As reviewed in Ashburner (1989), XO males found in *Drosophila melanogaster* are viable and phenotypically indistinguishable from the normal XY males, in spite of their sterility. We do not have information about the occurrence of this condition in *D. willistoni*, although a great deal of sterility seems to occur at large in the offspring of several strains reared in laboratory. The XO chromosome configuration was found in several meiotic metaphasic plates obtained from gonads of a male larva of a laboratory stock (WIP4, from the State of Bahia, Brazil) of *D. willistoni*. This stock is normally reared as massal culture, at 17 ± 1°C, 60% r.h. in Marques *et al.* (1966) medium, and the slide was prepared according to the protocol of Imai *et al.* (1977), with adjustments to *Drosophila* ananassae by Matsuda *et al.* (1983) and Imai *et al.* (1988), and to *D. willistoni* by Santos-Colares *et al.* (submitted). In Figure 1a, an XY metaphasic plate of a normal male is shown. Note the high size of the Y chromosome (arrow). Figure 1b shows the aspect of an optical microscope field in which 13 metaphases present both second (II) and third (III) chromosomes and only one X chromosome, without pair.

The evolutionary meaning of this finding is still obscure, but it calls attention to the fact that this phenomenon could be more common than we previously suspected in several unproductive strains of *D. willistoni* collected in nature and maintained in laboratory.

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