**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-regulatory  elements 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) |