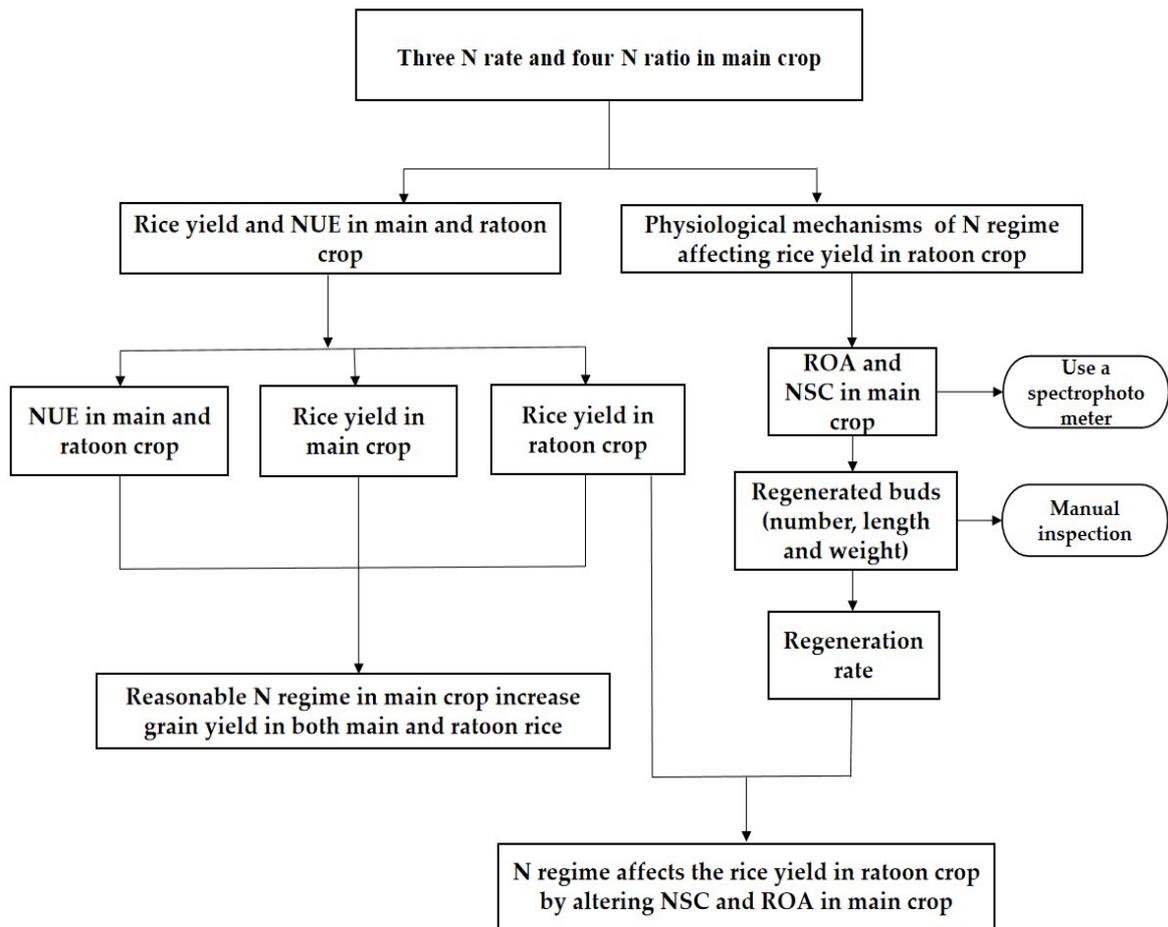


Figure S1. Mean temperature (A), sunshine hours (B) and rainfall (C) monthly during rice growth in 2018 and 2019.



**Figure S2. Technical drawings for experimental program.**



**Figure S3. The process of obtaining root samples from the field.**



**Figure S4. Field investigation on the growth and development of regenerated buds.**

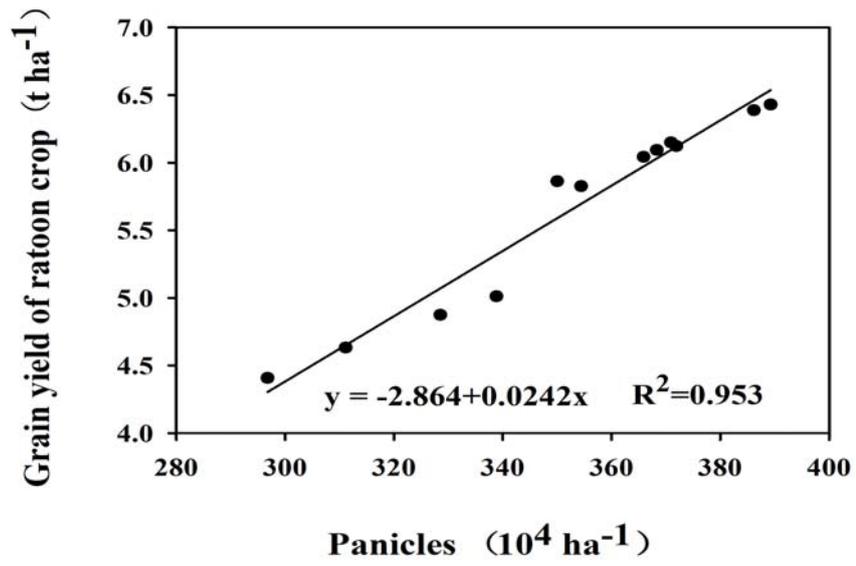
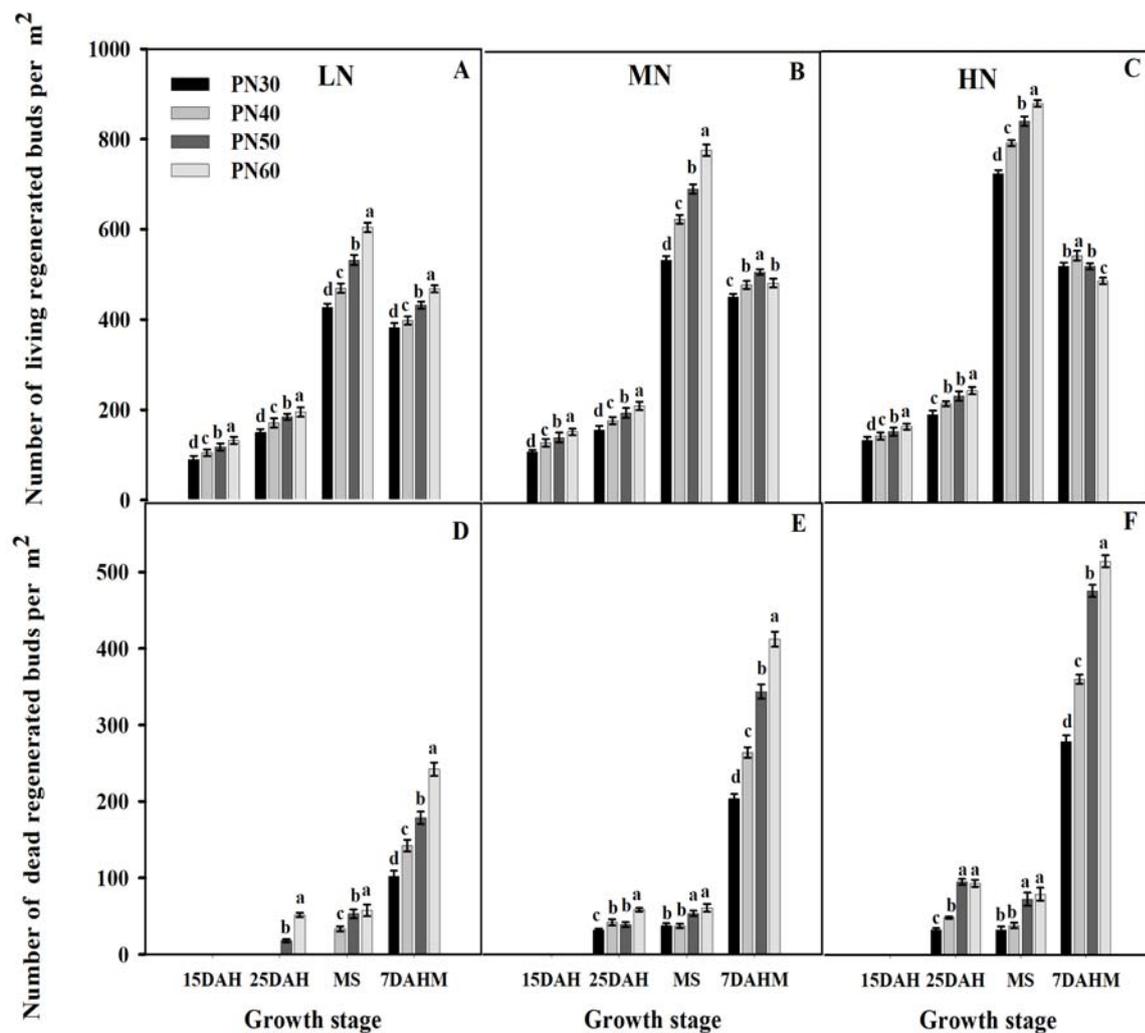


Figure S5. Relationships between the yield and panicle number in the ratoon crop.



**Figure S6. Effects of N regime in the main crop on number of living (A, B and C) and dead (D, E and F) regenerated buds per square meter.** Note: LN, low N rate (the total amount of N applied was 100 kg ha<sup>-1</sup>); MN, medium N rate (the total amount of N applied was 250 kg ha<sup>-1</sup>); HN, high N rate (the total amount of N applied was 400 kg ha<sup>-1</sup>). PN30, PN40, PN50 and PN60 correspond to N application ratios of basal tillering fertilizer to panicle fertilizer of 7:3, 6:4, 5:5 and 4:6, respectively. DAH, days after heading of the main crop. MS, maturity stage of the main crop. DAHM, days after harvest of the main crop. The different lowercase letters at the same growth stage and N application rate indicate significant differences at the 5% probability level according to LSD tests.

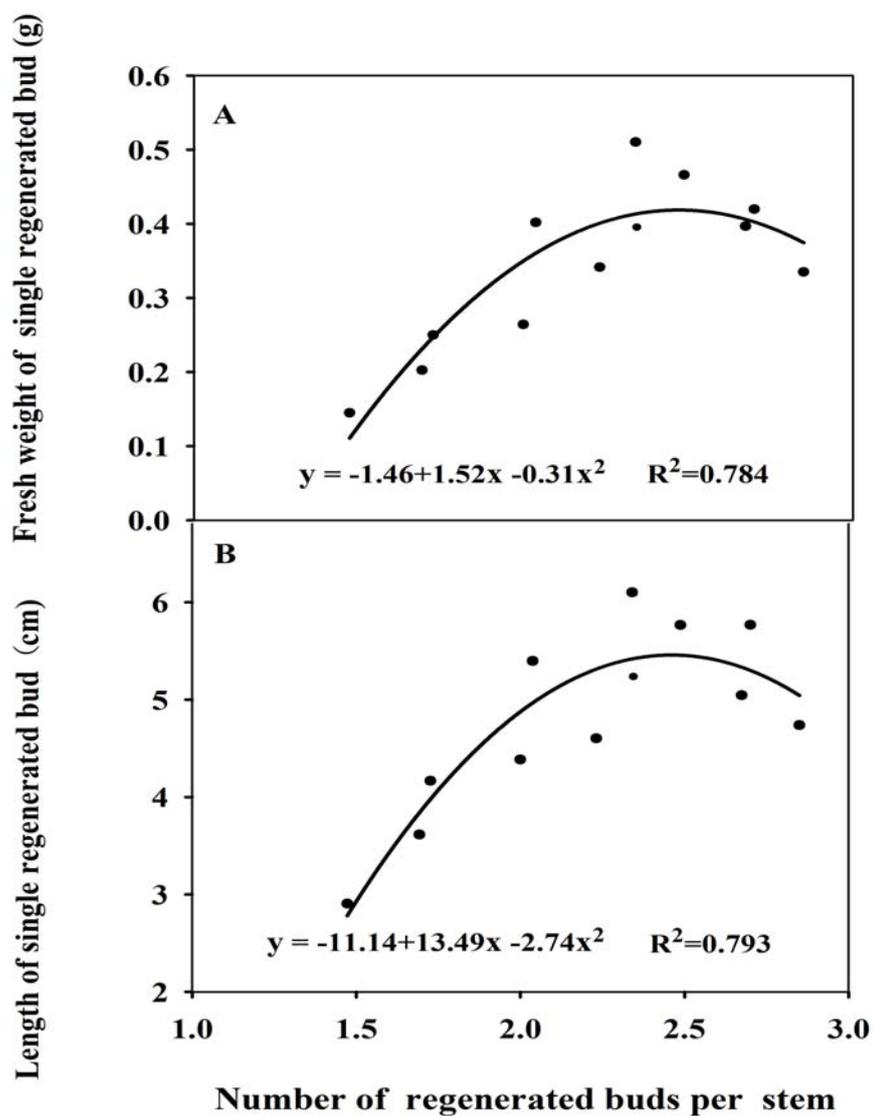


Figure S7. Relationships between number, fresh weight and length of regenerated buds at maturity of main crop.