

## Response to Editor decision

Based on the extensive and clear response provided to the RC, CC and editor's comments and questions - you may proceed in submitting your revised MS now as explained in the author responses. In particular willingness to comply with the requests to provide N balance estimates with account for N-volatilization is appreciated; as is their willingness to condense 3.4-3.6.

Of special note: several comments pertained to the data presentation in figures - the authors can decide which of the suggestions they will implement and which not in the revised version

>> We have modified the manuscript as detailed in prior 'Response to Reviewer and Editor comments' document. Notable revisions include:

- Inclusion of N mass balance table (Table 2) to support discussion on N losses
- Inclusion of discussion on N losses
- Where possible the complexity (especially as it relates to lengthy sentences or speculative discussion) has been reduced
- After further consideration, we elected to avoid excessive speculation on microbial degradation in the POCU discussion (section 3.5). Instead, we focus on our proposed hypothesis (which is supported by several observations) and note that, "Further experimentation is required to elucidate the exact processes contributing to the initial 'failure' of some POCU granules and to determine the extent to which other mechanisms (e.g., microbial degradation, soil-granule contact) are also involved."
- Figures 3-6 have been revised to present data more clearly: including adding second Y-axis for NO<sub>3</sub>-N concentrations (Figs. 5, 6), re-scaling of Y-axis for NH<sub>4</sub>-N (Fig. 5), improving scale mark clarity (Figs. 5, 6), making symbols larger and unfilled (Figs. 3, 4)
- Removal of Figure 7, which was confusing to interpret and where the information is now captured in Table 2

We again thank the Reviewers and Editor for their time and constructive feedback.