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**Response of humic acid formation to elevated nitrate during chicken manure  
composting**

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**Abstract:** Nitrate can stimulate microbes to degrade aromatic compounds, whereas humic acid (HA) as a high molecular weight aromatic compound, its formation may be affected by elevated nitrate during composting. Therefore, this study is conducted to determine the effect of elevated nitrate on HA formation. Five tests were executed by adding different nitrate concentrations to chicken manure composting. Results demonstrate that the concentration of HA in treatment group is significantly decreased compared with control group ( $p < 0.05$ ), especially in the highest nitrate concentration group. RDA indicates that the microbes associated with HA and environmental parameters are influenced by elevated nitrate. Furthermore, structural equation model

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