tial use of X-bearing sperm during the first day after insemination of the females would lead to the observed result. The variation of the sex ratio (F/M) in the controls from brood 1 to 4 (1.17, 1.37, 1.06, 0.87) does not show the systematic variation expected on the basis of this hypothesis. Statistically none of the 4 values is significantly different from the weighted mean of 1.13.

b) The extremely high rate of X/O males might result from the effect that during the first day, Stage-14 Oocytes which had been stored in the virgin females for 2 to 4 days, were inseminated. Physiological differences between stored and non-stored oocytes might be responsible for the high rate of chromosome loss. Experiments to test this possibility are under way.

c) As a third hypothesis one could assume that changes occur in the irradiated sperms during the first day of storage in the females.

Finally it should be stressed here that this "storage" effect is also found with two other types of females, but - as far as can be seen from preliminary data - seems to be absent in experiments with females of two other stocks.

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Mather, W.B. University of Queensland, Brisbane, Australia. The genus Drosophila at Cebu, Philippines.

An investigation of the evolution of the immigrans species group in South East Asia has made the determination of relative abundance at various stations of considerable interest. Data for Sabah (Mather 1968 and 1969) and Luzon (Mather 1970) have already been recorded. In February 1970 the genus Drosophila was sampled from fermenting banana baits within the grounds of the Cebu Forest Experiment Station at Camp 7. Sorting of the flies yielded the following results:

Species	Number	% of total
D. setifemur	278	16.7
D. pararubida	374	22.4
melanogaster group	1,014	60.9
	1,666	

References: Mather, W.B., 1968 The genus Drosophila in Sabah. DIS 43: 100-101; Mather, W.B., 1969 The genus Drosophila at Sandakan. DIS 44: 98; Mather, W.B., 1970 The genus Drosophila at Mt. Maquiling, Luzon, Philippines. DIS 45: 111.

Limbird, D.L. College of Wooster, Ohio. A test for mutagenicity of MA and its effectiveness in deactivating EMS.

Mercaptoacetic acid (MA) has been recommended as a deactivator of ethyl methanesulphonate (EMS) (Lewis and Bacher, DIS 43) although experimental tests were not reported which would support its effectiveness. In the following experiment, MA was tested for possible mutagenicity and for its effectiveness in deactivating EMS. The experimental procedure involved treating 4-5 day old Canton-S males with one of four test solutions: a) control: 1m KOH in 1% sucrose solution + carmine; b) 0.5% MA: 0.5ml MA/100 ml control solution; c) 0.025M EMS: 0.24ml EMS/100ml control solution; d) EMS/MA: 0.5ml EMS/100ml control solution. Males fed for 24 hours from a pad of Kimwipes saturated with one of the solutions. Only those flies having definitely red guts due to the vital dye carmine were used in M-5 tests for sex linked recessive lethals. According to the results tabulated below, MA should be considered safe to use as a deactivator of EMS, being non-mutagenic itself and effectively cancelling the mutagenic properties of EMS.

Treatment	No. X chromosomes tested	No. X chromosomes lethal	Mutation rate
Control	387	1	.003
MA	309	0	0
EMS	245	35	.143
EMS/MA	306	0	0