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# *Nocardia* Isolation of Soil

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Sir,

We read with interest article that published (Adv Biomed Res 2014; 3:151) by Faghri J *et al*. entitled *comparison of three phenotypic and deoxyribonucleic acid extraction methods for isolation and Identification of *Nocardia* spp.* however, authors and researchers should be noted that:

1. According to the literature, *Nocardia* isolation of soil sample used of paraffin baiting technique, paraffin agar, humic acid-vitamin agar, sucrose-gradient centrifugation, conventional media with antibacterial and antifungal agents and diagnostic sensitivity test agar.[1] Insome literature, paraffin baiting technique is the best method for *Nocardia* isolation of soil and clinical samples[2,3] but in this study, authors were reported is inappropriate that they did not optimize presumably
2. Based on scientific evidence, growth in lysozyme broth is important for the genus *Nocardia* identification[4] but in this study, used of Gram-stain and partially acid-fast characteristics. Hence we should mention that *Tsukamurella* spp., *Gordonia* spp. and *Rhodococcus* spp. are partially acid-fast and Gram-positive[5,6,7]
3. Authors used of slip-buried method with streptomycin/chloramphenicol for *Nocardia* isolation while many species of *Nocardia* are sensitive to chloramphenicol,[8] so streptomycin is used for the treatment of *Nocardia* infections[9]
4. In this article that describes DNA extraction methods from *Nocardia*, it needs revision based on the following comments:
    i. Authors mentioned that cetyltrimethylammonium bromide method is not satisfactory for DNA extraction while in some literature this method is suitable for DNA extraction of *Nocardia* and *Mycobacterium*[10]
    ii. Authors did not describe the amount of DNA recovered by the described method of extraction. This can be described in terms of the average µg of DNA per amount of cells and should include the range of DNA yield
    iii. Authors indicated that extracted DNA was visualized on a 1% gel to assess quality and purity, but did not indicate the amount of DNA run on the gel. In addition, no additional method of assessment of DNA purity was used such as the standard ultraviolet spectrophotometry method, which generates A260/A280 ratios.

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### Conflicts of interest

There are no conflicts of interest.

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