INTISARI

PENENTUAN SEROTIPE *Avibacterium paragallinarum* ISOLAT LAPANG PUYUH DENGAN UJI HAMBATAN HEMAGLUTINASI

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Snot merupakan suatu penyakit infeksius yang disebabkan oleh *Avibacterium paragallinarum*, yang menginfeksi saluran pernafasan bagian atas puyuh dan dapat berlangsung akut sampai kronis. Puyuh yang terinfeksi snot akan menujukkan gejala klinis yang mencirikan rinitis, edema wajah, anoreksia dan eksudat seromukoid di mata dan lobus hidung. Dikenal ada tiga serotipe *Avibacterium paragallinarum* yaitu serotipe A, B dan C. Penentuan serotipe yang paling sering dilakukan adalah dengan uji hambatan hemagglutinasi (HH). Uji hambatan hemaglutinasi memiliki tiga jenis yaitu *simple HI*, *extracted HI* dan *treated HI*, tetapi hanya uji *extracted HI* yang dilakukan pada penelitian ini. Penelitian ini menggunakan 3 sampel isolate lapang puyuh dari Yogyakarta. Sebanyak tiga isolat lapang *Avibacterium paragallinarum* diidentifikasi ulang kemudian dibuat antigen dengan menggunakan sonikasi untuk uji hemaglutinasi (HA). Setelah diuji HA dan menunjukkan positif pada 20HA unit, kemudian diuji HH dengan menggunakan antisera referens yaitu strain 221 serotipe A, strain Spross serotipe B, dan strain Modesto serotipe C. Hasil menunjukkan bahwa ketiga isolat tersebut menunjukkan titer tertinggi dengan antiserum serotipe B. Oleh karena itu, dapat disimpulkan bahwa ketiga sampel isolat tersebut adalah serotipe B.

Kata kunci: Snot, *Avibacterium paragallinarum*, serotipe, uji hambatan hemaglutinasi, puyuh,

ABSTRACT

DETECTION OF THE SEROTYPE OF *Avibacterium paragallinarum* FROM QUAIL FIELD ISOLATE USING HEMAGGLUTINATION INHIBITION TEST

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Snot is also called infectious coryza which infects the upper respiratory system in quail and caused by *Avibacterium paragallinarum.* The clinical signs in chicken are characterized by rhinitis, facial edema, anorexia and seromucoid exudates in the eyes and nasal lobes. There are three recognized *Av. paragallinarum* serovars, which are serovar A, B and C. Hemagglutination-inhibition (HI) test is the most common test done to detect the serotype. The hemagglutination-inhibition tests have three types which are simple HI, extracted HI and treated HI, but only extracted HI test was done in this research. This research used 3 field isolate samples of quail from Yogyakarta. Three field isolates of *Av. paragallinarum* were re-identified, then processed into antigen solution using sonication, further on used for hemagglutination (HA) test. After HA tested and showed positive at 20HA unit, then the antigens were tested with HI using reference antisera which is strain 221 serovar A, strain Spross serovar B, and strain Modesto, serovar C. The result showed that three of all isolates had the highest titer with antiserum serovar B. Therefore, it could be conclude that three of the isolate samples were serotype B.

Keywords: Snot, *Avibacteirum paragallinarum*, serotyping, hemagglutination inhibition, quail.