PPI8.28下午

**Figure S1:** Protein-protein interaction network of TtAux/IAA13L protein.

亩产量9.1

**Figure S2:** The effects of the *TtAux/IAA13L* overexpression on the theoretical grain yield per 667 m2. Bars indicate means with standard deviations (*n* = 3). Values with different letters are significantly different at *p* < 0.05.

**Table S1:** The primers used in the experiment

|  |  |  |  |
| --- | --- | --- | --- |
| **Gene ID** | **Forward primer (5′-3′)** | **Reverse primer (5′-3′)** | **Role** |
| *TtAux/IAA13L* | ATGGCTTGGCGCCGACGTC | TTAGCTCTTGTTCTTGTACTTGTCC | Gene cloning |
| *Pinb-D1* | GGATTACGTGATGGAGCGATGT | CCGCTCTTCCACCATTTTGT | qPCR |
| *TtAux/IAA13L* | GAGGCAGTGAACGGTTCAGA | TCGGACCCCTTCATGATCCT |
| *18S* | TCGGGATCGGAGTAATGA | TTCGCAGTTGTTCGTCTT |
| *β-actin* | CCAAGGCGGAGTACGATGAGTCT | TTCATACAGCAGGCAAGCACCAT |

**Table S2:** *TtAUX/IAA13L* copy number in the overexpression lines

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***TtAUX/IAA13L* overexpression lines** | ***TtAUX/IAA13L*** | | ***Pinb-D1*** | | **Ratio of log starting quantity** | **Copy number** |
| **Ct value** | **Log starting quantity** | **Ct value** | **Log starting quantity** |
| OE1 | 25.01 | 2.49 | 25.10 | 2.27 | 1.17 | 1 |
| OE2 | 26.65 | 1.93 | 24.46 | 2.49 | 0.78 | 1 |

**Table S3:** Pearson correlation analysis between *TtAUX/IAA13L* expression levels and phenotypic traits

|  |  |  |
| --- | --- | --- |
| **Phenotypic traits** | **Correlation coefficient** | ***p*-value** |
| Plant height | 0.923\*\* | 0.009 |
| Stem diameter | 0.922\*\* | 0.009 |
| Flag leaf area | 0.977\*\* | 0.001 |
| Grain number per spike | 0.887\* | 0.019 |
| 1,000-grain weight | 0.930\*\* | 0.007 |
| Grain yield per plant | 0.985\*\* | 0.000 |

\* indicates *p* < 0.05; and \*\* indicate *p* < 0.01.