77 中米3カ国におけるシャガス病ベクターコントロールの取り組み

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Chagas disease vector control strategies in Guatemala, Honduras and El Salvador

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中米におけるシャガス病ベクターコントロールは、グアテマラでの熱帯病防圧研究プロジェクト(1991-1998)の成果を受けて2000年からまずグアテマラで開始された。グアテマラでは、高リスクの9県(第一フェーズ4県, 第二フェーズ5県)で行われ, 現在中間点を過ぎたところである。隣接のホンジュラス, エルサルバドルでは, 2003年から防除を目的とした調査を開始した。これら中米3カ国は, 気候風土, 家屋構造, 対象種の類似性があり, その取り組みは共通したものである。対象種は*Triatoma dimidiata*および*Rhodnius prolixus*の2種である。米州保健機構(OPS)は*R. prolixus*はその地域で消滅を, *T. dimidiata*は疾病が防圧できる程度に生息密度を落とすことを進言している。現在までの防除の成果はほぼこの線に沿ったものである。ここでは, 3カ国での防除戦略の違いと現在までの防除効果について述べる。

78 Community programs using biological agent-*Mesocyclops* (Crustaceae-Copepoda) for dengue vector control in Vietnam.

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A new approach in dengue vector control has been applied in 4 communes (7809 households; 37,032 residents) of 4 provinces of Vietnam from July 2000 to June 2003. The goal of this experiment is to reduce incidence of dengue haemorrhagic fever and raise the quality of life in four communes. Four key strategies of the dengue vector control program are (1) combines "top down" and "bottom up" approaches; (2) Monthly vector control activities implemented at the household level; (3) Use of the new biological agent-*Mesocyclops* (Crustaceae-Copepoda); and (4) intersectoral collaboration. Seven species *Mesocyclops* naturally existed in 3% to 17% of drinking water containers in the communes and had a high predatory capacity for first instar *Aedes aegypti* larvae. One *Mesocyclops* was shown to be able to kill from 21.7 to 41.3 first-instar larvae during 24 hours. In the field, indigenous *Mesocyclops* species were introduced to the big water containers such as cemented tanks, drums, and big jars and were maintained by collaborators and householders. Three year implementing main achievements are (1) reduction of 99.9% of immature and 98.6% of *Aedes aegypti* adult mosquitos' population; (2) *Mesocyclops* were found to successfully maintain their populations in 60.0 to 85.1% of big water containers and accepted by 100% of the residents; and (3) Dengue related morbidity reduced from 80.2/100,000 in 2000 to 6.7 in 2001 and remained at 0 for the year 2002 and for the first half of 2003.