INDIAN STATISTICAL INSTITUTE

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India.

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Dear Lederberg ,

Many thanks for "The Chemical Basis of Heredity". I had just seen it before my migration. I shall now read it. It is clearly a most useful book. But such books are one of the curses of this country. One tends to quote them, instead of quoting the original work on which they are based. To do this might involve a journey to Delhi or Bombay, or even further.

We are gradually getting to work here. Helen has just got the F2 of her moths, and I am getting some plant genetics started. When one comes back to it after 20 years all kinds of questions are obvious. For example I don't know of any genes affecting seed characters (except maternal characters such as the seed coat) in Leguminosae except yellow cotyledons and wrinkled (stachyose) in Pisum. I am putting a young man onto Vigna sinensis on which some work is being done elsewhere in India. Suppose we weigh or measure seeds

- (1) two selfed pure lines A & B
- (2) on A and B each pollinated by the other
- (3) on the F1 (self-fertilized)
- (4) on the F₂ (self-fertilized).

I should expect the variances to be (4) > (3) >) >(2). Whereas in the parent plants I should expect $F_2 > (A & B) > F_1$. I hall make the young man in question read this letter and try to see what I am a > 1.

We have a rather amusing case of a Brazilian plant, inchhornia crassipes which has become a pest here. It was originally trimorphically heterostylic, but has now taken to clonal reproduction, so different "mating types" occur in different areas.

We greatly enjoyed your visit, and hope you me later visit this country for a bit longer.

Prof.Joshua Lederberg, Dept. of Genetics, University of Wisconsin, Madison 6. Wis., U.S.A. Yours sincerely, d. B. S. Heldun (J.B.S. Haldane)