

ABSTRACT

The comparison of the common house fly, *Musca domestica* L., and blow fly, *Chrysomya megacephala* (Fabricius), were assessed for their potential as mechanical carriers of bacteria in urban areas of Chiang Mai province, north Thailand, in 1999. From the total 260 flies collected, *C. megacephala* (87.7%) was significantly more positive than *M. domestica* (66.2%) in carrying bacterial species. No significant difference was found between the numbers of positive male and female flies within the same species of flies. A total of 42 bacterial species was isolated. The most common bacteria isolated from *M. domestica* was coagulase-negative staphylococci ($n=57$) followed by *Escherichia coli* ($n=10$) and *Viridans* streptococci ($n=10$) while those of *C. megacephala* was non-fermentative gram negative bacilli ($n=59$) followed by coagulase-negative staphylococci ($n=54$). The results of the quantitative examination of bacteria isolated indicated that the most common bacterial load of both species was 10^3 - 10^4 colonies per fly followed by $>10^4$ and 10^2 - 10^3 colonies per fly, respectively. It is recommended that fly control management measures, including sanitation improvement, should be implemented.

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