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Midgut glycoproteins in a Sri Lankan malaria vector *Anopheles tessellatus* serve as recognition sites for human malaria parasites *Plasmodium vivax* and *P. falciparum*. Rabbit antisera to (a) wheat germ agglutinin binding protein (WGABP) of the midgut, (b) the peritrophic matrix (PM) and (c) whole midgut (MG) of *An. tessellatus* were used to immunoscreen a cDNA library derived from the African malaria vector *An. gambiae*. This is the first step in the identification of mosquito genes that may mediate interactions with the malaria parasite.

The *An. gambiae* library constructed in the bacteriophage vector Lambda ZAP II carried the bluescript phagemid sequence. The library was amplified and grown in *Escherichia coli* XLI Blue, in petri dishes. The bacterial colonies were overlaid with nitrocellulose filters that were then screened with either rabbit anti WGABP, anti PM or anti MG sera and then with peroxidase conjugated sheep anti-rabbit antibodies. Bacterial colonies recognised by specific antibodies were detected by chemiluminescence reagents and exposed to X-ray film. Positive colonies were re-screened repeatedly until a homogeneous population of immunopositive recombinants was obtained. Three consistently positive clones were identified with anti-WGABP antibodies. To characterise the *An. gambiae* insert carried in the bluescript phagemid, the latter was excised from each clone using ExAssist helper phage and then grown in SOLR strain of *E. coli*. DNA was prepared and digested with restriction enzymes *EcoRI*, *ZbaI*, *ZhoI*, *PstI* and *HindIII* and separated on agarose gels. Inserts of ≥ 6 kb and in the range of 2-3 kb were observed. This demonstrates the presence of similar molecules in the midguts of malaria vectors from two different geographic locations.