Antibiotic residue in raw milk collected from collection points and marketplaces in Peja region.

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Introduction

➢Concerns about food safety in animal-sourced foods are increasing worldwide where urbanization, and changing of life-styles are associated with greater dependence on marketed foods by an increasing number of people. Antibiotics are used widely in animal husbandry to treat diseases related to bacterial infections. To resolve this problem, farmers should adhere strictly to withdrawal periods before producing foodstuffs from treated animals.

➢This study aims to of this study were to detect antibiotic residues in raw milk of cows. We used Rapid Test Methods for Antibiotic Residues from Charm science MRL Beta-lactam and Tetracycline 8-minute test that detects 14 Beta-lactam drugs andthree tetracycline drugs.

Sample collection

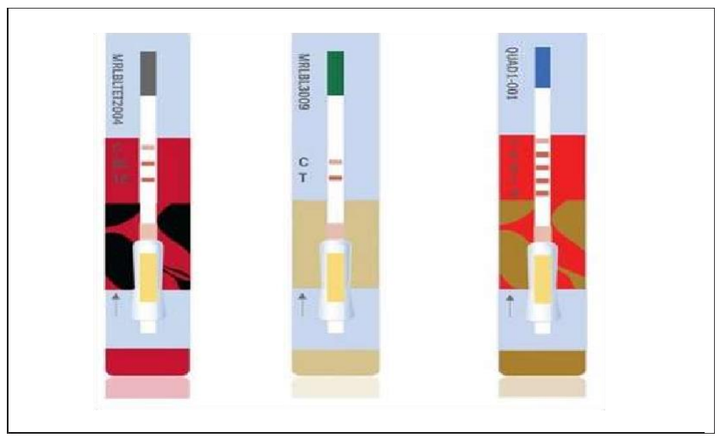
Each month 11 milk samples were collected from the collection points and 11 milk samples from Green Market, resulting in a total of 264 samples in the study period. To analyze the milk samples, we used 300-µl of milk from each sample to run the rapid test.

Color development

All milk samples were analyzed using the Charm MRL beta-lactam and tetracycline rapid test. We used ROSA incubators that provide the exact temperature and time 8 minutes needed to perform the test.

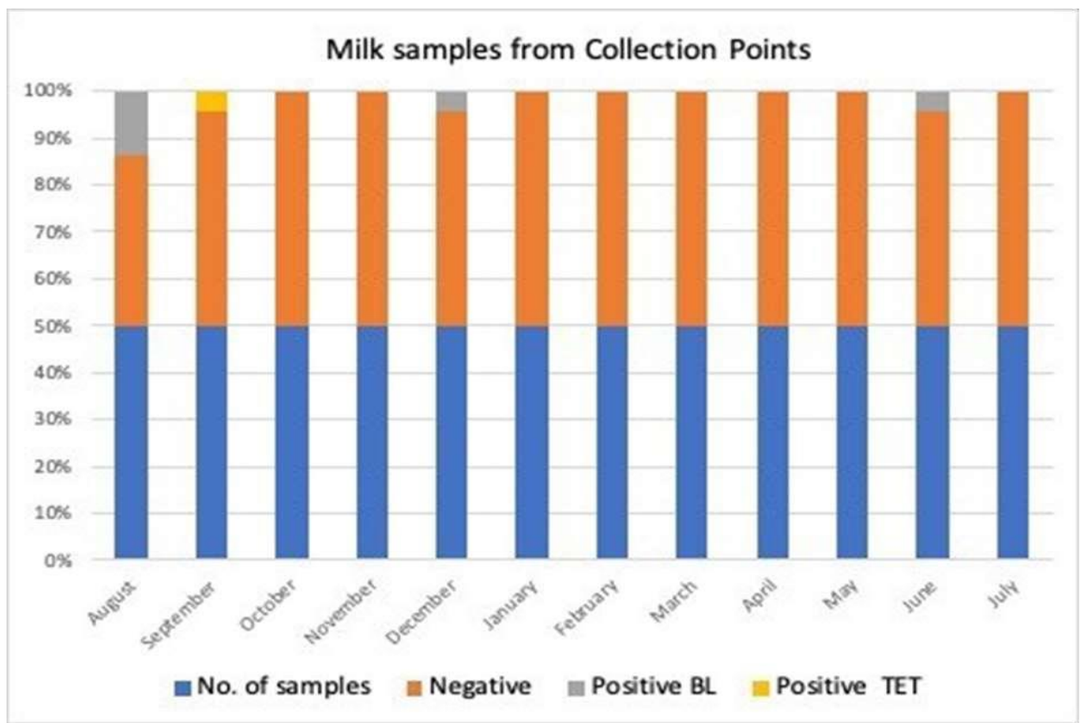
Reading of the results

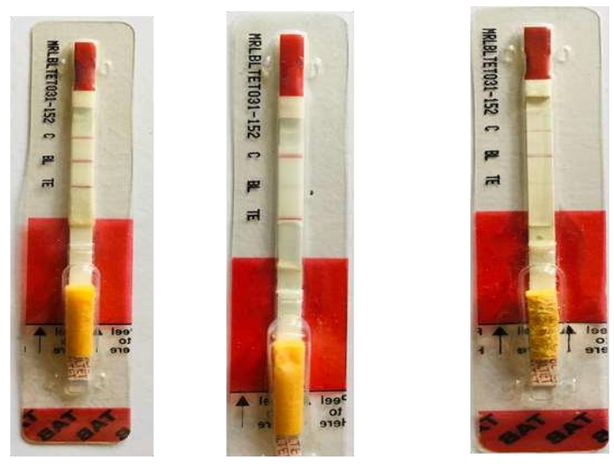
Expect the visual interpretation of the test strips in order to be more accurate the results were interpreted using the Charm EZ reader.

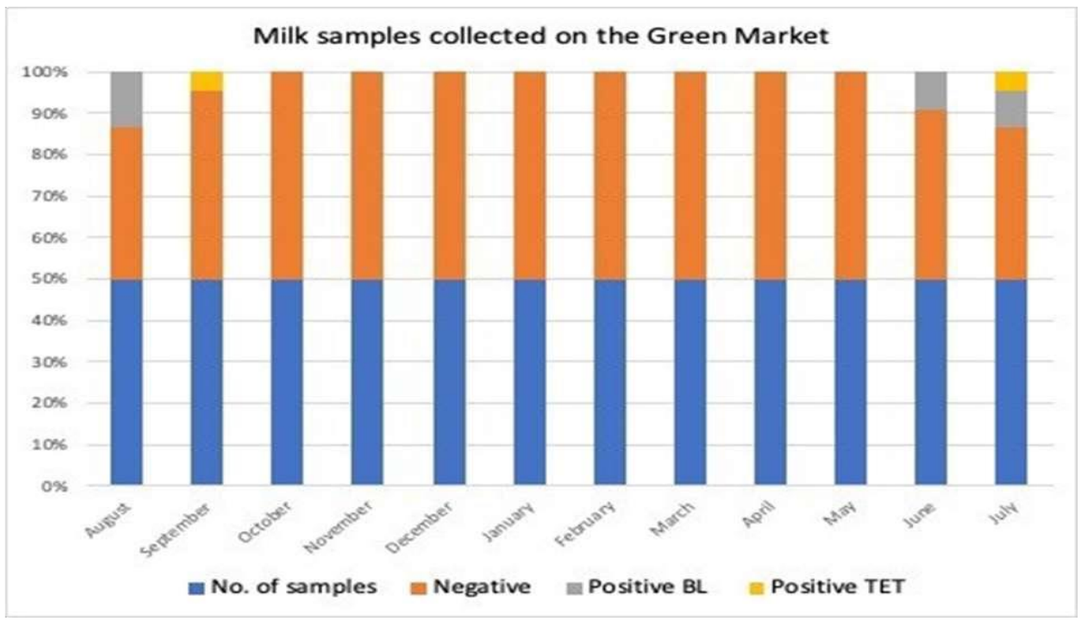


https://www.calibrecontrol.com/main-product-list/charm-antibiotic-test- strips

Results







Conclusions

From the results of this study we can conclude that there are risks involved in the consumption of public milk

To mitigate this risk, it is of high importance that a number of certain activities must be implemented, especially for the raw milk that is sold in the so-called "green market," which has no prior control. We advise competent authorities to control and maintain continuous monitoring or even prohibit the sale of raw milk without prior control, especially in the green markets.

Raising farmers awareness on the withdrawal period and the time required after administration of a drug to cattle needed to assure that antibiotic residues are below the maximum residue limit in the marketable milk or other animal- derived foodstuff.