

Supplementary Material

Table S1. Functions of HD-Zip proteins searched by Blast2GO.

[illegible]

| | | | | |
|---------|--|--|--|----|
| Sihdz20 | regulation of transcription, DNA-dependent | transcription factor activity; sequence-specific DNA binding | | IV |
| Sihdz23 | regulation of transcription, DNA-dependent | transcription factor activity; sequence-specific DNA binding | | IV |
| Sihdz24 | regulation of transcription, DNA-dependent | transcription factor activity; sequence-specific DNA binding | | IV |
| Sihdz25 | | | | IV |
| Sihdz26 | regulation of transcription, DNA-dependent | transcription factor activity; sequence-specific DNA binding | | IV |
| Sihdz30 | regulation of transcription, DNA-dependent | transcription factor activity; sequence-specific DNA binding | | IV |
| Sihdz31 | regulation of transcription, DNA-dependent | transcription factor activity; sequence-specific DNA binding | | IV |
| Sihdz32 | regulation of transcription, DNA-dependent | transcription factor activity; sequence-specific DNA binding | | IV |
| Sihdz35 | regulation of transcription, DNA-dependent | transcription factor activity; sequence-specific DNA binding | | IV |
| Sihdz36 | regulation of transcription, DNA-dependent | transcription factor activity; sequence-specific DNA binding | | IV |
| Sihdz42 | regulation of transcription, DNA-dependent | transcription factor activity; sequence-specific DNA binding | | IV |

Table S2. Cis-acting element of promoter.

| Site Name | Number of genes | Function of the cis-elements | Cis-elements types |
|-----------------|-----------------|---|---------------------|
| CGTCA-motif | 42 | cis-acting regulatory element involved in the MeJA-responsiveness | Hormone responsive |
| TGACG-motif | 42 | cis-acting regulatory element involved in the MeJA-responsiveness | Hormone responsive |
| MBS | 40 | MYB binding site involved in drought-inducibility | Stress responsive |
| ARE | 33 | cis-acting regulatory element essential for the anaerobic induction | Stress responsive |
| ABRE | 30 | cis-acting element involved in the abscisic acid responsiveness | Hormone responsive |
| GC-motif | 29 | enhancer-like element involved in anoxic specific inducibility | Stress responsive |
| motif IIb | 25 | abscisic acid responsive element | Hormone responsive |
| CAT-box | 20 | cis-acting regulatory element related to meristem expression | Meristem expression |
| TC-rich repeats | 19 | cis-acting element involved in defense and stress responsiveness | Stress responsive |
| TCA-element | 18 | cis-acting element involved in salicylic acid responsiveness | Hormone responsive |
| TCA-element | 18 | cis-acting element involved in salicylic acid responsiveness | Hormone responsive |
| TGA-element | 18 | auxin-responsive element | Hormone responsive |
| GARE-motif | 17 | gibberellin-responsive element | Hormone responsive |
| HSE | 9 | cis-acting element involved in heat stress responsiveness | Stress responsive |

Figure S1. Chromosomal distribution and segmental duplication events of 25 sihdz genes in green foxtail.

Figure S2. Expression profiles of sihdz genes in different tissues. The RNA-Seq data were analyzed and a heat map was generated. Values from 0 to 7 represent low to high expression.