

## DOMINANT BLACK IN CATS AND TORTOISE-SHELL MALES. A REPLY.

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THE criticism by Mrs R. C. Bisbee and Miss E. C. Herdman in the June number of this *Journal* (Vol. XVIII, p. 219) was rather welcome to us, since, in our reply to it, it gives us an opportunity of publishing some more details on our tortoiseshell males.

Before doing so, however, we wish to say that we do not regard our suggestion that the occurrence of dominant black may have something to do with the occurrence of tortoiseshell males as a final interpretation for all such males. But it seems to us that our case of two tortoiseshell males in a single litter of three tortoiseshells from a cross with dominant black was distinctly suggestive, and that there is a greater possibility that the few tortoiseshell males mentioned in the literature are due to the occurrence of dominant black than to either non-disjunction or freemartinism.

It is beyond all doubt that dominant black occurs in our Siamese material; it is also beyond doubt that this black does not lie in the sex-chromosome. There is, of course, a possibility that there are Y-chromosomes containing a factor which, in co-operation with dominant black, causes tortoiseshell. But we are quite convinced that the question of the tortoiseshell males is still unsolved, and that many experiments must yet be carried out before it will be possible to solve it.

With regard to our two tortoiseshell males already mentioned, we regret to state that one of them died when only two days old. He was however dissected and proved to be an indubitable male. The other one is still alive. He is now 17 months old, but so far has produced no offspring, although several queens were offered to him. Most probably he has never copulated, and we are forced to suppose that he is abnormal, or at any rate infertile. As the mother of these cats is still alive and vigorous, we are now trying, among other experiments, to repeat the cross that gave such an astonishing result.