## عنوان مقاله:

IS THE AIR SAMPLES APPROPRIATE TO ISOLATE THE DENITRIFYING BACTERIA

## محل انتشار:

نوزدهمین کنگره بین المللی میکروب شناسی ایران (سال: 1397)

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## خلاصه مقاله:

Background and Aim:In recent years, air pollution has emerged as a problem in mega cities of the developing countries. Because of this reason, the application of the biological procedures is significant due to its cost-effectiveness, low side contamination and high efficiencies. One of the most harmful air pollutants is nitrogen oxides. Nitrogen oxides also impose environmental impacts such as the ozone production, global warming and acid precipitation. In addition, it reveals harmful effects on human health.The purpose of this experiment is to find the denitrifying bacteria from air samples that can convert these oxides into dinitrogen (N2).Methods:For this reason, after air sampling according to impingment method, serial dilution prepared in screening medium (SM), and the sample was cultured onto the bromothymol blue (BTB) medium to identify the colony of the denitrifying bacteria. Then nitrate broth was used to ensure that N2 gas was produced.Results:The results showed that none of isolates produced nitrogen gas.Conclusion:Consequently, the air was not proper samples to isolate the denitrifiers. It should be carried .out more investigation on soil or sewage samples to find these kind of bacteria

## کلمات کلیدی:

air pollution, denitrifying bacteria, nitrogen oxides