

## **Antibiotic resistance and plasmid carriage among *Escherichia coli* isolates from chicken meat in Malaysia**

### **ABSTRACT**

*Escherichia coli* isolates from 131 raw chicken meat samples were tested for susceptibility to 12 antibiotics. Plasmids were isolated from many samples and their DNA molecular weight calculated. An 81.7% plasmid occurrence rate was observed among the isolates, ranging from 0 to 8 in number and with sizes from 1.2 to 118.6 MDa. Plasmids were detected in 93.8% of *E. coli* isolates resistant to all 12 antibiotics, and in 90.5% of *E. coli* isolates resistant to 11. Three (2.8%) isolates harboured 8 plasmids and were resistant to all 12 antibiotics. Antibiotic resistant genes in bacteria are usually carried in extrachromosomal DNA and it is postulated that *E. coli* with a high number of plasmids possesses wider resistance to antibiotics.

**Keyword:** Antibiotic resistant; Plasmid carriage; *Escherichia coli*; Chicken meat