International Journal of PharmTech Research
CODEN (USA): IJPRIF, ISSN: 0974-4304, ISSN(Online): 2455-9563
Vol.9, No.7, pp 170-174, 2016

STARTEC (Smart Tetracycline Kit deterction) in Carcass of Broiler

Bekti Sri Utami[1*], Hana Razanah[1],Puspita Diah Pravitasari[2], Fitri Indah Permata[1], AnnisaRizqi Rafrensca[1]

[1]Faculty of Veterinary Medicine, University of Brawijaya, Malang, Indonesia
[2]Faculty of Mathematics and Natural Sciences, Chemistry Department,University of Brawijaya, Malang, Indonesia

Abstract : Broiler consumption in Indonesia is increasing every year. However, broiler production is still insufficient. Consequently, many breeders put additional substances such as antibiotic to boost the growth of broiler. Most commonly used antibiotic is tetracycline. Tetracycline added in poultry feed affects the broiler to be resistance of antibiotic due to high amount of subterapeutic continuously received by the broiler. Tetracycline also affect to the consumer such as allergy, hypersensitivity, and toxic. So, the consumer should be smart to identify the carcass of broiler, which contains residue of tetracycline. Therefore, writer have innovation of STARTEC (*Smart Tetracycline Residual Kit Detection*) to help consumer and related institute to detect the residue of tetracycline in carcass of broiler. STARTEC using the principle of reaction between tetracyclines with *sulfuric acid*. This detector work seamlessly because it only put meat into a glass and grind it. Then, the meat reacted by EDTA to denature protein contained in tetracycline. So, a pure tetracycline could be obtained. Subsequently, sulfuric acid added into the glass to identify the process of color changing in the sample. STARTEC could be operated easily, fast, and safely to detect the residue of tetracycline in carcass of broiler.
Keywords : antibiotic, carcass, sulfuric acid, tetracycline.

*****