A35 Antibody formation specific to salivary gland components of *Anopheles stephensi* after repeated bites in mice

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It was reported that mosquito bites induced host's immunological reactions which was manifested by raised IgG and IgE specific to some salivary gland components (Ailus et al, 1985; Penneys et al, 1989 and Konishi, 1990). Although the role of anti-mosquito antibodies have not been fully explained yet it has been suggested that its detection could prove to be useful as a measure of exposure to mosquito bites in field studies (Das et al, 1990).

To develop sero-epidemiological method to measure frequency of mosquito bites we examined the time course of antibody formation against mosquito components in mice repeatedly exposed to *Anopheles stephensi*. The mice produced specific antibodies against components of salivary glands mainly of about 45 k-Da protein but not against other tissue components.

Anopheles 45kDa
(70%) 3hr 100% 6-8日 300 est chib
LCR 3hr

A36 ヒトスジシマカ、ショウジョウバエに感染した *Wolbachia* の系統学的解析 大塚 靖[○]、高岡宏行 (大分医科大学・感染予防医学)

Phylogenetic analysis of *Wolbachia* in *Aedes albopictus* and *Drosophila*.
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リッケチア様因子 *Wolbachia* は多くの節足動物に感染が知られ、感染した雄と感染していない雌との典型的な交配パターンで産まれた卵の孵化率が下がる細胞質不和合性という現象を起こす。ヒトスジシマカ、キイロショウジョウバエ、オナジショウジョウバエに感染している *Wolbachia* の 16SrRNA、*ftsZ* の一部の塩基配列を決定し、それぞれの系統学的関係を調べたので報告する。またヒトスジシマカ、キイロショウジョウバエ、オナジショウジョウバエそれぞれに感染していた *Wolbachia* をある系統のショウジョウバエに導入し、それぞれ由来の *Wolbachia* を持つショウジョウバエ間で交配実験を行い不和合性の関係を調べ、系統学的関係と細胞質不和合性のパターンにどのような関係があるのかも考察した。

A. alb
ThyA B x A
↓
Cyt. imp
C. p. p. r. s. deletion
A. alb
Dros. simulase.
cytoplasmic incompatibility
PCR 2/100 4/8

D. simulans

↑
W+
↓
W+

交配実験
結果