A comparison of RFID and visual ear tag retention in dairy cattle in Malaysia

ABSTRACT

Animal identification is a basic tool to identify animals for all activities including for farm management. Electronic ear tag using radio frequency identification (RFID) technology has been newly introduced in the dairy population. The objective of this study was to evaluate the retention of RFID and visual ear tag of various brands in dairy cattle in Malaysia. A field trial was carried out on 102 dairy cattle to assess the retention of four brands of RFID tags (Allflex, Cybortra, TSG and Ecosensa) and three brands of visual ear tags (Allflex, Cybortra, and Ecosensa). The presence or lost of the tag was evaluated every three month for one year. Cybortra RFID tag and Allflex visual ear tag have the highest percentage of tag retention at 81.5 and 96.1%, respectively when compared to other brands. The percentage of cattle that lost both of its tag (RFID and visual ear tag) was low at 3.7% for Cybortra brand and 0.0% for Allflex brand. Whereas, the percentage of cattle that lost its single identification was highest (45.5%) for TSG RFID tag. Severe ear necrosis was observed to be one of the reasons that influence the tag lost. Cattle with two identifications was found to be traced more efficiently compared to the cattle with single identification.