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Ethylene induced stay-green gene expression regulates drought stress in wheat

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Supplementary Data

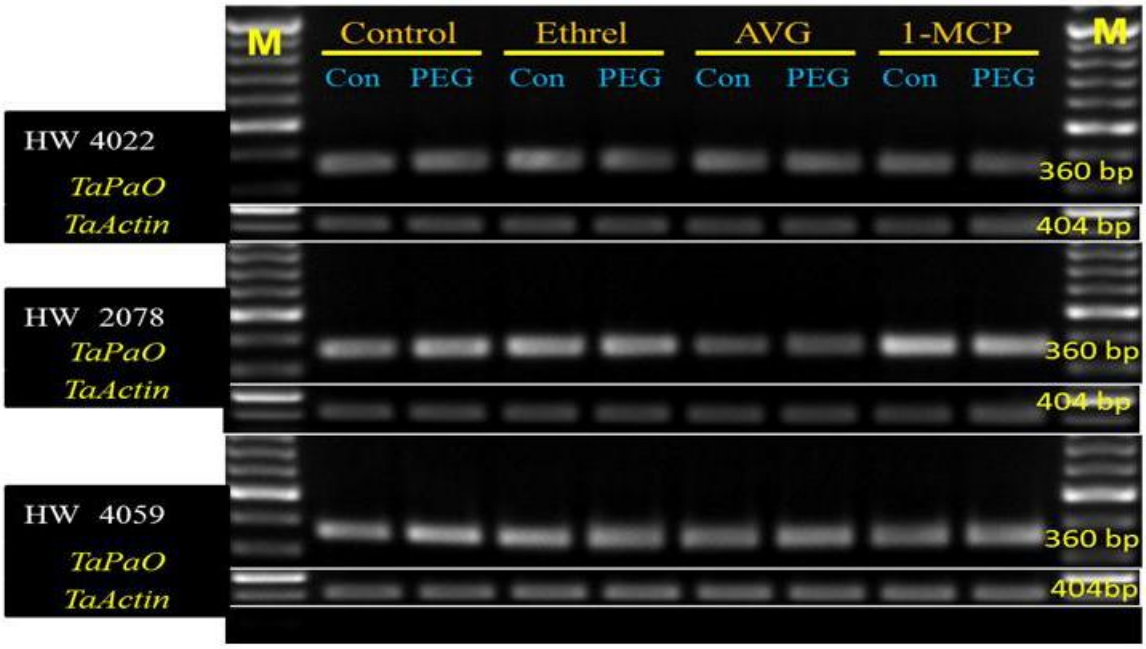

Plate 1: Semi-quantitative expression analysis of *TaPaO* gene encoding enzyme involved in chlorophyll degrading pathway in 10 days old wheat seedlings of genotypes HW 4022 (drought tolerant), HW 2078 (relatively drought tolerant) and HW 4059 (drought susceptible) under control and osmotic stress (20% PEG-6000, 4.91 MPa) conditions in combination with ethylene inducer (Ethrel, 10 ppm)/ inhibitors (AVG, 2 ppm and 1-MCP, 10 ppm). Lane M: 100 bp ladder. ***Abbrevation*:** PaO - Pheophorbide a Oxygenase; PEG - Polyethylene gylcol; AVG - Aminoethoxy vinylglycine; 1 MCP - 1 methyl cyclopropene, Ta - *Triticum aestivum* L.

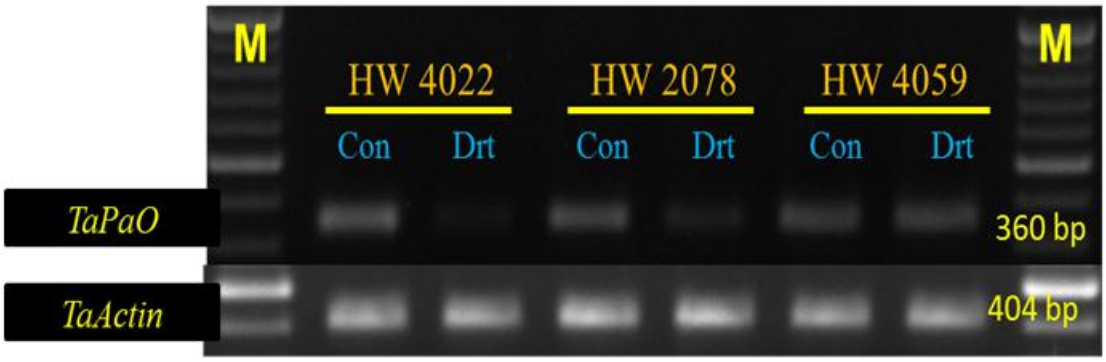

Plate 2: Semi-quantitative expression analysis of *TaPaO* gene encoding enzyme involved in chlorophyll degrading pathway in flag leaf sample of wheat genotypes HW 4022 (drought tolerant), HW 2078 (relatively drought tolerant)and HW 4059 (drought susceptible) under control (normal irrigation, RWC; 80-85%) and drought stress condition (withholding irrigation for 10 days, RWC; 65-75%). Lane M: 100 bp ladder. ***Abbrevation*:** PaO - Pheophorbide a Oxygenase; Con – Control; Drt – Drought; Ta - *Triticum aestivum* L.

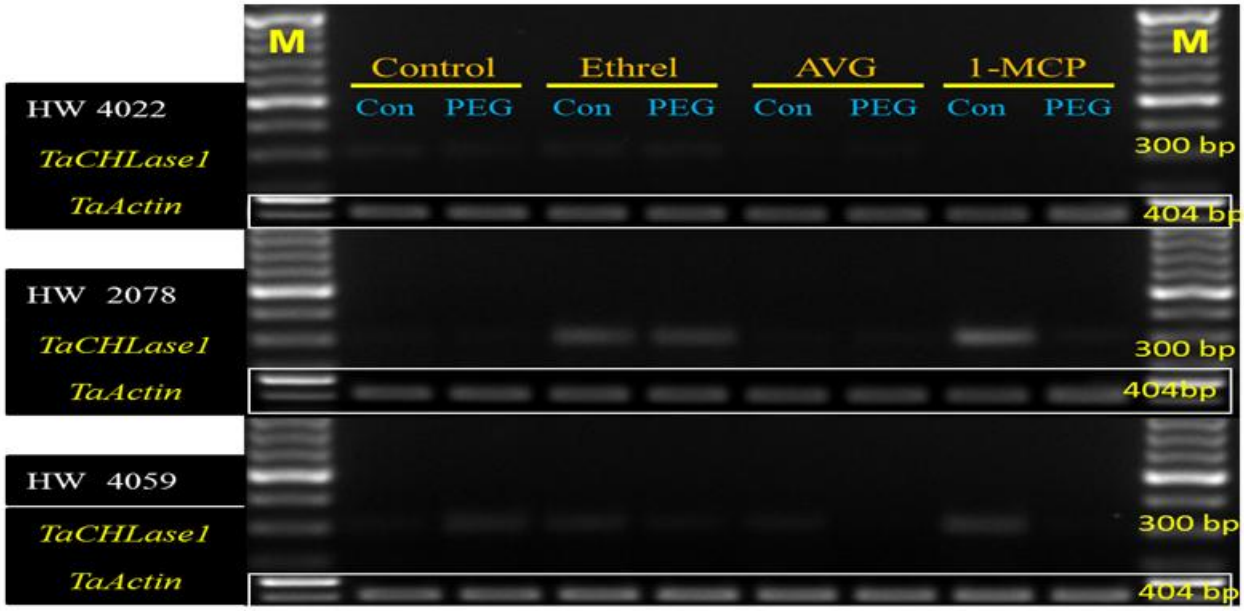

Plate 3: Semi-quantitative expression analysis of *TaCHLase1* gene encoding enzyme involved in chlorophyll degrading pathway in 10 days old wheat seedlings of genotypes HW 4022 (drought tolerant), HW 2078 (relatively drought tolerant) and HW 4059 (drought susceptible) under control and osmotic stress (20% PEG-6000, 4.91 MPa) conditions in combination with ethylene inducer (Ethrel, 10 ppm)/ inhibitors (AVG, 2 ppm and 1-MCP, 10 ppm). Lane M: 100 bp ladder. ***Abbrevation*:** CHLase - Chlorophyllase; PEG - Polyethylene gylcol; AVG - Aminoethoxy vinylglycine; 1 MCP - 1 methyl cyclopropene, Ta - *Triticum aestivum* L.