PREVALENCE OF ENTEROHAEMORRHAGIC *Escherichia coli* OF CATTLE IN SAU AREA

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Extended Summary

An investigation was carried out through cross-sectional survey to verify the enterohemorrhagic *Escherichia coli* (EHEC) isolated from fecal materials originated from rectum of 100 smallholders' cattle while using MacConkey (MAC) agar as a selective growth medium. Any EHEC is yields to produce pink colonies. The variations in the antimicrobial resistance profiles of the pink color colony producing isolates on MAC to 11 selected isolates were also investigated, by disk-diffusion method. In primary screening, rectum-originated fecal samples from 42 (42%) cattle yielded pink color colonies on MAC. While 5 cross-sectional such colonies from each positive sample was homogenized and re-verified by giving passage for the second time on MAC, only 33 produced pure pink color colonies. These (33) were verified further by culturing on eosin methylene blue (EMB) agar, of them 27 were finally found to be *E. coli* and based on their repeated positive they were considered as probable EHEC. Variable resistance profiles were seen among the isolates tested. In conclusion, the probable EHEC isolated from smallholders' cattle by using MAC were not clonally related rather different colonies of EHEC that are circulating in the population.

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