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What Are The Genes That Cause Male Sterility in Hybrid Offspring Between *Drosophila mauritiana* and *Drosophila simulans*?

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What Are The Genes That Cause Male Sterility in Hybrid Offspring Between Drosophila mauritiana and Drosophila simulans

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WHAT WE LEARNED

Finding genes that cause sterility in hybrid males between D. mauritiana and D. simulans will help us better understand evolution at the molecular level.

A genetic component related to sterility is near the 7.10 Mb region, but more research is needed to identify the gene or genes contributing to sterility.

This will expand on the current understanding of speciation and shed light onto mechanisms of male sterility in insects that may help solve the challenges of insect disease vectors.

BACKGROUND

Research has found that the genes causing sterility in interspecific hybrids have a higher chance of residing on the X chromosome; this pattern is called the 'large X-effect'. Therefore this study focuses on the X chromosome and not the autosomes. The mechanisms underlying the large X-effect are not well understood. Previous research has demonstrated that the genes causing sterility in interspecific hybrids have a higher chance of residing on the X chromosome; this pattern is called the 'large X-effect'.

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