

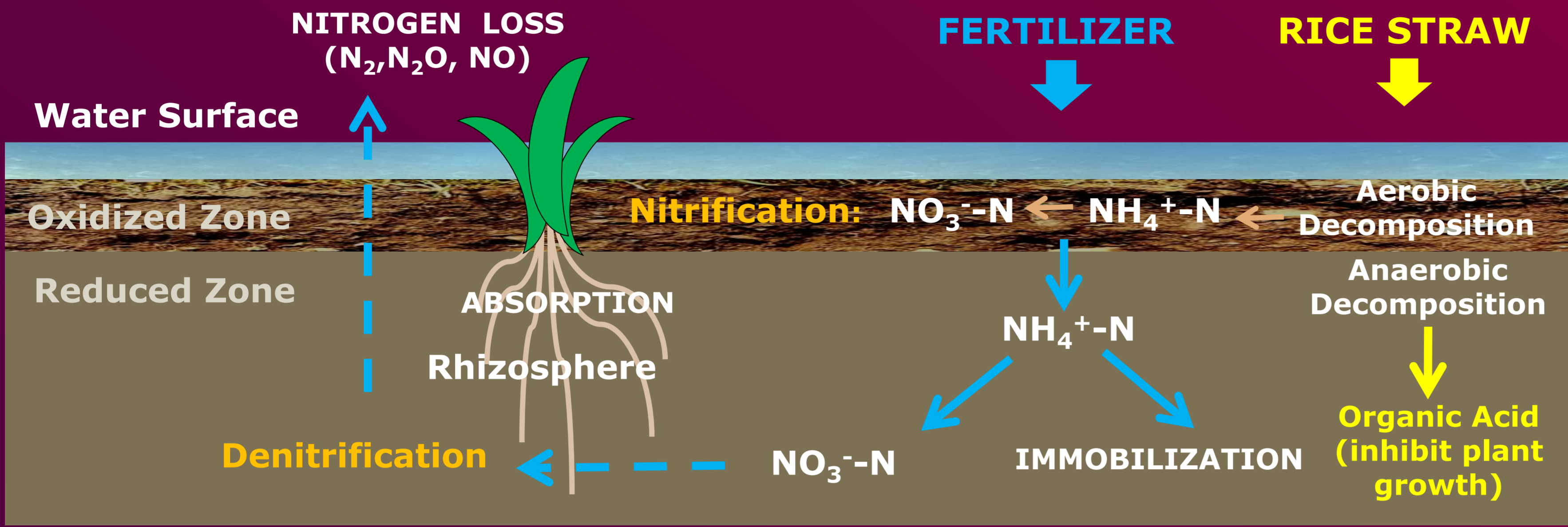
# EFFECT OF APPLICATION RATE OF ORGANIC MATTER ON THE FATE OF NITROGEN FERTILIZER IN FLOODED SOIL AT EARLY GROWTH STAGE OF RICE

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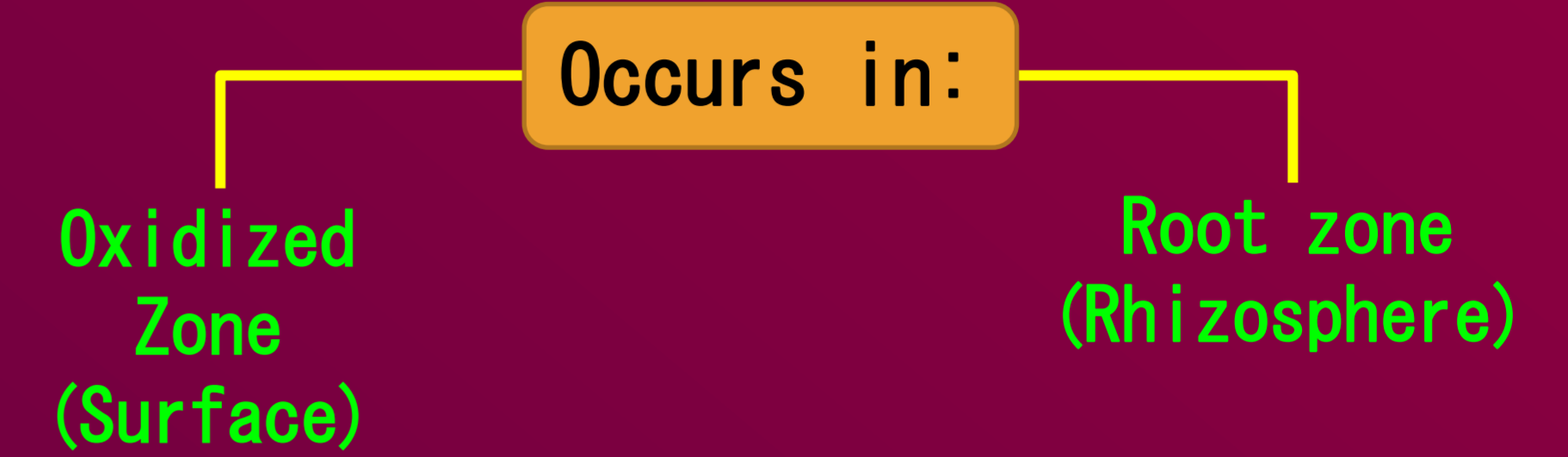


## INTRODUCTION



Rice straw reduces absorption of nitrogen (N) derived from fertilizer application.

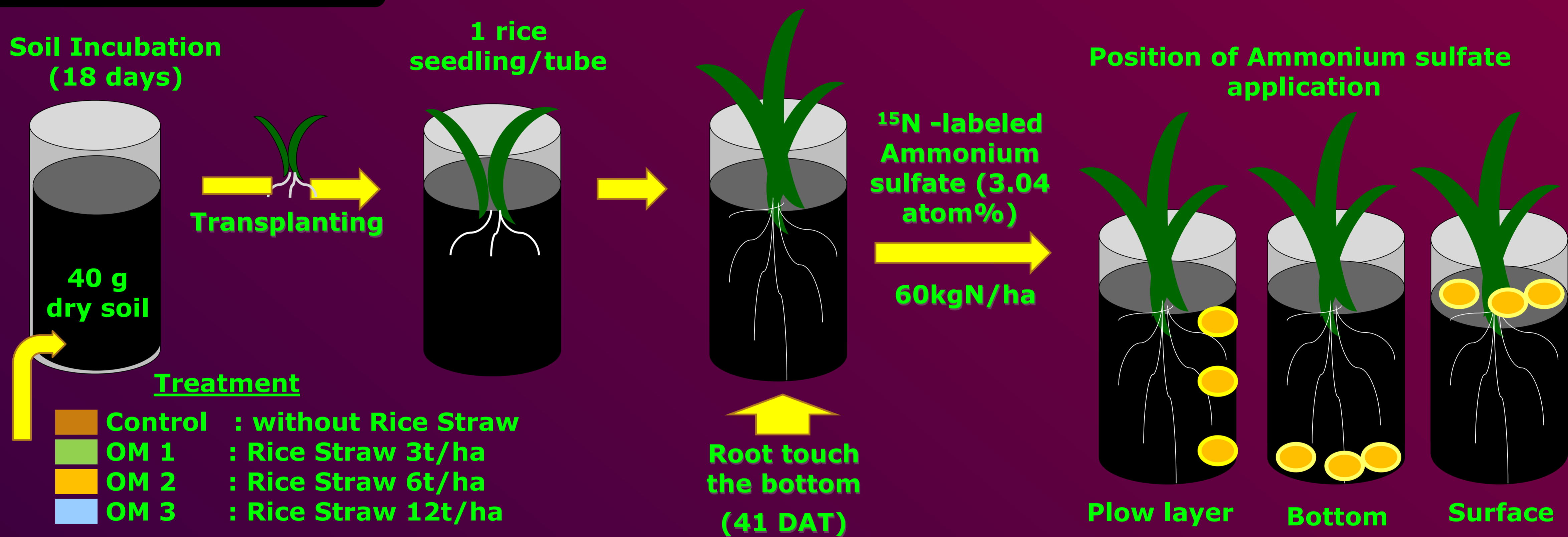
In other hand, applied fertilizer-N also losses as N-gas through nitrification and denitrification.



## OBJECTIVE

The fate of nitrogen fertilizer (absorption, immobilization, loss) under submerged condition as affected by application rate of organic matter with different position of fertilizer application.

## MATERIALS AND METHODS



## RESULTS AND DISCUSSION

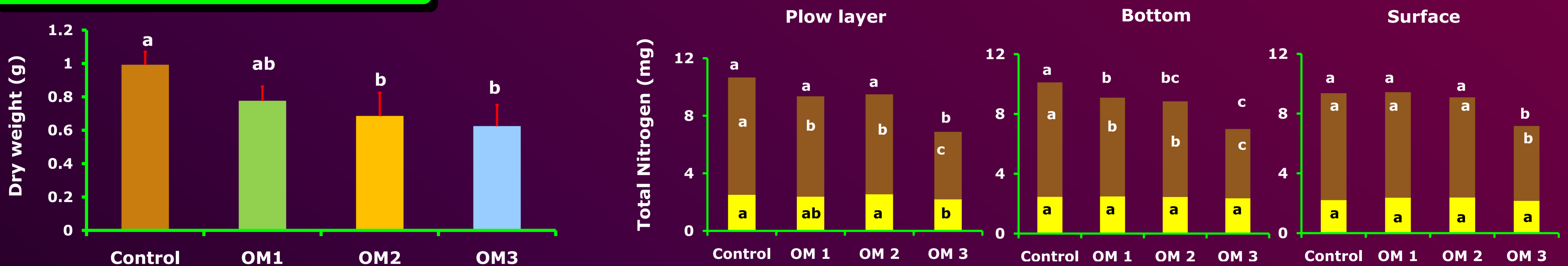


Figure 1. Plant dry weight as affected by application of organic matter treatment.

Figure 2. Effect of organic matter on total absorbed N derived from (soil+rice straw) and fertilizer for each position of applied N.

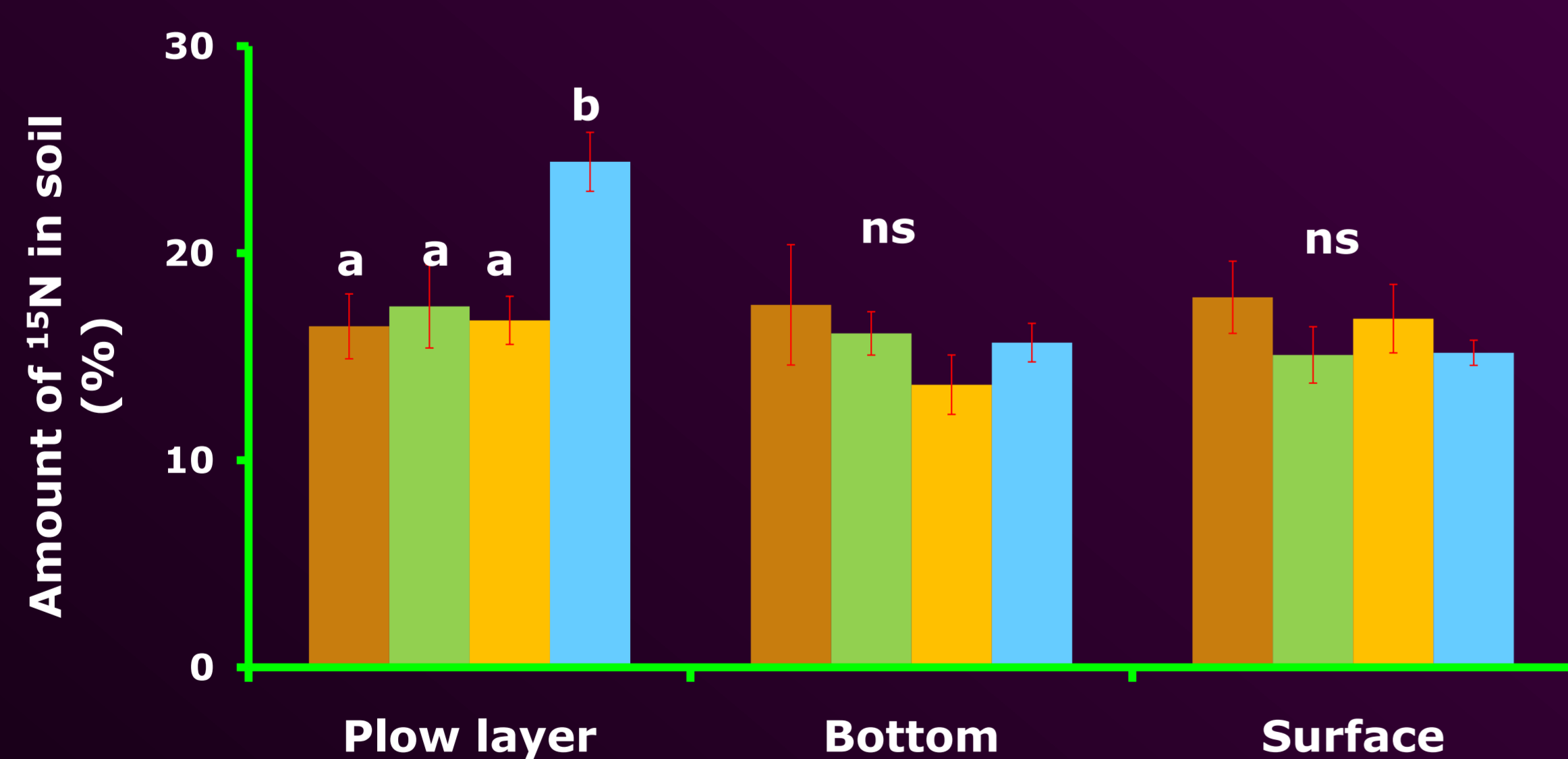


Figure 3. Effect of organic matter application on immobilized N derived from fertilizer for each position of applied N (ns: not significant at  $\alpha=5\%$ ).

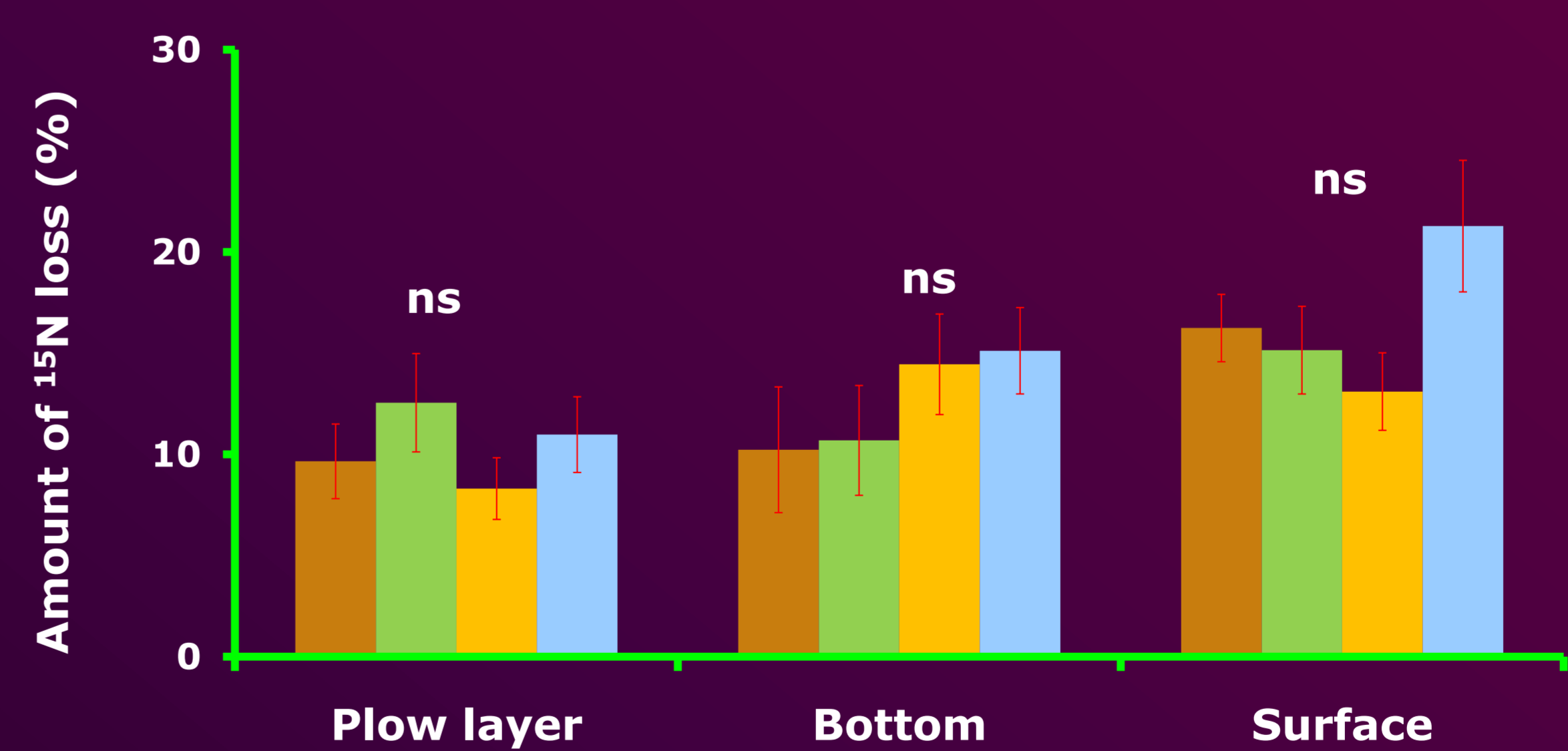


Figure 4. Effect of organic matter application on N loss derived from fertilizer for each position of applied N.

Application of inorganic N at early growth stage can be used as a solution to sustain the poor growth of plants treated with heavy dose of organic matter.

## ACKNOWLEDGEMENT

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