BIBLIOGRAPHY

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Able JR, Rathus C and Godwin ID (2001) the investigation of optimal bombardment parameters for transient and stable transgene expression in sorghum. In Vitro Cell Dev. Biol-Plant. 37: 341-348

Adamczyk JJ Jr, Hardee DD, Adams LC and Sumerford DV (2001b) Correlating differences in larval survival and development of bollworm (Lepidoptera: Noctuidae) and fall armyworm (Lepidoptera: Noctuidae) to differential expression of *Cry1Ac* delta-endotoxin in various plant parts among commercial cultivars of transgenic Bacillus thuringiensis cotton. J. Econ. Entomol. 94: 284-290

Alam MF, Datta K, Abrigo E, Vasquez A, Senadhira D and Datta SK (1998) Production of transgenic deep water rice plants expressing a synthetic *Bacillus thuringiensis cry1A(b)* gene with enhanced resistance to yellow stem borer. Plant Sci. 135: 25-30

Aldemita RR and Hodges TK (1996) *Agrobacterium tumefaciens*-mediated transformation of *japonica* and *indica* rice varieties. Planta. 199: 612-617

Alina W, Ismanizan I, Che R, Che MZ and Ruslan A (2010) *Agrobacterium tumefaciens*-mediated transformation of the *isopentenyltransferase* gene in japonica rice suspension cell culture. Australian Journal of Crop Science. 4(6): 421-429

Angenon G, Dillen W and Montagu MV (1994) Antibiotic resistance markers for plant transformation. Plant Mol. Biol. 1: 1-13

Anshu R and Robert GB (2010) Genetic transformation of sweet sorghum. Plant Cell Rep. 29: 997-1005

Arencibia AD, Carmona ER, Tellez P, Chan MT, Yu SM, Trujillo LE and Ormas P (1998) An efficient protocol for sugarcane (*Saccharum* spp L) transformation mediated by *Agrobacterium tumefaciens.* Transgenic Res. 7: 213-222

Arlene H, Shirley S, Ismail D, Mike F, Tom C (2006) Rapid and reproducible *Agrobacterium*-mediated transformation of sorghum. Plant Cell Rep. 25: 784-791

Armstrong CHL, Parker GB, Pershing JC, Brown SHM, Sanders PR, Duncan DR, Stone T, Dean DA, DeBoer DL, Hart J, Howe AR, Morrish FM, Pajeau ME, Petersen WL, Reich BJ, Santino RG, Sato ShJ, Sculer W, Sims SR, Stehling S, Tarochione LJ and Fromm ME (1995) Field evaluation of European corn borer control in progeny of 173 transgenic corn events expressing an insecticidal protein from *Bacillus thuringiensis*. Crop Science. 35: 550-557

Asuka N, Ikuko A and Makoto MA (2007) Protocol for *Agrobacterium*-mediated transformation in rice. Nature Protocols. 1: 2796-2802

Aufsatz W, Mette MF, Winden JVD, Matzke AJM and Matzke M (2002) RNA-directed DNA methylation in Arabidopsis. Proc. Natl. Acad. Sci. (USA) 99: 16499-16506

Bajaj YPS (2000) Biotechnology in agriculture and forestry Transgenic crops I (Eds.) Springer-Verlag Berlin Heidelberg

Barro F, Cannel ME, Lazzeri PA and Barcelo P (1998) The influence of auxins on transformation of wheat and triordeum and analysis of transgene integration patterns in transformants. Theor. Appl. Genet. 97: 684-695

Barton K, Whitely H and Yang NS (1987) *Bacillus thuringiensis* δ-endotoxin in transgenic *Nicotiana tabacum* provides resistance to lepidopteran insects. Plant Physiol. 85: 1103-1109

Battraw M and Hall TC (1991) Stable transformation of *Sorghum bicolor* protoplasts with chimeric *neomycin phosphotransferase* II and β-*glucuronidase genes*. Theor. Appl .Genet. 82: 161-168

Bauer LS (1995) Resistance-A threat to the insecticidal crystal proteins of *Bacillus thuringiensis.* Florida Entomologist. 78: 414-443

Benedict JH, Sachs ES, Altman DW, Deaton DR, Kohel RJ, Ring DR and Berbeich BA (1996) Field performance of cotton expressing *Cry1A* insecticidal crystal protein for

resistance to *Helioths viriscens* and *Helicoverap zea* (Lepidoptera: Noctuidae) J. Econ. Entomol.89: 230-238

Bevan MW, Flawvell RB and Chilton MD (1983) A chimeric antibiotic resistance marker gene as a selectable marker for plant cell transformation. Nature. 304: 184-187

Bhalla R, Dalal M, Panguluri SK, Jagadish B, Mandaokar AD, Singh AK and Kumar PA (2005) Isolation, characterization and expression of a novel vegetative insecticidal protein gene of *Bacillus thuringiensis*. FEMS Microbiol. Lett. 243: 467-472

Bhat SR and Srinivasan (2002) Molecular and genetic analysis of transgenic plants: Considerations and approaches. Plant Science.163: 673-681

Blanc G, Barakat A, Guyot R, Cooke R and Delseny M (2000) Extensive duplication and reshuffling in the Aradidopsis genome. Plant Cell. 12: 1093-1101

Bohorova N, Frutos R, Royer M, Estanol P, Pacheco M, Rascon Q, McLean S and Hoisington D (2001) Novel synthetic *Bacillus thuringiensis cry1B* gene and the *cry1B-cry1Ab* translational fusion confer resistance to southwestern corn borer, sugarcane borer and fall armyworm in transgenic tropical maize. Theor. Appl. Genet. 103: 817-826

Bohorova N, Zhand W, Julstrum S, McLean S, Luna B, Brito RM, Diaz L, Ramos ME, Estanol P, Pacheco M, Salgado M and Hoisington D (1999) Production of transgenic tropical maize with *cry1Ab* and *cry1Ac* genes via microprojectile bombardment of immature embryos. Theor. Appl. genet. 99: 437-444

Bower R, Elliot AR, Potier BAM and Birch RG (1996) High efficiency microprojectile-mediated co-transformation of sugarcane, using visible or selectable markers. Mol. Breed. 2: 239-249

Bregitzer P, Halbert SE and Lemaux PG (1998) Somaclonal variation in the progeny of transgenic barley. Theor. Appl. Genet. 96: 421-425

Breitler JC, Meynard D, Boxtel JS, Royer M, Bonnot F, Cambillau L and Guiderdoni E (2004b) A novel two T-DNA binary vector allows efficient generation of marker-free transgenic plants in three elite cultivars of rice (*Oryza sativa* L) Transgenic Res. 13, 271-287

Breitler JC, Cordero MJ, Royer M, Meynard D, San Segundo B and Guiderdoni E (2001) The –689/+197 region of the maize protease inhibitor gene directs high level, wound-inducible expression of the *cry1B* gene which protects transgenic rice plants from stem borer attack. Mol. Breeding. 7: 259-274

Breitler JC, Marfa V, Royer M, Meynard D, Vassal JM, Vercambre B, Frutos R, Messeguer J, Gabarra R and Guiderdoni E (2000) Expression of a *Bacillus thuringiensis cry1B* synthetic gene protects Mediterranean rice against the striped stem borer. Plant Cell Reports. 19: 1195-1202

Brickle DA, Turnipseed SG and Sullivan MJ (2001) Efficacy of insecticides of different chemistries against Helicoverpa zea (Lepidoptera: Noctuidae) in transgenic *Bacillus thuringiensis* and conventional cotton. J. Econ. Entomol. 94: 86-92

Burkness EC, Hutchison WD, Bolin PC, Bartels DW, Warnock DF and DavisDW (2001) Field efficacy of sweet corn hybrids expressing a *Bacillus thuringiensis* toxin for management of *Ostrinia nubilalis* (Lepidoptera: Crambidae) and Helicoverpa zea (Lepidoptera: Noctuidae) J. Econ. Entomol. 94: 197-203

Cai T and Butler L (1990) Plant regeneration from embryogenic callus initiated from immature inflorescences of several high-tannin sorghums. Plant Cell Tiss. Org. Cult. 20: 101-110

Callis J, Fromm M and Walbot V (1987) Introns increase gene expression in cultured maize cells. Genes Dev. 1: 1183-1200

Campbell BT, Baenziger PS, Mitra A, Sato S and Clemente T (2000) Inheritance of multiple transgenes in wheat. Crop Sci. 40: 1133-1141

Carlson CR and Kolsto AB (1993) A complete physical map of a *Bacillus thuringiensis* chromosome. J. Bacteriol. 175: 1053-1060

Carmona ER, Arencibia AD, López J, Simpson J, Vargas D and Sala F (2005) Analysis of genomic variability in transgenic sugarcane plants produced by *Agrobacterium tumefaciens* infection. Plant Breed. 124: 33-38

Carroll J and Ellar DJ (1993) Proteolytic processing of coleopteran specific δ endotoxin by *Bacillus thuringiensis* var tenebrionis. European J. Biochem. 214: 771-778

Carvalho CHS, Zehr UB, Gunaratna N, Anderson J, Kononowicz HH, Hodges TK and Axtell JD (2004) *Agrobacterium*-mediated transformation of sorghum: factors that affect transformation efficiency. Genetics and Molecular Biology. 27: 259-269

Casas AM, Kononowicz AK, Bressan RA and Hasegawa PM (1995) Cereal transformation through particle bombardment. Plant Breed Rev. 13: 235-264

Casas AM, Kononowicz AK, Zehr UB, Tomes DT, Axtell JD, Butler LG, Bressan RA and Hasegawa PM (1993) Transgenic sorghum plants via microprojectile bombardment. Proc. Natl. Acad. Sci. (USA) 90: 11212-11216

Casas AM, Kononowicz T, Haa L, Zhang DT, Bressan RA and Hasegawa PM (1997) Transgenic sorghum plants obtained after microprojectile bombardment of immature inflorescence. In Vitro Cell Dev. Biol. 33: 92-100

Chan MT, Chang HH, Ho SL, Tong WF and Yu SM (1993) *Agrobacterium* - mediated production of transgenic rice plants expressing a chimeric alpha amylase promoter-*glucuronidase* gene. Plant Mol. Biol. 22: 491-506

Chen Hao, Tang Wei, Caiguo Xu, Li Xianghua, Lin Yongjun and Zhang Q (2005) Transgenic indica rice plants harboring a synthetic *cry2A* gene of *Bacillus thuringiensis* exhibit enhanced resistance against lepidopteran rice pests. Theor. Appl. Genet. 111(7): 1330-1337

Chen LP, Marmey NJ, Taylor J, Brizard C, Espionza P, D'Cruz HH, Zhang S, deKochko A, Beachy RN and Faquet CM (1998) Expression and inheritance of multiple transgenes in rice plants. Nature Biotech. 16: 1060-1064

Chen XJ, Curtiss A, Alcantara E and Dean DH (1995) Mutation in domain I of *Bacillus thuringiensis* δ-endotoxin *Cry1Ab* reduces the irreversible binding of toxin to Manduca sexta brush border membrane vesicles. J. Biol. Chem. 270: 6412-6419

Cheng M, Hu T, Layton J, Liu C-N and Fry J (2003) Desiccation of plant tissues post-*Agrobacterium* infection enhances T-DNA delivery and increases stable transformation efficiency in wheat. In Vitro Cell Dev. Biol-Plant, 39: 595-604

Cheng M, Fry JE, Pang S, Zhou H, Hironaka C, Duncan DR, Conner TW and Wan Y. (1997) Genetic transformation of wheat mediated by *Agrobacterium tumefaciens*. Plant Physiol. 115: 971-980

Cheng X, Sardana R, Kalpana H and Altosaar I (1998) *Agrobacterium*- transformed rice plants expressing synthetic *cry1A(b)* and *cry1A(c)* genes are highly toxic to stripped stem borer and yellow stem borer. Proc. Natl. Acad. Sci. (USA): 2767-2772

Chona CT and Kalpan H (1990) Folding and unfolding of the protoxin from *Bacillus thuringiensis:* evidence that the toxic moiety is present in an active conformation. Biochem. 29: 1071-1077

Chourey PS and Sharpe DJ (1985) Callus formation from protoplasts of Sorghum cell suspension cultures. Plant Sci. 39: 171-175

Christianson ML (1985) Competence, determination and clonal analysis in plant development. In somatic embryogenesis-Proceedings of a San Miniato workshop (M Terzi and ZP Sung, Eds), IPRA, Roam: 146-151

Clegg MT, Cummings MP and Durbin ML (1997) The evolution of plant nuclear genes. Proc. Natl. Acad. Sci. (USA) 94: 7791-7798

Clive James (2012) Global status of commercialized biotech/GM crops: ISAAA Brief No. 44.ISAAA: Ithaca, NY

Cohen SN, Chang ACY, and Hsu L (1972) Nonchromosomal antibiotic resistance in bacteria. Genetic transformation of *Escheriacia coli* by R- factor DNA. Proc. Natl. Acad. Sci. (USA) 69: 2110-2114

Convents D, Houssier C, Lasters I and Lauwereys M (1990) The *Bacillus thuringiensis* δ-endotoxin. Evidence for a two domain structure of the minimal toxic fragment. J. Biol. Chem. 265: 1369-1375

Cooksey KE (1971) The protein crystal toxin of *Bacillus thuringiensis*: Biochemistry and mode of action. In: Burges HD and Hussey NW ed. Microbial control of insects and mites. New York, London, Academic Press Inc: 247-274

Cordero MJ, Raventos D and San Segundo B. (1994) Expression of a maize proteinase inhibitor is induced in response to wounding and fungal infection: systemic wound response of a monocot gene. Plant J. 6: 141-150

Cornejo MJ, Luth D, Blankenship KM, Anderson OD and Blechl AE (1993) Activity of a maize *ubiquitin1* promoter in transgenic rice. Plant Mol. Biol. 23: 567-581

Crickmore N, Zeigler DR, Feitelson J, Schnepf E, Van Rie J, Lereclus D, Baum J and Dean DH (1998) Revision of the nomenclature for the *Bacillus thuringiensis* pesticidal crystal proteins. Microbial Mol. Biol. Rev. 62: 807-813

Dai S, Zheng P, Marmey P, Zhang S, Tian W, Chen S, Beachy RN and Fauquet C (2001) Comparative analysis of transgenic rice plants obtained by *Agrobacterium*-mediated transformation and particle bombardment. Mol. Breed. 7: 25-33

Datta K, Koukolíková-Nicola Z, Baisakh N, Oliva N and Datta SK (2000) *Agrobacterium*-mediated engineering for sheath blight resistance of indica rice cultivars from different ecosystems. Theor. Appl. Genet. 100: 832-839

Datta K, Vasquez A, Tu J, Torrizo L, Alam MF, Oliva N, Abrigo E, Khush GS and Datta SK (1998) Constitutive and tissue-specific differential expression of the *cryIA(b)* gene in transgenic rice plants conferring resistance to rice insect pest. Theor. Appl. Genet. 97: 20-30

Davies JC (1982) Pest loses and controls of damage on sorghum in developing countries the realities and the myths. In: Sorghum in Eighties: Proceedings of International symposium on sorghum: 215-223

De Block M, Botterman J, Bandewick M, Dockx J, Thoen C, Gossele V, Rao D, Movva N, Thompson C, Van Montagu M and Lecmans I (1987) Engineering herbicide resistance in plants by expression of a detoxifying enzyme. EMBO J. 6: 2513-2518

De Block M, Debrouwer D and Moens T (1997) The development of a nuclear male sterile system in wheat. Expression of the barnase gene under the control of tapetum specific promoters. Theor. Appl. Genet. 95: 125-131

De Maagd RA, Bosch S and Stiekema W (1999) *Bacillus thuringiensis* toxin-mediated insect resistance in plants. Trends Plant Sci. 4: 9-13

De Maagd RA, Bravo A and Crickmore N (2001) How *Bacillus thuringiensis* has evolved specific toxins to colonize the insect world. Trends Genet. 17: 193-199

De Maagd RA, Kwa MSG, Van der klei H, Yamamoto T, Schipper B, Vlak JM, Stiekema WJ and Bosch D (1996) Domain III substitution in *Bacillus thuringiensis* δ-endotoxins *CryIA(b)* results in superior toxicity for Spodoptera exigua and altered membrane protein recognition. Appl. Environ. Microbiol. 62: 1537-1543.

Dean C, Jones J, Favreau M, Dunsmuir P and Bedbrook J (1989) Influence of flanking sequences on variability in expression levels of an introduced gene in transgenic tobacco plants. Plant Physiol. 117: 1445-1461

Dean DH, Rajamohan F, Lee MK, Wu SJ, Chen XJ, Alcantara E and Hussain SR (1996) Probing the mechanism of action of *Bacillus thuringiensis* insecticidal proteins by site-directed mutagenesis- a mini review. Gene. 179: 111-117

Dekeyser RB, Claes M, Marichal M, Van Montagu and Caplan A (1989) Evaluation of selectable marker genes for rice transformation. Plant Physiol. 90: 217-223

Delbreil B, Guerche P and Jullien M (1993) *Agrobacterium*-mediated transformation of *Asparagus officinalis* L. long-term embryogenic callus and regeneration of transgenic plants. Plant Cell Rep. 12: 129-132

Devi P and Sticklen MB (2002) Genetic culturing shoot tip of pearl millet [*Pennisetum glaucum* (L.) R. Br.] and optimal microprojectile bombardment parameters for transient expression. Euphytica. 125: 45-50

Devi P, Zhong H and Sticklen M B (2000) *In vitro* morphogenesis of pearl millet (*Pennisetum glaucum* L.): efficient production of multiple shoots and inflorescences from shoot apices. Plant Cell Rep. 56: 546-550

Diehn HS, Chiu WL, De Rocher EJ and Green PJ (1998) Premature polyadenylation at multiple sites within a *Bacillus thuringiensis* toxin gene-coding region. Plant Physiol. 117: 1433-1443

Ding X, Gopalakrishnan B, Johnson LB, White FF, Wang X, Morgan TD, Kramer KJ and Muthukrishnan S (1998) Insect resistance of transgenic tobacco expressing an insect chitinase gene. Transgenic Res. 7: 77-84

Dong J, Teng WM, Buchholz WG and Hall TC (1996) *Agrobacterium*-mediated transformation of javanica rice. Mol. Breed. 2: 267-276

Dongting Z, Sulan L, Rukai C and Kexuan T (2007) Improved *Agrobacterium* -mediated genetic transformation of GNA transgenic sugarcane. Biolgia. 62(4): 386-393

Duan X, Li X, Xue Q, Abo-El-Saad M, XU D and Wu R (1996) Transgenic rice plants harboring an introduced potato *proteinase inhibitor* gene II are insect resistant. Nature Biotechnology. 14: 494-498

Eapen S and George L (1990) Somatic embryogenesis and plant regeneration in inflorescence segments of *Sorghum versicolor*. Maydica. 35: 55-58

El'konin LA, Gudova TN and Ishin AG (1994) Inheritance of male sterility mutations induced in haploid sorghum tissue cultures. Euphytica. 80: 111-118

Elliott AR, Campbell JA, Brettell RIS and Grof CPL (1998) *Agrobacterium*-mediated transformation of sugarcane using GFP as a screenable marker. Aust. J. Plant Physiol. 25: 739743

Elliott AR, Campbell JA, Dugdale B, Brettell RIS and Grof CPL (1999) Green-fluorescent protein facilitates rapid in vivo detection of genetically transformed plant cells. Plant Cell Rep. 18: 707-714

Emani C, Sunilkumar G and Rathore KS (2002) Trans gene silencing and reactivation in sorghum. Plant Science. 162: 181-192

English L and Slatin SL (1992) Mode of action of δ-endotoxins from *Bacillus thuringiensis*: A comparison with other bacterial toxins. Insect Biochem. Mol. Biol. 22: 1-7

Enríquez-Obregón GA, Vázquez-Padrón RI, Prieto-Samsónov DL, Pérez M and Selman-Housein G (1997) Genetic transformation of sugarcane by *Agrobacterium tumefaciens* using antioxidant compounds. Biotechnologia Aplicada. 14: 169–174

Estruch JJ, Carozzi NB, Desai N, Duck NB, Warren GW and Koziel M. (1997) Transgenic plants: an emerging approach to pest control. Nat. Biotechnol. 15: 137-141

Estruch JJ, Warren GW, Mullins MA, Nye GJ, Craig JA and Kozeil MG. (1996) Vip3A, a novel *Bacillus thuringiensis* vegetative insecticidal protein with a wide spectrum of activities against lepidopteran insects. Proc. Natl. Acad. Sci. 93: 5389-5394

Fang YD, Akula C and Altpeter F (2002) *Agrobacterium* mediated barley (*Hordeum vulgare* L) transformation using green fluorescent protein as a visual marker and sequence analysis of the T-DNA barley genomic DNA junctions. J. Plant Physiol. 159: 1131-1138

FAO Production statistics, News report 2011. http://faostat.fao.org/faostat/form

Federici BA and Bauer LS (1998) *Cry1Aa* protein of *Bacillus thuringiensis* is toxic to the cottonwood leaf beetle, *Chrysomela scripta*, and suppresses high levels of resistance to *Cry3Aa*. Appl. Environ. Microbiol. 64: 4368-4371

Feitelson JS, Payne J and Kim L (1992) *Bacillus thuringiensis*: Insects and beyond. Biotechnology. 10: 271-275

Finnegan J and McElory D (1994) Transgene inactivation: plants fight back. Biotech. 12: 883-888

Fischhoff DA, Bowdish KS, Perlak FJ, Marrone PG, MvCormick SM, Niedermeyer JG, Dean DA, Kusano-Kretzmer K, Mayer EJ, Rochester DE, Rogers SG and Fraley RT (1987) Insect tolerant tomato plants. Biotechnology. 5: 807-812

Flavell RB (1994) Inactivation of gene expression in plants as a consequence of specific sequence duplication. Proc. Natl. Acad. Sci. (USA) 91: 3490-3496

Frame BR, Shou HX, Chikwamba RK, Zhang ZY, Xiang CB, Fonger TM, Pegg SE, Li BC, Nettleton DS, Pei DQ and Wang K (2002) *Agrobacterium tumefaciens*-mediated transformation of maize embryos using a standard binary vector system. Plant Physiol. 129: 13-22

Frame BR, McMurray JM, Fonger TM, Main ML, Taylor KW, Torney FJ, Paz MM, Wang K (2006) Improved *Agrobacterium* mediated transformation of three maize inbred lines using MS salts. Plant Cell Rep. 25: 1024-1034

Franks T and Birch RG (1991) Gene transfer into intact sugarcane cells using microprojectile bombardment. Aust. J. Plant Physiol. 18: 471-480

Fromm ME, Morrish F, Armstrong C, Williams R, Thomas J and Klein TM (1990) Inheritance and expression of chimeric genes in the progeny of transgenic maize plants. Biotechnology. 8: 833-839

Fu X, Kohli A, Twyman RM and Christou P (2000) Alternative silencing effects involve distinct types of non-spreading cytosine methylation at a three-gene, single-copy transgenic locus in rice. Mol. Gen. Genet. 263: 106-118

Fujimoto H, Itoh K, Yamamoto M, Kyozuka J and Shimamoto K (1993) Insect resistant rice generated by introduction of a modified δ-endotoxin gene of *Bacillus thuringiensis*. Biotechnology. 11: 1151-1155

Gallie DR and Young TE (1994) The regulation of gene expression in transformed maize aleurone and endosperm protoplasts. Plant Physiology. 106: 929-939

Gamborg OL, Shyluk JP, Brar DS and Constable F (1977) Morphogenesis and plant regeneration from callus of immature embryos of Sorghum. Plant Sci. Lett. 10: 64-67

Ganeshan S, Baga M, Harvey BL, Rossnagel GB, Scoles G L and Chibbar RN (2003) Production of multiple shoots from the Thidiazuron treated mature embryos and leaf base/apical meristems of barley (*Hordeum vulgare* L.) Plant Cell Tiss. Organ. Cult. 73: 57-64

Gao Z, Jayaraji J, Muthukrishnan S, Claflin L and Liang GH (2005a) Efficient genetic transformation of sorghum using a visual screening marker. Genome. 48: 321-333

Gao Z, Xie X, Ling Y, Muthukrishnana S and Liang GH (2005b) *Agrobacterium tumefaciens*-mediated sorghum transformation using a mannose selection system. Plant Biotechnology Journal. 3: 591-599

Gelvin SB (1998) The induction and expression of transgenes in plants. Curr. Opin. Biotechnol. 9: 227-232

Gendloff EH, Bowen B and Buchholz WG (1990) Quantification of chloromphenicol acetyl transferase in transgenic tobacco plants by ELISA and correlation with gene copy number. Plant Mol. Biol. 14: 575-583

George L and Eapen S (1988) Plant regeneration by somatic embryogenesis from immature inflorescence cultures of *Sorghum almum*. Annl. Bot. 61: 589-591

Gill R and Saxena PK (1993) Somatic embryogenesis in *Nicotiana tabacum* L. induction by thidiazuron of direct embryo differentiation from cultured leaf discs. Plant Cell Rep. 12:154-159

Gill SS, Cowles EA and Pietrantonio FV (1992) The mode of action of *Bacillus thuringiensis* endotoxins. Annual Rev. Entomol. 37: 615-636

Girijashankar V, Sharma HC, Sharma KK, Swathisree V, Sivarama Prasad L, Bhat BV, Royer M, Secundo BS, Narsu ML, Altosaar I and Seetharama N (2005) Development of transgenic sorghum for insect resistance against the spotted stem borer (*Chilo partellus*) Plant Cell Rep. 24: 513-522.

Gong-yu YE, Jumin TU, Cui HU, Datta K and Datta SK (2001) Transgenic IR72 with fused *Bt* gene *cry1Ab/cry1Ac* from *Bacillus thuringiensis* is resistant against four lepidopteran species under field conditions. Plant Biotechnology. 18(2): 125-133

Gonzalez JM and Carlton BC (1984) A large transmissible plasmid is required for crystal toxin production in *Bacillus thuringiensis* variety israelensis. Plasmid. 11: 28-38

Gonzalez JM, Dulmage HT and Carlton BC (1981) Correlation between specific plasmids and delta endotoxins production in *Bacillus thuringiensis*. Plasmid. 5: 351-365

Gordon KW, Dilkes BP, Lowe K, Hoerster G, Sun X, Ross M, Church L, Bunde C, Farrell J, Maddock S, Synder J, Sykes L, Li Z, Woo YM, Bidney D and Larkins BA (2002) Stimulation of the cell cycle and maize transformation by disruption of the plant retinoblastoma pathway. Proc. Natl. Acad. Sci. USA, 99 (18): 11975-11980

Gould J, Devery M, Hasegawa O, Ulian EC, Peterson G and Smith RH (1991) Transformation of *Zea mays* L. using *Agrobacterium tumefaciens* and the shoot apex. Plant Physiol. 95: 426-434

Gould JH (1997) Transformation of the cereals using *Agrobacterium*. In: RS Tuan (Ed), Methods in Molecular Biology, Humana Press Inc., Totowa NJ. 62: 489-499

Graves ACF and Goldman SL (1986) The transformation of *Zea mays* seedlings with *Agrobacterium tumefaciens*. Plant Mol. Biol. 7: 43-50

Graves JD, Press MC, Smith S and Stewart GR (1992) The carbon canopy economy of the association between cowpea and the parasitic angiosperm Striga gesnerioides. Plant Cell and Environment. 15: 283-288.

Gray SJ, Zhang S, Rathus C, Lemaux PG and Godwin ID (2004) Development of sorghum transformation: Organogenic regeneration and gene transfer methods. In: Seetharama, N. and I.D. Godwin (Eds.), Sorghum Tissue Culture and Transformation, Oxford Publishers, New Delhi, India: 35-43

Grimsley N, Hohn T, Davis JW and Hohn B (1987) *Agrobacterium*-mediated delivery of infectious maize streak virus into maize plants. Nature. 325:177-179

Grootboom AW, O'Kennedy MM, Mkhonza NL, Kunert K, Chakauya E and Chikwamba RK. (2008) *In vitro* culture and plant regeneration of sorghum genotypes using immature zygotic embryos as explant source. International Journal of Botany. 4(4): 450-455

Grootbroom AW, Mkhonza NL, Kennedy O, Chakuya E, Kurent K and Chikwamba R.K (2010) Biolostic mediated Sorghum transformation via Mannose and Bialaphos based selection system. International Journal of Botany. 6(2): 89-94

Guang-Min, X.I.A and Zhong-Ti, L.I (1999) Transgenic plant regeneration from wheat (*Triticum aestivum* L) mediated by *Agrobacterium tumefaciens*. Acta. Phytophysiol. Sin. 25: 22-28

Guo JH and Liang GH (1993) Callus induction and plant regeneration of cultivated and wild sorghums. Cytologia. 58: 203-210

Guoquan Liu and Ian D. Godwin (2012) Highly efficient sorghum transformation, Plant Cell Rep. 31: 999-1007

Gurel S, Gurel E, Kaur R, Wong J, Meng L, Tan HQ and Lemaux PG (2009) Efficient, reproducible *Agrobacterium*-mediated transformation of sorghum using heat treatment of immature embryos. Plant Cell Rep 28: 429-444

Hagio T, Blowers AD and Earle ED (1991) Stable transformation of sorghum cell cultures after bombardment with DNA coated micro projectiles. Plant Cell Rep. 10: 260-264

Hamilton CM, Frary A, Lewis C and Tanksley SD (1996) Stable transfer of intact high molecular weight DNA into plant chromosomes. Proc. Natl. Acad. Sci. (USA) 93: 9975-9979

Hanahan D (1983) Studies on transformation of *E. coli* with plasmids. J. Mol. Biol. 166: 557-580

Hansen G and Chilton MD (1996) 'Agrolistic' transformation of plant cells: integration of T-strands generated in planta. Proc. Natl. Acad. Sci. (USA) 93: 14978-14983

Hansen G, Shillito R and Chilton MD (1997) T-strand integration in maize protoplasts after co delivery of a T-DNA substrate and virulence genes. Proc. Natl. Acad. Sci. (USA) 94: 11726-11730

Hardegger M and Sturm A (1998) Transformation and regeneration of carrot (*Daucus carota* L.) Mol. Breed. 4: 119-127

Harlan JR and de Wet JMJ (1972) A simplified classification of cultivated sorghum. Crop Science. 12: 172-176

Harshavardhan D, Rani TS, Ugalanathan K and Seetharama N (2002) An improved protocol for regeneration of *Sorghum bicolor* from isolated shoot apices. Plant Biotechnology. 19:163-171

Hasen G. (2000) Evidence of *Agrobacterium*-induced apoptosis in maize cells. Mol. Plant Microbe. Interac. 13: 649-657

Haughn GW, Smith J, Mazur B and Somerville C (1988) Transformation with a mutant Arabidopsis acetolactate synthase gene renders tobacco resistant to sulfonylurea herbicides. Mol. Gen. Genet. 211: 266-271

He Y, Jones HD, Chen S, Chen XM, Wang DW, Li KX, Wang DS and Xia LQ (2010) *Agrobacterium*-mediated transformation of durum wheat (*Triticum turgidum* L. var. durum cv Stewart) with improved efficiency. Journal of Experimental Botany. 61(6):1567-1581

He Z, Fu Y, Si H, Hu G, Zhang S, Yu Y and Sun Z (2004) Phosphomannose-isomerase (*pmi*) gene as a selectable marker for rice transformation via *Agrobacterium.* Plant. Sci. 166: 17-22

Hegde M and Kuruvinashetti MS (1997) *In vitro* response of two wild species of sorghum. Crop Improvement. 24: 203-206

Helmer G, Casadaban M, Bevan MW, Kayes L and Chilton MD (1984) A new chimeric gene as a marker for plant transformation: The expression of *Eschrichia coli* β-*galactosidase* in sunflower and tobacco cells. Biotechnology. 2: 520-527

Hendrickx K, DeLoof A and van Mellaert H (1989) Effects of *Bacillus thuringiensis* delta-endotoxin on the permeability of brush border membrane vesicles from tobacco hornworm (*Manduca sexta*) midgut. Comparative Biochem. Physiol. 95: 241-245

Hensel G, Kastner C, Oleszczuk S, Riechen J, and Kumlehn J (2009) *Agrobacterium*-Mediated Gene Transfer to Cereal Crop Plants: Current Protocols for Barley, Wheat, Triticale, and Maize. International Journal of Plant Genomics. 2009: 1-9

Herrera EL, Deblock M, Messens E, Hernalsteens JP, Van Montagu M and Schell J (1983) Chimeric genes as dominant selectable markers in plants cells. EMBO J. 2: 987-995.

Herrera EL, Depicker A, Van Montagu M and Schell J (1983) Expression of chimeric genes transferred into plant cells using a Ti-plasmid-derived vector. Nature. 303: 209-213.

Hiei Y, Ohta S, Komar T and Kumasho T (1994) Efficient transformation of rice (Oryza sativa L.) mediated by *Agrobacterium* and sequence analysis of the boundaries of the T-DNA. Plant J. 6: 271-282

Hilbeck A (2002) Transgenic host plant resistance and non target effects. In: D. Letourneau and B. Burrows (eds.) Genetically Engineered Organisms: Assessing Environmental and Human Health Effects. CRC Press, Boca Raton.USA. 167-185

Hill Ambroz KL and Weeks JT (2001) Comparison of constitutive promoters for sorghum transformation. Cer. Res. Comm. 29: 17-24.

Himani Tyagi, Rajasubramaniam S and Dasgupta Indranil (2007) Regeneration and *Agrobacterium* -mediated transformation of a popular *indica* rice variety, Current science, 93: 678-683

Hobbs SLA, Kpodar P and DeLong CMO (1990) The effect of T-DNA copy number, position and methylation on reporter gene expression in tobacco transformants. Plant Mol Biol. 15: 851-864

Hobbs SLA, Warkentin TD and DeLong CMO (1993) Transgene copy number can be positively or negatively associated with transgene expression. Plant Mol. Biol. 21: 17-26

Hoflack L, Seurinck J and Mahillon J (1997) Nucleotide sequence and characterization of the cryptic *Bacillus thuringiensis* plasmid pG13 reveal a new family of rolling circle replicons. J. Bacteriol. 179 (16): 5000-5008

Hofte H and Whiteley HR (1989) Insecticidal crystal proteins of *Bacillus thuringiensis*. Microbiol. Rev. 53: 242-255

Hood EE, Gelvin SB, Melchers S and Hoekema A (1993) New *Agrobacterium* helper plasmids for gene transfer to plants (EHA 105) Trans. Res. 2: 208-218

Hood EE, Helmer GL, Fraley RT and Chilton MD (1986) The hypervirulance of *Agrobacterium tumefacience* A281 is encoded in a region of pTiBo542 outside of T-DNA. J. Bacteriol. 168: 1291-1301

Hori H, Takahashi Y, Takahashi M and Wada Y (2000) Detection of the *Bacillus thuringiensis serovar japonensis* strain *Buibui protoxin* with enzyme-linked immunosorbent assay and its application to detection of the protoxin in soil. Applied Entomology and Zoology. 35(3): 401-411

Hornby JA and Gradner WA (1987) Dosage/mortality response of *Spodoptera frugiperda* (Lepidoptera: Noctuidae) and other noctuid larvae to beta-exotoxin of *Bacillus thuringiensis*. J. Econ. Entomol. 80: 925-929

Horner TA, Dively GP and Herbert DA (2003) Development, survival and fitness performance of *Helicoverpa zea* (Lepidoptera: Noctuidae) in MON810 Bt field corn. J. Econ. Entomology. 96: 914-929

Horsch R and King KA (1983) A covert contaminant of cultured plant cells: elimination of a *Hyphomicrobium* sp. from culture of *Datura innoxia* (Mill.) Plant Cell Tiss. Org. Cult. 2: 21-28

Howe A, Sato S, Dweikat I, Fromm M and Clemente T (2006) Rapid and reproducible *Agrobacterium*-mediated transformation of sorghum. Plant Cell Reports. 25: 751-758

Hu T, Meltz S, Chay C, Zhou HP, Biest N, Chen G, Cheng M, Feng X, Radionenka M, Lu F and Fry JE (2003) *Agrobacterium*-mediated large scale transformation of wheat (*Triticum aestivum* L.) Plant Cell Rep. 21: 1010-1019

Huang S, Gilbertson LA, Adams TH, Malloy KP, Reisenbigler EK, Birr DH, Snyder MW, Zhang Q and Luethry MH (2004) Generation of marker-free transgenic maize

by regular two-border *Agrobacterium* transformation vectors. Transgenic Res.13, 451-461

Huixia Wu, Angela Doherty and Huw D Jones (2008) Efficient and rapid *Agrobacterium*-mediated genetic transformation of durum wheat (*Triticum turgidum L. var. durum)* using additional virulence genes . Transgenic Research 17(3): 425-436

Hutchinson MJ and Saxena PK (1996) Acetylsalicylic acid enhances and synchronizes thidiazuron-induced somatic embryogenesis in geranium (Pelargonium x hortorum Bailey) tissue culture. Plant Cell Rep. 15: 512-515

Indra Aruselvi P, Michael P, Umamaheswari S and Krishnaveni S (2010) *Agrobacterium* mediated transformation of *sorghum bicolor* for disease resistance. International Journal of Pharma and Bio Sciences. 1(4): 272-278

Ingelbrecht I, Houdt HV, Montagu MV and Depicker A (1994) Posttranscriptional silencing of reporter transgenes in tobacco correlates with DNA metylation. Proc. Natl. Acad. Sci. (USA) 91: 10502-10506

Ingram WR (1958) The lepidopterous stalk borers associated with gramineae in Uganda. Bull Entomol. Res. 49: 367-383

Ishida Y, Saito H, Ohta S, Hiei Y, Komari T and Kumashiro T (1996) High efficiency transformation of maize (*Zea mays* L.) mediated by *Agrobacterium tumefaciens*. Nature Biotechnology. 14: 745-750

Ishiwata S (1901) On a kind of severe flasherie (Sotto disease) Dainihan Sanbshi Kaiho. 9:1-5

Iyer LM, Kumpatla SP, Chandrasekharan MB and Hall TC (2000) Transgene silencing in monocots. Plant Mol Biol. 43: 323-346

Jaiwal PK, Kumari R, Ignacimuthu S, Potrykus I and Sautter C (2002) *Agrobacterium tumefaciens*-mediated genetic transformation of mungbean (*Vigna radiata* L. Wilczek)-a recalcitrant grain legume. Plant Sci. 161: 239-247

Jefferson RA (1987) Assaying chimeric genes in plants: The GUS gene fusion system. Plant Molecular Biology Reporter. 5(4): 387-405

Jefferson RA, Kavanagh TA and Bevan MW (1987b) Gus fusion β-glucuronidase as a sensitive and versatile gene fusion marker in higher plants. EMBO Journal 6: 3901-3907

Jeon JS, Lee S, Jung KH, Yang WS, Yi GH, Oh BG and An G (2000) Production of transgenic rice plants showing reduced heading date and plant height by ectopic expression of rice MADS-box genes. Mol. Breed. 6, 581–592

Jeoung JM, Krishnaveni S, Muthukrishnan S, Trick HN and Liang GH (2002) Optimization of sorghum transformation parameters using genes for green fluorescent protein and β-glucuronidase as visual marker. Heriditas. 137: 20-28

Joanne G Bartlett, Sílvia C Alves, Mark Smedley, John W Snape and Wendy A Harwood (2008) High-throughput *Agrobacterium*-mediated barley transformation. Plant Methods. 4(1): 4-22

Joersbo M, Donaldson I, Kreiber J, Peterson SG, Brunstedt J and Okkels FT (1998) Analysis of mannose selection used for transformation of sugar beet. Mol. Breed. 4: 111-117

Jogeswar G, Ranadheer D, Anjaiah V and Kavi Kishor PB (2007) High frequency somatic embryogenesis and regeneration in different genotypes of *Sorghum bicolor* (L.) Moench from immature inflorescence explants. In Vitro Cell. Dev. Biol-Plant. 43:159-166

Jotwani MG and Young WR (1972) Recent developments in chemical control of insect pests of sorghum. In: Rao NGP, House LR (eds) Sorghum in seventies. Oxford & IBH Publishing, New Dehli, India: 251-256

Jotwani MG, Young WP and Teetes GR (1980) Elements of integrated control of sorghum pests.FAO plant production and protection paper No.39. Food and Agriculture organization of the United Nations, Rome.159

Juan M Vega, Weichang Yu, Angela R Kennon, Xinlu Chen and Zhanyuan J Zhang (2008) Improvement of *Agrobacterium*-mediated transformation in Hi-II maize (*Zea mays)* using standard binary vectors. Plant Cell Rep. 27: 297-305

Jurat-Fuentes JL and Adang MJ (2001) Importance of *Cry1* delta-endotoxin domain II loops for binding specificity in *Heliothis virescens* (L.) Appl. Environ. Microbiol. 67: 323-329

Kant T, Kothari SL, Kononowicz-Hodges H and Hodges TK (2001) *Agrobacterium tumefaciens*-mediated transformation of rice using coleoptile and mature seed-derived callus. J. Plant Biochem. Biotechnol. 10: 121-126

Kar S, Basu D, Das S, Ramkrishnan NA, Mukherjee P, Nayak P and Sen SK (1997) Expression of *cryIA(c)* gene of *Bacillus thuringiensis* in transgenic chickpea plants inhibits development of podborer (Heliothis armigera) larvae. Transgen Res. 6: 177-185

Karunaratne SM and Scott KJ (1981) Mitotic activity in protoplasts isolated from *Sorghum bicolor (*L.) leaves. Plant Sci Lett. 23: 11-16

Khanna H.K and Raina S.K (1999) *Agrobacterium*-mediated transformation of indica rice cultivars using binary and superbinary vectors. Aust. J. Plant Physiol. 26, 311-324

Khanna HK and Daggard GE (2003) *Agrobacterium* tumefaciens-mediated transformation of wheat using a super binary vector and a polyamine supplemented regeneration medium. Plant Cell Rep. 21: 429-436

Khanna HK and Raina SK (2002) Elite Indica transgenic rice plants expressing modified Cry1Ac endotoxin of *Bacillus thuringiensis* show enhanced resistance to yellow stem borer (*Scirpophaga incertulas*) Transgenic Res. 11(4): 411-423

Kim EH, Suh SC, Park BS, Shin KS, Kweon SJ, Han EJ, Park S, Kim YS, Kim J (2009) Chloroplast-targeted expression of synthetic *cry1Ac* in transgenic rice as an alternative strategy for increased pest protection. Planta. 230: 397-405

Kim JK, Duan X, Wu R, Seok SJ, Boston RS, Jang IC, Eun MY, and Nahm BH (1999) Molecular and genetic analysis of transgenic rice plants expressing the maize ribosome-inactivating protein b-32 gene and the herbicide resistance bar gene. Mol. Breed. 5: 85-94

Kim SR, Lee J, Sun SH, Park S, Kang HG, Kwon S and An G (2003) Transgene structures in T-DNA-inserted rice plants. Plant Mol. Biol. 52: 761-773

Klahre U, Crete P, Leuenberger SA, Iglesias VA and Meins F Jr (2002) High molecular weight RNAs and small interfering RNAs induce systemic posttranslational gene silencing in plants. Proc. Natl. Acad. Sci. (USA) 99(18): 11981- 11986

Kneifel W and Leonhardt W (1992) Testing of different antibiotics against Gram-positive and Gram-negative bacteria isolated from plant tissue culture. Plant Cell Tiss. Org. Cult. 29: 139-144

Knowles BH and Dow JAT (1993) The crystal endotoxin of *Bacillus thuringiensis*: Models for their mechanism of action on the insect gut. Bioassays. 15: 469

Kohli AM, Leech P, Vain DA, Laurie and Christou P (1998) Trasngene organization in rice engineered through direct DNA transfer supports a two-phase integration mechanism mediated by the establishment of integration mechanism mediated by the establishment of integration hot spots. Proc. Natl. Acad. Sci. (USA) 95: 7203-7208

Kohli D, Gahakwa P, Vain DAL and Christou P (1999) Transgene expression in rice engineered through particle bombardment: molecular factors controlling stable expression and transgene silencing. Planta. 208: 88-97

Koller CN, Bauer LS and Hollingworth RM. (1992) Characterization of the pH mediated solubility of *Bacillus thuringiensis* var San Diego native delta endotoxin crystals. Biochem Biophy. Res. Commun. 184: 692-699

Komari T, Hiei Y, Saito Y, Murai N and Kumashiro T (1996) Vectors carrying two separate T-DNAs for co-transformation of higher plants mediated by *Agrobacterium tumefaciens* and segregation of transformants free from selection markers. Plant Journal 10, 165-174

Kononowicz AK, Casas AM, Tomes DT, Bresan RA and Hasegawa PM. (1995) New vistas are opened for sorghum improvement by genetic transformation. African Crop Sci. J. 3: 171-180

Koziel MG, Beland GL, Bowman C, Carozzi NB, Crenshaw R, Crossland L, Dawson J, Desai N, Hill M, Kadwell S, Launis K, Lewis K, Maddox D, McPherson K, Meghji MR, Merlin E, Rhodes R, Warren GW, Wright M and Evola S (1993) Field performance of elite transgenic maize plants expressing an insecticidal protein derived from Bacillus thuringiensis. Biotechnology. 11: 194-200

Koziel MG, Carozzi NB and Desai N (1996) Optimizing expression of transgenes with an emphasis on post-transcriptional events. Plant Mol. Biol. 32: 393-405

Kresovich S, McGee RE, Panella L, Reilley AA and Miller FR (1987) Application of cell and tissue culture techniques for the genetic improvement of sorghum, *Sorghum bicolor* (L.) Moench: progress and potential. Advances in Agronomy. 41: 147-170

Krishnaveni S, Jeoung JM, Muthukrishnan S and Liang GH (2001) Transgenic sorghum plants constitutively expressing a rice chitinase gene show improved resistance to stalk rot. J. Genet. Breed. 55: 151-158

Kumaria R and Rajam MV (2002) Alteration in polyamine titres during *Agrobacterium*-mediated transformation of indica rice with ornithine decarboxylase gene affects plant regeneration potential. Plant Sci. 162, 769-777

Kumlehn J, Serazetdinova L, Hansel G, Becker D and Loerz H (2006) Genetic transformation of barley (*Hordeum vulgare* L.) via infection of androgenetic pollen cultures with *Agrobacterium tumefaciens*. Plant Biotechnol Journal. 4: 251-261

Kumpatla SP, Teng W, Buchholz WG and Hall TC (1997) Epigenetic transcriptional silencing and 5-azacytidine-mediated reactivation of a complex transgene in rice, Plant Physiol. 115: 361-373

Lambert B and Peferoen M (1992) Insecticidal promise of *Bacillus thuringiensis*. Bioscience. 42: 112-121

Larkin PJ and Scowcroft WR (1981) Somaclonal variation-a novel source of variability from cell cultures for plant improvement. Theor. Appl. Genet. 60: 197-214

Last DI, Brettell RIS, Chamberlain DA, Chaudhary AM, Larkin PJ, Marsh EL, Peacock WJ and Dennis ES (1991) pEmu: an improved promoter for gene expression in cereal cells. Theor. Appl. Genet. 81: 581-588

Leifert C, Camotta H and Waites WM (1992) Effect of combinations of antibiotics on micropropagated Clematis, Delphinium, Hosta, Iris and Photinia. Plant Cell Tiss. Org. Cult. 29: 153-160

Leuschner K (1984) Sorghum entomology research: programs and need in the developing world. Proceedings of the international sorghum entomology work shop, Texas A and M University, College station, TX, USA, ICRISAT, Patancheru, A.P. 5023 24, India, 1985:13-20

Li L, Qu R, Kochko DA, Fauquet C and Beachy RN (1993) An improved rice transformation system using the biolistic method. Plant Cell Rep. 12: 250-255

Li X, Volrath SL, Nicholl DBG, Chilcott CE, Johnson MA, Ward ER and Law MD (2003) Development of protoporphyrinogen oxidase as an efficient selection marker for *Agrobacterium tumefaciens*-mediated transformation of maize. Plant Physiol. 133: 736-747

Lightwood DJ, Ellar DJ and Jarrett P (2000) Role of proteolysis in determining potency of *Bacillus thuringiensis* Cry1Ac delta-endotoxin. Appl. Environ. Microbiol. 66: 5174-5181

Loc NT, Tinjuangjun P, Gatehouse AMR, Christou P and Gatehouse JA (2002) Linear transgene constructs lacking vector backbone sequences generate transgenic rice plants which accumulate higher levels of proteins conferring insect resistance. Mol. Breed. 9: 231-244

Lowe K, Bowen B, Hoerster G, Ross M, Bond D, Pierce D and Gordon-Kamm B (1995) Germline transformation of maize following manipulation of chimeric shoot meristems. Biotechnology. 13: 677-682

Lucca P, Ye X and Potrykus I (2001) Effective selection and regeneration of transgenic rice plants with mannose as selective agent. Mol. Breed. 7: 43-49

Luehrsen KR and Walbot V (1991) Intron enhancement of gene expression and splicing efficiency of introns in maize cells. Mol. Gen. Genet. 225: 81-93

Luo K, Banks D and Adang MJ (1999) Toxicity, binding, and permeability analyses of four *Bacillus thuringiensis Cry1* delta-endotoxins using brush border membrane vesicles of Spodoptera exigua and Spodoptera frugiperda. Appl. Environ Microbiol. 65: 457-464

Lynch RE, Wiseman BR, Plaisted D and Warnick D (1999) Evaluation of transgenic sweet corn hybrid expressing *CryIA (b)* toxin for resistance to corn earworm and fall armyworm (Lepidoptera: Noctuidae) J. Econ. Entomol. 92: 246-252

Ma H, Gu M and Liang GH (1987) Plant regeneration from cultured immature embryos of *Sorghum bicolor* (L.) Moench. Theor. Appl. Genet. 73: 389-394

MacKinnon C, Gunderson G and Nabors MW (1986) Plant regeneration by somatic embryogenesis from callus cultures of sweet sorghum. Plant Cell Rep. 5: 349-351

Maheswari M, Jyothi lakshmi N, Yadav SK, Varalaxmi Y, Vijaya Lakshmi, Vanaja M and Venkateshwarlu B (2006) Efficient plant regeneration from shoot apices of sorghum. Biologia Plantarum. 50(4): 741-744

Manickavasagam M, Ganapathi A, Anbazhagan V.R, Sudhakar, B. Selvaraj N, Vasudevan A and Kasthurirengan S (2004) *Agrobacterium*-mediated genetic transformation and development of herbicide-resistant sugarcane (*Saccharum* species hybrids) using axillary buds. Plant Cell Rep. 23, 134-143

Maqbool SB and Christou P (1999) Multiple traits of agronomic importance in transgenic indica rice plants: analysis of transgene integration patterns. Expression levels and stability. Mol. Breed. 5: 471-480

Maqbool SB, Husnain T, Riazuddin S, Masson L and Christou P (1998) Effective control of yellow stem borer and rice leaf folder in transgenic rice indica varieties Basmati 370 and M7 using the novel δ-endotoxin *cry2A Bacillus thuringiensis* gene. Molecular Breeding. 4: 501-507

Maralappanavar MS, Kuruvinashetti MS and Harti CC (2000) Regeneration, establishment and evaluation of somaclones in *Sorghum bicolor* (L.) Moench. Euphytica. 115: 173-180

Matzke MA and Matzke AJM (1995) How and why do plants inactivate homologous (trans) genes? Plant Physiol. 107: 679-685

McElroy D and Brettell RIS (1994) Foreign gene expression in transgenic cereals: Progress and pitfalls. Trends Biotechnology. 12: 62-68

Meyers HB, Johnson DR, Singer TL and Page LM (1997) Survival of *Helicoverpa zea* Boddie on Bollgard cotton. Proceedings of Beltwide Cotton Conference Memphis, Tennesse, National Cotton Council of America. 2: 1269-1271

Miller M, Tagliani L, Wang N, Berka B, Bidney D and Zhao ZY (2002) High-efficiency transgene segregation in co-transformed maize plants using an *Agrobacterium tumefaciens* 2 T-DNA binary system. Transgenic Res. 11, 381-396

Miranda R, Zamudio FZ and Bravo A (2001) Processing of *Cry1Ab* delta-endotoxin from *Bacillus thuringiensis* by *Manduca sexta* and *Spodoptera frugiperda* midgut proteases: role in protoxin activation and toxin inactivation. Insect Biochem. Mol. Biol. 31: 1155-1163

Mithila J, Hall JC, Victor JMR and Saxena PK (2003) Thidiazuron induces shoot organogenesis at low concentrations and somatic embryogenesis at high concentrations on leaf and petiole explants of African violet (*Saintpaulia ionantha Wendl*.) Plant Cell Rep. 21: 408-414

Miti N, Nikoli R, Ninkovi S, Miljus-Djuki J and Neskovi M (2004) *Agrobacterium*-mediated transformation and plant regeneration of *Triticum aestivum* L. Bio. Plant 48: 179–184

Mohanty A, Sarma NP and Tyagi AK (1999) *Agrobacterium* mediated high frequency transformation of an elite indica rice variety *Pusa Basmati* 1 and transmission of the transgenes to R2 progeny. Plant Sci. 147, 127-137

Mok MC, Mok DWS, Armstrong DJ, Shudo K, Isogai Y and Okamoto T (1982) Cytokinin activity of n- phenyl –n1-1,2,3- thiadiazol-5-urea. Phytochemistry. 211: 1509-1511

Morikawa H, Sakamoto A, Hokazono H, Irifune K and Takahashmi M (2002) Mechanism of transgene integration into a host genome by particle bombardment. Plant Biotechnol. 19 (4): 219-228

Mouritzen P and Holms PB (1994) Chloroplast genome breakdown in microspore cultures of barley (*Hordeum vulgare* L.) occurs primarily during regeneration. J. Plant Physiol. 144: 586-593

Mugo S, DeGroote H, Songa J, Mulaa M, Odhiambo B, Taracha C, Bergvinson D, Hoisington D and Gethi M. (2001) Advances in developing insect resistant maize varieties for Kenya within the insect resistant maize for Africa (IRMA) project. Seventh Eastern and Southern Africa Regional Maize Conference 11th-15th Feb: 31-37

Murashige T and Skoog FA (1962) Revised medium for rapid growth and bioassays with tobacco tissue cultures. Plant Physiol. 15: 473-479

Murray F, Brettell R, Matthews P, Bishop D and Jacobsen J (2004) Comparison of *Agrobacterium*-mediated transformation of four barley cultivars using GFP and GUS reporter genes. Plant Cell Rep. 22, 397-402

Murthy BNS, Murch SJ and Saxena PK. (1995) Thidiazuron induced somatic embryogenesis in intact seedlings of peanut (*Arachis hypogaea* L.): endogenous growth regulator levels and significance of cotyledons. Physiol Plant. 94: 268-276

Mythili PK and Seetharama N (2000) Somatic hybridization for crop improvement: A review with special reference to cereals. J. Plant Biol. 27: 1-18

Mythili PK, Rani TS, Sairam RV, Reddy VD, Harshavardhan D and Seetharama N. (2004) Sorghum tissue culture and transformation research. In: N. Seetharama and I. D. Godwin (Eds.), Sorghum Tissue Culture and Transformation, Oxford Publishers, New Delhi, India. 51-56

Mythili PK, Seetharama N and Reddy VD (1999) Plant regeneration from embryogenic cell suspension cultures of wild sorghum (*Sorghum dimidiatum* Stapf.) Plant Cell Reports. 18: 424-428

Nahdi S and deWet JMJ (1995) In vitro regeneration of *Sorghum bicolor* lines from shoots apices. Inter. Sorghum Millet Newslett. 36: 89-90

Nayak P, Basu D, Das S, Basu A, Ghosh D, Raakrishnan NA, Ghosh M and Sen SK (1997) Transgenic elite indica rice plants expressing cry1Ac δ-endotoxin of *Bacillus*

thuringiensis are resistant against yellow stem borer (Scirpophaga incertulas) Proc Natl Acad Sci (USA) 94: 2111-2116

Nazim-Ud-Dowla MAN, Ahmed NU and Hassan L (2008) Optimization of *Agrobacterium*-mediated genetic transformation in indica rice. Thai Journal of Agricultural Science, 41(3-4): 127-133

Negrotto D, Jolley M, Beer S, Wenck AR and Hansen G (2000) The use of phosphomannose-isomerase as a selectable marker to recover transgenic maize plants *(Zea mays* L.) via *Agrobacterium* transformation. Plant Cell Rep. 19: 798-803

Nguyen TV, Tran TT, Martine C and Geert A (2007) *Agrobacterium*-mediated transformation of sorghum (*Sorghum bicolor* (L.) Moench) using an improved in vitro regeneration system. Plant Cell Tiss. Organ Cult. 91: 155-164

Norris JR (1971) The protein crystal toxin of *Bacillus thuringiensis*: biosynthesis and physical structure In: Burges HD and Mussey NW ed. Microbial control of insects and mites. New York, London, Academic Press Inc: 229-246

Nwanze KF (1997) Integrated management of stem borers of sorghum and pearl millet. Insect Science Applications. 17: 1-8

Ohno S (1973) Ancient linkage group and frozen accidents. Nature. 244: 259-262

Ohta S, Mita S, Hattori T and Nakamura K (1990) Construction and expression in tobacco of a β-glucuronidase (GUS) reporter gene containing an intron within the coding sequence. Plant Cell Physiology. 31: 805-813

Okkels FT and Pedersen MG (1988) The toxicity to plant tissue and to *Agrobacterium tumefaciens* of some antibiotics. Acta Hortic. 225:199-207

Ou-Lee T, Turgeon R and Wu R (1986) Expression of a foreign gene linked to either a plant-virus or a Drosophila promoter, after electroporation of protoplasts of rice, wheat, and sorghum. Proc. Natl. Acad. Sci. (USA) 83: 6815-6819

Ow DW, Wood KV, DeLuca M, DeWet JR, Helsinki DR and Howell SH (1986) Transient and stable expression of the firefly luciferase gene in plant cells and transgenic plants. Science. 234: 856-859

Palm CJ, Donegan K, Harris D and Seidler RJ (1994) Quantification in soil of *Bacillus thuringiensis* var. kurstaki δ-endotoxin from transgenic plants. Molecular Ecology. 3: 145-151

Park SH, Pinson SRM and Smith RH (1996) T-DNA integration into genomic DNA of rice following *Agrobacterium* inoculation of isolated shoot apices. Plant Mol. Biol. 32: 1135-1148

Patel M, Johnson JS, Brettell RIS, Jacobsen J and Xue GP (2000) Transgenic barley expressing a fungal xylanase gene in the endosperm of the developing grains. Mol. Breed. 6, 113-123

Patil VM and Kuruvinashetti MS (1998) Plant regeneration from leaf sheath cultures of some rabi sorghum cultivars. South African Journal of Botany. 64(3): 217-219

Pawlowski WP, Torbet KA, Rines HW and Somers DA (1998) Irregular patterns of transgene silencing in allohexaploid oat. Plant Mol. Biol. 38: 597-607

Perlak FJ, Fuchs RL, Dean DA, McPherson SL and Fischhoff DA (1991) Modification of the coding sequence enhances plant expression of insect control protein genes. Proc. Natl. Acad. Sci. (USA) 88: 3324-3328

Polisetty R, Paul V, Deveshwar JJ, Khetarpal S, Suresh K and Chandra R (1997) Multiple shoot induction by BAP and complete plant regeneration from seed explants of chickpea (*Cicer arietinum* L.) Plant Cell Rep. 16: 565-571

Popelka JC and Altpeter F (2003) *Agrobacterium tumefaciens* mediated genetic transformation of rye (*Secale cereale* L.) Mol. Breed. 11: 203-211

Priya Joyce, Melissa Kuwahata, Nicole Turner and Prakash Lakshmanan (2010) Selection system and co-cultivation medium are important determinants of *Agrobacterium*-mediated transformation of sugarcane. Plant Cell Rep, 29: 173-183

Przetakiewicz T, Kara A, Orczyk W and Nadolska OA (2004) *Agrobacterium*-mediated transformation of polyploidy cereals. The efficiency of selection and transgene expression in wheat. Cell Mol. Biol. Lett. 9: 903-917

Pu XA and Goodman RN (1992) Induction of necrogenesis by *Agrobacterium tumefaciens* on grape explants. Physiol. Mol. Plant Pathol. 41: 241-254

Raina AK (1985) Mechanisms of resistance to shoot fly in sorghum: A Review Proceedings of the International Sorghum Entomology Workshop, 15 – 21 July, 1984, Texas A and M University, College station, TX, USA, ICRISAT, Patancheru, A.P. 5023 24, India: 131-136

Rainieri D, Bottino P, Gordon M and Nesteer E (1990) *Agrobacterium* mediated transformation of rice (*Oryza sativa* L.) Biotechnology. 8: 33-38

Ramesh S, Nagadhara D, Pasalu IC, Padma Kumari A, Sarma NP, Reddy VD and Rao KV (2004) Development of stem borer resistant transgenic parental lines involved in the production of hybrid rice. Journal of Biotechnology. 111: 131-141

Rao AM and Kishore PBK (1989) In vitro plant regeneration potential from callus cultures of grain sorghum. Current Science. 58. 692-693

Rashid H, Yokoi S, Toriyama K and Hinata K (1996) Transgenic plant production mediated by *Agrobacterium* in indica rice. Plant Cell Reports. 15: 727-730

Rathus C, Adkins AL, Henry RJ, Adkins SW and Godwin ID (1996) Progress towards transgenic sorghum. In: Foale MA, Henzell RG, Kneipp JF (Eds) Proceedings of the Third Australian Sorghum Conference: 409-414

Raviraj MK, Archana MK, Harinathbabu K and Theerthaprasad D (2009) *Agrobacterium* mediated transformation of sugarcane for borer resistance using *Cry 1Aa*3 gene and

one-step regeneration of transgenic plants. Indian Journal of Microbiology. 11(4): 355-359

Reiss B, Sprengel R, Will H and Schaller H (1984) A new sensitive method for qualitative and quantitative assay of neomycin phospho transferase in crude cell extracts. Gene. 30: 211-218

Rockville MD (2003) RNA target sequences promote spreading of RNA silencing. Plant Physiol. 131(1): 245-253

Rolle RL, Ejiofor AO and Jhonson TL (2005) Determination of the plasmid size and location of δ-endotoxins genes of *Bacillus thuringiensis* by pulse field gel electrophoresis. African J. Biotechnology. 4: 580-585

Rui-Feng H, Yuan-Yuan W, Bo D, Ming T, Ai-Qing Y, Li-Li Z and Guang-Cun H (2006) Development of transformation system of rice based on binary bacterial artificial chromosome (BIBAC) vector. Acta. Gen. Sin. 33, 269-276

Sachs ES, Benedict JH, Taylor F, Stelly DM, Davis SK and Altman DW (1996) Pyramiding *Cry1A(b)* insecticidal protein and terpenoids in cotton to resist tobacco budworm. Env. Entomol. 25: 2157-2166

Saghai-Maroof M A, oliman K M S, Jorgensen R A and Allard R W, (1984) Ribosomal DNA spacer-length polymorphisms in barley: Mendelian inheritance, chromosomal location, and population dynamics. Proc. Natl. Acad. Sci. USA 81: 8014–8018

SaiKishore N, Visarada KBRS, Aravinda Lakshmi Y, Pashupatinath E, Rao SV and Seetharama N (2006) *In vitro* culture methods in sorghum with shoot tip as the explant material. Plant Cell Reports. 25: 174-182

Sairam RV, Seetharama N, Devi PS, Verma A, Murthy UR and Potrykus I (1999) Culture and regeneration of mesophyll derived protoplasts of sorghum (*Sorghum bicolor* (L.) Moench) Plant Cell Reports. 18: 972-977

Sairam RV, Seetharama N, Shyamala T and Devi PS (2000) Plant regeneration from scutella of immature embryos of diverse sorghum genotypes. Cereal Res. Communication. 28: 279-285

Salama HS and Sharaby A (1985) Histopathological changes in Heliothis armigera infected with *Bacillus thuringiensis* as detected by electron microscopy. Insect Sci. Appl. 6: 503-511

Sambrook J, Fritsch EF and Maniatis T (1989) Molecular cloning, a laboratory manual, 2nd edn,: Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY

Sanyal I, Singh AK, Kaushik M and Amla DV (2005) *Agrobacterium* mediated transformation of chickpea (*Cicer arietinum* L.) with *Bacillus thuringiensis cry1Ac* gene for resistance against pod borer insect *Helicoverpa armigera*. Plant Sci. 168: 1135-1146

Schafer W, Gorz A and Kahl G (1987) T-DNA integration and expression in a monocot crop plant after induction of *Agrobacterium.* Nature. 327: 529-532

Schmulling T and Jeff Schell (1993) Transgenic tobacco plants regenerated from leaf disks can be periclinal chimeras. Plant Mol. Biol. 21: 705-708

Schnepf E, Crickmore N, van Rie J, Lereclus D, Baum J, Feitelson J, Seigler DR and Dean DH (1998) *Bacillus thuringiensis* and its pesticidal crystal proteins. Microbiol. Mol. Biol. Rev. 62: 775-806

Schuler TH, Poppy GM, Kerry BR and Denholm I (1998) Insect resistant transgenic plants. TIBTECH. 16: 168-175

Schwartz JL, Garneau L, Savaria D, Masson L, Brousseau R and Rousseau E (1993) Lepidoptern specific crystal toxins from *Bacillus thuringiensis* from cation and anion-selective channels in planar lipid bilayer. J. Membrane Biol. 132: 53-62

Schwartz JL, Potvin L, Chen XJ, Brousseau R, Laprade R and Dean DH (1997) Single site mutation in the conserved alternating- arginine region affect ionic channels formed by *CryIAa, a Bacillus thuringiensis* toxin. Appl. Environ. Microbiol. 63: 3978-3984

Seetharama N, Sairam RV and Rani TS (2000) Regeneration of sorghum shoot tip cultures and field performance of progeny. Plant Cell Tiss. Org. Cult. 61: 169-173

Selvapandiyan A, Arora N, Rajagopal R, Jalali SK, Venkatesan T, Singh SP and Bhatnagar RK (2001) Toxicity analysis of N- and C- terminus-deleted vegetative insecticidal protein from *Bacillus thuringiensis*. Appl. Environ. Microbiol. 67: 5855-5858

Sh an, X, Li D and QU R (2000) Thidiazuron promotes *in vitro* regeneration of wheat and barley. *Invitro* cellular Developmental Biology of Plant 36: 207-210

Shackelford NJ and Chlan CA (1996) Identification of antibiotics those are effective in eliminating *Agrobacterium tumefaciens*. Plant Mol. Biol. Reporter. 14:50-57

Sharma V, Kothari SL and Chandra N (1989) In vitro regeneration, field transfer of plantlets and growth to maturity of plants of *Sorghum bicolor* (L.) Moench. Current Science. 58: 586-588

Shou H, Frame BR, Whitham SA and Wang K (2004) Assessment of transgenic maize events produced by particle bombardment or *Agrobacterium*-mediated transformation. Mol. Breed. 13: 201-208

Shridhar J, Bhat RS, Sumangala B and Kuruvinashetti MS (2010) *Agrobacterium*-mediated transformation studies in sorghum using an improved *gfp* reporter gene. Journal of SAT Agricultural Research, vol 8

Sims SR, Greenplate JT, Stone TB, Caprio MA and Gould FL (1996) Monitoring strategies of early detection of Lepidoptera resistance to *Bacillus thuringiensis* insecticidal proteins. In: TM Brown (ed) molecular genetics and evaluation of pesticide resistance. American Chemical Society, Washington: 229-242

Singh BU and Rana BS (1989) Varietal resistance in sorghum to spotted stem borer, Chilo partellus (Swinhoe) Insect Science and its application 10: 3-27

Singh SP and Lodhi GP (1995) Screening of forage sorghum genotypes for multiple resistances to shootfly and stem borer. Forage Research. 21: 43-48

Smedley DP and Ellar DJ (1996) Mutagenesis of three surface-exposed loops of a *Bacillus thuringiensis* insecticidal toxin reveals residues important for toxicity, receptor recognition and possibly membrane insertion. Microbiology. 142: 1617-1624

Smith N, Kilpatrick JB and Whitelam GC (2001) Superfluous transgene integration in plants. Crit. Rev. Plant Sci. 20: 215-249

Smith RH and Hood EE (1995) *Agrobacterium tumefaciens* transformation of monocotyledons. Crop Sci. 35: 301-309

Sneh B and Schuster S (1981) Recovery of *Bacillus thuringiensis* and other bacteria from larvae of *Spodoptera littoralis* Boisd. Previously fed on *B. thuringiensis* treated leaves. J Invert. Pathol. 37: 295-303

Southern EM (1975) Detection of specific sequences among DNA fragments separated by gel electrophoresis. J. Mol. Biol. 98: 503-517

Srivastava V and Ow DW (2001) Single-copy primary transformants of maize obtained through the co-introduction of a recombinase-expressing construct. Plant Mol. Biol. 46: 561-566

Stachel SE, Messens E, Van Montagu M and Zambryski P (1985) Identification of the signal molecules produced by wounded plant cells that activate T-DNA transfer in *Agrobacterium tumefaciens*. Nature. 318: 624-629

Stahl R, Horvath H, Fleet JV, Voetz M, von Wettstein D and Wolf N (2002) T-DNA integration into barley genome from single and double cassette vectors. Proc. Natl. Acad. Sci. (USA) 99: 2146-2151

Steinhaus EA (1951) Possible use of *Bacillus thuringiensis* subsp. Berliner as an aid in the biological control of the alfalfa caterpillar. Hilgardia. 20: 350-381

Stewart CNJ, Adang MJ, A11 JN, Boerma HR, Cardineau G, Tucher D and Parrott WA (1996) Genetic transformation, recovery, and characterization of fertile soybean transgenic for a synthetic *Bacillus thuringiensis cryIAc* gene. Plant Physiol. 112: 121-129

Stewart RN and Derman H (1970) Determination of number and mitotic activity of shoot apical initial cells by analysis of medicinal chimeras. Amer. J. Bot. 61: 54-67

Stotzky G (2002) Release, persistence and biological activity in soil of insecticidal proteins from *Bacillus thuringiensis*. In: Genetically Engineered Organisms: Assessing Environmental and Human Health Effects, eds. Letourneau, D.K. & Burrows, B.E., CRC Press, Boca Raton, Fla:187-222

Studier FW and Moffatt BA (1986) Use of bacteriophage T7 RNA polymerase to direct selective high-level expression of cloned genes. J. Mol. Biol. 189:113-130

Sudhakar P and Sarada Mani N (2006) Somatic Embryogenesis and Plantlet regeneration in *Sorghum bicolor* (L.) Moench, from leaf segments. Journal of Cell and Molecular Biology. 5:99-107

Sudhakar P, Sarada Mani N and T Ramana (2009) Long-Term Maintenance of Callus Cultures from Immature Embryo of *Sorghum bicolor*. World Journal of Agricultural Sciences 5 (4): 415-421

Szymkowiak J. Eugene (1996) What chimeras can tell us about plant development? Annual Reviews of Plant physiology and Plant molecular Biology. 47: 351-376

Tadesse Y and Jacobs M. (2004) Nutritional quality improvement of sorghum through genetic transformation. In: N. Seetharama and I.D. Godwin (Eds.) Sorghum Tissue Culture and Transformation, Oxford Publishers, New Delhi, India: 81-84

Tadesse Y, Sagi L, Swennen R and Jacobs M (2003) Optimization of transformation conditions and production of transgenic sorghum (*Sorghum bicolor*) via microparticle bombardment. Plant Cell Tissue Organ Cult. 75: 1-18

Takavar S, Rahnama H, Rahimian H and Kazemitabar K *(*2010) *Agrobacterium* Mediated Transformationof Maize (*Zea mays* L.) Journal of Sciences, Islamic Republic of Iran 21(1):21-29

Teixeira da Silva JA and Fukai S (2001) The impact of carbenicillin, cefotaxime and vancomycin on chrysanthemum and tobacco TCL morphogenesis and *Agrobacterium* growth. J Appl. Hort. 3(1): 3-12

Terada R, Asao H and Iida S (2004) A large-scale *Agrobacterium* mediated transformation procedure with a strong positive– negative selection for gene targeting in rice (*Oryza sativa* L*)* Plant Cell Rep. 22: 653-659

Thomas E, King PJ and Potrykus I (1977) Shoot and embryo like structure formation from cultured tissues of *Sorghum bicolor* (L.) Naturwissenschaften. 64: 587

Thomas TD (2003) Thidiazuron induced multiple shoot induction and plant regeneration from cotyledonay explants of mulberry. Biol. Plant. 46: 529-533

Thorpe TA (1993) In vitro organogenesis and somatic embryogenesis. Physiological and biochemical aspects. In: KA Roubelakis-Angelakis K. Tran Thanh Van (eds), Morphogenesis in plants, Plenum press, New York: 19-38

Tian HC and Marcotrigiano M (1994) Cell-layer interactions influence the number and position of lateral shoot mirestem in Nocotiana. Dev. Biol. 162(2): 579-589

Tingay S, McElroy D, Kalla R, Fieg S, Wang M, Thornton S and Brettell R (1997) *Agrobacterium tumefaciens*-mediated barley transformation. Plant J. 11: 1369-1376

Toki S (1997) Rapid and efficient *Agrobacterium*-mediated transformation in rice. Plant Mol. Biol. Rep. 15: 16-21.

Travella S, Ross SM, Harden J, Everett C, Snape JW and Harwood WA (2005) A comparison of transgenic barley lines produced by particle bombardment and *Agrobacterium*-mediated techniques. Plant Cell Rep. 23, 780-789

Trifonova A, Madsen S and Olesen A (2001) *Agrobacterium*mediated transgene delivery and integration into barley under a range of in vitro culture conditions. Plant Sci. 161: 871-880

Tu J, Datta K, Alam MF, Fan Y, Khush GS and Datta SK (1998) Expression and function of a hybrid Bt toxin gene in transgenic rice conferring resistance to insect pests. Plant Biotechnology. 15(4): 195-203

Tu JM, Zhang GA, Datta K, Xu CG and He YQ (2000) Field performance of transgenic elite commercial hybrid rice expressing *Bacillus thuringiensis* deltaendotoxin. Nat. Biotechnol. 18: 1101-1104

Ty V, Tracey C, Gurdip B, Timothy C, Todd DG, Stephanie F, Mark G, Arlene H, Scott J, Kathryn K, Clinton P, John P, Charles R, Leigh E and Jay P (2005) A method of controlling corn rootworm feeding using a *Bacillus thuringiensis* protein expressed in transgenic maize. Crop Science. 45: 931-938

Upadhyaya NM, Surin B, Ramm K, Gaudron J, Schünmann PHD, Taylor W, Waterhouse PM and Wang MB (2000) *Agrobacterium*- mediated transformation of Australian rice cultivars Jarrah and Amaroo using modified promoters and selectable markers. Aust. J. Plant Physiol. 27, 201-210

Usami S, Morikawa S, Takebe I and Machida Y (1987) Absence in monocotyledonous plants of the diffusible plant factors inducing T-DNA circularization and vir gene expression in *Agrobacterium*. Mol. Gen. Genet. 209:221-226

Vaeck M, Reynaerts A, Hoftey H, Jansens S, DeBeuckleer M, Dean C, Zabeau M, Van Montagu M and Leemans J (1987) Transgenic plants protected from insect attack. Nature. 327: 33-37

Vain P, Finer KR, Engler DE, Pratt RC and Finer JJ (1996) Intron mediated enhancement of gene expression in maize (*Zea mays* L.) and bluegrass (*Poa pratensis* L.) Plant Cell Rep. 15: 489- 494

Van den Elzen PJM, Townseed J, Lec KY and Bedbrook JR (1985) A chimeric Hygromycin resistance gene as a selectable marker in plant cells. Plant Mol. Biol. 5: 299-302

Van Rie J, Jansens S, Hoftey H, Degheele D and Van Mellaert H (1989) Specificity of *Bacillus thuringiensis*-endotoxins. Importance of specific receptors on the brush border membrane of the mid-gut of target insects. Eur. J. Biochem. 186: 239-247

Vazquez RI, Prieto D, De La Riva GA and Selman-Housein G (1996) Development of an immunoradiometric assay for quantitative determination of *Cry1A(b)* in transgenic sugarcane plants. Journal of Immunological Methods. 196(1): 33-39

VinodKumar, LeAnne M. Campbell, Keerti SR (2011) Rapid recovery- and characterization of transformants following *Agrobacterium*-mediated T-DNA transfer to sorghum. Plant Cell Tiss. Organ Cult. 57: 147-154

Visarada KBRS, Saikishore N, Balakrishna D and Rao SV (2003) Transient gus expression studies in sorghum to develop a simple protocol for *Agrobacterium* mediated genetic transformation. J. Genet. Breed. 57: 147-154

Vision TJ, Brown DG and Tanksley SD (2000) The origins of genomic duplications in Arabidopsis. Science. 290: 2114- 2117

Walters DA, Vetch CS, Potts DE and Lundquist RC (1992) Transformation and inheritance of a hygromycin phosphotransferase gene in maize plants. Plant Mol. Biol. 18: 189-200

Wang MB, Abbott DC, Upadhyaya NM, Jacobsen JV and Waterhouse PM (2001) *Agrobacterium tumefaciens*-mediated transformation of an elite Australian barley cultivar with virus resistance and reporter genes. Aust. J Plant Physiol. 28: 149-156

Wang W, Wang J, Yang C, Li Y, Liu L and Xu J (2007) Pollen-mediated transformation of *Sorghum bicolor* plants. Biotechnol. Appl. Biochem. 48(2): 79-83

Ward E and Ellar D (1983) Assignment of the δ-endotoxin gene of *Bacillus thuringiensis* var. israelensis to a specific plasmid by curing analysis. FEBS Lett. 158: 45-49

Warren GW (1997) Vegetative insecticidal proteins: novel proteins for control of corn pests, In N. Carozzi and M. Koziel (ed.), Advances in insect control. Taylor & Francis, Bristol, Pa: 109-121

Wei ZM and Xu ZH (1990) Regeneration of fertile plants from embryogenic suspension culture protoplasts of *Sorghum vulgare*. Plant Cell Rep. 9: 51-53

Weirv B, Gu X, Wang MB, Upadhyaya N, Elliott AR and Brettell RIS (2001) *Agrobacterium tumefaciens*-mediated transformation of wheat using suspension cells as a model system and green fluorescent protein as a visual marker. Aust. J. Plant. Physiol. 28, 807-818

Wendorf F, Close AE, Schild R, Wasylikowa K, Housley RA, Harlan JR and Krolik H (1992) Saharan exploitation of plants 8,000 years. Nature. 359: 721-724

Wernicke W and Brettell RIS (1982) Morphogenesis from cultured leaf tissue of *Sorghum bicolor* culture initiation. Protoplasma. 111: 19-27

Wilkinson M, Harding K, O'Brien E, Dubbels S, Chapters Y and Lawson H (1993) Herbicides and transgenic rape. Nature. 365: 114

Williams WP, Sagers JB, Hanten JA, Davis FM and Buckley PM (1997) Transgenic corn evaluated for resistance to fallarmyworm and southweatern corn borer. Crop Science. 37: 957-962

Wilmink A, Van de Ven BCE and Dons HJM (1995) Activity of constitutive promoters in various species from the Liliaceae. Plant Mol. Biol. 28: 949-955

Wolfersberger MG, Chen XJ and Dean DH (1996) Site- directed mutations in the third domain of *Bacillus thuringiensis* δ- endotoxin *Cry1Aa* affect its ability to increase the

permeability of *Bombyx mori* midgut brush border membrane vesicles. Appl. Environ. Microbiol. 62: 279-282

Wu C, Fan Y, Zhang C, Oliva N and Datta SK (1997) Transgenic fertile japonica rice plants expressing a modified *cryIA(b)* gene resistant to yellow stem borer. Plant Cell Reports. 17: 129-132

Wu H, McCormac AC, Elliott MC and Chen DF (1998) *Agrobacterium*-mediated stable transformation of suspension cultures of barley (*Hordeum vulgare* L*)* Plant Cell Tiss. Org. Cult. 54: 161-167

Wu H, Sparks C, Amoah B and Jones HD (2003) Factors influencing successful *Agrobacterium*-mediated genetic transformation of wheat. Plant Cell Rep. 21, 659-668

Wunn J, Kloti A, Burkhardt PK, Ghosh Biswas GC, Launis K, Iglesias VA and Potrykus I (1996) Transgenic Indica rice breeding line IR 58 expressing a synthetic *cry1A(b)* gene from *Bacillus thuringiensis* provides effective insect pest control. Biotechnology. 14: 171-176

Yang A, He C, Zhang K and Zhang J (2006) Improvement of *Agrobacterium*-mediated transformation of embryogenic calluses from maize elite inbred lines *In Vitro.* Cell. Dev. Biol-Plant, 42: 215-219

Ye GY, Tu J, Hu C, Datta K and Datta SK (2001) Transgenic IR72 with fused *Bt* gene *cry1Ab/cry1Ac* from *Bacillus thuringiensis* is resistant against four lepidopteran species under field conditions. Plant Biotechnol. 18 (2): 125-133

Yokoi S, Tsuchiya T, Toriyama K and Hinata K (1997) Tapetumspecific expression of the Osg6B promoter-β-*glucuronidase* gene in transgenic rice. Plant Cell Rep. 16, 363-367

Yu CG, Mullins MA, Warrens GW, Kozeil MG and Estruch JJ (1997) The *Bacillus thuringiensis* vegetative insecticidal protein Vip3A lyses midgut epithelium cells of susceptible insects. Appl. Environ Micro biol. 63: 532-536

Zhang M, Tang Q, Chen Z, Liu J, Cui H, Shu Q, Xia Y, Altosaar I (2009) Genetic transformation of *Bt* gene into sorghum [*Sorghum bicolor* (L.)] mediated by *Agrobacterium tumefaciens*. 25(3): 418-423

Zhang S, Wang W and Sticklen MB (1998) In vitro morphogenesis of *Sorghum bicolor* (L.) Moench: efficient plant regeneration from shoot apices. J. Plant Physiol. 153:719-726

Zhang S, Warkentin D, Sun B, Zhong H and Sticklen MB (1996a) Variation in the inheritance of expression among subclones for unselected (*uidA*) and selected (*bar*) transgenes in maize (Zea mays L.) Theor. Appl. Genet. 92:752-761

Zhang S, Zhong H and Sticklen MB (1996b) Production of multiple shoots from shoot apical meristems of oats (*Avena sativa* L.) Plant Physiol. 148: 667-671

Zhang W, Subbarao S, Addae P, Shen A, Armstrong C, Peschke V and Gilbertson L (2003) Cre/*lox* mediated marker gene excision in transgenic maize (*Zea mays* L) plants. Theor. Appl. Genet. 107: 1157-1168

Zhao JZ, Lu MG, Fan XL and Xie FZ (1998) Survival and growth of different instars of *Helicoverpa armigera* in transgenic *Bt* cotton. Acta. Entomol. Sinica. 41: 354-358

Zhao Z, Cai T, Tagliani L, Miller M, Wang N, Pang H, Rudert M, Schroeder S, Hondred D, Seltzer J and Pierce D (2000) *Agrobacterium*-mediated sorghum transformation. Plant Mol. Biol. 44: 789-798

Zhao ZY, Gu W, Cai T, Tagliani L, Hondred D, Bond D, Schroeder S,Rudert M and Pierce D (2001) High throughput genetic transformation mediated by *Agrobacterium tumefaciens* in maize. Mol. Breed. 8: 323-333

Zhong H, Srinivasan C and Sticklen MB (1996a) In vitro morphogenesis of corn (*Zea mays* L.) I. Differentiation of multiple shoot clumps and somatic embryos from shoot apices. Planta. 18: 483-497

Zhong H, Wang W and Sticklen M (1998) *In vitro* morphogenesis of *Sorghum bicolor* (L.) Moench: Efficient plant regeneration from shoot apices. J. Plant Physiol. 153: 719-726

Zhu H, Muthukrishnan S, Krishnaveni S, Wilde G, Jeoung JM and Liang GH (1998) Biolistic transformation of sorghum using a rice chitinase gene. J. Genet. Breed. 52: 243-252