

Extract of letter to E. B. Ford
from R. A. F.

Sept 29, 1931.

I doubt if one would expect very many red-eyed in the wild population, even taking their experience as typical. Even if all their 11 mutants were genetically alike, there would be 3 wild homozygotes to 1 heterozygote, or an equilibrium ratio of 36:12:1 in the wild, that is 1 in 49 born would be red-eyed. But this must be divided by the number of different mutants, which seem to be rather numerous, so that one might not expect more than about 1 per 1000, even without differential mortality of the red-eyed young. If most of these came from broods which were a quarter red, then collecting broods before hatching, you would only expect 1 in 250 to include red young, and would need to examine about 1000 broods before you could feel sure that the proportion was really lower.