UJI SENSITIVITAS *Streptococcus sp.* ISOLAT SUSU SAPI PERAH KOPERASI PETERNAK SAPI BANDUNG UTARA TERHADAP ANTIBIOTIK

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INTISARI

Mastitis merupakan salah satu masalah yang paling sering ditemukan pada peternakan sapi perah di Indonesia. *Streptococcus sp.* tergolong bakteri Gram positif penyebab mastitis subklinis dan berbahaya bagi kesehatan masyarakat veteriner. Pengobatan mastitis sampai saat ini masih menggunakan antibiotik. Apabila pengobatan menggunakan antibiotik tidak tepat maka dapat menimbulkan sifat resistensi. Penelitian ini bertujuan untuk mengetahui sensitivitas *Streptococcus sp.* isolat susu sapi perah Koperasi Peternak Sapi Bandung Utara **(**KPSBU), Jawa Barat, terhadap enam antibiotik yaitu penisilin, amoksisilin, ampisilin, kloramfenikol, tetrasiklin dan gentamisin.

Sebanyak sembilan isolat *Streptococcus sp.* asal susu KPSBU diidentifikasi ulang dengan mengkultur *Streptococcus sp.* pada plat agar darah (PAD), pewarnaan Gram dan uji katalase. Uji sensitivitas terhadap antibiotik menggunakan metode difusi disk *Kirby-Bauer*. Isolat dikultur pada *Mueller-Hinton agar* (MHA) menggunakan tangkai kapas steril, selanjutnya diletakkan disk antibiotik di atas permukaan agar. Inkubasi dilakukan pada suhu 37 ^{0}C selama 24 jam. Zona inhibisi yang terbentuk diukur dan dicocokkan dengan tabel standar *Kirby-Bauer.*

Hasil uji sembilan isolat *Streptococcus sp.* yaitu sensitif terhadap amoksisilin, ampisilin dan kloramfenikol (100%), penisilin (89%), tetrasiklin dan gentamisin (67%); intermediet terhadap penisilin (11%) dan gentamisin (33%) serta resisten terhadap tetrasiklin (33%). Berdasarkan hasil penelitian ini dapat disimpulkan bahwa *Streptococcus sp*. bersifat sensitif terhadap amoksisilin, ampisilin, kloramfenikol, penisilin, tetrasiklin dan gentamisin; intermediet terhadap penisilin dan gentamisin serta resisten terhadap tetrasiklin.

Kata kunci: Mastitis, *Streptococcus sp.*, sensitivitas, antibiotik, resistensi

SENSITIVITY TEST OF *Streptococcus sp.* DAIRY CATTLE ISOLATES MILK KOPERASI PETERNAK SAPI BANDUNG UTARA AGAINST ANTIBIOTICS

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ABSTRACT

Mastitis is one of the most common problems found on a dairy farm in Indonesia. *Streptococcus sp.* classified as Gram-positive bacteria that cause subclinical mastitis and dangerous for veterinary public health. Treatment of mastitis is still using antibiotics. If treatment by antibiotics is not right, it can cause resistance properties.This study aims to determine the sensitivity of *Streptococcus sp.* dairy cattle isolates Koperasi Peternak Sapi Bandung Utara **(**KPSBU), West Java, to six antibiotics including penicillin, amoxicillin, ampicillin, chloramphenicol, tetracycline and gentamicin.

A total of nine isolates of *Streptococcus sp.* milk origin KPSBU re-identified by culturing *Streptococcus sp.* on a blood agar plate (BAP), Gram staining and catalase test. Test sensitivity to antibiotics using the *Kirby-Bauer* disk diffusion. The isolates were cultured on *Mueller-Hinton* agar (MHA) using sterile cotton stalk, then placed the disk on agar surface. Incubation was carried out at a temperature of 37 ^{0}C for 24 hours. Inhibition zones formed is measured and matched with standard tables *Kirby-Bauer*.

The test results of nine isolates of *Streptococcus sp.* that is sensitive to amoxicillin, ampicillin and chloramphenicol (100%), penicillin (89%), tetracycline and gentamicin (67%); intermediet to penicillin (11%) and gentamicin (33%) and resistance to tetracycline (33%). Based on these results we can conclude that *Streptococcus sp*. sensitive to amoxicillin, ampicillin, chloramphenicol, penicillin tetracycline and gentamicin; intermediet to penicillin and gentamicin and resistance to tetracycline.

Keywords: Mastitis, *Streptococcus sp.*, sensitivity, antibiotics, resistance