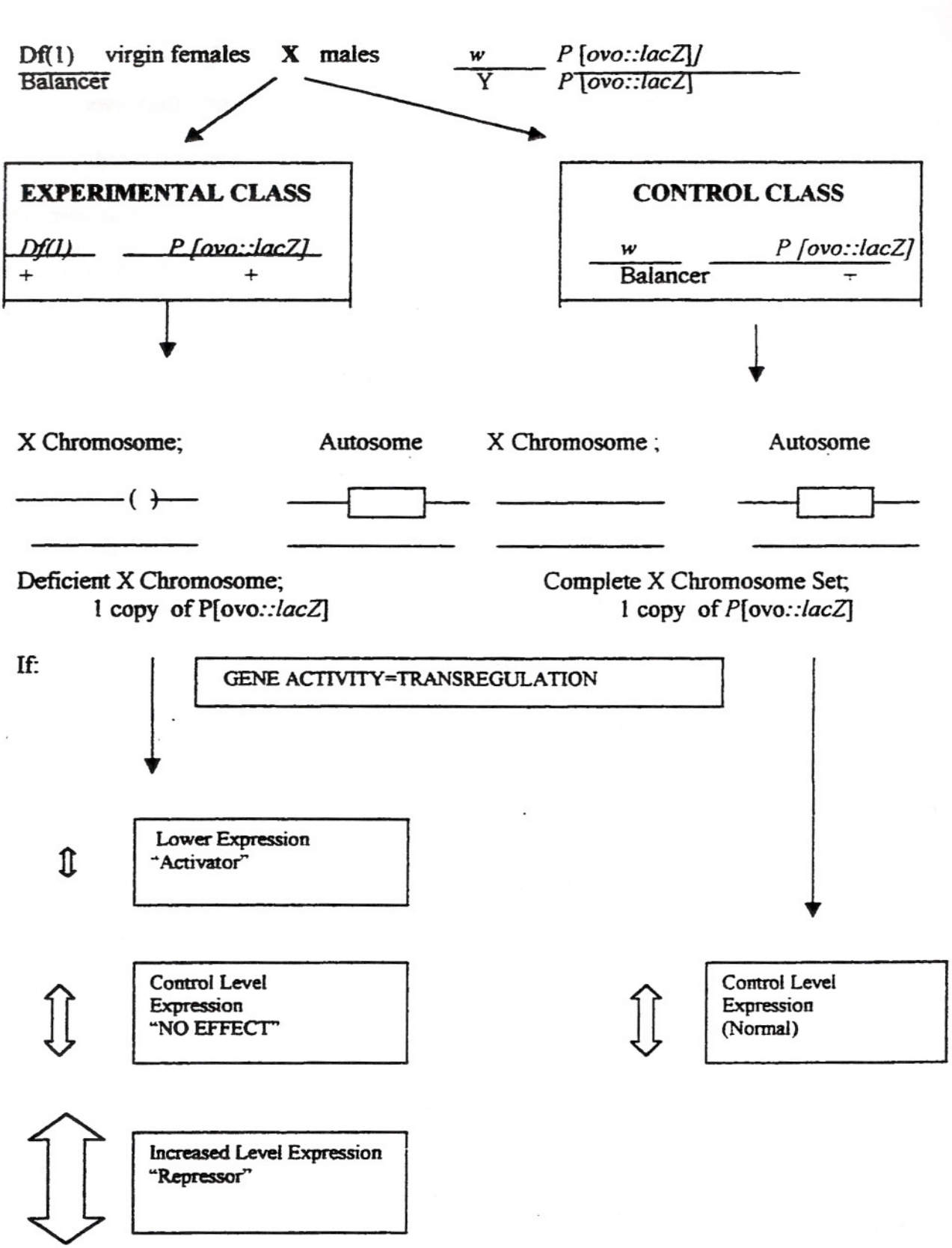


**Figure 2.2.** *In vivo* Biochemical-Genetic Assay for Regulators of *ovo* transcription. (see legend in the next page)

**Legend for Figure 2.2.** *In vivo* Biochemical-Genetic Assay for Regulators of *ovo* transcription. Virgin female flies were collected 14 hour long windows at 18°C or 8 hour long windows, during which newly emerged males remained immature. Collected females were kept 3-5 days to make sure they are virgin before outcrossing them. Heterozygous virgin females (5-7), carrying deficiency X chromosomes balanced over first chromosome balancers were mated with males homozygous for either of two P-element transformation constructs of a lacZ reporter gene fused to the the *ovo* promoter. Both event were inserted on third chromosome. They were grown at 25°C unless otherwise noted. The control class of $F_1$ progeny has a complete X chromosome pair, whereas the experimental class has one complete X chromosome and one deficiency X chromosome in its genome. The *ovo:lacZ* constructs (Fig. 2.1) were designed by Oliver *et al.*,(1994). In this study two of their strains, *ovo*4B8 (pCOW+1.9) and *ovo*3U21 (pCOW+2.1) respectively, were used to determine the *ovo* promoter activity.