

表 1 农杆菌介导的高粱遗传转化

Table 1 Details of *Agrobacterium*-mediated genetic transformation in sorghum

基因型 Genotype	外植体 Explant	农杆菌株 Strains of <i>Agrobacterium</i>	选择标记基因 Selective marker gene	报告基因 Reporter gene	参考文献 Reference
PHI391, P898012	幼胚 Immature embryos	LBA4404	<i>bar</i>	<i>gus</i>	Zhao et al., 2000
Tx 430, C401, CO25, Wheatland P898012	幼胚 Immature embryos	EHA101, EHA105, AGL1	-	<i>gus</i> , <i>gfp</i>	Jeoung et al., 2002
	幼胚 Immature embryos	LBA4404	<i>hpt</i>	<i>gus</i>	Carvalho et al., 2004
Tx430, C401	幼胚 Immature embryos	EHA101	-	<i>gfp</i>	Gao et al., 2005a
Pioneer 8505, C401	幼胚 Immature embryos	EHA102	<i>manA</i>	<i>gfp</i>	Gao et al., 2005b
Tx430, C2-97	幼胚 Immature embryos	NTL4	<i>npt II</i>	<i>gus</i>	Howe et al., 2006
Sensako 85/1191	幼胚 Immature embryos	LBA4404	<i>hpt</i>	<i>gus</i>	Nguyen et al., 2007
296 B	茎尖,叶 Shoot apices, Leaves	LBA4404, EHA105	-	<i>gus</i>	Verma et al., 2008
C401, 296 B, Tx430, P898012	幼胚 Immature embryos	LBA4404, EHA101	<i>manA</i>	<i>gfp</i>	Gurel et al., 2009
P898012	幼胚 Immature embryos	EHA101	<i>bar</i>	<i>gus</i>	Lu et al., 2009
115, ICS21B, 5-27	幼穗 Immature inflorescence	EHA105	<i>hpt</i> , <i>npt II</i>	<i>gus</i>	Zhang et al., 2009
TNS586, CO25	幼胚 Immature embryos	LBA4404, EHA105	<i>bar</i> , <i>hpt</i>	<i>gus</i>	Indra Arulselvi et al., 2010
M 35-1	成熟胚, 幼苗, 叶, 幼穗 Mature embryos, Young seedling, Leaves, Immature inflorescence	LBA4404	<i>hpt</i>	<i>gfp</i>	Shridhar et al., 2010
BABUSH, MN-3025 P898012	幼胚 Immature embryos	EHA101, LBA4404	<i>manA</i>	<i>gfp</i>	BABUSH, MN-3025 Gurel et al., 2012
APK 1	茎尖 Shoot apices	LBA4404	<i>hpt</i>	<i>gus</i>	Ignacimuthu et al., 2014
TX430	幼胚 Immature embryos	LBA4404, AGL1	<i>bar</i> , <i>manA</i>	<i>DsRed</i> , <i>yfp</i>	Wu et al., 2014

注: *bar*: 双丙氨膦抗性; *gfp*: 绿色荧光蛋白; *gus*: β -葡萄糖苷酸酶; *hpt*: 潮霉素磷酸转移酶; *npt II*: 新霉素磷酸转移酶; *manA*: 磷酸甘露糖异构酶; *DsRed*: 红色荧光蛋白; *yfp*: 黄色荧光蛋白

Note: *bar*: phosphinothricin acetyl transferase; *gfp*: green fluorescence protein; *gus*: β -glucuronidase, *hpt*: hygromycin phosphotransferase; *nptII*: neomycin phosphotransferase; *manA*: phosphomannose isomerase; *DsRed*: red fluorescence protein; *yfp*: yellow fluorescence protein