1. **INTRODUCTION:**

In many respects the greatest need of the poultry industry throughout the world, and particularly in the tropics, is increased efficiency. Improvement in methods of rearing, feeding and general management, could accomplish much towards increasing the return from the average tropical flock, but beyond this optimum point, further progress is impossible without an improvement in the breeding quality of the stock. With this thought in view a progeny testing scheme was inaugurated at the Imperial College, using the College flock of parmenter strain Rhode Island Red birds. It was realised that no real improvement could be achieved in one academic year, which was all the time available to the author. It was decided, therefore, to inaugurate a progeny testing scheme for fertility, hatchability, and high egg production which could be continued by others in subsequent years, with, it is hoped, a near perfect technique already established and some progeny with which to work. The progeny tests would, furthermore, provide a practical demonstration to undergraduate students.

Normally a farmer when breeding any class of stock, selects them on their pedigree or show records. This is not a reliable method as it often happens that an animal with a good pedigree will not produce good offspring, being unable to transmit any of the high producing factors it may possess. On the other hand, some nondescript sire or dam, may consistently produce higher producing offspring than itself. However, often before this is realised, the sire or dam will have been slaughtered as worthless. By progeny testing, all these chances are eliminated, the potential high producers being discovered and then kept for breeding. If it is not possible, because of age, for the "tested" individuals to be further used, promising lines may have been identified with which to persevere.