

表 2 豆科作物常用标记基因

Table 2 Common marker genes of legume crops

物种 Species	品种(品系) Cultivar (Line)	外植体 Explant	筛选 Selection		参考文献 References
			标记基因 Marker gene	药品 Agent	
花生 Arachis hypogaea	Gajah, NC-7	体细胞胚 Embryogenic	<i>hph</i>	Hyg	Livingstone and Birch., 1999
	JL-24	子叶 Cotyledons	<i>npt II</i>	Kan	Sharma and Anjaiah, 2000
	AT120/VC1	体细胞胚 Embryogenic	<i>hph</i>	Hyg	Magbanua et al., 2000
	TMV-2	未成熟胚 Embryo axes non-tissue	<i>gusA</i>	Visual	Rohini and Rao, 2000
木豆 Cajanus cajan L. Millsp.	Hyderabad	胚轴 Embryonic axis	<i>npt II</i>	Kan	Lawrence et al., 2001
		胚轴和子叶节 Embryonic axes and cotyledary nodes	<i>npt II</i>	Kan	Satyavathi et al., 2003
鹰嘴豆 Cicer arietinum	PG1/PG12/Chafa/Turkey	胚轴和子叶节 Embryonic axes and cotyledary nodes	<i>pat, npt II</i>	PPT, Kan	Krishnamurthy et al., 2000
瓜尔豆 Cyamopsis tetragonoloba	Lewis/Santa Cruz	胚轴 Embryonic axis	<i>npt II</i>	Kan	Joersbo et al., 1999a
大豆 Glycine max	Jack	子叶 Cotyledons	<i>hph</i>	Hyg	Santarem and Finer., 1999
	A3237	未成熟胚 Immature embryos	<i>bar</i>	PPT	Zhang et al., 1999
	Jack	子叶节 Cotyledonary node	<i>hpt</i>	Hyg	Yan et al., 2000
	BR-16/DokoPC/BR-19/C onquista	未成熟胚 Immature cotyledon	<i>ahas</i>	imazapyr	Arag ̃o et al., 2000
	Bert	胚轴 Embryonic axis	<i>hph</i>	Hyg	Olhoft et al., 2003
扁豆 Lens culinaris Medik	Laird/CDC599-23	子叶节 Cotyledonary node	<i>als</i>	Chlorsulfuron	Anju et al., 2002
羽扇豆 Lupinus angustifolius	Unicrop/Merit	子叶节 Cotyledonary node	<i>bar</i>	PPT	Pigeaire et al., 1997
黄羽扇豆 Lupinus luteus	Wodjil/Popiel/Teo/Juno	腋芽 Axillary shoot embryonic axis	<i>bar</i>	PPT	Li et al., 2000
宽叶菜豆 Phaseolus acutifolius A. Gray	NI576	顶端分生组织 Apical meristem	<i>npt II</i>	G418	de Clercq et al., 2002
菜豆 Phaseolus vulgaris	Olathe/Carioca	芽外植体 Bud explants	<i>bar</i>	PPT	Arag ̃o et al., 2002
豌豆 Pisum sativum	94-A26/Bolero/Hadlee/Crown/Courier/89T46.UK	胚轴 Embryonic axes	<i>npt II</i>	Kan	Grant et al., 1998
	Laser, Heiga	未成熟子叶 Immature cotyledons	<i>npt II, bar</i>	PPT, Kan	Nadolska-Orczyk and Orczyk, 2000

续表 2

Continuing table 2

物种 Species	品种(品系) Cultivar (Line)	外植体 Explant	筛选 Selection		参考文献 References
			标记基因 Marker gene	药品 Agent	
蚕豆 <i>Vicia faba</i>	Greenfeast/CDC Vienna/ S2-90-25E/93-4-18G/ MP1338/MP1382/AWPNZ	子叶 Cotyledons	<i>npt II, bar</i>	PPT, Kan	Polowick et al., 2000
	66/AWP1512	胚轴 Embryonic axis	<i>als</i>	chlorsulfuron	Polowick et al., 2000
	Mythos	胚轴 Embryonic axis	<i>npt II</i>	Kan	Bättinger et al., 2001
纳尔冯豆 <i>Vicia narbonensis</i>	Var. narbonensis	上胚轴 Epicotyls	<i>npt II</i>	G418	Zakharov et al., 2004
小豆 <i>Vigna angularis</i> Willd.	Beni-dainagon	上胚轴和茎尖 Epicotyls and shoot tips	<i>npt II</i>	Kan	Yamada et al., 2001
Ohwi/Ohashi 绿豆 <i>Vigna radiata</i> L.	K-851	上胚轴 Elongated epicotyls	<i>npt II</i>	Kan	Jaiwal et al., 2001
Wilczek 豇豆 <i>Vigna sesquipedalis</i>	Koern	子叶节 Cotyledonary node	<i>bar, npt II</i>	PPT, Kan	Ignacimuthu, 2000