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LACK OF AN EFFECT OF FORMALDEHYDE AND NITROGEN-MUSTARD IN INDUCING DOMINANT LETHALS IN *CULEX QUINQUEFASCIATUS*, SAY

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Formaldehyde and Nitrogen-Mustard are proven mutagens for many test organisms. Formaldehyde is a very peculiar mutagen in that it produces mutations only when *Drosophila* larvae are treated by supplementing formaldehyde in the larval food medium[1]. N-Mustard too has been tested on *Drosophila* and its mutagenicity parallels that of X-rays.

We attempted to test whether these mutagens can be used on *C. quinquefasciatus* as chemosterilants or as agents producing chromosomal mutations which are of importance for genetic control purposes.

As in the *Drosophila* studies, formaldehyde was added to yeast and then fed to mosquito larvae. The N-Mustard-treatment was given by injecting appropriate doses of N-Mustard into adult mosquito males by employing laboratory turned out micro-injection pipettes[2]. Adult males emerging from formaldehyde treated larvae and N-Mustard treated males were mated to virgin females whose eggs were screened for dominant lethals.

From an overall point of view, the results showed that there was no treatment effect for both formaldehyde and N-Mustard. Apart from the spotty occurrence of high mutation frequencies in some lines, most of the dominant lethal frequencies were at the control level.

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References

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