Introduction: Dengue viruses transmitted principally by the urban mosquito Aedes aegypti, cause one of the major public health problems confronting tropical cities. Insecticide spraying has been the mainstay of mosquito control; however, its continuous use has selected for resistance. Other important methods of control involve community participation. Objective: This study evaluated two control methods for Ae. aegypti that can be used by the community: Lethal ovitraps (LOs) and Bacillus thuringiensis var israeliensis (Bti) briquettes. Materials and methods: The project study was carried out in four similar neighborhoods within a representative district in the city of Cali, Colombia. Three interventions (LO, Bti, LO+Bti plus education and one control (education only) area were evaluated for efficacy in post-intervention entomological surveys. Additionally, entomological indices were also compared to results from a pre-intervention survey carried out on a sample of city blocks in the same neighborhoods. Relative vector abundance in relation to weather conditions using the same entomological sampling methods was compared. Results: The interventions did not achieve significant differences in vector abundance among the treatments. However, the interventions achieved a significant reduction in entomological indices compared with those observed during the pre-intervention survey: House index 15.1% vs. 8.5%, mean pupae per house 1.15 vs. 0.073, and Adult index 56.3% vs. 34.8% (p<0.05). Conclusions: The lack of significant differences among the interventions, and between treated and control blocks suggested that educational activities together with periodic visits to the houses produced similar reductions of immature and adult Aedes aegypti.

Keywords
Aedes aegypti, vector control, Bacillus thuringiensis, dengue, consumer participation.