TABLE I

Serum cholesterol levels in normal and hypercholesterolemic rats and their statistical significance
(Values are mean ± SD and are expressed in mg/dl)

Group	Rats	Diet	Serum cholesterol			*P* value
			Initial	After 1 week	After 2 weeks	
I	Normal	Control	93 ± 7	92 ± 7	92 ±7	Not Significant
III	Normal	50% Seed	99 ± 8	70 ±13	57 ± 2	< 0·00005
II	Hypercholesterolemic	Control	203 ±11	199 ±13	199 ±11	Not Significant
IV	Hypercholesterolemic	50% Seed	189 ±13	127 ± 7	79 ±18	< 0·00005

hypercholesterolemia is closely related to the heart disease, the study can be extended to find the prospects so as to give some relief to persons suffering from hypercholesterolemic ailments.

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INFLUENCE OF ALIEN POLLEN ON SOME FIBRE PROPERTIES OF COTTON

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TER-Avanesian[1] has discussed the influence of alien pollen on the progeny of a plant even when the pollen did not take part in fertilization. "The alien pollen which is laid on, in the additional pollination does not participate directly in the double fertilization but it brings metabolically its materials into the developing embryos".[1] Using this method, the Russians claim that they have achieved improvements in the existing varieties of cotton for fibre quality, disease resistance, etc.

To evaluate this method, an experiment was conducted using two varieties of cotton, one belonging to *G. arboreum*, diploid with short and coarse fibres and the other belonging to *G. barbadense*, tetraploid, with long, fine fibres. Since the objective was not to obtain hybrids but only to study the influence of alien pollen on the progeny, the diploid species (*Var. G. 27*) was used as the female parent and the tetraploid (*Var. Suvin*) as male. Limited quantity of pollen collected from the variety *Suvin* was dusted on the stigma of *G. 27* and subsequently the flowers were allowed to get pollinated with their own pollen. Boll setting was good and seeds were collected. These were sown along with selfed seeds of *G. 27* which served as control. Lint samples were collected from these two groups of plants and the fibre quality was tested for length (2.5 span length in mm) and fineness (micronaire value expressed as μg/inch).

Seeds from alien pollen treated plants were sown in the subsequent year also to study the next generation with the control. Fibre tests were conducted on these lint samples also.

The pollen donor (*var. Suvin*) has extremely long fibres (37 mm) and low micronaire (3.7) value. If its pollen had any influence on the progeny of *G. 27* the fibre quality would show some improvement. But both in 1979-80 and 1980-81 crops, the fibres of alien pollen treated plants of *G. 27* were of the same quality as that of selfed plants. *G. 27*, pollinated with alien pollen, had a fibre length of 17.5 mm and fineness of 7.4 (micronaire) in 1979-80. In 1980-81 the fibre length was 16.5 mm and micronaire was 6.1. The control (*G. 27*) had a fibre length of 16.7 mm and micronaire value of 5.9 in 1979-80. In 1980-81 the corresponding values for the control were 16.7 mm and 6.2 (micronaire). There is no evidence to support the finding that alien pollen influence the characters of the progeny of the recipient without taking part in fertilization.

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