

**A-35: Cloning of a repetitive DNA sequence for the development of a DNA probe for *Culex quinquefasciatus***

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*Culex quinquefasciatus* is the principal vector of the filarial parasite *Wuchereria bancrofti* which causes lymphatic filariasis in humans. In order to develop a DNA probe for *Cx. quinquefasciatus* a repetitive DNA sequence from the genome has been cloned and completely sequenced. The 693 base pair fragment

had an A+T content of 72%. Dot matrix analysis of the fragment did not reveal any direct or inverted repeats. Southern blot analysis using a variety of enzymes appear to indicate the cloned fragment to be interspersed within the genome. A search of the Gene Bank Database at National Center for Biotechnology Information USA with the nucleotide sequence and putative translation products of all reading frames did not reveal any significant homologies to previously cloned sequences.

When the cloned sequence was used as a probe in a hybridization assay it was capable of detecting 100 pg of *Cx. quinquefasciatus*.

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