

2. Pollen transmission from plants heterozygous for ab 10 and a paracentric inversion of chromosome 7.

The data for the transmission of ab 10 and its closely associated dominant R allele through the pollen given last year is now more complete. Plants heterozygous for ab 10 only, show that of the 76764 seeds classified 44.6% carried ab 10. This departure from 50%, first observed by Dr. Rhoades, indicates that ab 10 is at a disadvantage when in competition with pollen carrying normal 10.

Similar data for the transmission of ab 10 in plants also heterozygous for a paracentric inversion of the long arm of chromosome 7 show that of the 71243 seeds classified 45.2% carried ab 10. This per cent is barely significant at the .01 level from the 44.6% observed for ab 10 alone. This higher per cent is possibly due to preferential association of the normal 10 and the deleted chromosome 7, resulting in the loss of the recessive 1 allele in the population of viable pollen.

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