

Screening of Ammonia Removable *Bacillus* sp. among Nitrogen Removal Strains

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Abstract

The numbers of animals in stall continue to be increased in modern stock farming and have created manure-related problems, which are air pollution in stall, water pollution and disease-causing potential. The main air pollutant is ammonia gas from manure in stall. Ammonia gas is very harmful to workers and live stocks too.

In this study, ammonia removable strain were screened and tested for the efficiency of removal of ammonia from poultry manure with 32 species which are known to have higher nitrification rate. One of ammonia removable strain was selected by the consideration of capacity for ammonia removal and growth rate. Selected strain was showed 98% genomic homology in 16s rRNA sequencing to *Bacillus* sp. The selected strain was named for IB 101 and the strain could remove 70% of ammonia from poultry manure.

References

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