**Supplementary 1.** The roles of each cis-regulatory element's binding sites were identified during the in-silico analysis, along with the organism.

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| **ABIOTIC STRESSES** |
| Cis-regulatoryelements binding sites | Organisms | Type of Stress | Reference |
| C3H    | Potato(*Solanum tuberosum* L.) | Salinity, Drought, Extreme Temperature  | (Deng *et al*. 2023) |
| *Pyrus betulaefolia* | Salinity | (Liu *et al*. 2020a) |
| *Arabidopsis thaliana* | Drought | (Sun *et al*. 2007) |
| *Oryza sativa* | Salinity, Drought, and Oxidative. | (Jan *et al*. 2013). |
| CPP   | Tomato(*Solanum lycopersicum*) | Drought, Salinity, and Extremely Cold Temperature  | (Sun *et al*. 2023) |
| Oryza sativa*Triticum aestivum* L. | Salinity, Drought, and Extremely High and Low Temperature. | (Ullah *et al*. 2022). |
| Tea tree | Extremely High and Low Temperature. | (Nan *et al*. 2021) |
| ERF    | *Oryza sativa* | Drought and Salinity | (Xu *et al*. 2011) |
| *Arabidopsis thaliana* | Heat | (Huang *et al*. 2021) |
| Walnut*(Juglans regia)* | Drought | (Wang *et al*. 2021). |
| *Brassica rapa* | Salinity | (Seo *et al*. 2010) |
| MYB   | *Arabidopsis thaliana* | Dehydration, Drought, and Cold | (Urao *et al*. 1993), (Cominelli *et al*. 2005), (Agarwal *et al*. 2006) |
| *Oryza sativa* | Extremely High Temperature | (El-kereamy *et al*. 2012). |
| Sugar Cane(*Saccharum officinarum L*.) | Drought and Salinity | (Wang, Niu & Zheng 2021). |
| HSF   | *Oryza sativa* | Salinity and Cold | (Huang *et al*. 2021; Yoshida *et al*. 2008).(Shim *et al*. 2009) |
| *Arabidopsis thaliana* | Heat | (Guo *et al*. 2016; Yoshida *et al*. 2008) |
| Bean*(Phaseolus vulgaris)* | Heat | (Zhang *et al*. 2022) |
| C2H2    | *Arabidopsis thaliana* | Salinity | (Han *et al*. 2020) |
| Soybean*(Glycine max)* | Osmotic | (Sun *et al*. 2019). |
| *Oryza sativa* | Drought | (Yuan *et al*. 2018). |
| Apple*(Malus domestica)* | Salinity, Drought and  Cold | (Yang *et al*. 2021a) . |
| HDZIP    | *Arabidopsis thaliana* | Light and Water | (Yu *et al*. 2013) . |
| *Oryza sativa* | Drought, Salinity, and Heavy Metal | (Elhiti & Stasolla 2009; Li *et al*. 2022b). |
| Cotton*(Gossypium hirsutum)* | Salinity and Drought  | (Yuan *et al*. 2018). |
| Tomato*(Solanum lycopersicum)* | Extremely Cold Temperature  | (Zhang *et al*. 2014). |
| CAMTA    | *Oryza sativa* | Cold | (Cohen & Leach 2019; Xiao *et al*. 2021). |
| *Solanum lycopersicum* | Cadmium (Cd) | (Fang *et al*. 2022). |
| *Arabidopsis thaliana* | Drought and Cold. | . (Rahman *et al*. 2016) |
| Kacang kuda*(Cicer arietinum)* | Salinity and Drought | (Meenakshi *et al*. 2021)  |
| bZIP   | *Arabidopsis thaliana,**Oryza sativa* | Salinity  | (Hossain *et al*. 2010) |
| Red chillies*Capsicum annuum L.* | Salinity | (Gai *et al*. 2020). |
| Sesame*Sesamum indicum* | Drought, Osmotic, Salinity, and Cold | (Wang *et al*. 2018) |
| WRKY   | *Arabidopsis thaliana* | Extremely High and Low temperature | (Wu *et al*. 2019) |
| *Oryza sativa* | Salinity  | (Jiang *et al*. 2017). |
| Tobacco*Nicotiana rustica* | Salinity and Drought | (Khoso *et al*. 2022). |
| GATA   | *Oryza sativa* | Cold | (Guo *et al*. 2021) |
| *Arabidopsis thaliana* | Cold | (Reyes, Muro-Pastor & Florencio 2004). |
| *Oryza sativa**Brassica juncea**cucumis sativus,**Solanum lycopersicum* | Salinity and Drought | (Reyes, Muro-Pastor & Florencio 2004) |
| MYB-related  | *Oryza sativa**Arabidopsis thaliana* | Drought and Salinity.   | (Xiong *et al*. 2014) |
| Lilies*lilium lancifolium l*. | Cold | (Yong, Zhang & Lyu 2019). |
| Trihelix    | *Oryza sativa* | Drought and Salinity  | (Li *et al*. 2019a) |
| *Gossypium hirsutum* L. | Salinity  | (Li *et al*. 2022a). |
| Bamboo*Phyllostachys edulis* | Salinity, Drought, and Cold | (Cheng *et al*. 2019). |
| *Arabidopsis thaliana* | Salinity and Cold | (Xi *et al*. 2012). |
| NAC   | *Arabidopsis**thaliana* | Salinity | (He *et al*. 2005). |
| *Oryza sativa* | Drought and salinity | (Hu *et al*. 2006; Nakashima *et al*. 2007; Song *et al*. 2011; Trapnell *et al*. 2012). |
| *Glycine max* | Cold | (He *et al*. 2005). |

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| **PLANT DEVELOPMENTAL** |
| MICKS-MADS | *Cyclocarya paliurus* | Flowering Organ   | (Qu *et al*. 2021). |
|   | *Oryza sativa* | Root Elongation | (Liu *et al*. 2020b). |
|   | *Brassica napus* | Primary Flower Development | (Zhou *et al*. 2022). |
|   | *Arabidopsis thaliana,**Oryza sativa* | Root Development, Fruit Ripening | (Shah *et al*. 2022).  |
| BBR-BPC | *Arabidopsis thaliana* | Flower and Seed Development | (Theune *et al*. 2019). |
|   | *Oryza sativa* | Flowering Proses | (Gong *et al*. 2018). |
| G2 like | *Oryza sativa* | Chloroplast Development | (Hernández-Verdeja & Lundgren 2024) |
| bHLH | *Oryza sativa* | Root Formation and Elongation | (Das *et al*. 2019) |
| TCP | *Arabidopsis thaliana* | Shoot Formation, Flower Development | (Zhang *et al*. 2021) |
|   | *Oryza sativa* | Paddy Grain Formation | (Li *et al*. 2020) |
|   | *Gossypium hirsutum* | Stem Formation and Elongation | (Liu *et al*. 2021b) |
| DOF | *Arabidopsis thaliana* | Flower Development | (Liu *et al*. 2021) |
|   | Tobacco*Nicotiana tabacum* | Root Formation | (Baumann *et al*. 1999). |
|   | *Oryza sativa* | Paddy Height Development | (Wu *et al*., 2015) |
| EIL | Cotton*Gossypium hirsutum* | Fibre Development   | (Dolgikh, Pukhovaya & Zemlyanskaya 2019) |
|   | Soy Bean *Glyscine max* | Cell Development, Seed Germination, Root Development, and Organ Senescence | (Li *et al*. 2019b) |
|   | *Arabidopsis thaliana* | Root Development |  (Yi *et al*. 2010; Feng *et al*. 2017) |
|   | *Oryza sativa* | Cell Proliferation | (Jin *et al*. 2020) |
| LFY | *Oryza sativa* | Flower Formation | (Jin *et al*. 2021) |
|   | *Arabidopsis  thaliana* | Flower Formation | (Yamaguchi 2021) |
| B3 | *Populus alba Populus glandulosa* | Stem Development | (Wei *et al*. 2023) |
|   | *Arabidopsis thaliana* | Embryogenesis and Seed Germination | (Waltner *et al*. 2005) |
|   | *Oryza sativa**Zea mays* | Endosprem Formation | (Yang *et al*. 2021b) |
| LBD | *Oryza sativa* | Flowering Organ Development | (Zhao *et al*. 2023) |
|   | *Arabidopsis thaliana* | Root Formation | (Mangeon *et al*. 2012) |
| Nin-like | *Arabidopsis thaliana* | Root Formation | (Dahro *et al*. 2016) |