow \times non-yellow, but this result is not-confirmed by Miss Durham's experiments.

Miss Durham's paper contains the record of a large number of experiments in addition to those on yellow mice. They deal mainly with the heredity of coloured forms having pink eyes, and the results may be briefly given as follows. The factors concerned are those for dark eye (E), agouti (G), black (B), and chocolate (Ch). Corresponding to the series of dark-eyed forms, agouti, cinnamon-agouti, black, and chocolate, there is a series of pink-eyed