Supplementary

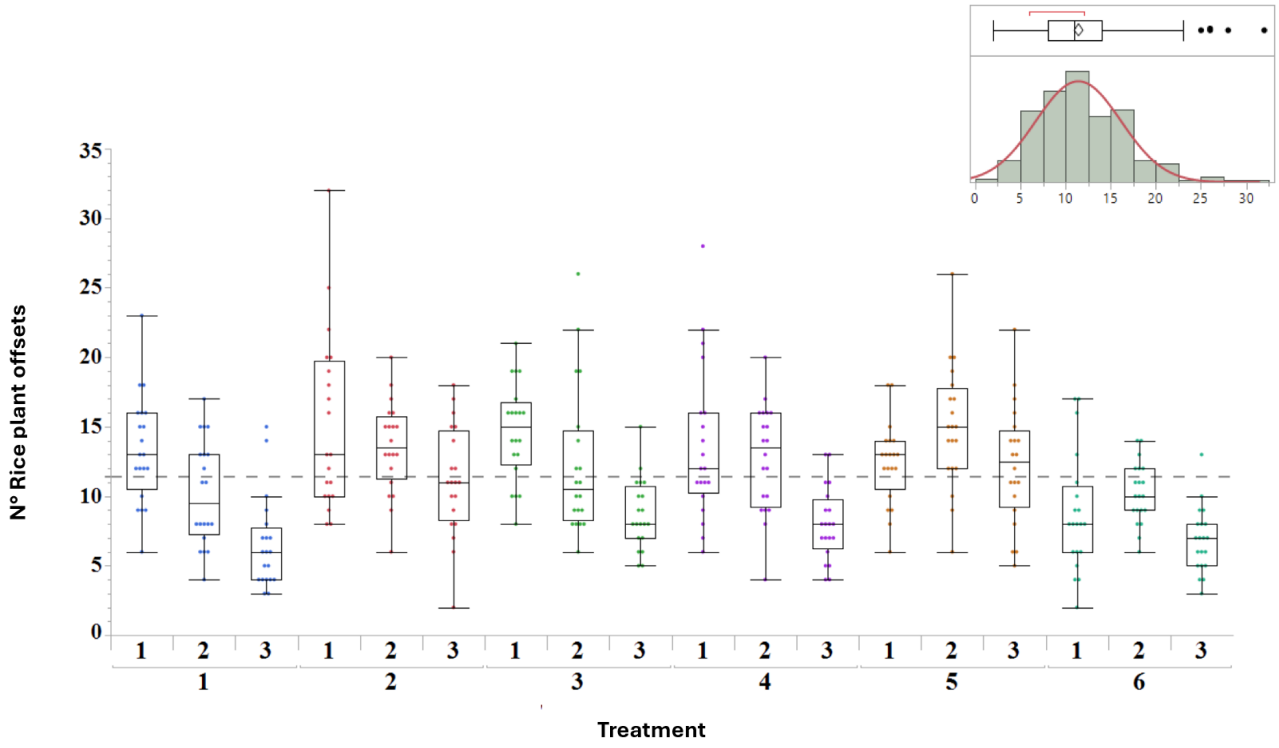


Figure S1. Distribution of rice plant offsets number per plant across treatments and blocks. (A) Individual plant records (jittered) overlaid with boxplots representing the median and interquartile range for each treatment (1–6) and replicate block (1–3). (B) Cumulative frequency histogram with an overlaid normal distribution curve and a summary horizontal boxplot, highlighting the non-normal data distribution ($p < 0.0001$) that justified the use of non-parametric Kruskal-Wallis and Wilcoxon rank-sum tests

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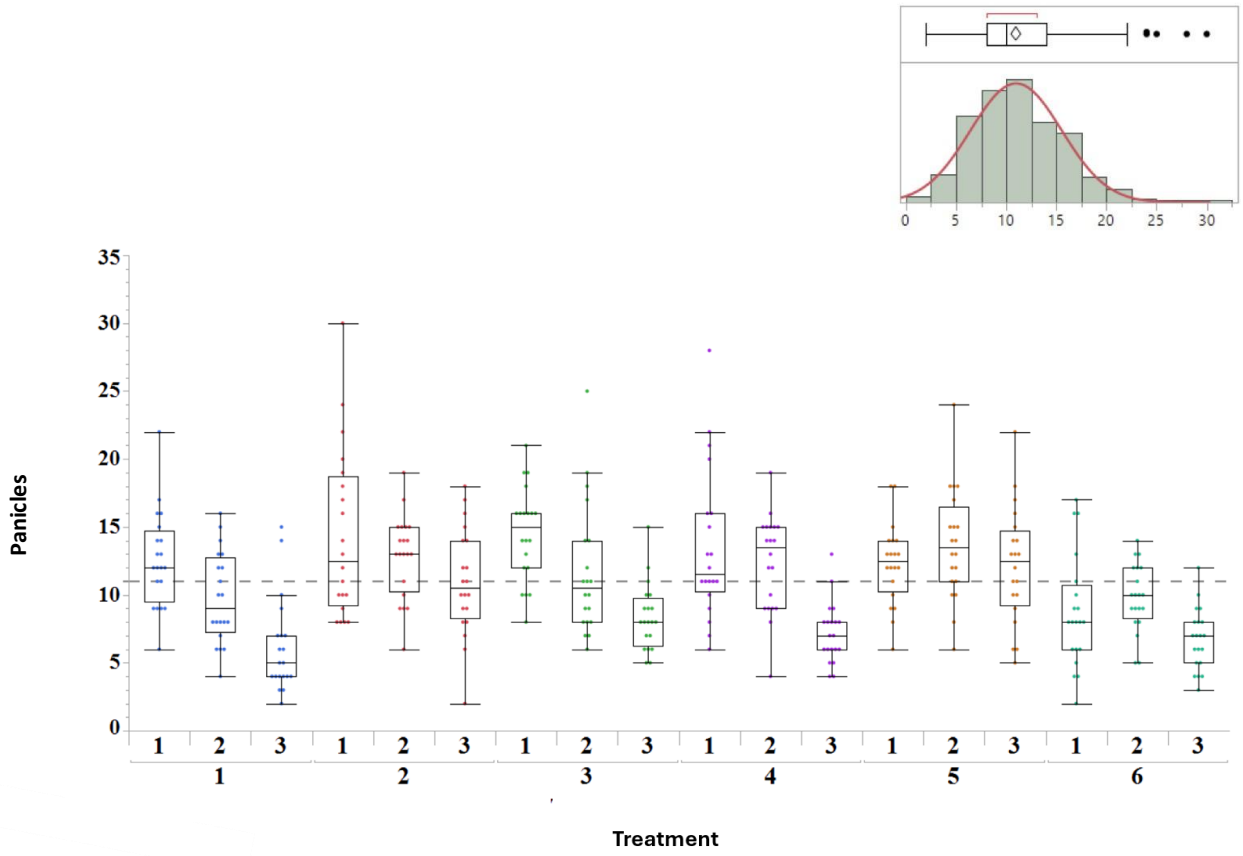


Figure S2. Distribution of panicles per plant across experimental units. (A) Boxplot categorized by treatment and replicate blocks, illustrating the consistency of the biological response across the experimental field. (B) Summary distribution and histogram of the total spike count dataset. The statistical overlap between replicate blocks confirms the significance of the randomized complete block design (RCBD)

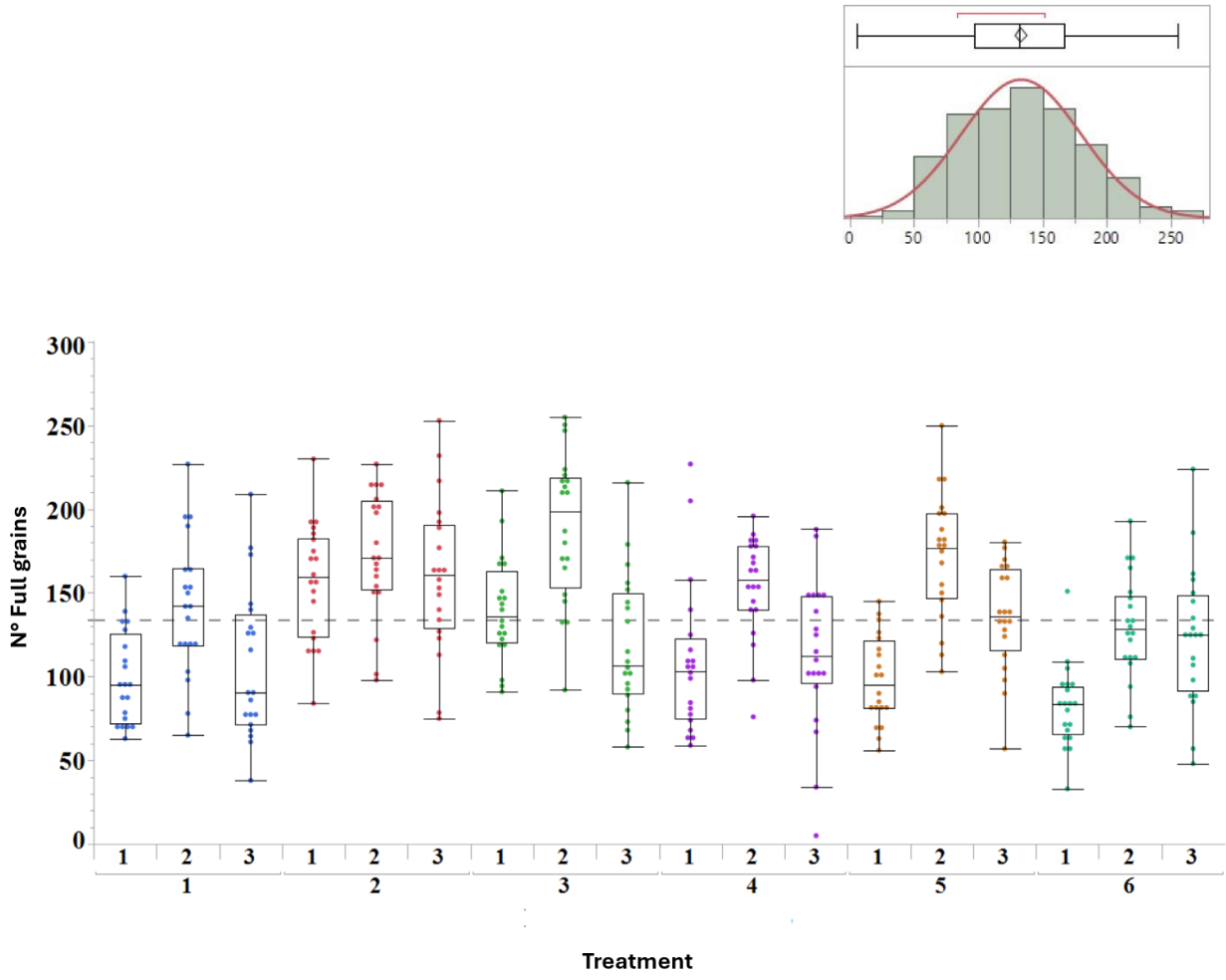


Figure S3. Distribution of filled grains per plant during the harvest stage. (A) Detailed biometric records categorized by treatment (1–6) and blocks (1–3), showcasing the individual variability among biological replicates. (B) Histogram and normality assessment for the global filled grain count. The results indicate a significant influence of PGPB inoculation on the efficiency of grain partitioning

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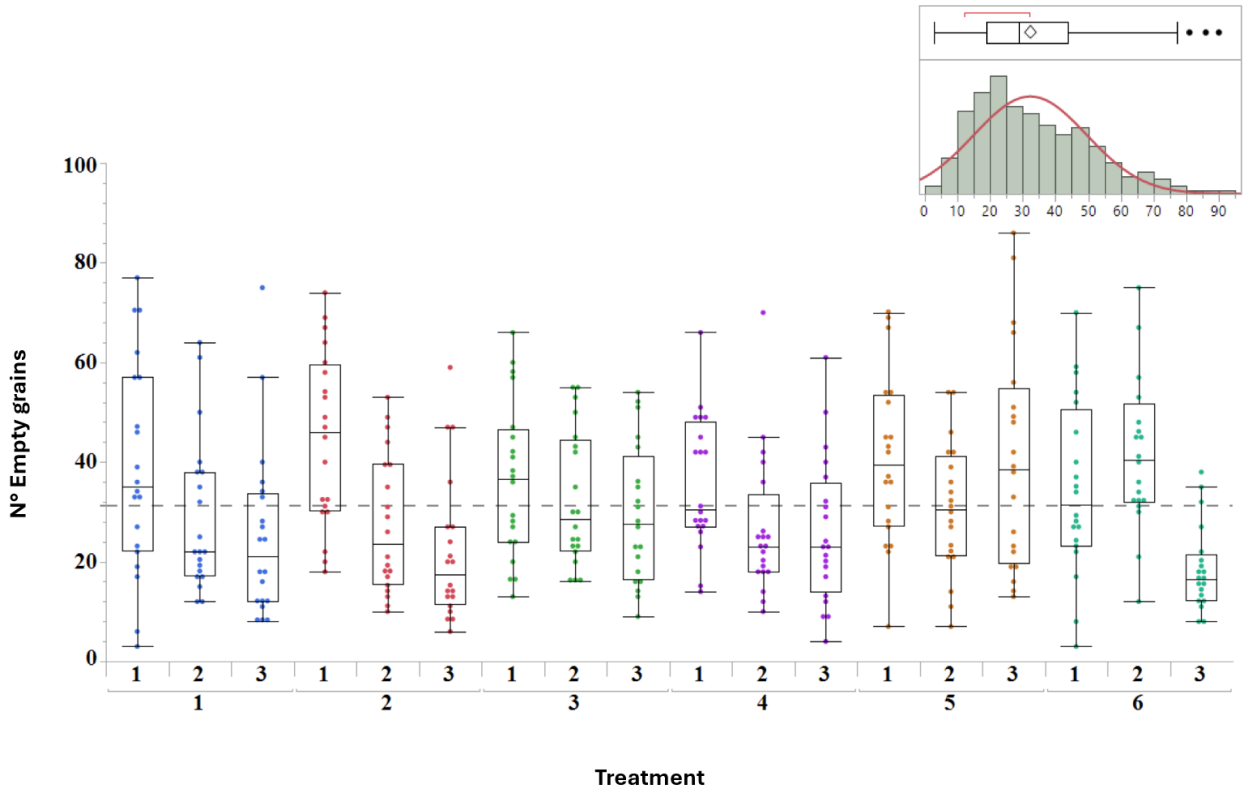


Figure S4. Distribution of empty (chaffy) grains per plant. (A) Comparative analysis across treatments and blocks to identify the impact of native isolates on rice sterility rates. (B) Global frequency distribution of empty grains. Data transparency is ensured by presenting all individual records collected during the final sampling stage

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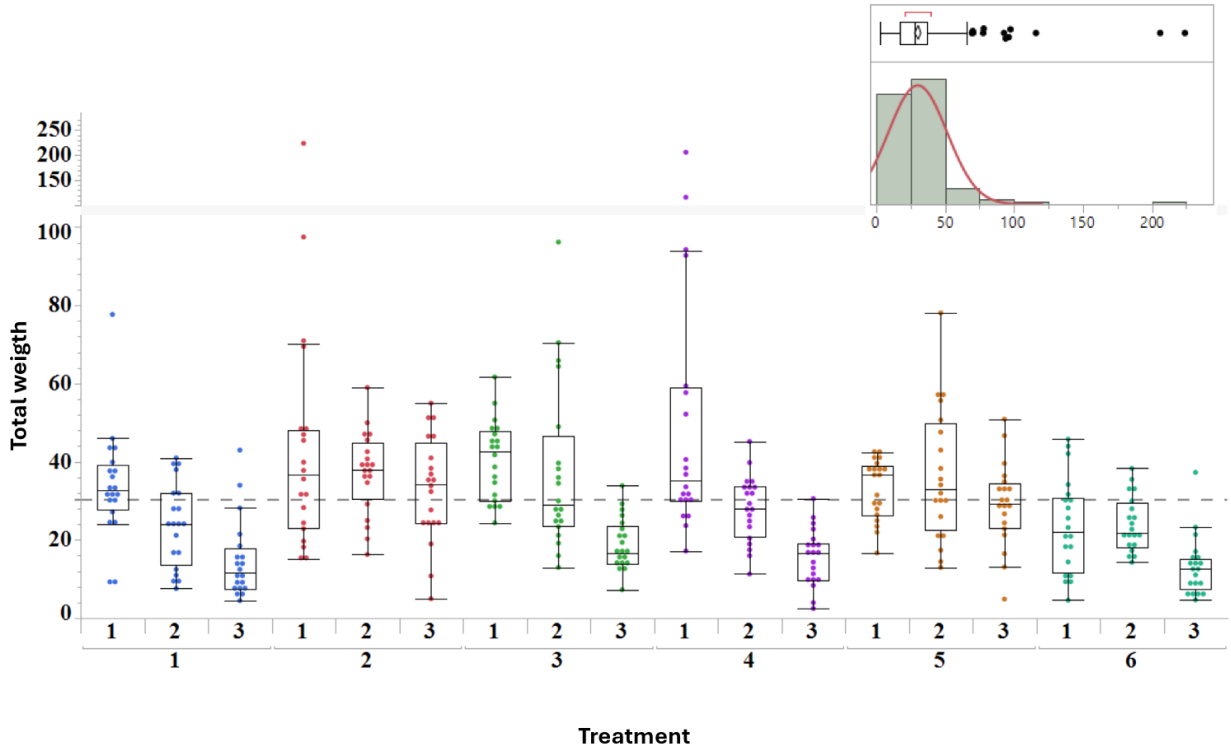


Figure S5. Raw distribution of total grain weight per plant. (A) Visual representation of individual plant productivity across treatments and blocks, used to derive the pooled mean yield data presented in the results (Tables 5 and 6). (B) Histogram of total grain weight and summary statistics. The extreme values (outliers) highlight the inherent biological variability of rice (variety I-FL-69-18) under field conditions

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