**Table S1. Examples of interesting outliers detected in the linear regression outlier analysis. References mentioned in the Description column are listed below.**

|  |  |  |  |
| --- | --- | --- | --- |
| Gene name | Scaffold name | Position in scaffold | Description |
| NPK1 | scaffold902027 | 73997, 74052, 74058 | Has a role in pathogen resistance responses in tobacco (Jin et al., 2002) |
| Auxin response factor-5 like | C32502832 | 26212 | Involved in salt and drought tolerance in A. thaliana (Kang et al., 2018), regulates fruit set and development in tomato (Liu et al., 2018) |
| Tetratricopeptide repeat domain (TPR) | scaffold291986.2 | 49639, 49782, 50073, 50079 | Possibly associated to osmotic stress responses (Rosado et al., 2006), and shown to be outlier in environmental association tests in Eucalyptus microcarpa (Jordan, Hoffmann, Dillon, & Prober, 2017)  |
| Gamma carbonic anhydrase 1 | scaffold204210 | 124240, 124265, 124403 | Carbonic anhydrases have various roles in photosynthesis where they work in conjunction with Rubisco (Badger & Price, 1994) |
| 18 SNPs within Pentatricopeptide repeat containing genes | scaffold39072scaffold160879scaffold876405tscaffold6603tscaffold7974 | 120552101352, 102086, 102600, 102615, 102671, 102788, 102855, 103194, 1033312703841052, 113519403268, 403301, 403357, 403453, 403468 | They have multitude of tasks in plants (Barkan & Small, 2014) and have been shown to be outliers in selection scans e.g. in A. lyrata (Foxe & Wright, 2009) and in conifers (Scalfi et al., 2014; Yeaman et al., 2016) |
| Phospholipase D | C32494998 | 52515 | Role in responses to drought and salinity (Hong, Zhang, & Wang, 2010) |
| myb family transcription factor APL isoform X2 | scaffold473342 | 56177 | Various roles in biotic and abiotic stresses (Ambawat, Sharma, Yadav, & Yadav, 2013) |
| erd1 | tscaffold1451 | 366226, 366447 | Associated with dehydration stress (Simpson et al., 2003) |
| FUSCA3 | C32543392 | 18521 | A major regulator of induction of seed dormancy (Laitinen, 2015). |
| SFR2 | tscaffold1329 | 19929 | Has a role in freezing tolerance in *Arabidopsis thaliana* (McKown, Kuroki, & Warren, 1996; Thorlby, Fourrier, & Warren, 2004) |

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