**Supplementary Figure 2.** Diagram of the three *Qs*HMTs structure. (**A**) *QsSUVH4* with four domains found in SUVH4 proteins: SRA-YDG, Pre-SET, SET, and post-SET from N to C terminal; (**B**) *QsATXR3* lacks the N-terminal, but with the SET domain of ATXR3 proteins detected at the C terminal; (**C**) *QsATX3* with the domains described for ATX3 proteins: PWWP, plant homeodomains (PHD) finger, SET, and post-SET from N to C terminal.

