

INTISARI

SENSITIVITAS *Avibacterium paragallinarum* ISOLAT LAPANG TERHADAP BEBERAPA ANTIBIOTIKA

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Infectious coryza (snot) merupakan penyakit yang disebabkan oleh *Avibacterium paragallinarum* yang menginfeksi saluran pernafasan bagian atas baik pada ayam petelur, ayam pedaging, ayam kampung maupun burung puyuh. Meskipun kejadian snot banyak dilaporkan di Indonesia namun penelitian tentang *Avibacterium paragallinarum* dan sensitivitasnya terhadap beberapa antibiotika belum banyak dilaporkan. Penelitian ini bertujuan untuk mengetahui sensitivitas dan resistensi *Avibacterium paragallinarum* dari berbagai unggas isolat lapang terhadap beberapa antibiotika.

Tahap pertama adalah melakukan identifikasi ulang terhadap 31 isolat *Avibacterium paragallinarum* yang terdiri dari 21 isolat berasal dari ayam petelur, empat isolat berasal dari ayam pedaging, satu isolat berasal dari ayam kampung dan lima isolat berasal dari burung puyuh. Identifikasi ulang diawali dengan melakukan kultur pada agar coklat dan diinkubasi selama 24 jam pada suhu 37°C menggunakan *candle jar*. Koloni yang menunjukkan bentuk bulat dan transparan dengan morfologi sel bakteri berbentuk kokobasil dan bersifat Gram negatif, selanjutnya dilakukan uji biokimiawi (katalase, oksidase, urease, indol, motilitas dan fermentasi karbohidrat). Tahap kedua adalah melakukan uji sensitivitas terhadap beberapa antibiotika yang dikultur pada *Mueller-Hinton Agar* menggunakan swab steril, selanjutnya diletakkan disk antibiotika di atas permukaan agar. Inkubasi dilakukan menggunakan *candle jar* pada suhu inkubator 37°C selama 24 jam untuk kemudian dilakukan pengukuran diameter zona hambat dalam milimeter

Hasil pengujian menunjukkan bahwa *Avibacterium paragallinarum* sensitif terhadap ampicilin (87,1%), amoksisilin (83,8%), kloramfenikol (71%), gentamisin dan enrofloksasin (45,2%), amikasin (38,7%), kanamisin (25,8%), trimetoprim (22,6%), serta yang sensitivitas terendah terhadap tetrasiklin (16,1%) dan eritromisin (9,6%). Ada perbedaan sensitivitas *Avibacterium paragallinarum* terhadap 10 jenis antibiotika yang digunakan. Isolat *Avibacterium paragallinarum* memiliki sebelas pola sensitivitas yang berbeda. Setiap isolat *Avibacterium paragallinarum* yang berasal dari hospes berbeda memiliki sensitivitas yang berbeda terhadap antibiotika yang diuji.

Kata kunci: *Infectious coryza*, *Avibacterium paragallinarum*, antibiotika

ABSTRACT

SENSITIVITY OF *Avibacterium paragallinarum* FIELD ISOLATES AGAINST SOME ANTIBIOTICS

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Infectious coryza (snot) is a disease caused by *Avibacterium paragallinarum* that infects upper respiratory tract in layers, broilers, native chickens or quails. Recently, there are many cases about *infectious coryza* in Indonesia but these researches about *Avibacterium paragallinarum* and its sensitivity against some antibiotics have not been more reported. This aimed of this study is to find out sensitivity and resistance of *Avibacterium paragallinarum* against some antibiotics.

The first step was doing reidentification of 31 *Avibacterium paragallinarum* isolates consist of 21 isolates from layers, four isolates from broilers, one isolate from village chickens and five isolates from quails. All samples cultured on chocolate agar and was incubated by using candle jar in temperature 37°C for 24 hours. Colonies that showed circular form and transparant with cell morphology that showed coccobacil and Gram negative then continued with biochemical test (catalase, oxidase, urease, motility and fermentations of carbohydrates). The second step was doing sensitivity against some antibiotics from 31 *Avibacterium paragallinarum* isolates that cultured on *Mueller-Hinton Agar* by using steril swab and then was put on them antibiotic discs. Isolates was incubated by using candle jar in temperature 37°C for 24 hours and then read the diameter in milimeter.

The result showed that *Avibacterium paragallinarum* were sensitive to ampicilin (87.1%), amoxycillin (83.8%), chloramphenicol (71%), gentamicin and enrofloxacin (45.2%), amikacin (38.7%), kanamycin (25.8%), trimethoprim (22.6%), tetracycline (16.1%) and erythromycin (9.6%). There were variation among the isolates of *Avibacterium paragallinarum* against some antibiotics. *Avibacterium paragallinarum* isolates had eleven sensitivity patterns that were not same for each other. Every *Avibacterium paragallinarum* isolates from different host had different sensitivity.

Keywords : *Infectious coryza*, *Avibacterium paragallinarum*, antibiotics