

Supplementary Information for:

Foliar application of iron-based nanofertilizers to wheat grown in a Cd-contaminated field: Implications for food safety and biofortification

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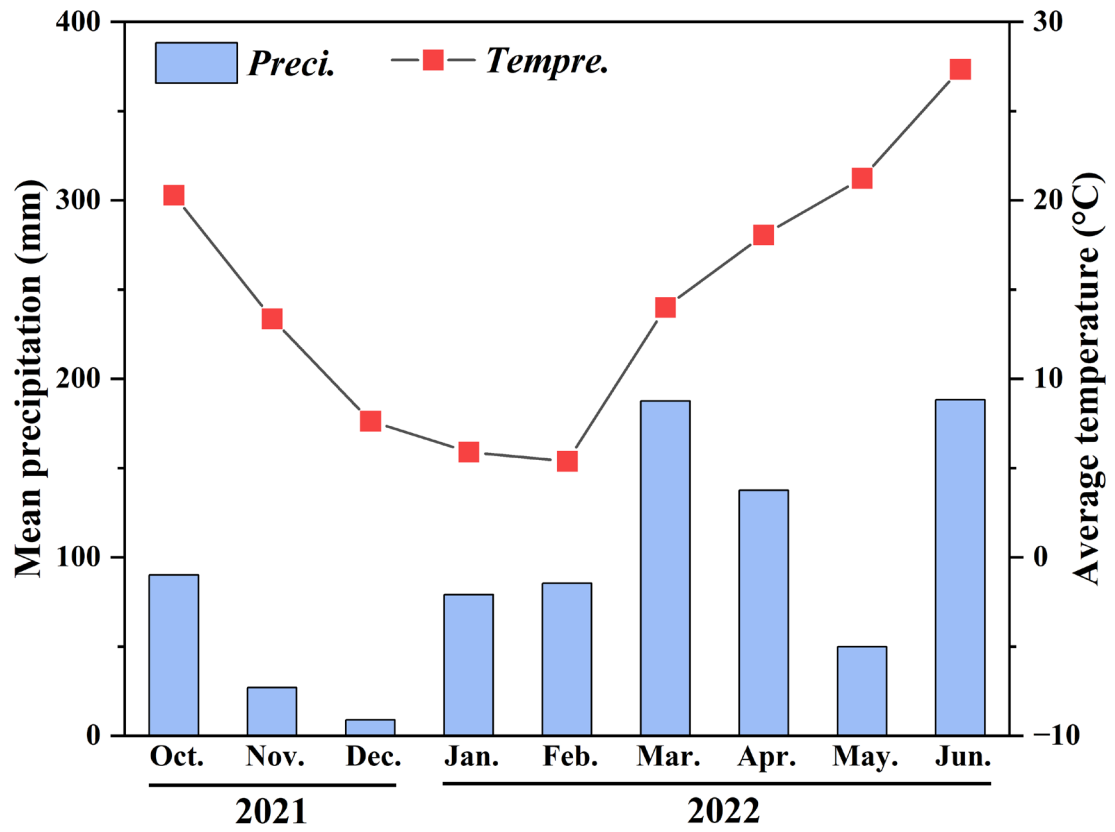


Figure S1. Mean precipitation and temperature of field site during wheat cultivation.

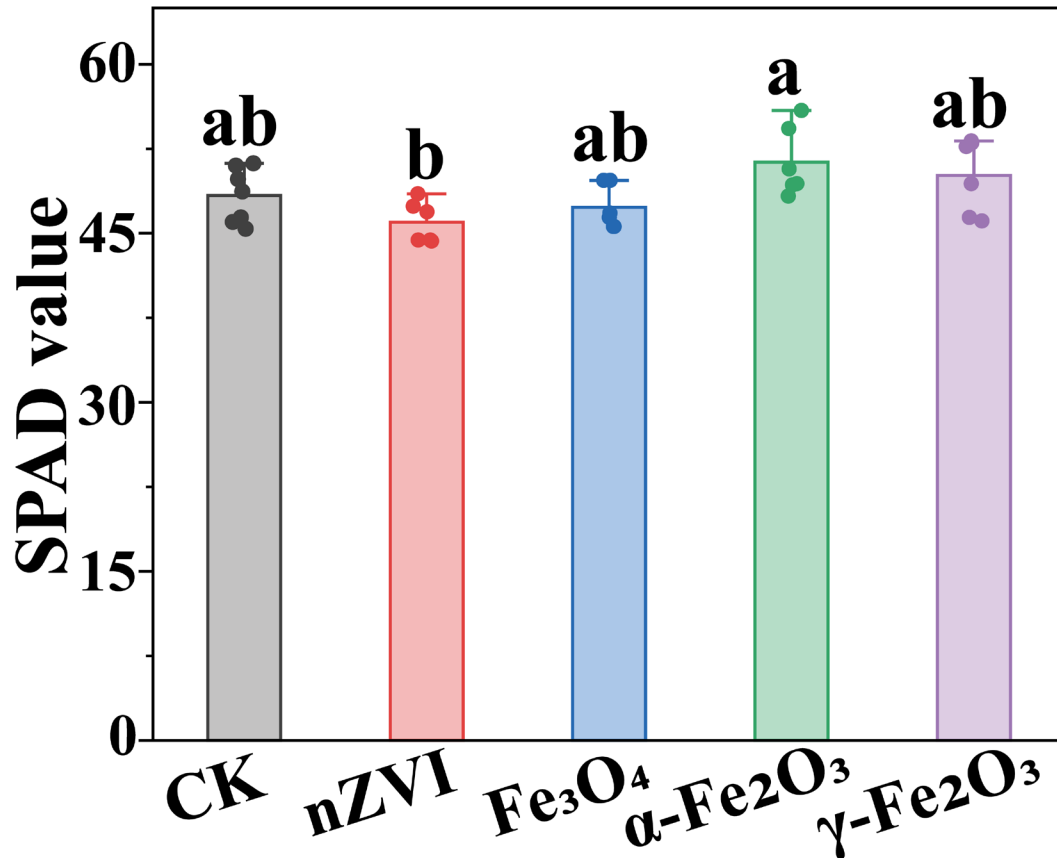


Figure S2. SPAD values of wheat leaves after foliar application of four Fe NMs. Different letters above bars represent significant differences ($p < 0.05$) determined by one-way analysis of variance (ANOVA) with Tukey's multiple comparisons test.

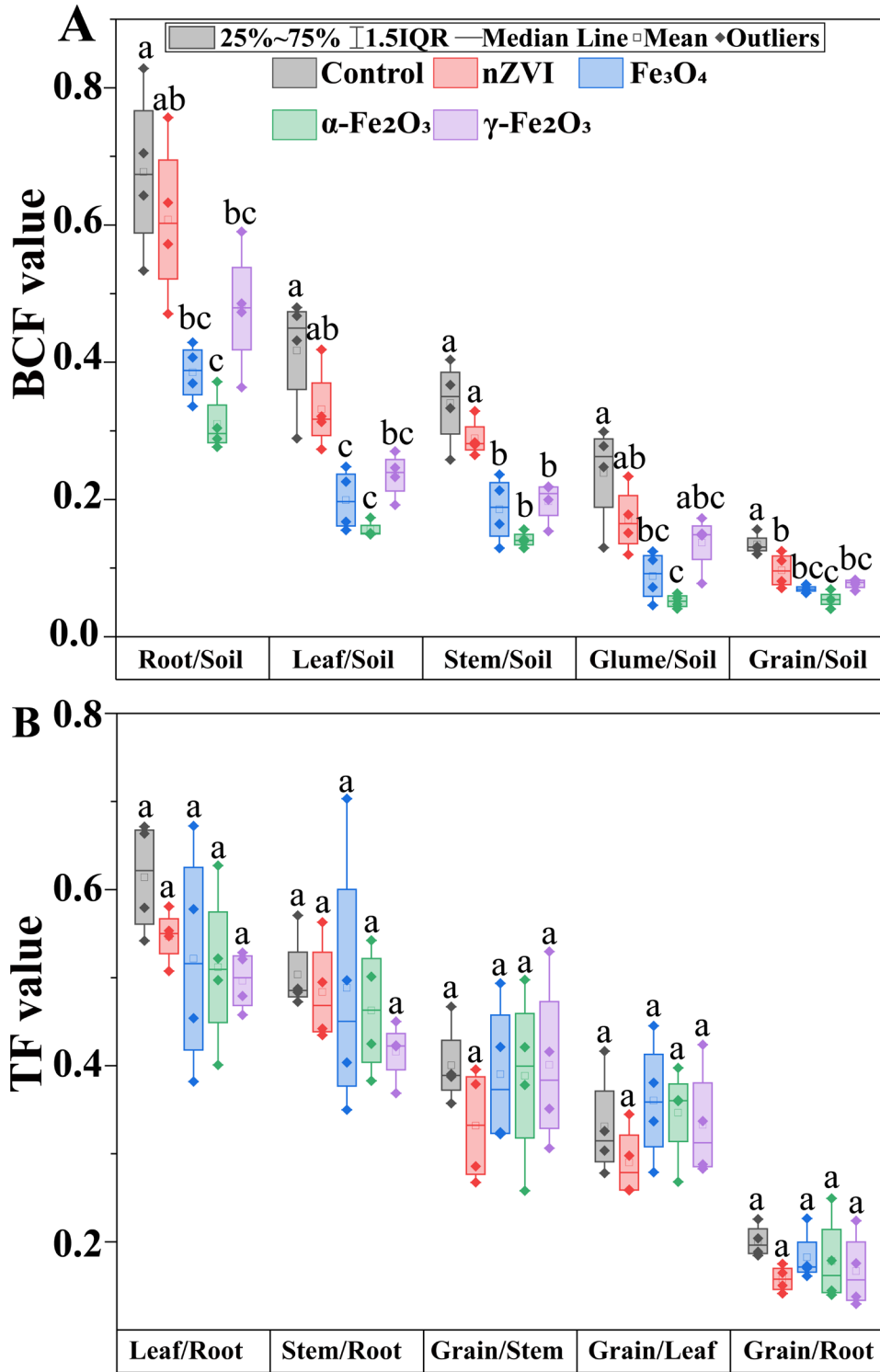


Figure S3. BCF and TF of Cd in wheat tissues after foliar application of four different Fe NMs. Different letters above bars represent significant differences ($p < 0.05$) determined by one-way analysis of variance (ANOVA) with Tukey's multiple comparisons test.

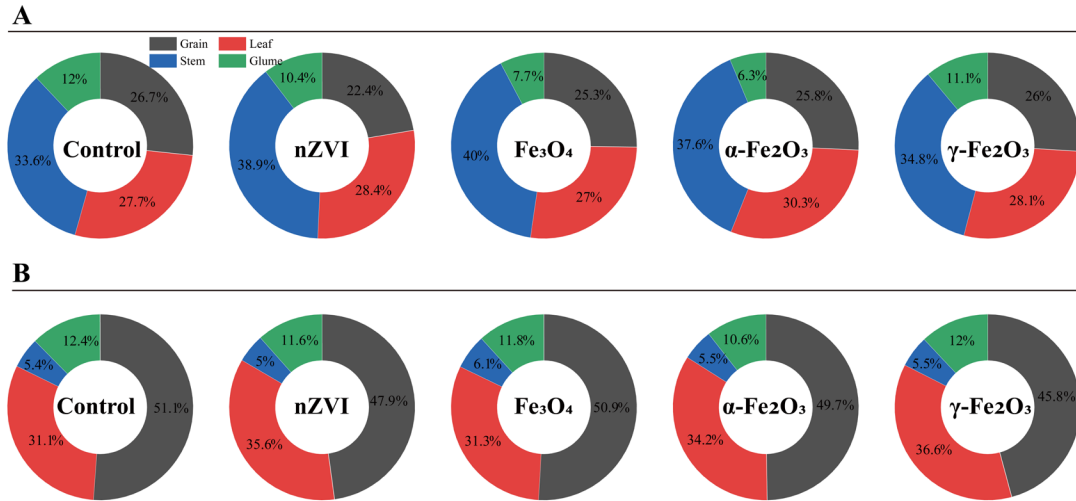


Figure S4. Cd (A) and Fe distribution pattern (B) in the aboveground wheat tissues after foliar application of four different Fe NMs. NS: None significance.

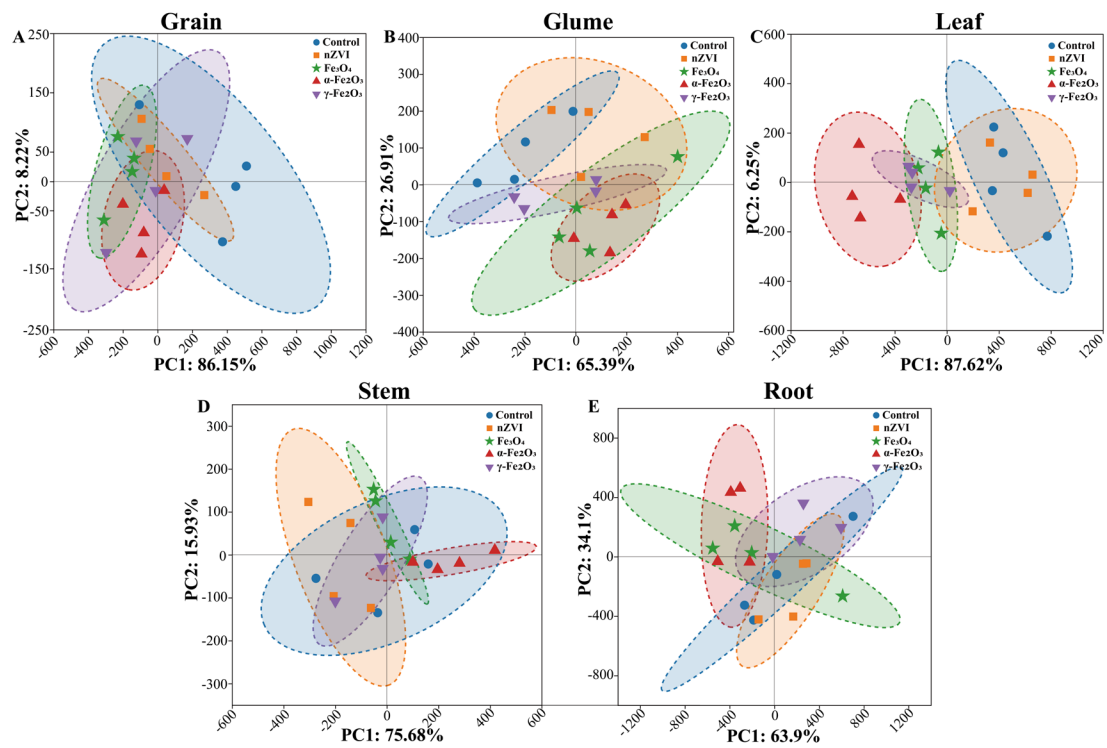


Figure S5. PCA analysis of ionomic profile in different wheat tissues after foliar application of four different Fe NMs.

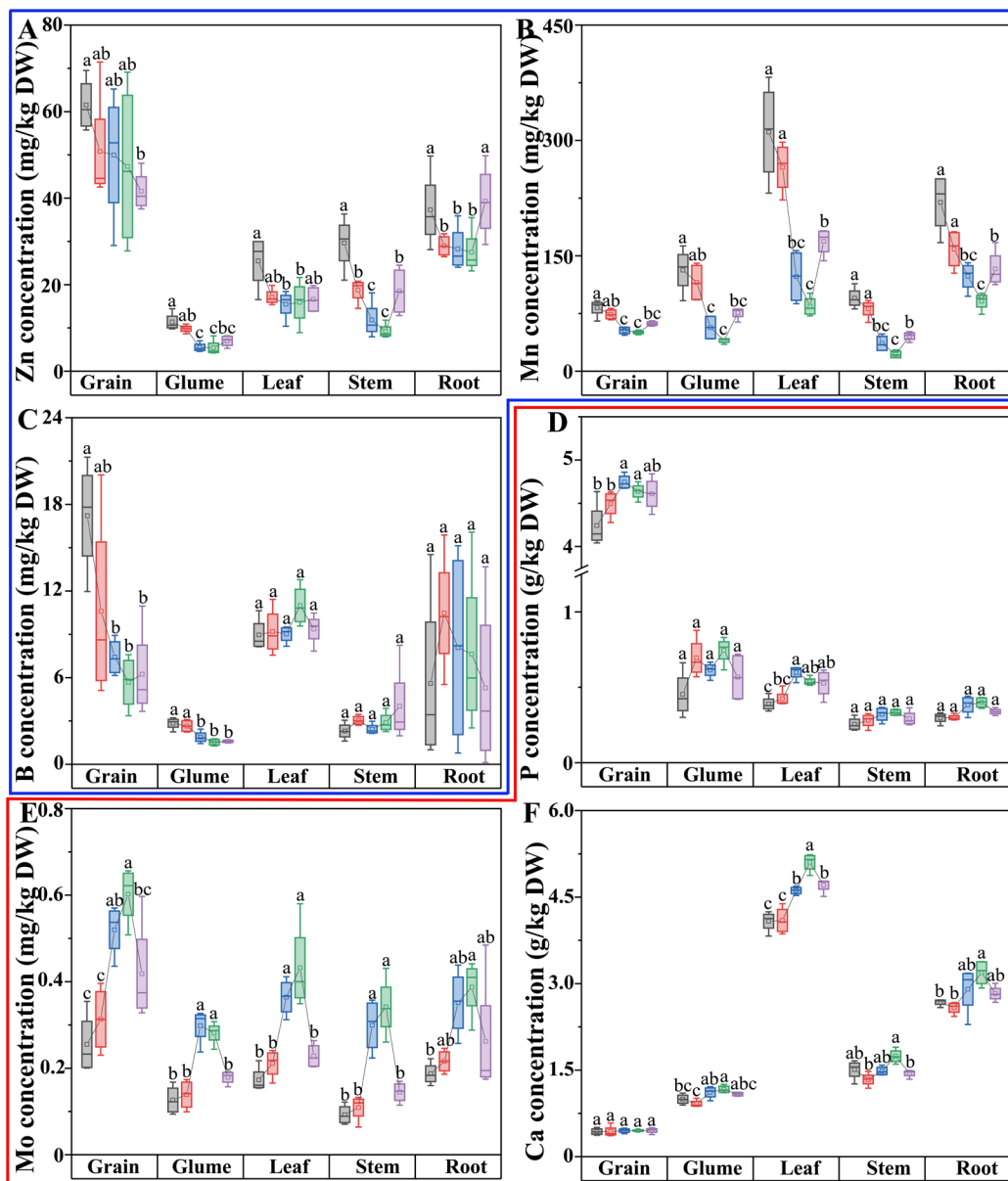


Figure S6. Nutrient concentrations of different wheat tissues under foliar application of four Fe NMs. Increased element concentrations inside the blue box line (A-C). Decreased element concentrations inside the red box line (D-F). Different letters above bars represent significant differences ($p < 0.05$) determined by one-way analysis of variance (ANOVA) with Tukey's multiple comparisons test.

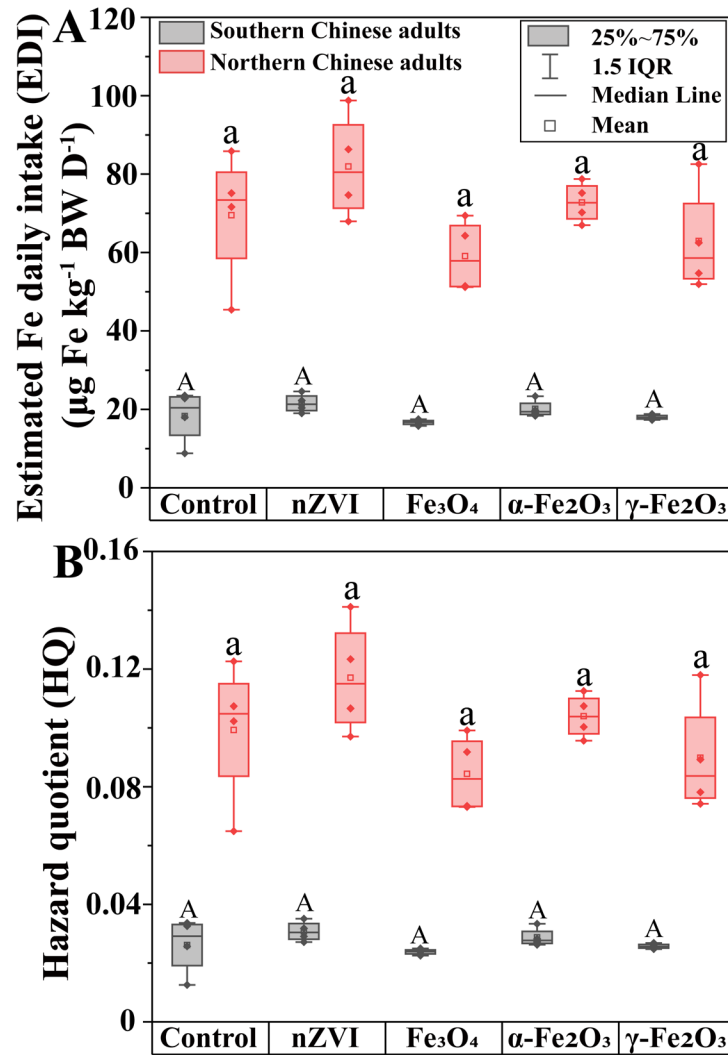


Figure S7. The estimated Fe daily intake (EDI) and hazard quotient (HQ) of Fe through wheat flour consumption treated with four different Fe NMs. Different letters above bars represent significant differences ($p < 0.05$) determined by one-way analysis of variance (ANOVA) with Tukey's multiple comparisons test.