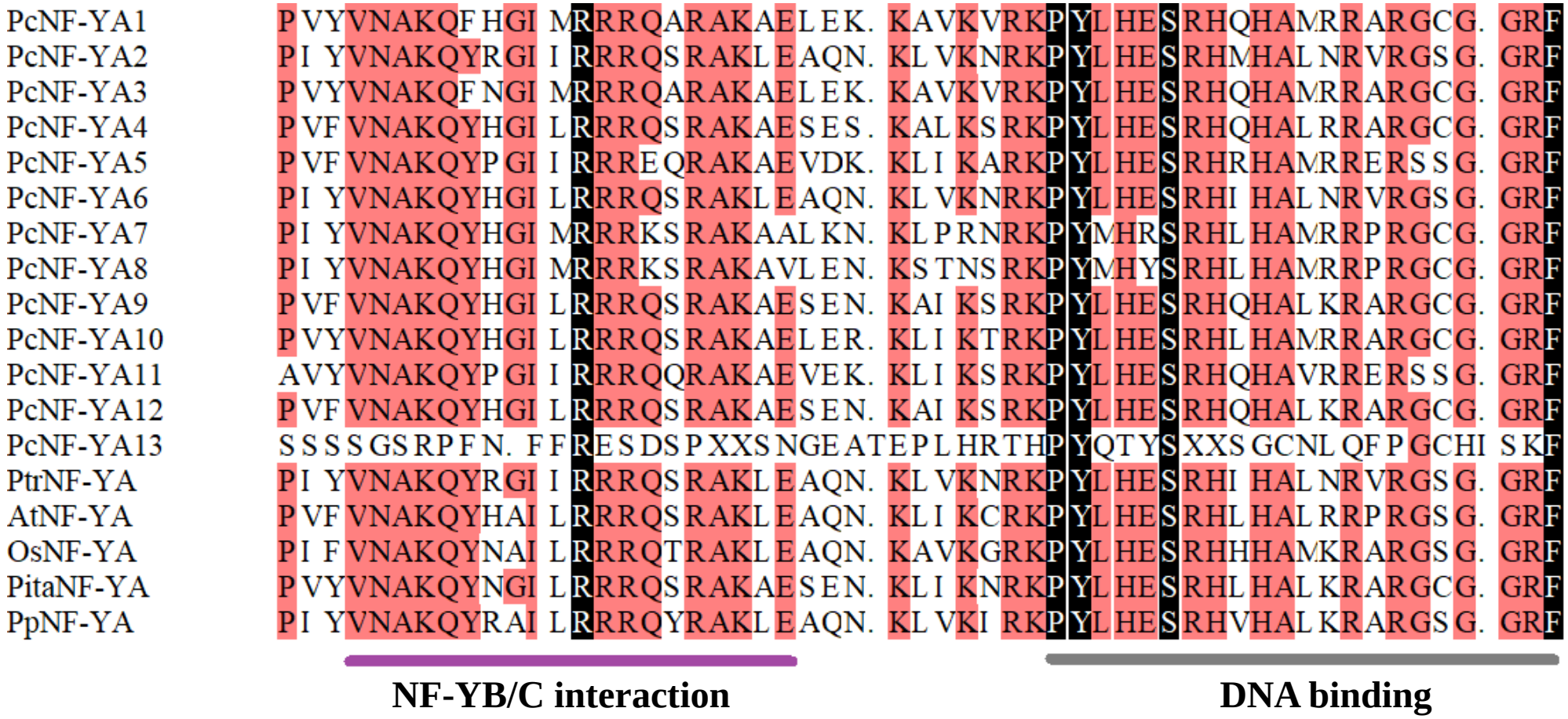


Figure S1. Multiple alignments of *P. ×canescens* PcNF-YA family members. The gray line indicates the CBF_NF-YA conserved domain. The purple line indicates the NF-YB/C interaction.

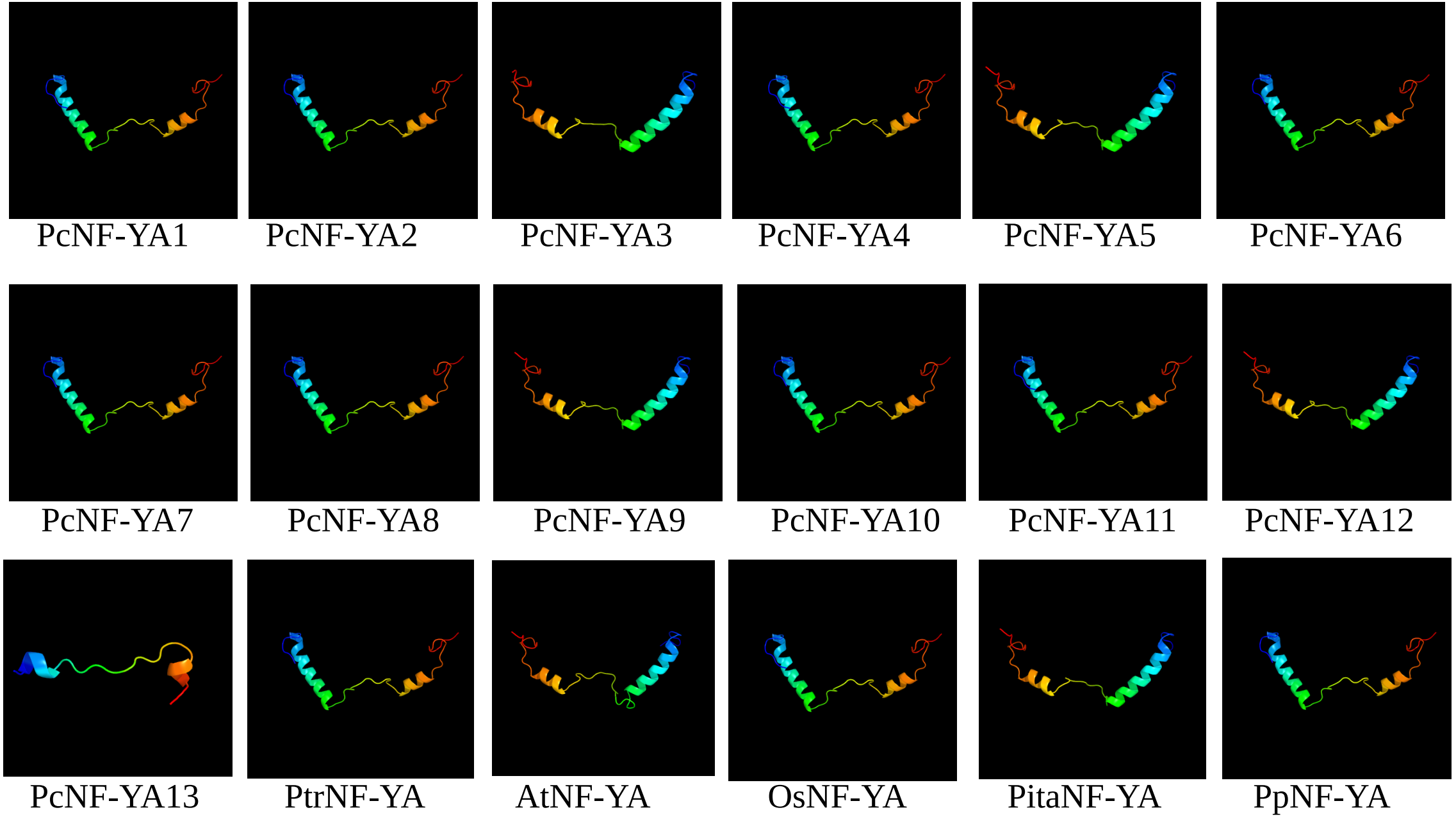


Figure S2. Predicted tertiary structure of 13 PcNF-YA proteins in *P. ×canescens*. The tertiary structures are colored in rainbow order and represent the N to C termin.

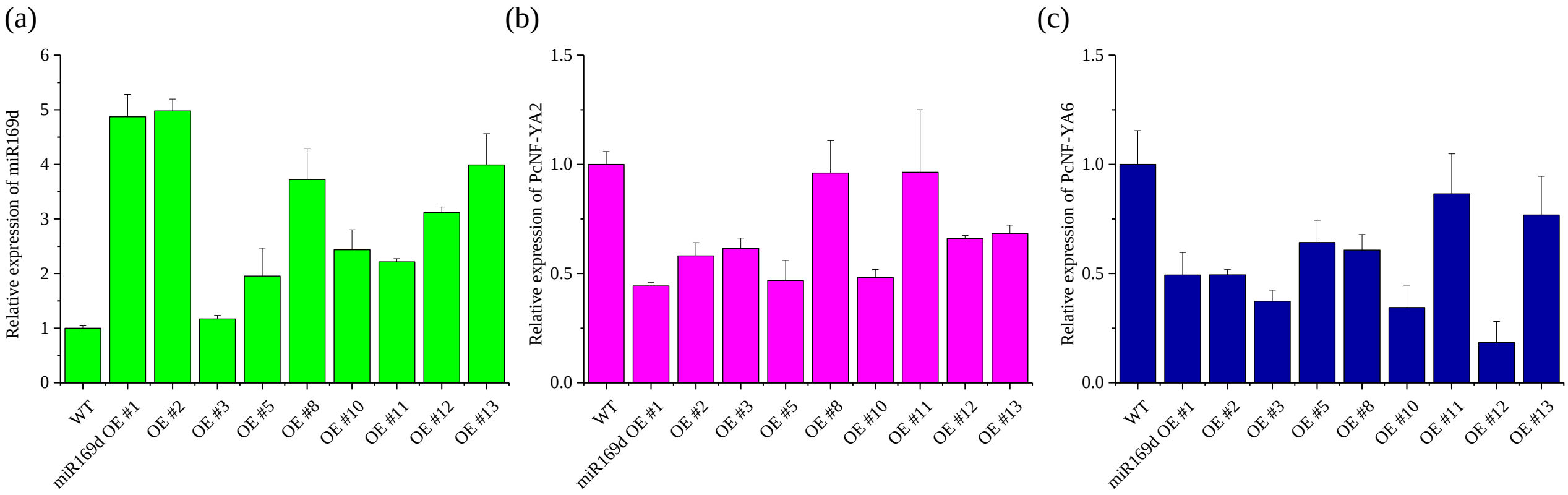


Figure S3. Expression analysis of the miR169d (a) and *PcNF-YA2/6* genes (b, c) with RT-qPCRs in 9 transgenic *Populus* lines. The data are expressed as the mean±SD (n=3).