

## DNA Extracted from Nocardia Spp. by Manual Methods During 1 Hour

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**Background & Objectives:** Nocardiosis is opportunistic infection in patients with immunodeficiency. Molecular techniques provide rapid and accurate identification of Nocardia species. The first step in the molecular diagnosis is DNA extracted. In the present study, rapid Methods of DNA extraction from Nocardia species has been introduced. This study introduced a fast and handy Methods for the DNA extraction from Nocardia species.

**Methods:** In this survey, phenol – chloroform methods was used. This protocol used routinely for detect of microorganisms such as fungi and bacteria. This technique has been modified in many ways, including: time of water bath, centrifuge, freeze and ... . The total time DNA extracted at different ways (63,122,197,227 minutes) was evaluated. Also, for the presence of DNA from agarose gel and Nocardia genus specific primers were used.

**Results:** At all times there was DNA on agarose gel and was confirmed with specific primers.

**Conclusion:** Investigation reveal that Nocardia spp. DNA can be extracted by manual methods during 1 hour. The present study, was performed on the species of Nocardia in culture, which in future studies will be evaluated on clinical samples (including sputum and BAL).

**Keywords:** DNA Extracted; Nocardia; Rapid Manual