

Table 1 Some improved plant varieties with target gene

| <b>Traits improvement</b>             | <b>Targeted gene and plant</b>              | <b>References</b>         |
|---------------------------------------|---|---------------------------|
| Biomass                               | <i>OsDWARF4</i> . Rice                      | (Feldmann, 2006)          |
| Grain yield                           | <i>OsGA20ox2</i> ,Rice                      | (Qiao et al., 2007)       |
| Carotenoid and flavonoid              | <i>DET1</i> Tomato                          | (Davuluri et al., 2005)   |
| Low glutenin content                  | <i>GluB</i> ,Rice                           | (Kusaba et al., 2003)     |
| Tearless onion                        | Lachrymatory factor synthase ( <i>LFS</i> ) | (Eady et al., 2008)       |
| Increased shelf life                  | $\alpha$ -Man/ $\beta$ - Hex,Tomato         | (Meli et al., 2010)       |
| Seedless fruit                        | tChalcone synthase, Tomato                  | (Schijlen et al., 2007)   |
| Reduction of toxic terpenoid gossypol | Delta-cadinene synthase,Cotton              | (Sunilkumar et al., 2006) |
| Amylose                               | <i>SBE IIa</i> and <i>SBE IIb</i> Wheat     | (Regina et al., 2006)     |