Optimizing the Incorporated Amount of Chinese Milk Vetch (*Astragalus sinicus* L.) to Improve Rice Productivity without Increasing CH_4 and N_2O Emissions

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Supplemental Material

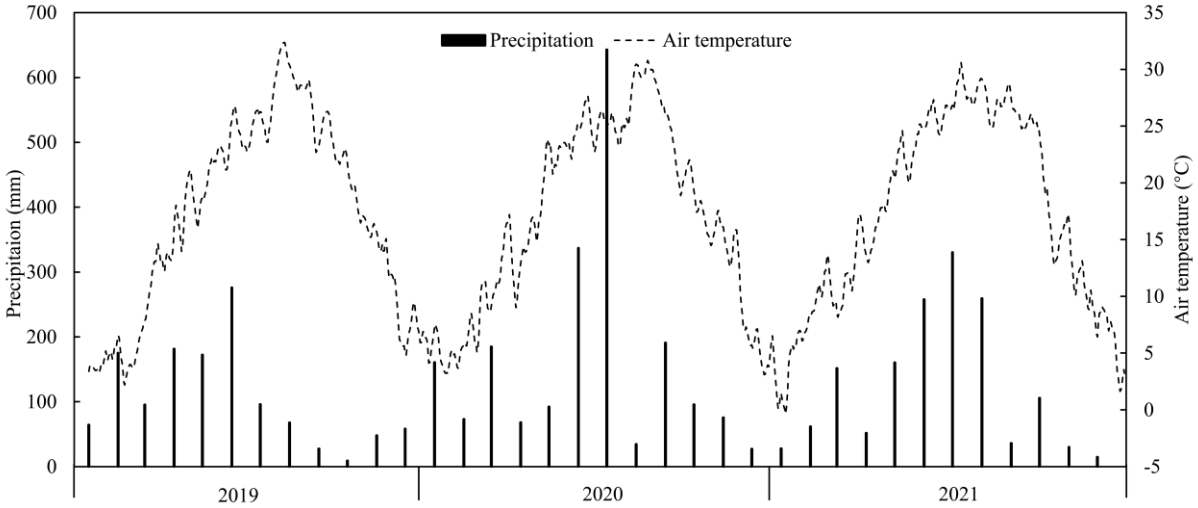

Figure S1. Monthly precipitation and daily ambient temperature during the experimental period. Daily ambient temperature data are 7-day moving averages.

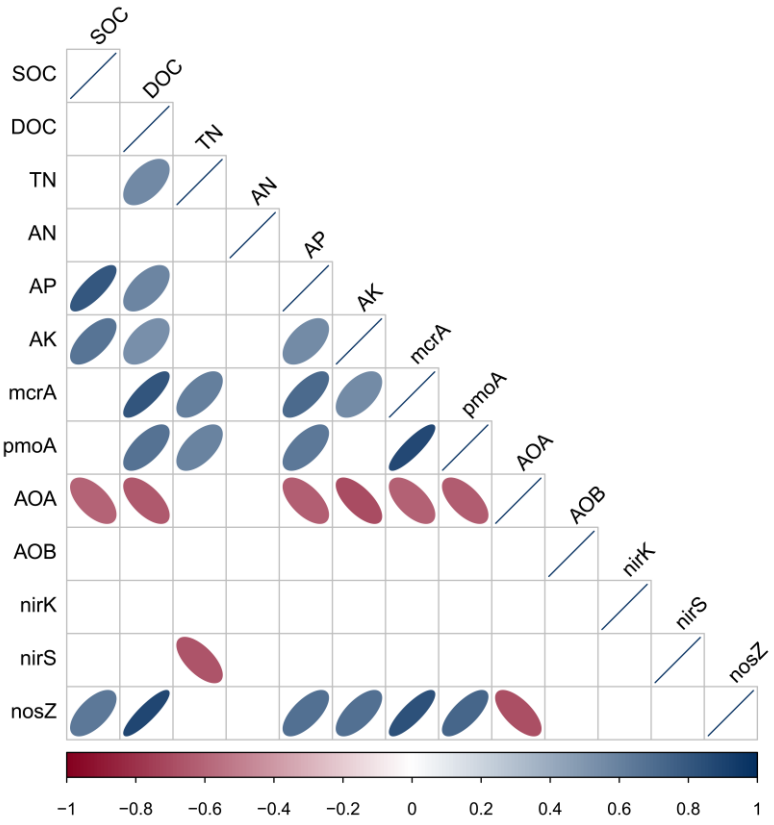

Figure S2. Pearson's correlations between the abundances of functional genes and soil nutrients. The blue and red ellipses denote significantly positive and negative correlations, respectively (n=15, $P < 0.05$). The color shades represent correlation coefficients (r). SOC: soil organic carbon, DOC: dissolved organic carbon, TN: total nitrogen, AN: available nitrogen, AP: available phosphorus, AK: available potassium.

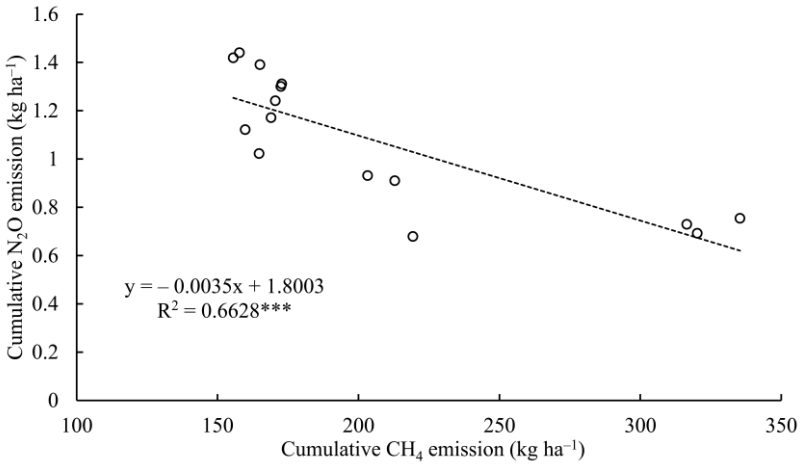

Figure S3. Trade-off correlation between cumulative CH_4 and N_2O emission. *** significant at $p < 0.001$