Residual Antibiotic of Amoxicillin in Broiler Chicken Meat in Surabaya Traditional Market

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ABSTRACT

The aim of this study is to know the presence of Amoxicillin antibiotic residue in chicken meat at Traditional Market in Surabaya. This research is a qualitative test using bioassay method. Bioassay is a test that using microorganism to detect antibiotic compounds that are still remain. The specificity of the bioassay method can be shown from the type of antibiotic that can be detected by looking at bacterial growth barriers. The bacteria which is used is Bacillus stearothermophilus for β-lactam group amoxycilin. Thirty samples of chicken meat were not randomly collected in a several traditional markets in Surabaya. The result showed that 45% chicken thigh meat doesn’t contained antibiotical residue and 55% contained antibiotical residue from the total of sample. This is shown by the resistance zone doesn’t reach 20 mm. The resistance zone which formed is in the safe limits and the meat still feasible to be consumed. There is no residual antibiotic of Amoxicillin in chicken meat because the residual concentration in the samples are under the detection limit test (<0,00125 ppm for Amoxicillin). The other cause is the breeder has good knowledge in using antibiotic based on the withdrawal time and the appropriate dose.

Keywords: Chicken, Amoxicillin, Bioassay method, residual antibiotics