

Efficiency of BacT/Alert in detecting *Salmonella*

D2-4

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Abstrak

Untuk mengetahui efisiensi BacT/Alert, suatu otomatisasi yang digunakan dalam bidang mikrobiologi, kami membandingkan sensitivitas dan waktu yang diperlukan dari biakan empedu dan Fan BacT/Alert yang memiliki Ecosorb yang dapat menetralkan materi toksik yang dapat mempengaruhi pertumbuhan bakteri. Dari 40 biakan darah, 16 (40%) positif dengan BacT/Alert, 12 (30%) *Salmonella* dan 4 (10%) bukan *Salmonella*. Sedangkan dengan biakan empedu didapatkan 10 (25%) positif, 8 (20%) *Salmonella* dan 2 (5%) bukan *Salmonella*. Waktu rata-rata yang dibutuhkan untuk mendeteksi pertumbuhan bakteri menggunakan BacT/Alert ialah 15,6 jam sedangkan dengan biakan empedu 57,6 jam. Waktu rata-rata yang dibutuhkan untuk identifikasi *Salmonella* menggunakan BacT/Alert ialah 66 jam sedangkan biakan empedu 78 jam. BacT/Alert merupakan metoda otomatis yang lebih sensitif dan efisien dalam mendeteksi pertumbuhan bakteri.

Abstract

To find out the efficiency of BacT/Alert, an automation in microbiological field, we compared the sensitivity in *Salmonella* detection and the time consumed by Gall culture and by Fan BacT/Alert which had an Ecosorb that could neutralized toxic material which could affect bacterial growth. From 40 blood cultures, 16 (40%) positive by BacT/Alert, 12 (30%) were *Salmonella* and 4 (10%) were non *Salmonella*. By Gall culture 10 (25%) were positive: 8 (20%) were *Salmonella* and 2 (5%) were non *Salmonella*. The mean time consumed for detection of bacterial growth by BacT/Alert was 15.6 hours and by Gall culture were 57.6 hours. The mean time consumed to identify *Salmonella* by BacT/Alert were 66 hours and by Gall culture were 78 hours. BacT/Alert is an automatic method that is more sensitive and efficient in detecting bacterial growth.