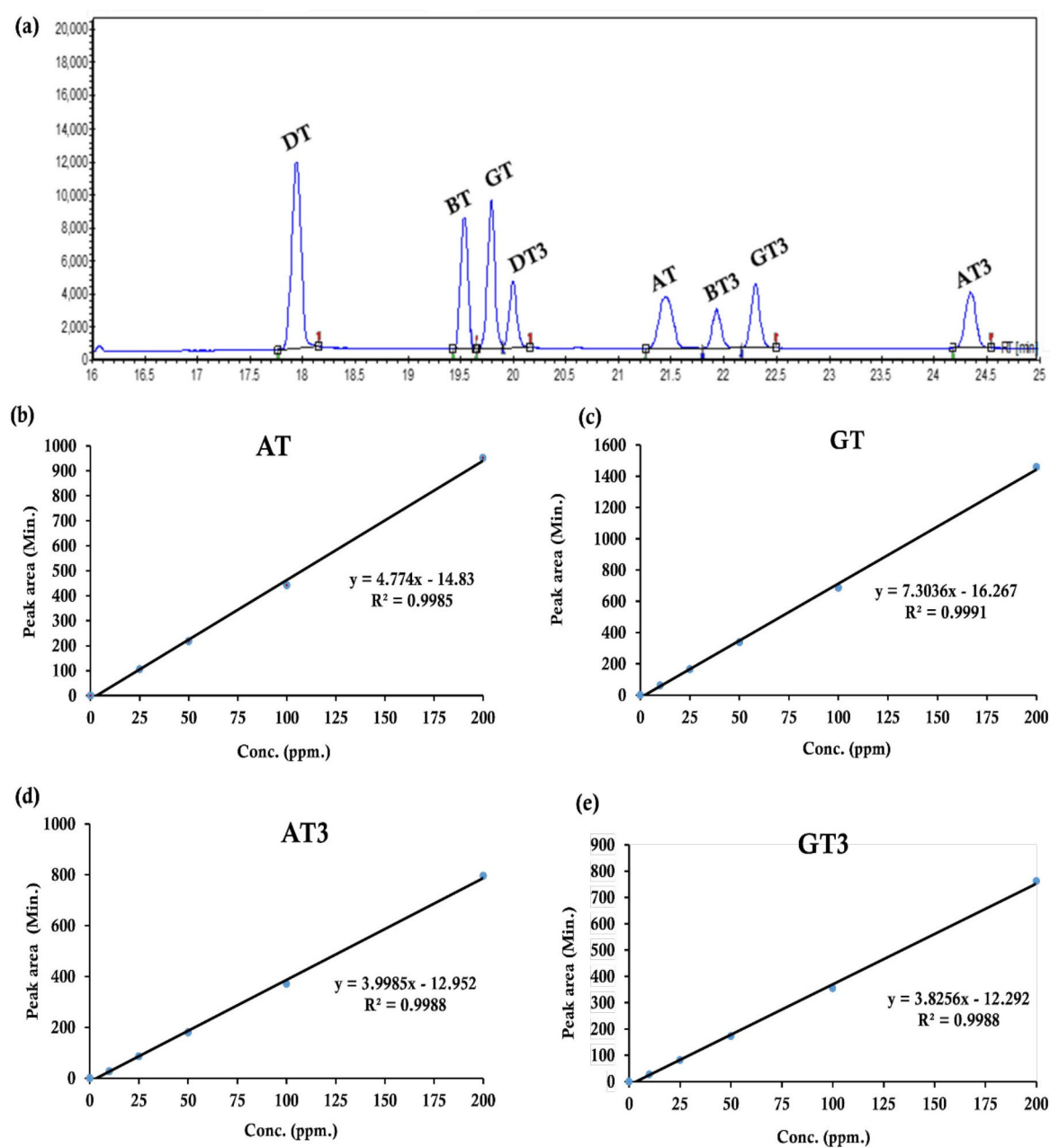
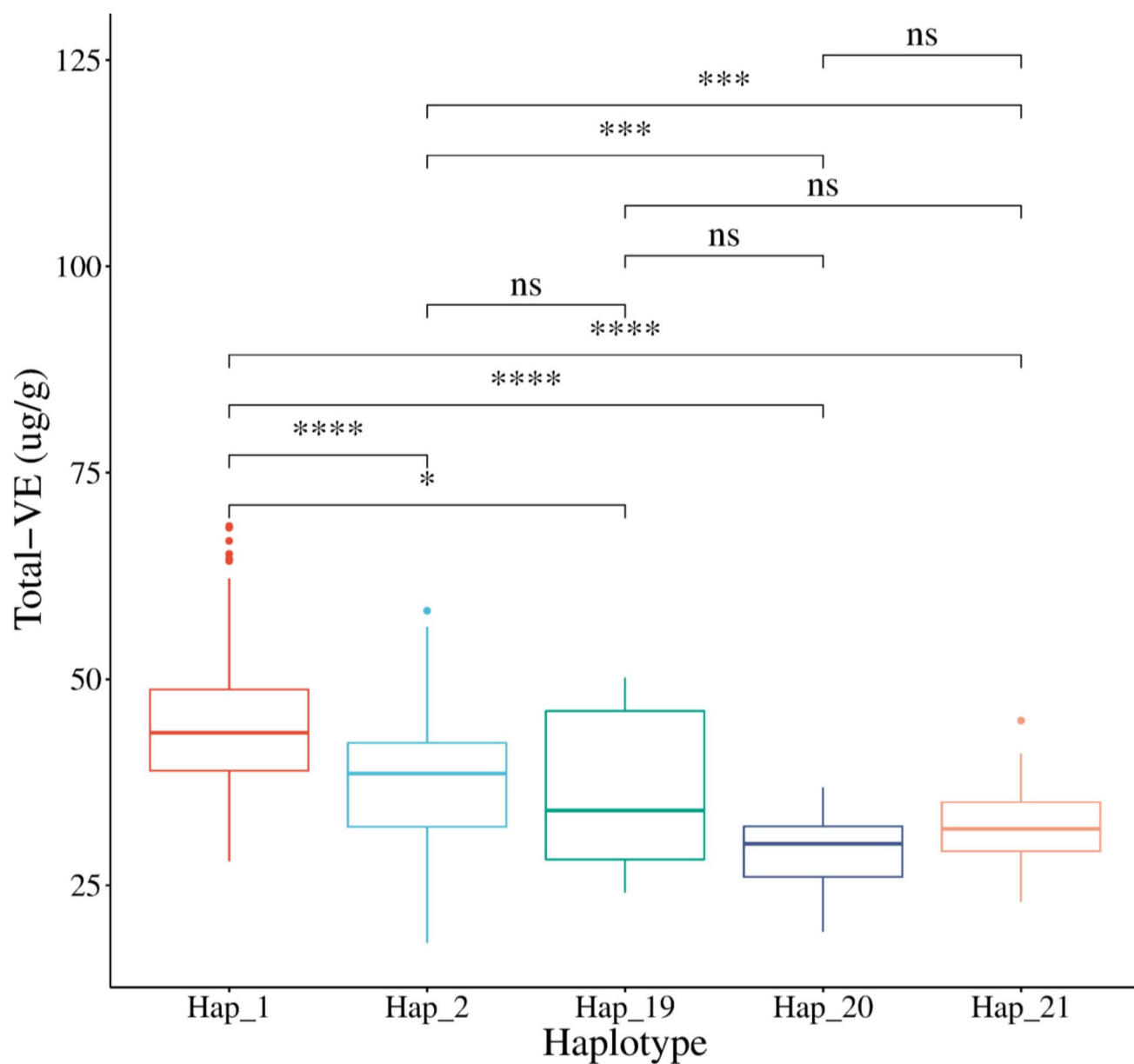


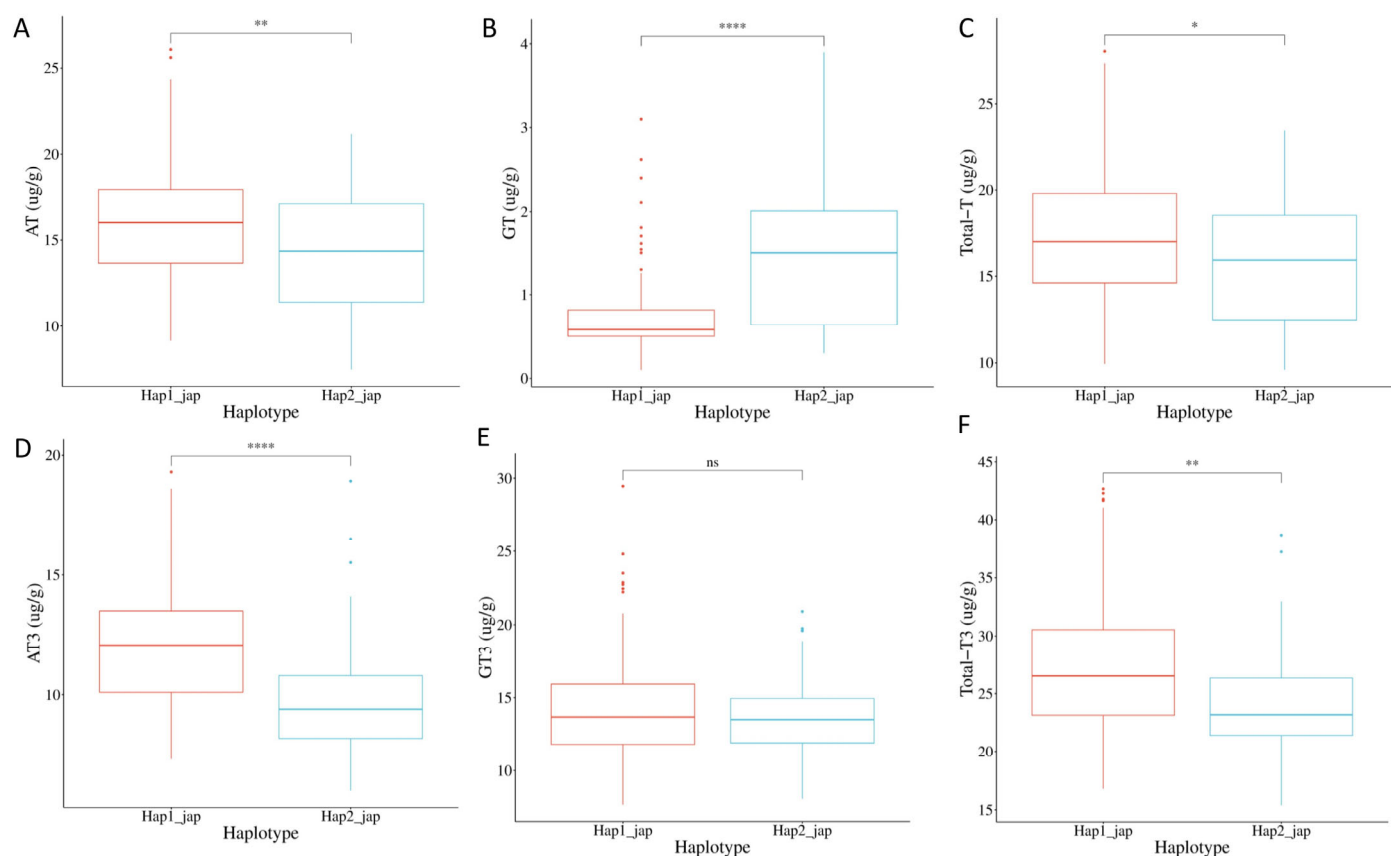
## Supplementary Figures



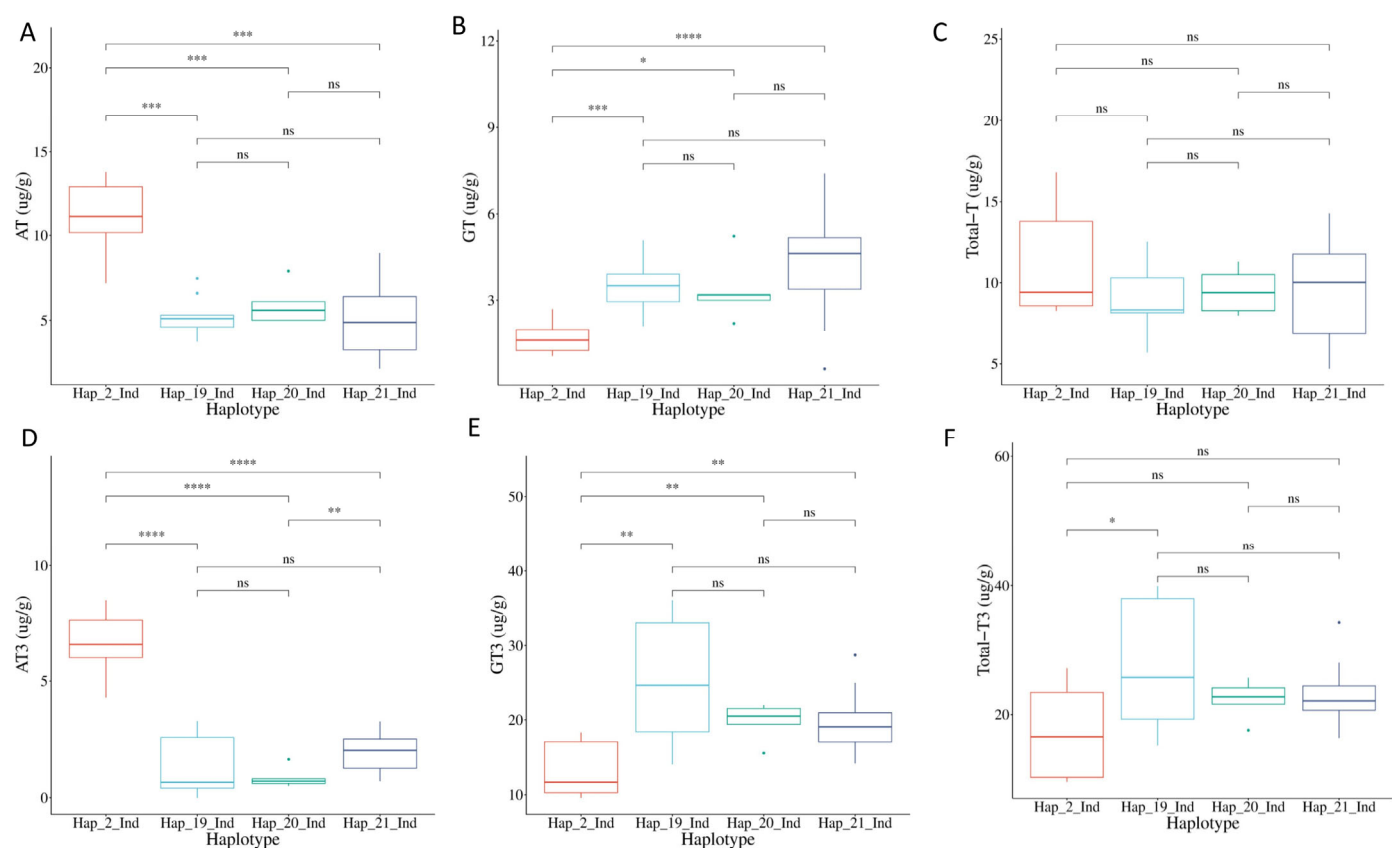
**Figure S1.** Vitamin E standard (a) Chromatogram of mixed standard for eight tocopherol isomers; AT,  $\alpha$ -tocopherol; BT,  $\beta$ -tocopherol; GT,  $\gamma$ -tocopherol; DT,  $\delta$ -tocopherol; AT3,  $\alpha$ -tocotrienol; BT3,  $\beta$ -tocotrienol; GT3,  $\gamma$ -tocotrienol; DT3,  $\delta$ -tocotrienol (b–e) standard curve for vitamin E quantification in rice sample.



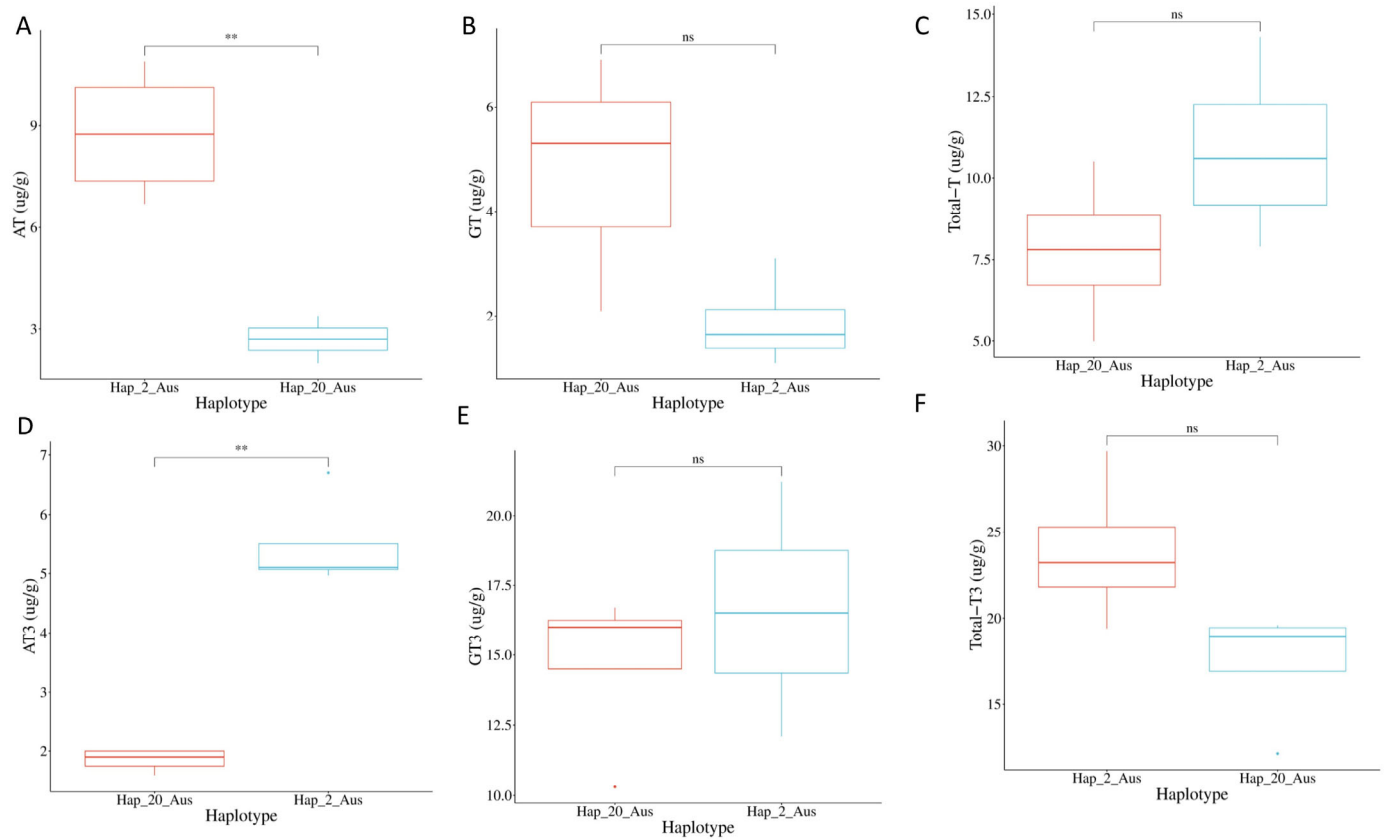
**Figure S2.** Variation in total vitamin E content among the haplotypes. The significant difference between each haplotype was investigated with  $p < 0.0001$ ,  $0.001$ ,  $0.05$  indicating \*\*\*\*, \*\*\*, \* based on t-test statistics.



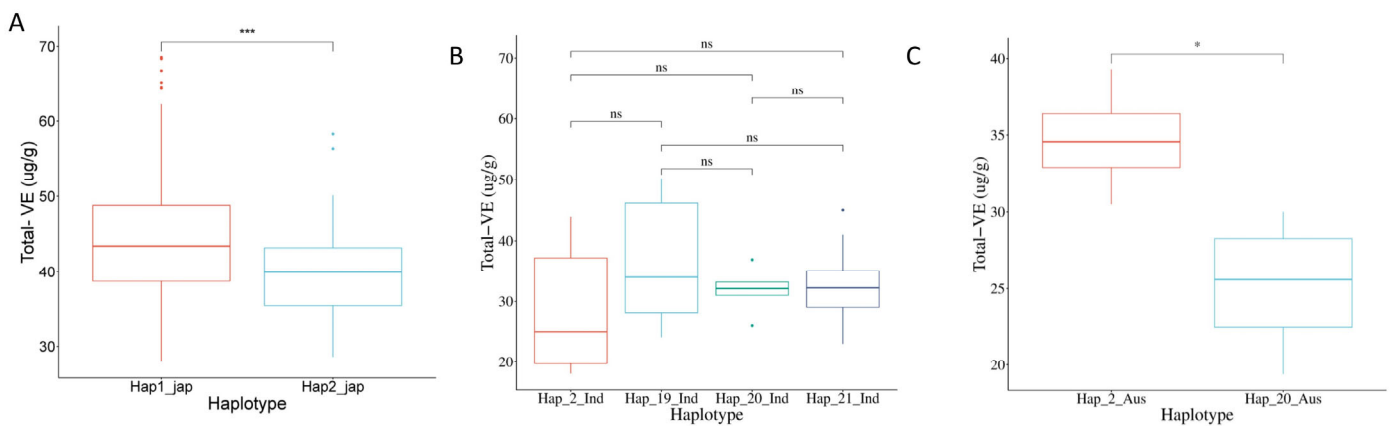
**Figure S3.** Evaluation of *japonica* haplotypes impact on vitamin E profile. Boxplot showing the impact of haplotypes on (A) AT,  $\alpha$ -tocopherol; (B) GT,  $\gamma$ -tocopherol; (C) Total\_T, total tocopherol; (D) AT3,  $\alpha$ -tocotrienol; (E) GT3,  $\gamma$ -tocotrienol; (F) Total\_T3, total tocotrienol. The significant difference between each haplotype was investigated with  $p < 0.0001$ , 0.01, 0.05 indicating \*\*\*\*, \*\*, \* based on t-test statistics.



**Figure S4.** Evaluation of *indica* haplotypes impact on vitamin E profile. Boxplot showing the impact of haplotypes on (A) AT, α-tocopherol; (B) GT, γ-tocopherol; (C) Total\_T, total tocopherol; (D) AT3, α-tocotrienol; (E) GT3, γ-tocotrienol; (F) Total\_T3, total tocotrienol. The significant difference between each haplotype was investigated with  $p < 0.0001$ , 0.001, 0.01, 0.05 indicating \*\*\*\*, \*\*\*, \*\*, \* based on t-test statistics.



**Figure S5.** Evaluation of *aus* haplotypes impact on vitamin E profile. Boxplot showing the impact of haplotypes on (A) AT,  $\alpha$ -tocopherol; (B) GT,  $\gamma$ -tocopherol; (C) Total\_T, total tocopherol; (D) AT3,  $\alpha$ -tocotrienol; (E) GT3,  $\gamma$ -tocotrienol; (F) Total\_T3, total tocotrienol. The significant difference between each haplotype was investigated with  $p < 0.01$  indicating \*\* based on t-test statistics.



**Figure S6.** Evaluation of haplotypes impact on total vitamin E content. Boxplot showing the impact of haplotypes in (A) Japonica; (B) Indica; (C) Aus. The significant difference between each haplotype was investigated with  $p < 0.001$ , 0.05 indicating \*\*\*, \* based on t-test statistics.