

Comparison of Paraffin Bait, Humic Acid Vitamin B Agar and Paraffin Agar Methods to Isolate *Nocardia* from Soil

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Abstract

Background and Objective: The Isolation of *Nocardia* species is complex and time-consuming, which is due to rapid growth of adjacent bacteria. Because of the importance of a specific medium with the ability of controlling intrusive microorganisms, this study aimed at comparing three laboratory methods to introduce the reliable isolation technique for *Nocardia* species.

Material and Methods: The soil samples were collected from different regions of Tehran province, Iran, and carefully transferred to the laboratory. The samples were cultured in three different media including Paraffin Baiting, Humic acid vitamin B agar and Paraffin agar, and incubated for 3-4 weeks at 35 °C.

Results: Of 110 soil samples, 31 *Nocardia isolates* (28.18%) were obtained from the media including Paraffin Baiting, (19; 17.27%), Humic acid and vitamin B agar (4; 3.63%), and Paraffin agar, (8; 7.27%).

Conclusion: because of high rate of isolation, low cost and the clearance of colonies suspected nocardia, Paraffin Bait technique is more reliable and efficient compared to the other methods.

Key words: *Nocardia*; Soil; Paraffin Baiting; Humic Acid Vitamin B