

REFERENCES

- Ahmed, N., M.I. Tanki and J. Nayeema. 1999. Heterosis and combining ability studies in hot pepper (*Capsicum annuum* L.). *Applied Biological Research*, 1(1): 11-14.
- Ahmed, T.A., H. Tsujimoto and T. Sasakuma. 2001. QTL analysis of fertility-restoration against cytoplasmic male sterility in wheat. *Gene & Genetic Systems*, 76(1): 33-38.
- Akagi, H., A. Nakamura, Y. Yokozeki-Misono, A. Inagaki, H. Takahashi, K. Mori and T. Fujimura. 2004. Positional cloning of the rice Rf-1 gene, a restorer of BT-type cytoplasmic male sterility that encodes a mitochondria-targeting PPR protein. *Theoretical and Applied Genetics*, 108: 1449-1457.
- Anan, T., H. Ito, H. Matsunaga and S. Monma. 1996. A simple method for determining the degree of pungency of pepper. *Capsicum and Eggplant Newsletter*, 15: 51-54.
- Andrews, J. 1995. *Peppers: The Domesticated Capsicums*, new ed. University of Texas Press, Austin. 186 p.
- Andrews, J. 1998. *The Pepper Lady's Pocket Pepper Primer*. University of Texas Press, Austin. 190 p.
- Andrews, J. 1999. *The Pepper Trail: History and Recipes from Around the World*. University of North Texas Press, Denton, Texas. 261 p.
- Apichartsrangkoon, A. 2006. Improvement of Chili Varieties for Nam Prik Noom with Constant Pungency without Bitterness. Faculty of Agro-Industry, Chiang Mai University, Chiang Mai, Thailand. 225 p. (in Thai).
- Bailey, L.H. 1961a. *The Standard Cyclopedia of Horticulture*. 19th ed. The Macmillan Company, New York. Vol. I-A-E: pp 1-1200.
- Bailey, L.H. 1961b. *The Standard Cyclopedia of Horticulture*. 19th ed. The Macmillan Company, New York. Vol. III-P-Z: pp 2423-3639.

- Basset, M.J. 1986. Breeding Vegetable Crops. AVI Publishing Company Inc., Westport, Connecticut. 584 p.
- Belletti, P. and L. Quagliotti. 1989. Problems of seed production and storage of peppers. Tomato and pepper production in the Tropics, Asian Vegetable Research and Development Center, Taiwan, 28-41.
- Bentolila, S., A.A. Alfonso and M.R. Hanson. 2002. A pentatricopeptide repeat containing gene restores fertility to cytoplasmic male sterile plants. Proceedings of the National Academy of Sciences of the United States of America, 99: 10887-10892.
- Berke, T.G. 1999. Hybrid seed production in Capsicum. Journal of New Seeds, 1: 49-67.
- Bosland, P.W. 1992. Chiles: A diverse crop. HortTechnology, 2: 6-10.
- Bosland, P.W. 1994. Chiles: History, cultivation and uses. Pp. 347-366 in G. Charalambous, ed., Spices, Herbs and Edible Fungi. Developments in Food Science Vol. 34. Elsevier, Amsterdam.
- Bosland, P.W. 1996. Capsicums: Innovative uses of an ancient crop. Pp. 479-487 in J. Janick, ed., Progress in New Crops. ASHS Press, Arlington, Virginia, USA.
- Bosland, P.W. and E.J. Votava. 2000. Peppers: Vegetable and Spice Capsicums. Crop Production Science in Horticulture 12. CAB International Publishing, Wallingford, England, UK. 204 p.
- Briggs, F.N. and P.F. Knowles. 1967. Introduction to plant breeding. Reinhold Publishing Corporation, A subsidiary of chapman-reinhold, INC. USA. 426 p.
- Britton, G. and D. Hornero-Méndez. 1997. Carotenoids and colour in fruits and vegetables. Pp. 11-28 in F.A. Tomás-Barberán and R.J. Robins, eds., Phytochemistry of Fruits and Vegetables. Clarendon Press, Oxford, England, UK.
- Brown, G.G. 1999. Unique aspects of cytoplasmic male sterility and fertility restoration in *Brassica napus*. The American Genetic Association, 90: 351-356.

- Brown, G.G., N. Formanova, H. Jin, R. Wargachuk, C. Dendy, P. Patil, M. Laforest, J. Zhang, W.Y. Cheung and B.S. Landry. 2003. The radish Rfo restorer gene of *Ogura* cytoplasmic male sterility encodes a protein with multiple pentatricopeptide repeats. *Plant Journal*, 35: 262-272.
- Budar F., P. Touzet and R. De Paepe. 2003. The nucleo-mitochondrial conflict in cytoplasmic male sterilities revised. *Genetica*, 117: 3-16.
- Budar, F. and G. Pelletier. 2001. Male sterility in plants: occurrence, determinism, significance and use. *Life Sciences*, 324: 543-550.
- Burli, A.V., M.G. Jadhav, S.M. More and B.N. Gare. 2001. Heterosis studies in chilli, *Journal of Maharashtra Agricultural Universities*, 26(2): 208-209.
- Chahal, A, H.S. Sidhu and D.J. Wolyn. 1998. A fertile revertant from petaloid cytoplasmic male-sterile carrot has a rearranged mitochondrial genome. *Theoretical and Applied Genetics*, 97: 450-455.
- Chase, C.D. 2007. Cytoplasmic male sterility: a window to the world of plant mitochondrial-nuclear interactions. *Trends in Genetics*, 23: 81-90.
- Chen, X., W. Sorajjapinun, S. Reiwthongchum and P. Srinives. 2003. Identification of parental mungbean lines for production of hybrid varieties. *Chiang Mai University Journal*, 2(2): 97-105.
- Cui, X., R.P. Wise and P.S. Schnable. 1996. The rf2 nuclear restorer gene of male-sterile T-cytoplasm maize. *Science*, 272: 1334-1336.
- D'Arcy, W.G. and W.H. Eshbaugh. 1974. New World peppers (*Capsicum* - Solanaceae) north of Colombia: A resumé. *Baileya*, 19: 93-105.
- De Witt, D. and N. Gerlach. 1990. The whole Chile pepper book. Little, Brown, and Co., Boston.
- De Witt, D. and P.W. Bosland. 1996. Peppers of the World: An Identification Guide. Ten Speed Press, Berkeley, California. 219 p.
- Dejan C., Z. Bogoljub, P. Nenad and Đ. Radiša. 2007. Mona F₁ - new pepper (*Capsicum annuum* L.) hybrid in the centre for vegetable crops. *Plant Breeding and Seed Production*, 13(1-2): 27-31.

- Delourme, R., A. Bouchereau, N. Hubert, M. Renard and B.S. Landry. 1994. Identification of RAPD markers linked to a fertility restorer gene for the *Ogura* radish cytoplasmic male sterility of rapeseed (*Brassica napus* L.). *Theoretical and Applied Genetics*, 88: 741-748.
- Denevan, W.M. 2001. *Cultivated Landscapes of Native Amazonia and the Andes: Triumph Over the Soil*. Oxford University Press, Oxford, UK and New York, USA. 432 p.
- Desloire, S.H., W. Gherbil, S. Laloui, V. Marhadour, V. Clouet, L. Cattolico, C. Falentin, S. Giancola, M. Renard, F. Budar, I. Small, M. Caboche, R. Delourme and A. Bendahmane. 2003. Identification of the fertility restoration locus, Rfo, in radish, as a member of the pentatricopeptide-repeat protein family. *European Molecular Biology Organization Reports*, 4: 588-594.
- Ducos, E., P. Touzet and M. Boutry. 2001. The male sterile G cytoplasm of wild beet displays modified mitochondrial respiratory complexes. *The Plant Journal*, 26(2): 171-180.
- Duvick, D.N. 1959. The use of cytoplasmic male-sterility in hybrid seed production. *Economic Botany*, 13: 167-195.
- Eshbaugh, W.H. 1993. Peppers: History and exploitation of a serendipitous new crop discovery. Pp. 132-139 in J. Janick and J.E. Simon, eds., *New Crops*. John Wiley & Sons, New York.
- Eshbaugh, W.H. 1980. The taxonomy of the genus *Capsicum* (Solanaceae) - 1980. *Phytologia*, 47: 153-166.
- Eshbaugh, W.H., S.I. Guttman and M.J. McLeod. 1983. The origin and evolution of domesticated *Capsicum* species. *Journal of Ethnobiology*, 3: 49-54.
- Frankel, R. and E. Galun. 1977. *Pollination mechanisms, reproduction and plant breeding*. Springer-Verlag, Berlin, Heidelberg, New York. 281 p.
- Fulton, T.M., J. Chunwongse and S.D. Tanksley. 1995. Microprep protocol for extraction of DNA from tomato and other herbaceous plants. *Plant Molecular Biology Reporter*, 13(3): 207-209.
- Geleta, L.F. and M.T. Labuschagne. 2004. Hybrid performance for yield and other characteristics in peppers (*Capsicum annuum* L.). *Journal of Agricultural Science*, 142: 411-419.

- George, R.A.T. 1985. Vegetable Seed Production. Longman, London and New York. 318 p.
- Gill, B.S. and S.S. Gill. 1996. Hybrid seed production through nature open pollination in chili (*Capsicum annuum* L.). Plant Breeding Abstracts, 66(5): 698.
- Gonzalez, M. and P. Bosland. 1991. Strategies for stemming genetic erosion of *Capsicum* germplasm in the Americas. Diversity, 7(1&2): 52-53.
- Greenleaf, W.H. 1986. Pepper breeding. Pp. 69-127 in M.J. Bassett, ed., Breeding Vegetable Crops. AVI Publishing Co., Westport, Connecticut, USA.
- Grelon, M., F. Budar, S. Bonhomme and G. Pelletier. 1994. Ogura cytoplasmic male-sterility (CMS)-associated *orf138* is translated into a mitochondrial membrane polypeptide in male-sterile *Brassica* cybrids. Molecular and General Genetics, 243(5): 540-547.
- Gulyas, G., K. Pakozdi, J.S. Lee and Y. Hirata. 2006. Analysis of fertility restoration by using cytoplasmic male-sterile red pepper (*Capsicum annuum* L.) lines. Breeding Science, 56: 331-334.
- Hanson, M. R. 1991. Plant mitochondrial mutations and male sterility. Annual Review of Genetics, 25: 461-486.
- Hanson, M. R. and O. Folkerts. 1992. Structure and function of the higher plant mitochondrial genomes. International Review of Cytology, 141: 129-165.
- Hanson, M. R. and S. Bentolila. 2004. Interactions of mitochondrial and nuclear genes that affect male gametophyte development. The Plant Cell, 16: S154-S169.
- Havey, M.J. 2000. Diversity among male-sterility-inducing and male-fertile cytoplasms of onion. Theoretical and Applied Genetics, 101: 778-782
- Heiser Jr., C.B. 1985. How many kinds of peppers are there? Pp. 142-154 in C.B. Heiser Jr., Of Plants and People. University of Oklahoma Press, Norman and London.
- Hernández-Verdugo, S., P. Dávila Aranda and K. Oyama. 1999. Síntesis del conocimiento taxonómico, origen y domesticación del género *Capsicum*. Boletín de la Sociedad Botánica de México, 64: 65-84.

- Hernández-Verdugo, S., R. Luna-Reyes and K. Oyama. 2001. Genetic structure and differentiation of wild and domesticated populations of *Capsicum annuum* (Solanaceae) from Mexico. *Plant Systematics and Evolution*, 226: 129-142.
- Hochholdinger, F. and N. Hoecker. 2007. Towards the molecular basis of heterosis. *Trends in Plant Science*, 12(9): 428-432.
- Horn, R., R.H. Köhler and K. Zetsche. 1991. A mitochondrial 16-kDa protein is associated with cytoplasmic male sterility in sunflower. *Plant Molecular Biology*, 7: 29-36.
- Hornero-Méndez, D., J. Costa-García and M.I. Mínguez-Mosquera. 2002. Characterization of carotenoid high-producing *Capsicum annuum* cultivars selected for paprika production. *Journal of Agricultural and Food Chemistry*, 50: 5711-5716.
- Huang, Z., P. Laosuwan, T. Machikowa and Z. Chen. 2009. Combining ability for seed yield and other characters in rapeseed. *Suranaree Journal of Science and Technology*, 17(1): 39-47.
- Hundal, J.S. and R.K. Dhall. 2004. Breeding for hybrid hot pepper, *Journal of New Seeds*, 6: 31-50.
- Hunziker, A.T. 1979. South American Solanaceae: A synoptic survey. Pp. 49-85 in J.G. Hawkes, R.N. Lester and A.D. Skelding, eds., *The Biology and Taxonomy of the Solanaceae*. Linnean Society Symposium Series No. 7. Academic Press, London and New York.
- Hunziker, A.T. 2001. *Genera Solanacearum: The Genera of Solanaceae Illustrated, Arranged According to a New System*. Gantner Verlag, Ruggell, Liechtenstein. 516 p.
- Hwang, H.S. and B.S. Kim. 1998. Testing Phytophthora blight resistant line of hot pepper for nuclear genotype interacting with male sterile cytoplasm. *Plant Breeding Abstracts*, 68(5): 685.
- IPGRI, AVRDC and CATIE. 1995. *Descriptors for Capsicum (Capsicum spp.)*. International Plant Genetic Resources Institute, Rome, Italy; the Asian Vegetable Research and Development Center, Taipei, Taiwan, and the Centro Agronómico Tropical de Investigación y Enseñanza, Turrialba, Costa Rica.

- Ivanov, M. K. and G. M. Dymshits. 2007. Cytoplasmic Male Sterility and Restoration of Pollen Fertility in Higher Plants. *Russian Journal of Genetics*, 43(4): 354-368.
- Jo, Y.D., Y.M. Kim, M.N. Park, J.H. Yoo, M.K. Park, B.D. Kim and B.C. Kang. 2010. Development and evaluation of broadly applicable markers for restorer-of-fertility in pepper. *Molecular Breeding*, 25: 187-201.
- Karladee, D. 2002. Technology of plant breeding. Ming Muang Printing, Chiang Mai, Thailand. 256 p.
- Kawanishi, Y., H. Shinada, M. Matsunaga, Y. Masaki, T. Mikami and T. Kubo. 2010. A new source of cytoplasmic male sterility found in wild beet and its relationship to other CMS types. *Genome*, 53(4): 251-256.
- Kazama, T. and K. Toriyama. 2003. A pentatricopeptide repeat containing gene that promotes the processing of aberrant *atp6* RNA of cytoplasmic male-sterile rice. *Federation of European Biochemical Societies Letters*, 544: 99-102.
- Kempthorne, O. 1957. The design and analysis of experiments. Robert E. Krieger Publ. Co. Inc. New York. 631 p.
- Kim, D.H. and B.D. Kim. 2005. Development of SCAR Markers for Early Identification of Cytoplasmic Male Sterility Genotype in Chili Pepper (*Capsicum annuum* L.). *Molecules and Cells*, 20(3): 416-422.
- Kim, D.H. and B.D. Kim. 2006. The organization of mitochondrial *atp6* gene region in male fertile and CMS lines of pepper (*Capsicum annuum* L.). *Current Genetics*, 49(1): 59-67.
- Kim, D.H., J.G. Kang and B.D. Kim. 2007. Isolation and characterization of the cytoplasmic male sterility-associated *orf456* gene of chili pepper (*Capsicum annuum* L.). *Plant Molecular Biology*, 63(4): 519-532.
- Kim, D.H., J.G. Kang, S. Kim and B.D. Kim. 2001. Identification of *coxII* and *atp6* regions as associated to CMS in *Capsicum annuum* by using RFLP and long accurate PCR. *Journal of the Korean Society for Horticultural Science*, 42: 121-127.

- Kim, D.S., D.H. Kim, J.H. Yoo and B.D. Kim. 2006. Cleaved amplified polymorphic sequence and amplified fragment length polymorphism markers linked to the fertility restorer gene in chili pepper (*Capsicum annuum* L.). *Molecules and Cells*, 21: 135-140.
- Knapp, S. 2002. Tobacco to tomatoes: A phylogenetic perspective on fruit diversity in the Solanaceae. *Journal of Experimental Botany*, 53: 2001-2022.
- Koizuka, N., R. Imai, H. Fujimoto, T. Hayakawa, Y. Kimura, J. Kohno-Murase, T. Sakai, S. Kawasaki and J. Imamura. 2003. Genetic characterization of a pentatricopeptide repeat protein gene, *orf687*, that restores fertility in the cytoplasmic male-sterile Kosen radish. *Plant Journal*, 34: 407-415.
- Komori, T., S. Ohta, N. Murai, Y. Takakura and Y. Kuraya. 2004. Map-based cloning of a fertility restorer gene, *Rf-1*, in rice (*Oryza sativa* L.). *Plant Journal*, 37: 315-325.
- Krishna De, A. 2003. *Capsicum: The Genus Capsicum*. Medicinal and Aromatic Plants-Industrial Profiles Vol. 33. Taylor & Francis, London and New York. 275 p.
- Kück, U. and G. Wricke. 1995. *Advances in Plant Breeding* 18. Genetic Mechanisms for Hybrid Breeding, Blackwell Wissenschafts-Verlag.
- Lanteri, S. and B. Pickersgill. 1993. Chromosomal structural changes in *Capsicum annuum* L. and *C. chinense* Jacq. *Euphytica*, 67: 155-160.
- Laosuwan, P. 1983. Principles of plant improvement. Faculty of Natural Resources, Prince of Songkla University, Songkla, Thailand. (in Thai).
- Law-Ogbomo K.E. and J.E. Law-Ogbomo 2010. Characterization and evaluation of some cultivars of sweet pepper (*Capsicum annuum*). *Notulae Scientia Biologicae*, 2(1): 49-54.
- Lee, D.H. 2001. Studies on unstable fertility of CGMS (cytoplasmic-genic male sterility) in *Capsicum annuum* L. Dissertation, Seoul National University.
- Lee, J., J.B. Yoon and H.G. Park. 2008a. A CAPS marker associated with the partial restoration of cytoplasmic male sterility in chili pepper (*Capsicum annuum* L.). *Molecular Breeding*, 21(1): 95-104.

- Lee, J., J.B. Yoon and H.G. Park. 2008b. Linkage analysis between the partial restoration (pr) and the restorer-of-fertility (*Rf*) loci in pepper cytoplasmic male sterility. *Theoretical and Applied Genetics*, 117: 383-389.
- Legesse, G. 2000. Combining ability study for green fruit yield and its components in hot pepper (*Capsicum annuum* L.). *Acta Agronomica Hungarica*, 48(4): 373-380.
- Li, X.Q., M. Jean, B.S. Landry and G.G. Brown. 1998. Restorer genes for different forms of *Brassica* cytoplasmic male sterility map to a single nuclear locus that modifies transcripts of several mitochondrial genes. *Proceedings of the National Academy of Sciences of the United States of America*, 95: 10032-10037.
- Linke, B. and T. Börner. 2005. Mitochondrial effects on flower and pollen development. *Mitochondrion*, 5: 389-402.
- Liu, F., X. Cui, H.T. Horner, H. Weiner and P.S. Schnable. 2001. Mitochondrial aldehyde dehydrogenase activity is required for male fertility in maize. *Plant Cell*, 13: 1063-1078.
- Long-Solís, J. 1998. *Capsicum* y Cultura: La Historia del Chilli, 2nd ed. Fondo de Cultura Económica, Mexico, D.F. 203 p.
- Luo, X.D., L.F. Dai, S.B. Wang, J.N. Wolukau, M. Jahn and J.F. Chen. 2006. Male gamete development and early tapetal degeneration in cytoplasmic male-sterile pepper investigated by meiotic, anatomical and ultrastructural analyses. *Plant Breeding*, 125: 395-399.
- Mackenzie, S. and C. Chase. 1990. Fertility restoration is associated with loss of a portion of the mitochondrial genome in cytoplasmic male-sterile common bean. *Plant Cell*, 2: 905-912.
- MacNeish, R.S. 1964. Ancient Mesoamerican civilization. *Science*, 143: 531-537.
- Marin, A., F. Ferreres, F.A. Tomás Barberán and M. Gil. 2004. Characterization and quantitation of antioxidant constituents of sweet pepper (*Capsicum annuum* L.). *Journal of Agricultural and Food Chemistry*, 52: 3861-3869.
- Martin, J. and J.H. Grawford. 1951. Several type of sterility in *Capsicum frutescens*. *Journal of the American Society for Horticultural Science*. 57: 335-338.

- Melgar, S. and M.J. Havey. 2010. The dominant *Ms* allele in onion shows reduced penetrance. *Journal of the American Society for Horticultural Science*, 135(1): 49-52.
- Meshram, L.D. and A.M. Mukewar. 1986. Heterosis studies in chilli (*Capsicum annuum* L.). *Scientia Horticulturae*, 28(3): 219-225.
- Meshram, L.D. and M.N. Narkhede. 1982. Natural male sterile mutant in hot chilli (*Capsicum annuum* L.). *Euphytica*, 31: 1003-1005.
- Min, W.K., H. Lim, Y.P. Lee, S.K. Sung, B.D. Kim and S. Kim. 2008. Identification of a third haplotype of the sequence linked to the *Restorer-of-fertility* (*Rf*) gene and its implications for male-sterility phenotypes in peppers (*Capsicum annuum* L.). *Molecules and Cells*, 25(1): 20-29.
- Min, W.K., S. Kim, S.K. Sung, B.D. Kim and S. Lee. 2009. Allelic discrimination of the *Restorer-of-fertility* gene and its inheritance in peppers (*Capsicum annuum* L.). *Theoretical Applied Genetics*, 119(7): 1289-1299.
- Moneger, F., C.J. Smart and C.J. Leaver. 1994. Nuclear restoration of cytoplasmic male sterility in sunflower is associated with the tissue-specific regulation of a novel mitochondrial gene. *European Molecular Biology Organization Journal*, 13:8-17.
- Moscone, E.A., M. Baranyi, I. Ebert, J. Greilhuber, F. Ehrendorfer and A. Hunziker. 2003. Analysis of nuclear DNA content in *Capsicum* (Solanaceae) by flow cytometry and feulgen densitometry. *Annals of Botany*, 92: 21-29.
- Moscone, E.A., M.A. Scaldaferrro, M. Grabiele and N.M. Cecchini. 2007. The evolution of chili peppers (*Capsicum*-Solanaceae): a cytogenetic perspective. VI International Solanaceae Conference: Genomics Meets Biodiversity. *Acta Horticulturae*, 745: 137-170.
- Mulyantoro, S.Y. Chen, A. Wahyono and H.M. Ku. 2009. Modified complementation test of male sterility mutants in pepper (*Capsicum annuum* L.): preliminary study to convert male sterility system from GMS to CMS. *Euphytica*, 169(3): 353-361.
- Nakajima, Y., T. Yamamoto, T. Muranaka and K. Oeda. 2001. A novel *orfB*-related gene of carrot mitochondrial genomes that is associated with homeotic cytoplasmic male sterility (CMS). *Plant Molecular Biology*, 46(1): 99-107.

- Nikolova, V., V. Todorova, S. Daskalov, Y. Todorov and V. Stoeva. 2001. Pollen fertility of pepper cultivars and their hybrids on male sterility basis. *Capsicum and Eggplant Newsletter*, 20: 50-52.
- Nikolova, V., V. Todorova, Y. Stefanova and N. Tomlekova. 2010. Cytological particularities in nuclear and nuclear-cytoplasmic male sterile pepper lines. *Caryologia*, 63(3): 262-268.
- Novak, F., J. Betlach and J. Dubovsky. 1971. Cytoplasmic male sterility in sweet pepper (*Capsicum annuum* L.). I. phenotype and inheritance of male sterile character. *Zeitschrift für Pflanzenzücht*, 65: 129-140.
- Odland, M.L. and A.M. Porter. 1941. A study of natural crossing in pepper (*Capsicum annuum* L.). *Journal of the American Society for Horticultural Science*, 38: 585-588.
- Onus, A.N. and B. Pickersgill. 2004. Unilateral incompatibility in *Capsicum* (Solanaceae): Occurrence and taxonomic distribution. *Annals of Botany*, 94: 289-295.
- Osuna-García, J.A., M.W. Wall and C.A. Waddell. 1998. Endogenous levels of tocopherols and ascorbic acid during fruit ripening of New Mexican-type chile (*Capsicum annuum* L.) cultivars. *Journal of Agricultural and Food Chemistry*, 46: 5093-5096.
- Pakozdi, K., J. Taller, Z. Alföldi and Y. Hirata. 2002. Pepper (*Capsicum annuum* L.) cytoplasmic male sterility. *Journal of Central European Agriculture*, 3(2): 149-157.
- Pandey, S.K., J.P. Srivastana, B. Singh and S.D. Dutta. 2003. Combining ability for yield and component traits in chilli (*Capsicum annuum* L.). *Progressive Agriculture*, 3(1/2): 66-69.
- Patel, J.A., M.J. Patel, A.S. Bhanvadia, R.R. Acharya and M.K. Bhalala. 2001. Extent of natural cross pollination with GMS line in chilli (*Capsicum annuum* L.). *Capsicum and Eggplant Newsletter*, 20: 35-37.
- Patel, M.P., A.R. Patel, J.B. Patel and J.A. Patel. 2010. Heterosis for green fruit yield and its components in chilli (*Capsicum annuum* var. *longicum* (D.G) Sendt.) over environments. *Journal of Plant Breeding*, 1(6): 1443-1453.

- Pathak, C.S. 1997. A possible new source of male sterility in onion. *Acta horticulturae*, 433: 313-316.
- Pérez-Gálvez, A., H.D. Martin, H. Sies and W. Stahl. 2003. Incorporation of carotenoids from paprika oleoresin into human chylomicrons. *British Journal of Nutrition*, 89: 787-793.
- Pérez-Grajales, M., V.A. González-Hernández, A. Peña-Lomelí and J. Sahagún-Castellanos. 2009. Combining ability and heterosis for fruit yield and quality in manzano hot pepper (*Capsicum pubescens* R & P) landraces. *Revista Chapingo. Serie Horticultura*, 15(1): 103-109.
- Peterson, P.A. 1958. Cytoplasmically inherited male sterility in *Capsicum*. *American Naturalist*, 92: 111-119.
- Pickersgill, B. 1991. Cytogenetics and evolution of *Capsicum* L. Pp. 139-160 in T. Tsuchiya and P.K. Gupta, *Chromosome Engineering in Plants: Genetics, Breeding, Evolution*, Part B. Elsevier, Amsterdam.
- Pickersgill, B. 1997. Genetic resources and breeding of *Capsicum* spp. *Euphytica* 96: 129-133.
- Pozzobon, M.T., M.T. Schifino-Wittmann and L.B. Bianchetti. 2006. Chromosome numbers in wild and semidomesticated Brazilian *Capsicum* L. (Solanaceae) species: do $x = 12$ and $x = 13$ represent two evolutionary lines? *Biological Journal of the Linnean Society*, 151: 259-269.
- Prasad, B.C.N., K.M. Reddy and A.T. Sadashiva. 2003. Heterosis studies in chilli (*Capsicum annuum* L.). *Indian Journal of Horticulture*, 60(1): 69-74.
- Purseglove, J.W., E.G. Brown, C.I. Green and S.R.I. Robbins. 1981. *Spices*. Vol.1. Longman Inc, New York. 365p.
- Rai, S.K., M.K. Banerjee, G. Kalloo and S. Kumar. 2001. Cytological mechanisms of male sterility in a nuclear-cytoplasmic line of chilli pepper (*Capsicum annuum* L.). *Capsicum & Eggplant Newsletter*, 20: 64-67.
- Ranganna, S. 1986. *Manual of Analysis of Fruit and Vegetable Products*. Tata McGraw-Hill Publishing Company Limited, New Delhi. 634 p.

- Rathburn, H., J. Song and C. Hedgcoth. 1993. Cytoplasmic male sterility and fertility restoration in wheat are not associated with rearrangements of mitochondrial DNA in the gene regions for *cob*, *coxII*, or *coxI*. *Plant Molecular Biology*, 21(1): 195-201.
- Rattanapanone, N. and R. Rujanakraikarn. 2001. Principles of Food Analysis. Faculty of Agro-Industry, Chiang Mai University, Chiang Mai, Thailand. (in Thai).
- Raw, A. 2000. Foraging behaviour of wild bees at hot pepper flowers (*Capsicum annuum*) and its possible influence on cross pollination. *Annals of Botany* 85: 487-492.
- Rego, E.R., M.M. Rego, F.L. Finger, C.D. Cruz and V.W.D. Casali. 2009. A diallel study of yield components and fruit quality in chilli pepper (*Capsicum annuum* L.). *Euphytica*, 168: 275-287.
- Sabar, M., D. Gagliardi, J. Balk and C.J. Leaver. 2003. ORFB is a subunit of F₁F₀-ATP synthase: insight into the basis of cytoplasmic male sterility in sunflower. *European Molecular Biology Organization Reports*, 4: 1-6.
- Sadoch, Z., A. Goc, R. Wierzechowski and L. Dalke. 2003. Cytoplasmic male sterility in hybrids of sterile wild beet (*Beta vulgaris* ssp. *maritima*) and O-type fertile sugar beet (*Beta vulgaris* L.): molecular analysis of mitochondrial and nuclear genomes. *Molecular Breeding*, 11(2): 137-148.
- Sangkachantranon, O., M. Maleewong and S. Sukprakarn. 1994. Seed development and maturation of chillies. *Proceedings of the 2nd symposium on vegetable and legume research, The Tropical Research Development of Vegetable Center, Kasetsart University, Kumpangsan*. 606 p. (in Thai).
- Schnabel, P.S. and R.P. Wise. 1998. The molecular basis of cytoplasmic male sterility and fertility restoration. *Trends in Plant Science*, 3: 175-180.
- Shifriss, C. 1997. Male sterility in pepper (*Capsicum annuum* L.). *Euphytica*, 93: 83-88.
- Shrestha, S.L., B.P. Luitel and W.H. Kang. 2011. Heterosis and heterobeltiosis studies in sweet pepper (*Capsicum annuum* L.). *Horticulture, Environment, and Biotechnology*, 52(3): 278-283.

- Singh, R.K. and B.D. Chaudhary. 1979. Biometrical methods in quantitative genetic analysis. Kalyani Publishers, Ludhiana, New Delhi.
- Sneep, J. and A.J.T. Hendriksen. 1979. Plant Breeding Perspectives. Centre Agricultural Publishing and Documentation (PUDOC), Wageningen, The Netherlands. 435 p.
- Song, J. and C. Hedgcoth. 1994a. A chimeric gene (*orf256*) is expressed as protein only in cytoplasmic male-sterile lines of wheat. *Plant Molecular Biology*, 26, 535-539.
- Song, J. and C. Hedgcoth. 1994b. Influence of nuclear background on transcription of a chimeric gene (*orf256*) and *coxI* in fertile and cytoplasmic male sterile wheats. *Genome*, 37(2): 203-209.
- Sousa, J.A.D. and W.R. Maluf. 2003. Dialle analyses and estimation of genetic parameters of hot pepper (*Capsicum chinense* Jacq.). *Scientia Agricola*, 60(1): 105-113.
- Sprague, G.F. and L.A. Tatum. 1942. General vs. specific combining ability in single crosses of corn. *Journal of the American Society of Agronomy*, 34: 923-932.
- Sreekala, C. and S.P.S. Raghava. 2003. Exploitation of hetrosis for carotenoid content in African marigold (*Tagetes erecta* L.) and its correlation with esterase polymorphism. *Theoretical and Applied Genetics*, 106: 771-776.
- Steinborn, R., W. Schwabe, A. Weihe, K. Adolf, G. Melz and T. Börner. 1993. A new type of cytoplasmic male sterility in rye (*Secale cereale* L.): analysis of mitochondrial DNA. *Theoretical and Applied Genetics*, 85: 822-824.
- Stojałowski, S., M. Jaciubek and P. Masojć. 2005. Rye SCAR markers for male fertility restoration in the P cytoplasm are also applicable to marker-assisted selection in the C cytoplasm. *Journal of Applied Genetics*, 46(4): 371-373.
- Stojałowski, S.A., P. Milczarski, M. Hanek, H. Bolibok-Brągoszewska, B. Myśków, A. Kilian and M. Rakoczy-Trojanowska. 2011. DArT markers tightly linked with the *Rfc1* gene controlling restoration of male fertility in the CMS-C system in cultivated rye (*Secale cereal* L.). *Journal of Applied Genetics*, 52(3): 313-318.

- Tang, H.V., D.R. Pring, L.C. Shaw, R.A. Salazar, F.R. Muza, B. Yan and K.F. Schertz. 1996. Transcript processing internal to a mitochondrial open reading frame is correlated with fertility restoration in male-sterile sorghum. *Plant Journal*, 10: 123-133.
- Tanksley, S.D. 1984. High rates of cross-pollination in chile pepper. *HortScience*, 19: 580-582.
- Techawongstien, S. 2006. Chili: Production, Management and Improvement. Faculty of Agriculture, Khon Kaen University, Khon Kaen, Thailand. 168 p. (in Thai).
- Thul, S.T., R.K. Lal, A.K. Shasany, M.P. Darokar, A.K. Gupta, M.M. Gupta, R.K. Verma and S.P.S. Khanuja. 2009. Estimation of phenotypic divergence in a collection of *Capsicum* species for yield-related traits. *Euphytica*, 168(2): 235-247.
- Tong, N. and P.W. Bosland. 2003. Observations on interspecific compatibility and meiotic chromosome behavior of *Capsicum buforum* and *C. lanceolatum*. *Genetic Resources and Crop Evolution*, 50: 193-199.
- Toquica, S.P., F. Rodríguez, E. Martínez, M.C. Duque and J. Tohme. 2003. Molecular characterization by AFLPs of *Capsicum* germplasm from the Amazon Department in Colombia, characterization by AFLPS of *Capsicum*. *Genetic Resources and Crop Evolution*, 50: 639-647.
- Velez, A.J. 1991. El ají (*Capsicum chinense* Jacq.). Patrimonio cultural y fitogenético de las culturas amazónicas. *Colombia Amazónica*, 5: 161-185.
- Virmani, S.S., Z.X. Sun, T.M. Mou, A. Jauhar Ali and C.X. Mao. 2003. Two-line hybrid rice breeding manual. Los Baños (Philippines): International Rice Research Institute. 88 p.
- Walsh, B.M. and S.B. Hoot. 2001. Phylogenetic relationships of *Capsicum* (Solanaceae) using DNA sequences from two noncoding regions: The chloroplast *atpB-rbcL* spacer region and nuclear *waxy* introns. *International Journal of Plant Sciences*, 162: 1409-1418.
- Wang, L.H., B.X. Zhang, A.M. Daubeze, S.W. Huang, J.Z. Guo, S.L. Mao, A. Palloix and Y.C. Du. 2006. Genetics of fertility restoration in cytoplasmic male sterile pepper. *Agricultural Sciences in China*, 5(3): 188-195.

- Wang, L.H., B.X. Zhang, V. Lefebvre, S.W. Huang and A.M. Daubèze. 2004. QTL analysis of fertility restoration in cytoplasmic male sterile pepper. *Theoretical and Applied Genetics*, 109: 1058-1063.
- Whitmore, T.M. and B.L. Turner II. 2002. *Cultivated landscapes of middle America on the Eve of conquest*. Oxford University Press, New York. 338 p.
- Wisut, C. 1999. Situation of vegetable seed production in Thailand. Paper presented at “ The Training course for vegetable production extension ” held at Kaen Inn Hotel, Khon Kaen, Thailand, Mar. 22-26, 1999. Department of Agriculture Extension, Ministry of Agriculture and Cooperation. Bangkok, Thailand.
- Witham, F.H., D.F. Blaydes and R.M. Devlin. 1971. *Experiments in Plant Physiology*. Van Nostrand Reinhold Company, New York.
- Wolyn, D.J. and A. Chahal. 1998. Nuclear and cytoplasmic interactions for petaloid male-sterile accessions of wild carrot (*Daucus carota* L.). *Journal of the American Society for Horticultural Science*, 123(5): 849-853.
- Yang, C.J., B.J. Chen, J.G. Liu and S. Li. 2008. Study on the superiority of hybrid breeding by male sterility in hot pepper. *Journal of China Capsicum*, 1: 36-38.
- Yoo, I.W. 1990. The inheritance of male sterility and its utilization for breeding in pepper (*Capsicum* spp.). Doctoral Dissertation, Kyung Hee University, Suwon, Korea.
- Yoon, J.B., D.C. Yang, J.W. Do and H.G. Park. 2006. Overcoming two post-fertilization genetic barriers in interspecific hybridization between *Capsicum annuum* and *C. baccatum* for introgression of Anthracnose resistance. *Breeding Science*, 56: 31-38.
- Zewdie, Y., W. Bosland and R. Steiner. 2001. Combining ability and heterosis for capsaicinoids in *Capsicum pubescens*. *HortScience*, 36(7): 1315-1317.
- Zhang, B., S. Huang, G. Yang and J. Guo. 2000. Two RAPD markers linked to a major fertility restorer gene in pepper. *Euphytica*, 113: 155-161.
- Zou, X.X., Y.Q. Ma, R.Y. LIU, Z.Q. Zhang, W.C. Cheng, X.Z. Dai, X.F. Li and Q.C. Zhou. 2007. Combining ability analyses of net photosynthesis rate in pepper (*Capsicum annuum* L.). *Agricultural Sciences in China*, 6(2): 159-166.