

Spices Bibliography - 1998 (Part II)

COMPILED BY : P AZGAR SHERIFF

*Indian Institute of Spices Research
Calicut - 673 012, Kerala, India.*

Spices - General

- Agrawal S, Sastry E V D & Sharma R K 1998 Evaluation of seed spices entries for its value addition. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998 (p.10). Indian Society for Spices, Calicut.
- Akpomedaya D E & Ejechi B O 1998 The hurdle effect of mild heat and two tropical spice extracts on the growth of three fungi in fruit juices. *Food Research International* 31 (4) : 339-343.
- Baricevic D, Zupancic A & Bartol T 1998 The importance of propagation method for medicinal and aromatic plants. *Sjemenarstvo* 15 (3/4) : 189-194.
- Bomme U & Nast D 1998 Nutrient uptake and proper fertilizer application of medicinal and spice plants grown under field conditions. *Zeitschrift fur Arznei - & Gewirzpflanzen* 3 (2) : 82-90.
- Buckenhuskes H J 1998 Hygenic aspects of the use of spices. *Zeitschrift fur Arznei - & Gewirzpflanzen* 3 (1) : 21-30.
- De A K 1998 Futurology of spices as therapeutic agents. In: Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants: Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998 (p. 38). Indian Society for Spices, Calicut.
- Finger P, Bertram A & Bomme U 1998 Selective thermal weed control on medicinal and spice plants. *Zeitschrift fur Arznei - & Gewirzpflanzen* 3 (2) : 70-76.
- Gopalakrishnan N & Narayanan C S 1998 Detection of organochlorine pesticide residues in black pepper and clove using tolidine paper. *Journal of Spices and Aromatic Crops* 7 (1) : 23-26.
- Haider M G, Jha R N & Nath R P 1998 Studies on the nematodes of spices : Pathogenic effect of root knot and reniform nematodes alone and in combination on turmeric. *Indian Journal of Nematology* 28 (1) : 52-53.
- Kaira C L, Manan J K, Sehgal R C, Kulkarni S G & Berry S K 1998 Studies on the preparation, packaging and analysis of ground spice mixes. III. Chana

- masala and meat masala. *Journal of Food Science and Technology* 35 (5) : 408-414.
- Kinizios S E, Hiureaus G, Shortsianitis E, Sereti E, Blouhos P, Manos C, Makri O, Travira N, Drossopoulos J B & Holevas C D 1998 The effect of light on the induction, development and maturation of somatic embryos from various horticultural and ornamental species. *Acta Horticulturae* No. 461 : 427-432.
- Krishnamoorthy B, Rema J & Mathew P A 1998 Tree spices - biodiversity, conservation and utilization. In: *Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity Conservation and Utilization, Calicut, 10-12 August 1998* (p. 8). Indian Society for Spices, Calicut.
- Macia Bareo M J 1998 Allspice in Sierra Norte de Puebla (Mexico). *Anneles del Jardin Botanico de Madrid* 56 (2) : 337-349.
- Mehtani S 1998 Medicinal value of everyday spices. In : *Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity Conservation and Utilization, Calicut, 10-12 August 1998* (p. 8). Indian Society for Spices, Calicut.
- Meier U & Gebelein D 1998 Crop sensitivity of medicinal, spice and aromatic plants to different insecticides. *Zeitschrift fur Arznei- & Gewirzpflanzen* 3 (2) : 96-98.
- Muni Ram & Sushil Kumar 1998 Intercropping medicinal spice and oil seed crops with geranium for improving productivity in assured input system of a subtropical environment. *Journal of Medicinal and Aromatic Plant Sciences* 20 (4) : 1060-1066.
- Nair P K S & Suresh Kumar 1998 Species and their uses in ayurveda. In : *Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998* (p. 3). Indian Society for Spices, Calicut.
- Nirmal Babu K, Geetha S P, Minoo D, Rajalakshmi K, Manya W, Girija P, Ravindran P N & Peter K V 1998 In vitro approaches for conservation and exchange of spices germplasm. In : *Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plant : Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998* (pp. 4-5). Indian Society for Spices, Calicut.
- Pandey R N & Dange S R S 1998 Diseases of coriander and fennel - a review. *Agricultural Reviews (Karnal)* 19 (2) : 120-125.
- Pandravada S R & Sivaraj N 1998 Diversity and collection of germplasm of spices, medicinal, aromatic and dye yielding plants from Andhra Pradesh, South India. In : *Abstracts, Golden Jubilee National Symposium on Spices, Meicinal and Aromatic Plants : Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998* (p. 22). Indian Society for Spices, Calicut.
- Patel I D, Patel M M & Patel M 1998 Major seed spices and medicinal crops in Gujarat. In : *Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants: Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998* (p. 13). Indian Society for Spices, Calicut.
- Ravindran P N 1998 Biodiversity of major spices in India. In : *Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998* (p. 1). Indian Society for Spices, Calicut.
- Sadanandan A K, Kandiannan K & Hamza S 1998 Soil nutrients and water management for sustainable spices production. In : Krishnamurthy K, Kandiannan K and Korikanthimath V S (Eds.) *Water and Nutrient Management for Sustainable Production and Quality of Spices* (pp. 12-20). Indian Society for Spices, Calicut.
- Satheesan K V, Mammen G, Krishnakumar K V & Sadanandan A K 1998 Water requirement of multiple cropping system with spices. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) *Water and Nutrient Management for Sustainable Production and Quality of Spices* (pp. 123-130). Indian Society for Spices, Calicut.
- Shah A H, Al Shareef A H, Ageel A M & Qureshi S 1998 Toxicity studies in mice of common spices, *Cinnamomum zeylanicum* bark and *Piper longum* leaves. *Plant Foods for Human Nutrition* 52 (3) : 1998.
- Sheriff P A 1998 Spices bibliography - 1997 (Part II). *Journal of Spices and Aromatic Crops* 7 (2) : 159-189.
- Sivanappan R K 1998 Water management in spice crops In : Sadanandan A K, Kandiannan K and Korikanthimath V S (Eds.) *Water and Nutrient Management for Sustainable Production and Quality of Spices* (pp. 103-106). Indian Society for Spices, Calicut.
- Variyar P S, Bandyopadhyay C & Thomas P 1998 Effect of r-irradiation on the volatile oil constituents of some Indian spices. *Food Research International* 31 (2) : 99-105.
- Variyar P S, Bandyopadhyay C & Thomas P 1998 Effect of gamma - irradiation on the phenolic acids of some Indian Spices. *International Journal of Food Science and Technology* 33 (6) : 533-539.
- Velayuthan M & Bhattacharya T 1998 Soil agro climatic planning for sustainable spices production. In: Sadanandan A K, Krishnamoorthy K S, Kandiannan K and Korikanthimath V S (Eds.) *Water and Nutrient Management for Sustainable Production and Quality of Spices* (pp. 1-11). Indian Society for Spices, Calicut.
- Basil (*Ocimum basilicum*)**
- Arzone E, Alma A & Tavella L 1998 Preliminary notes on the insects of basil cultivated in Liguria. *Colture Protette* 27 (5) : 75-78.

Chowdhury A R 1998 Chemical examination of essential oil from *Ocimum basilicum* L. raised on saline alkali soil. In: Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants: Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998 (pp. 33-34). Indian Society for Spices, Calicut.

Chiocchetti A, Ghignone S, Minuto A, Gullino M L, Garibaldi A & Migheli A 1999 Identification of *Fusarium oxysporum* f. sp. *basilical* isolated from soil, basil seed and plants by RAPD analysis. Plant Disease 83 (6) : 576-582.

Vadukkoot J L & Prasannakumari K T 1998 Anatomical variations in four species of *Ocimum*. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1993 (p. 23). Indian Society for Spices, Calicut.

Zeechinelli R 1998 Varietal characterization of basil. Preliminary note. Sementi Elette 44 (5) : 11-16.

Black pepper and related species (*Piper* spp.)

Jubina P A & Girua V K 1998 Antagonistic rhizobacteria for management of *Phytophthora capsici*, the incitant of foot rot of black pepper. Journal of Mycology and Plant Pathology 28 (2) : 147-153.

Krishnamoorthy K S & Ankegowda S J 1998 Genetic variability for adaptation to moisture stress in black pepper germplasm accessions. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants: Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998 (p. 10). Indian Society for Spices, Calicut.

Krishnamurthy K S, Gowda S J A & George J K 1998 Impact of water stress on some physiological parameters in black pepper. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) Water and Nutrient Management for Sustainable Production and Quality of Spices (pp. 153-157). Indian Society for Spices, Calicut.

Kumar P R, Kaliappan R & Viswanathan R 1998 Pepper thresher. Planters' Chronicle 93 (5) : 207 - 209.

Lei LiGong & Liang HanXing 1998 Pollen morphology and its taxonomic significance of Piperaceae. Acta Botanica Yunnanica 20 (4) : 429-433.

Mathew P J, Mathew P M & Pushpangadan P 1998 Characterisation of cultivars of *Piper nigrum* and assessment of intraspecific variability. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants: Biodiversity, Conservation and Utilisation, Calicut, 10-12 August 1998 (p. 6). Indian Society for Spices, Calicut.

Matsuda A, France J D M De, Gonzalez J L & Watanabe T 1998 Root rots of black pepper caused by *Pythium splendens* in the Dominican Republic. Annals of Phytopathological Society of Japan 64 (4) : 303-306.

Nalini N, Sabitha K, Viswanathan P & Menon V P 1998 Influence of spices on the bacterial (enzyme) activity in experimental colon cancer. Journal of Ethnopharmacology 62 (1) : 15-24.

Prasad Kumar, Divakar B N, Hegde N K & Ganigara B.S 1998 Nature of damage and efficacy of insecticides against mealy bug on black pepper cuttings. Pest Management in Horticultural Ecosystems 4 (1) : 52-53.

Ravindran P N & Remashree A B 1998 Anatomy of *Piper colubrinum* Link. Journal of Spices and Aromatic Crops 7 (2) : 111-123.

Ravindran P N, Nirmal Babu K, Sasikumar B, George J K & Saji K V 1999 Genetic resources of black pepper in India and its conservation. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants: Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998 (p. 10). Indian Society for Spices, Calicut.

Krishnamurthy K S, Gowda S J A & George J K 1998 Impact of water stress on some physiological parameters in black pepper. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) Water and Nutrient Management for Sustainable Production and Quality of Spices (p. 3). Indian Society for Spices, Calicut.

Satheeshan K N, Rajagopalan A, Kumar T N J, Mammothy K P & Nair P K U 1998 Influence of irrigation levels on yield, quality and incidence of pests and diseases in black pepper. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) Water and Nutrient Management for Sustainable Production and Quality of Spices (pp. 107 - 110). Indian Society for Species, Calicut.

Veloso C A C, Muraoka T, Malavolta E & Carvalho J G De 1998 Micronutrient deficiency in black pepper. Pesquisa Agropecuaria Brasileira 33 (11) : 1883-1888.

Veloso C A C, Muraoka T, Malavolta E & Carvalho J G De 1998 Diagnosis of micronutrient deficiency in black pepper. Pesquisa Agropecuaria Brasileira 33 (11) : 1889-1896.

Caraway (*Carum carvi*)

Heine H 1998 Variety trials with biennial caraway. Zeitschrift fur Arznei - Gewirzpflanzen 3 (2) : 67-69.

Cardamom (*Elettaria cardamomum*)

Anand T, Govindaraju C, Sudharshan M R & Sreenivasulu P 1998 Epidemiology of vein-clearing disease of small cardamom. Indian Journal of Virology 14 (2) : 105-109.

Chandrappa H M, Shadakshari Y G, Umeha K & Thyagaraj N E 1998 Effect of auxenol on growth and yield of cardamom. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) Water

- and Nutrient Management for Sustainable Production and Quality of Spices (pp. 38-41). Indian Society for Spices, Calicut.
- Chakravarthy A K & Thyagaraj N E 1998 Evaluation of selected synthetic sex pheromones of the cardamom shoot and fruit borer, *Conogethes punctiferalis* Guense (Lepidoptera: Pyralidae) in Karnataka. Pest Management in Horticultural Ecosystem 4 (2) : 78-82.
- Gowda S J A & Krishnamurthy K S 1998 Effect of moisture stress on growth of cardamom. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) Water and Nutrient Management for Sustainable Production and Quality of Spices (pp. 158-160). Indian Society for Spices Calicut.
- Korikanthimath V S & Rajendra Hegde 1998 Water management in cardamom : Problems and prospects. In: Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) Water and Nutrient Management for Sustainable Production and Quality of Spices (pp. 111-122). Indian Society for Spices, Calicut.
- Korikanthimath V S & Ravindra Mulge 1998 Assessment of elite cardamom lines for dry matter distribution and harvest index. Journal of Medicinal and Aromatic Plant Sciences 20 (1) : 28-31.
- Korikanthimath V S, Venugopal M N, Rajendra Hegde & Gowda S J A 1998 Studies on multiple branching panicles in cardamom. Journal of Spices and Aromatic Crops 7 (2) : 125-127.
- Korikanthimath V S, Rajendra Hedge, Ravindra Mulge & Hosmani M M 1998 Growth and yield parameters of cardamom as influenced by nutrition and planting density. Journal of Spices and Aromatic Crops 7 (1) : 39-42.
- Korikanthimath V S, Hiremath G M & Hosmani M M 1998 Cultivation of cardamom in homesteads. Journal of Spices and Aromatic Crops 7 (1) : 1-6.
- Madhusoodanan K J, Radhakrishnan V V & Kuruvilla K 1998 Genetic resources and diversity of cardamom. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998 (p. 5). Indian Society for Spices, Calicut.
- Mathew M J, Saju K A & Venugopal M N 1998 Efficacy of entomogenous fungi on biological suppression of *Pentalonia nigronervosa* f. *caladii* Van der Goot of cardamom. Journal of Spices and Aromatic Crops 7 (1) : 43-46.
- Moorthy V K, Moorthy A K & Rao K B 1998 Effect of compost on growth of cardamom. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) Water and Nutrient Management for Sustainable Production and Quality of Spices (pp. 85-88). Indian Society for Spices, Calicut.
- Nair K P P 1998 A perspective for soil fertility and plant nutrition management of spices crops - a case study with cardamom. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) Water and Nutrient Management for Sustainable Production and Quality of Spices (pp. 21-24). Indian Society for Spices, Calicut.
- Padmini K, Venugopal M N & Korikanthimath V S 1998 Biodiversity and conservation of small caramom. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity, Conservation and Utilisation, Calicut, 10-12 August 1998 (pp. 5-6). Indian Society for Spices, Calicut.
- Rajendra Hegde & Korikanthimath V S 1998 Integrated nutrient management in cardamom. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) Water and Nutrient Management for Sustainable Production and Quality of Spices (pp. 25-32). Indian Society for Spices, Calicut.
- Ravindran K C & Kulandaivelu G 1998 Effect of light intensity on growth and yield of cardamom. Journal of Plantation Crops 26 (1) : 87-88.
- Ravindran K C & Kulandaivelu G 1998 Effect of light intensity on leaf scorching in nursery seedlings of cardamom. Journal of Spices and Aromatic Crops 7 (2) : 129-131.
- Selvakumaran S, David B V & Kumaresan D 1998 Biology of the whitefly, *Kanakarajella cardamomi* (David & Subramaniam) (Aleyrodidae: Homoptera) M. on cardamom. Pest Management in Horticultural Ecosystems 4 (2) : 89-92.
- Siddagangaiah, Krishnakumar V & Sudharshan M R 1998 Effect of different methods of planting and spacing on growth and yield of cardamom. Journal of Spices and Aromatic Crops 7 (2) : 81-84.
- Sreeramulu K R & Bagyaraj D J 1998 Response of cardamom seedlings to vesicular arbuscular mycorrhizal fungi. Journal of Spices and Aromatic Crops 7 (2) : 89-94.
- Srinivasan K, Krishnakumar V & Potty S N 1998 Micronutrient studies on small cardamom. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) Water and Nutrient Management for Sustainable Production and Quality of Spices (pp. 33-37). Indian Society for Spices, Calicut.
- Celery (*Apium graveolens*)**
- Bizak R, Gurugul E & Herman B 1998 The effect of NPK fertilization on yield and content of chlorophyll sugars and ascorbic acid in celery. Folia Horticulturae 10 (2) : 23-34.
- Chen ZhenDe, Huang JunJie, Zhai GuangHui et al. 1998 Studies on complex media for celery plug seedlings. China Vegetables No.2 : 10-13.

- Koike S T, Smith R F, Schulbach K F & Chaney W E 1998 Celery petiole lesion damage caused by insecticide. California Agriculture 52 (4) : 36-40.
- Leonardi C 1998 Dry matter yield and nitrogen content in celery under salt stress conditions. Acta Horticulturae No. 458 : 257-261.
- Park DuckHwan, Hahn Younglt & Lim Chunkeun 1998 Bacterial soft rot of celery by *Erwinia carotovora* sub sp. *carotovora*). Korean Journal of Plant Pathology 14 (4) : 361-363.
- Peng WenShan, Mai ZengShen & Yang ZhongCheng 1998 Selection of heat tolerant celery varieties. Journal of Shanghai Agricultural College 16 (1) : 32-35.
- Wang XueJun & Guo HongYung 1998 A study of the components for soilless culture of celery. China Vegetables No. 4: 40-41.
- Wiebe H J 1998 Flower formation of celeraic. 1. Vernalization and devernalization. Gartenbauwissenschaft 63 (4) : 171-177.
- Wu JinXin 1998 A review of new developments in breeding research in celery in the USA. China Vegetables No. 4 : 54-56.
- Zhang YanLing, Sun ShouRu, Wang LanZu, Qiao BaoJian & Lu XiangYang 1998 Effects of low temperature treatments on germination of celery seeds. Acta Agriculturae Universitatis Henanensis 32 (1) : 73-75.

Chillies (*Capsicum* spp.)

- Ambarus A 1998 Variability of quantitative characters pursued in conservative selection in the semi-hot pepper cultivar Zlaten Medal. Anale Institutul de Cercetari pentru Legumicultura Si Floricultura, Vidra 15 : 123-127.
- Anu A, Nirmal Babu, Babu K, Mathew P A & Peter K V 1998 Variability in paprika germplasm. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998 (p. 9). Indian Society for Spices, Calicut.
- Aranzana M J 1998 Breeding pepper for resistance to tomato spotted wilt virus (TSWV). ITEA Production Vegetal 94 (1) : 33-47.
- Arteaga De R L, Viloria De Z A & Rodriguez H 1998 Chronological response of physical variables indicative of fruit maturity of bell pepper in relation to planting structure. In : Proceedings of the Interamerican Society for Tropical Horticulture 14: 13-17. Decanato de Agronomia, Universidad Centroccidental, Lara, Venezuela.
- Astori C, Crippa L, Genevini P L, Quattirini E, Martignon G, Casarotti D, Nervo G & Falavigna A 1998 Sweet peppers in NFT : Nutritional aspects. Colture Protette 27 (10) : 65-71.
- Basak A B 1998 Studies on the location of *Colletotrichum capsici* (Syd.) Butler & Bisby in the infected chilli seeds. Seed Research 26 (1) : 101-104.

- Basavaraja P K, Shashidhara G B, Manjunathaiah H M, Ekbote S D, Jagadeesha R C & Prabhu S T 1998 Effect of copper ore tailings on chilli yield and quality. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) Water and Nutrient Management for Sustainable Production and Quality of Spices (pp. 99-102). Indian Society for Spices, Calicut.
- Basavaraja P K, Shashidhara G B, Ekbote S D & Eisha R C J 1998 Agronomic efficiency of nitrogen fertilizers and levels of potash in chilli crop yield and its quality parameters. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) Water and Nutrient Management for Sustainable Production and Quality of Spices (pp. 62-67). Indian Society for Spices, Calicut.
- Bleve - Zacheo T, Bongiovanni M, Melillo M T & Castagnone - Sereno P 1998 The pepper resistance genes Me1 and Me3 induce differential penetration rates and temporal sequences of root cell ultrastructural changes upon nematode infection. Plant Science (Limerick) 133 (1) : 79-90.
- Borowski E, Blamowski Z K & Kozlowska L 1998 Growth and physiological reactions to cold in sweet peppers exposed to paclobutrazol. Annales Universitatis Mariae Curie Skłodowska. Sectio EEE, Horticultura 6 : 129-136.
- Borosic J, Romic D, Tomic F, Zutic I & Klacic Z 1998 Soil mulching and irrigation in bell pepper growing. In : Ben - Yohoshua (Ed.) 14th International Congress on Plastics in Agriculture, Tel Aviv, Israel, March 1997 (pp. 411-420). Laser Pages Publishing, Jerusalem.
- Boukhalfa A B & Benhapid A 1998 Greenhouse study on the varietal susceptibility of vegetables to the aleyrodid *Bemisia tabaci* Gen. in the region of Biskra (South-East Algeria). Proceedings of the Symposium on Crop Protection 63 (2a) : 385-388. Institute National Agronomique, Alger, Algeria.
- Bratu E 1998 Efficiency of the predator *Coccinella septempunctata* L. (Coleoptera : Coccinellidae) released in the egg stage to reduce populations of the pest *Myzus persicae* Sultz in pepper crops. Anale Institutul de Cercetari pentru Legumicultura Si Floricultura, Vidra 15 : 215-229.
- Carvajal M & Alcaraz C F 1998 Titanium as a beneficial element for *Capsicum annuum* L. plants. Recent Research Developments in Phytochemistry 2 (1) : 83-94.
- Carvalho C G P De, Olivera V R, Casali V W D & Cruz C D 1998 Canonical correlations between primary and secondary components of fruit production in sweet pepper. Horticultura Brosileira 16 (2) : 113-118.
- Cebula S, Kalisz A & Kunicki E 1998 Canopy formation of sweet pepper plants pruned to one main shoot in greenhouse production. Folia Horticulturae 10 (2) : 35-44.

- Chen HsuChing, Klein A, Xiang Ming Hiu, Backhaus R A & Kuntz M 1998 Drought and wound induced expression in leaves of a gene encoding a chromoplast carotenoid associated protein. *Plant Journal* 14 (3) : 317-326.
- Cheng YinHua & Jiang JianZhen 1998 The effects of light intensity on photosynthetic characteristics, growth and development in pepper. *Acta Agriculturae Shanghai* 14 (3) : 46-50.
- Chemsombat P, Sae-Ung N, Attathom S, Patarapuwadol S & Siriwong P 1998 Molecular taxonomy of a new potyvirus isolated from chilli pepper in Thailand. *Archives of Virology* 143 (10) : 1855-1863.
- Choe YoungWon, Park DaeYoung & Suh Kilti 1998 Pepper cultivar identification and seed purity test by random amplified polymorphic DNAs (RAPDs) and phosphoglucomutase (PGM) isozyme. *RDA Journal of Horticultural Science* 40 (1) : 15-23.
- Clark G A, Stanley C D & Maynard D N 1998 MSWC as a soil amendment in irrigated vegetable production. *ASAE Paper No. 982172*. American Society for Agricultural Engineers, USA.
- Cohen M, Save R, Biel C & Marfa O 1998 Simultaneous measurements of water stress LVDT sensors and electro-tensiometers : Application in pepper plants grown in two types of perlites. *Acta Horticulturae* No. 421 : 193-199.
- Coss-Romero M De & Pena J E 1998 Relationship of broad mite (Acari : Tarsonemidae) to host phenology and injury levels in *Capsicum annuum*. *Florida Entomologist* 81 (4) : 515-526.
- Czarnowski M & Cebula S 1998 Spectral properties of sweet pepper fruits. *Folia Horticulturae* 10 (1) : 39-51.
- Damodaran A 1998 Coffee as a mixed crop in pepper gardens - resource management implications of transition. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) *Water and Nutrient Management for Sustainable Production and Quality of Spices* (pp. 164-169). Indian Society for Spices, Calicut.
- Damke M M & Kawarkhe V J 1998 Jayanthi (AKC 86-39) - new chilli variety. *Orissa Journal of Horticulture* 26 (1) : 91-96.
- De CossRomero M & Pena J E 1998 Relationship of broad mite (Acari : Tarsonemidae) to host phenology and injury levels in *Capsicum annuum*. *Florida Entomologist* 81 (4) : 515-526.
- Deli J, Molnar P, Matur Z, Toth G, Steck A & Pfander H 1998 Isolation of carotenoids with 3, 5, 6 - trithydroxy - 5, 6 - dihydro - β - end groups from red paprika. *Helvetica Chimica Acta* 81 (7) : 1233-1241.
- Dor G & Reuveni M 1998 Local and systemic control of powdery mildew on pepper plants by foliar spray of mono-potassium phosphate. *Crop Protection* 17 (9) : 703-711.

- Flores Velasquez J & Ibarra J L 1998 Cultivation of peppers using plastics mulch with coloured films and nutrient irrigation. *Plasticulture No. 116* : 16-26.
- Galmarini C R & LopezFrasca A 1998 Estimation of fruit length heritability as a tool for developing a new pepper cultivar. *Journal of Genetics and Breeding* 52 (1) : 17-20.
- Gomez R, Varon R & Pardo J E 1998 Color loss in paprika from variety Nu Mex conquistador peppers grown in field and greenhouse. *Journal of Food Quality* 21 (5) : 411-421.
- Goncalves C P & Oliveira A P De 1998 Production and quality of pepper cultivar. All big seeds in Paraiba State. *Agropecuaria Catarinense* 11 (3) : 52-57.
- Gutunoiu A & Ghica M 1998 New sweet pepper lines obtained at the Statiumea de Cercetare si Productie Legumicola, Bacau. *Anale Institutul de Cercetari pentru Legumicultura Si Floricultura, Vidra* 15 : 73-78.
- Heissner A 1998 CO₂ gas exchange and water uptake of sweet pepper plants under the conditions of water stress. *Gartenbauwissenschaft* 63 (4) : 177-184.
- Hellamans F 1998 Bell pepper. Bell pepper cultivars show their true colours. *Proeftuinnieuws* 8 (18) : 21-23.
- Houlne G, Meyer B & Schantz R 1998 Alteration of the expression of a plant defensin gen by exon shuffling in bell pepper. *Molecular and General Genetics* 259 (5) : 504-510.
- Hoza G, Popescu V, Neata G & Dobrescu A 1998 Research on application of some technological solutions for protecting sweet pepper transplants. *Anale Institutu de Cercetari Pentru Legumicultura Si Floricultura, Vidra* 15 : 269-278.
- Hwang JaeMoon & Chung KooMin 1998 Investigation of distribution and quality of dried red pepper in Andong market. *Journal of the Korean Society for Horticultural Science* 39 (6) : 702-706.
- Hwang JaeMoon & Chung KooMin 1998 Evolution of dried fruit quality and some characteristics of local red pepper cultivars. *Journal of the Korean Society for Horticultural Science* 39 (6) : 666-669.
- Jagadeesha R C, Prabhu S T & Basavaraja P K 1998 Variation in "Byadagi" chilli. In: *Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity, Conservation and Utilization*, Calicut, 10-12 August 1998 (Pp. 7). Indian Society for Spices, Calicut.
- Jang HonGi & Chung SoonJu 1998 Cultivar differences in dry matter production and potentially - grown fruits of sweet pepper in rockwool culture. *Journal of the Korean Society for Horticultural Science* 39 (6) : 676-679.
- Jeyalakshmi C & Seetharaman K 1998 Biological control of fruit rot and die back of chilli with plant products and antagonistic micro-organisms. *Plant Disease Research* 13 (1) : 46-48.

- Jeyalakshmi C, Durairaj P, Seetharaman K & Sivaprakasan K 1998 Biocontrol of fruit rot and die back of chilli using antagonistic micro-organisms. Indian Phytopathology 51 (2) : 180-183.
- Kawecki Z, Michalik L & Wierzbicka B 1998 Sweet pepper cultivation in a film tunnel in the climatic condition of Olsztyn. II. Characteristics and chemical composition of fruits. Acta Academiae Agriculturae ac Technicae Olstenensis Agriculturae No. 65 : 147-154.
- Kazinczi G, Kadeliesko S & Horrath J 1998 The effect of *Macrophomina phaseolina* (Tassi) Gold, and two viruses on pepper. Acta Phytopathologica et Entomologica Hungarica 33 (1/2) : 61-68.
- Kim ByungSoo & Hwang HeeSuk 1998 Testing bacterial spot resistant lines of capsicum pepper for nuclear genotype interacting with male sterile cytoplasm. Korean Journal of Plant Pathology 14 (3) : 212-216.
- Kim BungSoo, Cheung JongDo, Cha YuSun & Hwang HeeSuk 1998 Resistance to bacterial wilt of introduced peppers. Korean Journal of Plant Pathology 14 (3) : 217-219.
- Klaring H P & Cierpinska W 1998 Control of nutrient solution concentration depending on greenhouse climate in a sweet pepper crop. Acta Horticulturae No. 458: 141-146.
- Komosa A, Golcz A & Rokossowska E 1998 Application of slow and fast acting fertilizers in cultivation of pepper. Folia Universitatis Agriculturae Stetinensis, Agricultura No. 72 : 153-158.
- Korzeniewska A & Niemirowicz - Szczytt K 1998 Characteristics of two different male sterile lines of sweet pepper with emphasis on hybrid seed production ability. Folia Horticulturae 10 (1) : 15-25.
- Kosson R, Adamicki F, Horbowicz M & Dobrzanska J 1998 The effect of storage conditions on weight losses, quality and marketable value of breaker and red pepper fruit. Vegetable Crops Research Bulletin 49 : 121-129.
- Lakshmanan V & Berke T G 1998 Lack of primary seed dormancy in pepper. Capsicum and Eggplant Newsletter No. 17 : 72-75.
- Lao Arenas M T, Jimenez Mejias R, Moral Torres F M Del & Jimenez Becker S 1998 Estimation of the evolution in time of the salts of the soil solution of suction cup. Acta Horticulturae No. 458 : 147-149.
- Lee EunKyung, Kim JaeSung, Lee YoungKeun & Lee YongBok 1998 Effect of low dose γ -ray irradiation on the germination and growth in red pepper. Journal of the Korean Society for Horticultural Science 39 (6) : 670-675.
- Lee SeoungHee, Lee JuYeon & Cha JaeSoon 1998 Induction of resistance by TMV infection in *Capsicum annuum* against *Phytophthora* blight. Korean Journal of Plant Pathology 14 (4) : 319-324.

- Linden A Van Der 1998 Effect of releasing the predatory stink bug *Podisus maculiventris* (Say) against the noctuid *Chrysodeixis chalcites* (Esper) in sweet pepper. In : Sommeizer M J and Francker P J (Eds.) Proceedings of the Section Experimental and Applied Entomology of the Netherlands Entomological Society. Research Station for Floriculture and Glasshouse Vegetables, Naaldwijk, Netherlands.
- Liu JianHua, Yang YuHong, Wei Lin & Zhou YeFang (1998) Resistance to *Phytophthora* blight in hot pepper germplasm. Human Agricultural Research Newsletter 5 (4) : 9-10.
- Lozek O & Varga L 1998 Utilization of the stimulating effect of sodium humate in growing peppers. Acta Fytotechnica et Zootechnica 1 (4) : 96-98.
- Luz J M Q, Pinto J E B P, Ehlert P A D & Cerqueira E S A 1998 In vitro embryo induction in sweet pepper anthers. Horticultura Brasileira 16 (1) : 56-60.
- Mangan F, Hazzard R, Howell J, Wick R, Bonanno R, Hollingsworth C, Carter A K, Ferro D, Miller A, Bernatzky R & Herbert S 1998 Integrated management of peppers in the state of Massachusetts. Proceedings of the InterAmerican Society for Tropical Horticulture 41 : 1-6. Department of Plant and Soil Sciences, Amherst, USA.
- Margignon G, Quattrini E, Casarotti D, Astori C, Crippa L, Genevini P L, Falavigna A & Nervo G 1998 Sweet pepper in NFT: completion of nutritional studies. Culture Protette 27 (11) : 81-85.
- Matsubara S, Yamamoto M, Man Hyun J o, Murakami K 1998 Embryoid and callus formation from microspores by anther culture from July to November in pepper. Scientific Reports of the Faculty of Agriculture, Okayama University No. 87 : 117-122.
- Mehaboob - ur Rahiman, Nawab Ali, Shahid Khan & Hussain S A 1998 Irrigation frequency and planting method reduce root rot in chillies. Sharhad Journal of Agriculture 14 (6) : 549-551.
- Minami M, Toyota M, Inoue T, Nemoto K & Ujihara A 1998 Changes of capsaicinoid contents during maturing stage in chilli pepper. Journal of the Faculty of Agriculture, Shinshu University 35 (1) : 45-49.
- Mohamed M F 1998 In vitro propagation of an Egyptian land race of green pepper and breeding for tolerance to heat and drought stresses. Acta Horticulturae No. 457 : 243-253.
- Nayeema J, Ahmad N & Tanki M I 1998 Genetic variability in hot pepper. Agricultural Science Digest 18 (1) : 23-26.
- Ombodi A, Saigusa M & Shibuya K 1998 Effect of single basal application of polyolefin coated fertilizer on growth and yield of green peppers. Tohoku Journal of Agricultural Research 49 (1/2) : 33-40.
- Paschold P J & Zengerle K H 1998 Sweet pepper production in a closed system in mound culture with special consideration to irrigation scheduling. Acta Horticulturae No. 458 : 329-333.

- Portis E & Lanteri S 1998 New developments in the analysis of the molecular effect of priming treatments in vegetable seeds. *Sementi Elette* 44 (6) : 33-37.
- Prabhakar M & Hebbar S S 1998 Water management in chilli under semiarid conditions. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) *Water and Nutrient Management for Sustainable Production and Quality of Spices*. (pp. 131-135). Indian Society for Spices, Calicut.
- Pressman E, Tomer E, Cochen M, Rosenfeld K, Shaked R, Moshkovitz H & Aloni B 1998 Histological examination of low temperature or TIBA-induced swelling of pepper ovaries. *Plant Growth Regulation* 25 (3) : 171-177.
- Pressman E, Moshkovitch H, Rosenfield K, Shaked R, Gamliel B & Aloni B 1998 Influence of low night temperatures on sweet pepper flower quality and effect of repeated pollinations, with viable pollen, on fruit setting. *Journal of Horticultural Science and Biotechnology* 73 (1) : 131-136.
- Quattirini E, Martignon G, Casarotti D, Astori C, Cripa L, Genevini P L, Nervo G & Falavigna A 1998 Sweet peppers grown in NFT : Practical aspects. *Colture Protette* 27 (12) : 69-73.
- Qian ZhiLong, Sun JieBo, Ding LiPing & Yuan CaiYao 1998 The genetic effects of three male sterile F₁ lines of chilli. *Jiangsu Agricultural Sciences* No. 4 : 54-57.
- Reghin M Y & Kimoto T 1998 Dormancy, vernalization and garlic production after different chilling treatments of seed bulbs. *Horticulturae Brasileria* 16(1) : 73-79.
- Reifsneider F J B, Rebeiro C S C & Lopes C A 1998 Pepper production and breeding in Brazil, and a word on eggplants: Present situation and prospects. *Capsicum & Eggplant Newsletter* No. 17 : 13-18.
- Reuveni R R, Dor G & Reuveni M 1998 Local and systemic control of powdery mildew on pepper plants by foliar spray of mono-potassium phosphate. *Crop Protection* 17 (9) : 703-709.
- Roy A, Bordoloi D K & Paul S R 1998 Reaction of chilli genotypes to fruit rot under field conditions. *PKV Research Journal* 22 (1) : 155.
- Ruus M N A & Vermeulen P C M 1998 Simulation model for determining the effects of farm specific aspects on energy consumption in glasshouse. *Acta Horticulturae* No. 456 : 515-521.
- Sanchez J A, Lacasa A, Guthierrez L & Contreras J 1998 Comparison of sampling methods of *Frankliniella occidentalis* (Pergande) (Thys: Thripidae) and *Orius* spp. Wolff (Hemip : Anthocoridae on sweet pepper. *Boletin de Sanidad Vegetal, Plagas* 24 (1) : 183-191.
- Sasaki J & Horita H 1998 Occurrence of spotted wilt of sweet pepper caused by tomato spotted wilt tospovirus in Hokkaido, Japan. *Annual Report of the Society of Plant Protection of North Japan* No. 49 : 61-64.

- Sastre P, Costa J, Monserrat A & Zaragoza C 1998 Pre-emergence herbicides in pepper for paprika production. *Horticultura, Revista de Hortalizas, Flores, Plantas Ornamentales Y Viveros*. No. 132, p. 90-94.
- Sato K, Shinozaki T, Genda Y, Yoneyama S, Wunomura O, Kimura M, Hirabayashi T & Tojo M 1998 Root rot of sweet pepper caused by *Pythium* sp. *Proceedings of the Kanto-Tosan Plant Protection Society* No. 45 : 35-37.
- Selvaraj K V, Iqbal I M, Dawood M S, Krishnaswamy S M, Muralidharan V & Hariharan M S 1998 Irrigation management under differential moisture regime for chilli crop. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K, Korikanthimath V S (Eds.) *Water and Nutrient Management for Sustainable Production and Quality of Spices* (pp. 161-163). Indian Society for Spices, Calicut.
- Sharma G C & Bajaj B K 1998 Effect of inter cropping bell pepper with ginger on plant parasitic nematode populations and crop yield. *Annals of Applied Biology* 133 (2) : 199-207.
- Sharma S N, Goyal K C & Kakralya B L 1998. Chilli seed storage in relation to variety and container. *Seed Research* 26 (1) : 83-86.
- Shashidhara G B, Basavaraja P K, Basavarajappa R, Jagadeesha R C & Nadagouda V B 1998 Response of chilli to intercropping systems in red soils. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) *Water and Nutrient Management for Sustainable Production and Quality of Spices* (pp. 95-98). Indian Society for Spices, Calicut.
- Shashidhara G B, Basavaraja P K, Basavarajappa R, Jagadeesha R C & Nadagouda V B 1998 Effect of organic and inorganic fertilizers on growth and yield of Byadagi chilli. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) *Water and Nutrient Management for Sustainable Production and Quality of Spices* (pp. 59-61). Indian Society for Spices, Calicut.
- Shrestha R K & Ladha J K 1998 Nitrate in ground water and integration of nitrogen - catch crop in rice - sweet pepper cropping system. *Soil Science Society of America Journal* 62 (6) : 1610-1620.
- Siddiqui B A & Azad S A 1998 Induced variability of chemical mutagenesis in *Capsicum annuum* L. var. California Wonder (CW). *Advances in Plant Sciences* 11 (1) : 51-56.
- Siviero P, Bibin R & Paulos J M 1998 Physiological disorders, diseases and pests of sweet pepper. *Informatore Agrario* 54 (21) : 49-63.
- Sirsat S, Patil S J & Jagadeesha R 1998 Genetic diversity in chilli. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1988 (p. 12). Indian Society for Spices, Calicut.

- Skerget M, Knez Z, Novak Z & Bauman D 1998 Separation of paprika components using dense CO₂. *Acta Alimentaria* 27 (2) : 149-160.
- Soler S, Diez M J & Nuez F 1998 Effect of temperature regime and growth stage interaction on pattern of virus presence in TSWV resistant accessions of *Capsicum chinense*. *Plant Disease* 82 (11) : 1199-1205.
- Steenkamp J M 1998 Variety : 'Peppadew' Syn. Steenkamp Application No. 97/602. *Plant Varieties Journal* 11 (3) : 17-18.
- Sudarsono, Sari C I N & Suseno R 1998 Response of ten hot pepper lines to infection on CMV or PVY. *Capsicum and Eggplant Newsletter* No. 17 : 57-60.
- Sunil K P & Rasheed Ahmad 1998 Diversity and horticultural grouping in *Capsicum* spp. *Journal of Spices and Aromatic Crops* 7 (1) : 27-33.
- Tsuda S, Kirita M & Watanabe Y 1998 Characterization of a pepper mild mottle tobamovirus strain capable of overcoming the L-3 gene mediated resistance, distinct from the resistance - breaking Italian isolate. *Molecular Plant - Microbe Interactions* 11 (4) : 327.
- Tullio M C De, Gara L De, Paciolla C & Arrigoni O 1998 Dehydroascorbate-reducing proteins in maize are induced by the ascorbate biosynthesis inhibitor lycorine. *Plant Physiology and Biochemistry (Paris)* 36 (6) : 433-440.
- Valladares G R 1998 Three new species of *Haplopeodes* Steyskal (Dipt. Agromyzidae) from Argentina. *Entomologists' Monthly Magazine* 133 (1604-7) : 31-38.
- Verdial M F, Iwata A Y, Lima M S De & Tessarioli Neto J 1998 Influence of the floating system on conditioning of the growth of pepper seedlings. *Scientia Agricola* 55 (1) : 25-28.
- Viloria De Z A, Arteaga De R L & Rodriguez H A 1998 Effect of planting distance on the plant structure of bell pepper. *Proceedings of the InterAmerican Society for Tropical Horticulture* 41 : 7-12.
- Vos J G M & Frinking H D 1998 Pests and diseases of hot pepper in tropical low land of Java, Indonesia. *Journal of Plant Protection in the Tropics* 11 (1) : 53-71.
- Wang DeSheng 1998 Ju Zao 85-1, a sweet pepper cultivar with extremely large fruit. *Crop Genetic Resources* No. 1.
- Wierzbicka B, Kawecki Z & Michalik L 1998 Sweet pepper cultivation in film tunnel in the climatic condition of Olsztyn. I. Evaluation of cultivar yield. *Acta Academiae Agriculturae ac Technicae Olstenensis, Agriculturae*, No. 65 : 139-145.
- Yang GuiMei, Zhang BaoXi & Guo JiaZhen et al 1998 Breeding of sweet hot pepper F₁ hybrid Zhongjiao 10. *China Vegetables* No. 5 : 27-29.

- Yang YongJoon & Lee Kyunga 1998 Thiabendazole and CA effect on reduction of chilling injury during cold storage in pepper fruit. *Journal of the Korean Society for Horticultural Science* 39 (6) : 680-683.
- Yao YuanGan, Shi XueHui, Yang JianGuo, Wang ShuYing & Liu Young 1998 Study on physiological and biochemical indices of heat-tolerance of pepper leaves. *Journal of Hunan Agricultural University* 24 (2) : 119-122.
- Yegen O, Unlu A & Berger B M 1998 Use and side effects on the soil microbial activity of the essential oil from *Thymbra spicata* to control pepper blight *Phytophthora capsici* (in German). *Journal of Plant Disease and Protection* 105 (6) : 602-611.
- Zabri A W & Burrage S W 1998 The effect of vapour pressure deficit (VPD) and enrichment with CO₂ on photosynthesis, stomatal conductance, transpiration rate and water use efficiency (Wue) of sweet pepper grown by NFT. *Acta Horticulturae* No. 458 : 351-356.
- Zhao HuaLun, Liu JinBing & Sun JieBo et al. 1998 Biyu-a sweet-hot pepper F₁ hybrid produced by male sterility. *China Vegetables* No. 4 : 25-26.
- Cinnamon (*Cinnamomum* spp.)**
- Atta A H & Alkofahi A 1998 Anti-nociceptive and anti-inflammatory effects of some Jordanian medicinal plant extracts. *Journal of Ethnopharmacology* 60 (2) : 117-124.
- Pathiratna L S S & Perera M K P 1998 The effect of shade on the bark yield components of cinnamon intercropped with rubber. *Journal of Plantation Crops* 26 (1) : 70-74.
- Pathiratna L S S Nugawela A & Samarasekera R K 1998 Shade effects of photosynthesis of cinnamon. *Journal of Rubber Research Institute of Sri Lanka* 81 : 29-37.
- Rajapakse R & Ratnasekara D 1998 Studies on the distribution and control of leaf galls in cinnamon caused by *Trioza cinnamomi* Boselli in Sri Lanka. *International Journal of Tropical Agriculture* 15 (1/4) : 53-56.
- Rasonairo P & Gorce P De La 1998 Essential oils of economic value in Madagascar : Present state of knowledge. *Herbal Gram* No. 43 : 31-39, 58-59.
- Clove (*Eugenia caryophyllus*)**
- Coghlan A 1999 A clove a day keeps cancer at bay. *New Scientist* 162 (2188) : 21.
- Kim H M, Le E H, Hong S H, Song H J, Shin M K, Kim S H & Shin T Y 1998 Effect of *Syzygium aromaticum* extract on immediate hypersensitivity in rats. *Journal of Ethnopharmacology* 60 (2) : 125-131.
- Reddy D V S, Biddappa C C & Gopala Sundaram P 1998 Clove mixed cropping in coconut garden. *Indian Coconut Journal* 29 (5) : 6-8.

Coriander (*Coriandrum sativum*)

- Asfaw N & Abegaz B M 1998 The essential oils of *Coriandrum sativum* L. grown in Ethiopia. *Sinet an Ethiopian Journal of Science* 21 (2) : 279-285.
- Garbagnoli C & Irigoyen E D 1998 Detection of phytopathogenic bacteria in coriander seeds in Argentina. *Fitopatología* 33 (4) : 212-219.
- Lal H, Rathore S V S & Kumar P 1998 Influence of irrigation and mixtalol spray on yield and yield components of coriander. *Indian Journal of Soil Conservation* 26 (2) : 141-143.
- Lieha A & Rudolph K 1998 Inheritance of resistance to bacterial umbel blight of coriander caused by *Pseudomonas syringae* pv. *coriandricola*. *Gesunde Pflanzen* 50 (7) : 189-195.
- Medeiros J F De, Medeiros D S De, Porta Filho F Q & Nogueira I C C 1998 Effect of quality and amount of irrigation water on coriander cultivated in initially saline substrate. *Revista Brasileira de Engenharia Agrícola e Ambiental* 2 (1) : 22-26.
- Nehra B K, Rana S C, Narendra Singh S C, Azar Singh & Thakrai K K 1998 Seed yield and quality of coriander as influenced by varieties, spacings and fertility levels. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) Water and Nutrient Management for Sustainable Production and Quality of Spices (pp. 73-75). Indian Society for Spices, Calicut.
- Reddy S N, Latha M K & Jadhav J 1998 Trace elements and ascorbic acid in coriander of different days of harvest grown in soil fortified with different fertilizers. *Indian Journal of Nutrition and Dietetics* 35 (8) : 221-226.
- Singh U C, Singh R & Jadhav M R 1998 Incidence of *Protomyces* gall and aphid on coriander. *Flora and Fauna (Jhansi)* 2 (2) : 129-130.
- Thakrai K K, Singh G R & Bhatia A K 1998 Split application of nitrogen in coriander seed crop. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) Water and Nutrient Management for Sustainable Production and Quality of Spices (pp. 68-72). Indian Society for Spices, Calicut.
- Toncer O, Tansi S & Kizil S 1998 The effect of different sowing times on essential oil of coriander in GAP region. *Anadolu* 8 (2) : 101-105.
- Vadiraj B A, Siddagangaiah & Potty S N 1998 Response of coriander cultivars to graded levels of vermicompost. *Journal of Spices and Aromatic Crops* 7 (2) : 141-143.

Cumin (*Cumin cyminum*)

- Bhatanagar K, Kant U & Sharma B S 1998 Efficacy of Blitox - 50 and Topsin - M against cumin blight at different intervals. *Indian Phytopathology* 51 (2) : 204-205.

Fennel (*Foeniculum vulgare*)

- Magnifico V, Parente A & Tallarico R 1998 Nutritional requirements and use of fertilizers in fennel. *Informatore Agrario* 54 (31) : 41-43.
- Patel I D, Patel G M & Patel M 1998 Genetic diversity in Indian fennel. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998 (p.13). Indian Society for Spices, Calicut.
- Rapisarda A, Iauk L & Ragusa S 1998 Biometric analysis of the fruits of subspecies and varieties of *Foeniculum vulgare* Mill. *Revista Italiana Epos* No. 24 : 19-22.
- Yadav A C, Batra B R & Malik Y S 1998 Irrigation requirement of fennel. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.) Water and Nutrient Management for Sustainable Production and Quality of Spices (pp. 136-140). Indian Society for Spices, Calicut.

Fenugreek (*Trigonella foenum graecum*)

- Aneesarani M S & Vijayakumar M 1998 Evaluation of fenugreek genotypes for green types. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998 (p. 13). Indian Society for Spices, Calicut.
- Baquer N Z 1998 Glucose overutilization and underutilization in diabetes and effects of antidiabetic compounds. *Anales de la Real Academia De Farmacia* 64 (1) : 147-180.
- Berbee S & Kolodziej J B 1998 The comparison of growth and yielding of polish and Egyptian fenugreek. *Herba Polonica* 44 (4) : 386-391.
- Halesh D P, Gowda M C, Farooqi A A & Vasundhara M 1998 Response of fenugreek to nitrogen and phosphorus. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds.). Water and Nutrient Management for Sustainable Production and Quality of Spices (pp. 76-79). Indian Society for Spices, Calicut.
- Kolodziej B 1998 The effect of the time of sowing on fenugreek. *Herba Polonica* 44 (4) : 392-396.
- Lowanshi R K, Shukla R S, Dubey R K & Choubey P C 1998 Association and path coefficient analysis in fenugreek. *Advances in Plant Sciences* 11 (2) : 45-50.
- Mir Z, Mir P S, Acharya S N, Zaman M S, Taylor W G, Mears G J, Mc Allister T A & Goonewardane L A 1998 Comparison of alfalfa and fenugreek silages supplemented with barley grain on performance of growing steers. *Canadian Journal of Animal Science* 78 (3) : 343-351.
- Garlic (*Allium sativum*)**
- Abou - Hadid A F, El-Shinawy M Z & Omer E A 1998 Cultivation of garlic in

- nutrient film technique (NFT). Egyptian Journal of Horticulture 25 (3) : 271-280.
- Ali M S, Ahmad V U, Azahar L & Usmanghani K 1998 Some medicinally important plants and their uses. Hamdard Medicus 41 (2) : 96-102.
- Avato P, Miccolis V & Tursi F 1998 Agronomic evaluation and essential oil content of garlic ecotypes grown in Southern Italy. Advances in Horticultural Science 12 (4) : 201-204.
- Blank A F, Pereira R J, Souza K J De & Arrigoni Blank M De F 1998 Trial with non-vernalized garlic cultivars for highest quantitative and qualitative production in Lavras (MG) region. Ciencia & Agrotecnologia 22 (1) : 5-12.
- Bora L C & Semual J 1998 Use of medicinal plants for management of bacterial blight in rice and bacterial wilt of tomato in Assam. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity, Conservation and Utilization, Calicut 10-12th August 1998 (p. 36). Indian Society for Spices, Calicut.
- Bull L T, Forli F, Tecchio M A & Correa J C 1998 Relations between resin extractable soil phosphorus and response of vernalized garlic to phosphate fertilization of five soils, with and without organic fertilizer. Revista Brasileira de Ciencia do solo 22 (3) : 459-470.
- Cheng YuFu, Li LiangJun, Zhao Youel & Zhang Weiping 1998 Effect of plant growth regulators and cool storage on growth and development of garlic. Advances in Horticulture 2 : 602-606.
- Cho YoungCho & Jeong ByoungRyong 1998 Effect of soaking in KNO_3 or K_3PO_4 solution and sowing date of bulbils on the seed bulbs production of garlic. Korean Jurnal of Horticultural Science & Technology 16 (2) : 219-221.
- Fabian Rodriguez J, Pinzon H, Leverde H & Corchuelo G 1998 Growth and development of garlic cv. Creole Pink. Agronomia Colombiana 15 (1) : 76-81.
- Haque M S, Wada T & Hattori K 1998 Efficient plant regeneration in garlic through somatic embryogenesis from root tip explants. Plant Production Science 1 (3) : 216-222.
- Khan M R & Omoloso A D 1998 *Momordica charantia* and *Allium sativum* : Broad spectrum antibacterial activity. Korean Journal of Pharmacognosy 29 (3) : 155-158.
- Komissarov V A 1998 Fresh garlic all year round. MSKHA No. 4 : 24-26.
- Latif A & Rahman S Z 1998 Medical use of spices for skin care in Unani medicine. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998 (p. 28). Indian Society for Spices, Calicut.

- Lawson M, Kennedy R & Stopes C 1998 Evaluation of garlic oil and other chemicals for control of downey mildew in organic production of brassicas. Annals of Applied Biology 132 (Supl.) (June) : 14-16.
- Lavigne D & Audubert A 1998 Garlic cultivars : Research results. Infos (Paris) No. 146 : 48-52.
- Na SeungYong, Cho MyongRae, Kim DongSoon, Park KnownWoo, Woo ChongKyu & Kim Kitaek 1998 Survey on the pests of stored garlic. Korean Journal of Applied Entomology 37 (1) : 65-71.
- Nurzynska - Wierdak R 1998 Changes in chemical composition during garlic storage under different conditions. Annales Universitatis Mariae Curie Skłodowska. Sectio EEE, Horticultura 6 : 9-16.
- Patena L F, Rasco-Gaunt S M, Chavez - Lapitan V P, Bariring A L & Barba R C 1998 Seed production and in vitro conservation systems for garlic and shallot. Acta Horticulturae No. 461 : 503-516.
- Pevicharova G 1998 Influence of nitrogen fertilizer application and variety on the nitrate content in green garlic. Pochvoznanie, Agrokhimiya Y Ekologiya 33 (3) : 66-68.
- PradosLigero A M, GonzalezAndujar J L, Melerovara J M & BasalloteUreba M J 1998 Development of *Pieospora allii* on garlic debris infected by *Stemphylium vesicarium*. European Journal of Plant Pathology 104 (9) : 861-871.
- Qu ShuCun & Zhou Puttua 1998 The extraction of diallyl thiosulfonate and the analysis of chemical composition of garlic oil and the residue. Journal of Human Agricultural University 24 (3) : 235-240.
- Saker M M & Sawahel W A 1998 Origin of garlic explants govern their competence for plant regeneration. Bulletin of the National Research Centre (Cairo) 23 (2) : 203-211.
- Shen ShuXing, Wang ShuFang, Wang Mei & Zhang GuangRong 1998 Studies on the relation between infertility and organ development of Anguo garlic. Advances in Horticulture 2 : 598-601.
- Singh L & Srivastava K 1998 Garlic developments in India. Role of NHRDF. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998 (p. 37). Indian Society for Spices, Calicut.
- Zheng HaiRou, Shen MinJian, Zhong WeiJin, Zhang ZhiQi & Zhou Yin 1998 Induction and utilization of globular bodies on calli from garlic leaf explants study of cellular histology in morphogenesis. Acta Agriculturae Shanghai 14 (1) : 33-38.
- Zhen HaiRou 1998 Effect of garlic leaf callus irradiation with gamma ray on globular body formation. Acta Agriculturae Shanghai 14 (3) : 21-23.

Zhang Xiang, Zhu HongXun & Sun Chuntte 1998 Study on balanced fertilization and NPK nutrients absorption of garlic. Soils and Fertilizers (Beijing) No. 1 : 10-13.

Ginger (*Zingiber officinale*)

Gaikwad S H, Thorve P V & Bhole B D 1998 Economics of ginger production in Amravati District (Maharashtra, India). Journal of Spices and Aromatic Crops 7 (1) : 7-11.

Al XiZhen, Zhang ZhenXian, Cui ZhiFeng & Chen LiPing 1998 Changes of photosynthetic rate, MDA content and the activities of protective enzymes during development of ginger leaves. Acta Horticulturae Sinica 25 (3) : 294-296.

Al Xizhen, Zhang ZhenXian, Wang Shaottui (*et al.*) 1998 Effect of temperature on photosynthetic characteristics of ginger leaf. China Vegetables No. 3 : 21-3.

Behura S, Rout N C & Sahoo S 1998 A note of anthesis in zingiberaceous plants. Orissa Journal of Horticulture 26 (1) : 118-119.

Chandel B S & Chakor I S 1998 Economic evaluation of crop management research recommendation for farmers' adoption - a study on ginger cultivation in Himachal Pradesh. Indian Journal of Agricultural Economics 53 (1) : 53-60.

Das A B, Rai S & Das P 1998 Karyotype analysis and 4C DNA content in some cultivars of ginger. Cytobios 93 (374) : 175-184.

Das N & Senapati A K 1998 Chemical control of leaf spot of ginger. Annals of Plant Protection Sciences 6 (2) : 207-208.

Dhamayanthi K P M 1998 Comparative karyomorphology and DNA estimation studies in ginger cultivars. Cytologia 63 (3) : 311-315.

Gowda K K & Melanta K R 1998 Effect of nitrogen, phosphorous and potassium on ginger yield in the southern dry region of Karnataka. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds). Water and Nutrient Management for Sustainable Production and Quality of Spices (pp. 42-46). Indian Society for Spices, Calicut.

He Xianguo, Bernart M W, Lian LiZhi & Lin LongZe 1998 High-performance liquid chromatography-electrospray mass spectrometric analysis of pungent constituents of ginger. Journal of Chromatography 796 (2) : 327-334.

Him de Freitez Y & Paez De Casares J 1998 Micropropagation of ginger by organogenesis and embryogenesis. Proceedings of the Interamerican Society for Tropical Horticulture 41 : 70-76. Decanato de Agronomia, Universidad Centroccidental, Lara, Venezuela.

Hyung DongYung, Kim Kiyoung, Choi InLok, Kim SooDong & Park MoonSoo 1998 Change of stomatal behaviour and chlorophyll fluorescence to environmental

conditions in ginger. Journal of the Korean Society for Horticultural Science 39 (2) : 145-148.

Jayachandran B K & Nair G S 1998 Performance of mango ginger under different levels of shade. Journal of Spices and Aromatic Crops 7 (2) : 145-146.

Khan M L & Makhnotra A K 1998 Occurrence and distribution of plant nematodes in ginger in Himachal Pradesh. Indian Journal of Nematology 28 (1) : 87-88.

Kim ChoongHoe, Yang JongMun & Yang SungSeok 1998 Identification and pathogenicity of microorganisms associated with seed rhizome rot of ginger in underground storage caves. Korean Journal of Plant Pathology 14 (5) : 484-490.

Newman S M, Bennett K & Wu Y 1998 Performance of maize, beans and ginger as intercrops in paulownia plantations in China. Agroforestry Systems 39 (1) : 23-30.

Nirmal Babu K, Samsudeen K, Venugopal M N, Padmini K, Daniel B, Joseph D, Praveen K & Ramashree A B 1998 Enhancement of genetic variability in Zingiberaceous crops and their utilization. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants: Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998 (p. 11). Indian Society for Spices, Calicut.

Noh M S, Ha J Y, Cee C H, Lee W Y, Lee S H & Lee J J 1998 Inhibitory activities of natural products on lipopolysaccharide induced prostaglandin production in mouse macrophages. Yakhak Hoeji 42 (6) : 558-566.

Rama K & Dasgupta M K 1998 Population ecology and community structure of plant parasitic nematodes associated with ginger in West Bengal. Indian Journal of Nematology 28 (1) : 10-14.

Remashree A B, Unnikrishnan K & Ravindran P N 1998 Developmental anatomy of ginger rhizomes. II. Ontogeny of buds, roots and pholem. Phytomorphology 48 (2) : 155-156.

Sadanandan A K & Hamza S 1998 Effect of organic farming on nutrient uptake, yield and quality of ginger. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds). Water and Nutrient Management for Sustainable Production and Quality of Spices (pp. 89-94). Indian Society for Spices, Calicut.

Santos G De O & Silva E A M Da 1998 Model of rhizome vascularization in ginger. Brazilian Archives of Biology and Technology 41 (3) : 344-348.

Sasikumar B, Nirmal Babu K, Dhamayanthi K P M, Ravindran P N & Peter K V 1998 Genetic resources of ginger and its conservation in India. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants: Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998 (p. 4). Indian Society for Spices, Calicut.

- Srivastava L S, Gupta S R, Basnet C P, Mahato U P & Neopani B 1998 Microorganisms associated with ginger in Sikkim. *Journal of Hill Research* 11 (1) : 120-122.
- Stirling G R & Nikulin A 1998 Crop rotation, organic amendments and nematicides for control of root knot nematodes (*Meloidogyne incognita*) on ginger. *Australasian Plant Pathology* 27 (4) : 234-244.
- Turner I M & Cheek M R 1998 Some new eastern gingers' - a paper by H N Ridley containing descriptions of four species overlooked since their publication in 1900. *Garden's Bulletin (Singapore)* 50 (Pt. I) : 115-119.
- Vadhera I, Tiwari S P & Dave G S 1998 Integrated management of root knot nematode *Meloidogyne incognita* in ginger. *Indian Pathopathology* 51 (2) : 161-163.
- Wang ShaoHui & Zhang ZhenXian 1998 Effect of shade on growth and yield of ginger. *China Vegetables* No. 5 : 5-8.

Large cardamom (*Ammonum subulatum*)

- Srivastava L S 1998 Management of leak streak disease of large cardamom through fungitoxicants in Sikkim. *Journal of Hill Research* 11 (1) : 101-103.

Mustard (*Brassica juncea*)

- Deswal R & Sopory S K 1998 Biochemical and immunochemical characterization of *Brassica juncea* glyoxalase 1. *Phytochemistry* 49 (8) : 2245-2255.
- Dhingra K K, Kaur H, Kumar S & Singh J 1998 Agronomic management for maximizing productivity of greengram - Indian mustard. *Indian Journal of Agronomy* 43 (3) : 414-419.
- Eber F, Boucherie R, Broucqsault L M, Bouchet Y & Chivre A M 1998 Spontaneous hybridisation between vegetable crops and weeds. 1: Garden radish and wild mustard. *Agronomie* 18 (7) : 489.
- Kandalkar V S & Upadhyay S N 1998 Stability of Indian mustard varieties under delayed sowing and aphid infestation conditions. *Indian Journal of Agricultural Sciences* 69 (1) : 62-65.
- Khan N A 1998 Effect of ethrel spray on yield of mustard cultivars under non-irrigated conditions. *Annals of Applied Biology* 132 Suppl. (June) : 38-40.
- Majid A & Simpson G M 1998 Response of mustard to timing and quality of irrigation. *Bangladesh Journal of Botany* 27 (2) : 61-71.
- Premavalli K S, Madhura C V & Arya S S 1998 Storage and thermal stability of refined cottonseed oil mustard oil blend. *Journal of Food Science and Technology (Mysore)* 35 (6) : 530-533.
- Purwantara A, Salisbury P A, Burton W A & Howlett B J 1998 Reaction of *Brassica juncea* lines to Australian isolates of *Leptospaeria maculans* under

- glasshouse and field conditions. *European Journal of Plant Pathology* 104 (9) : 895-903.
- Saroop S, Thaker V S, Chanda S V & Singh Y D 1998 Light and nitrate induction of nitrate reductase in kinetin - and gibberlllic acid treated mustard cotyledons. *Acta Physiologae Plantarum* 20 (4) : 359-363.
- Smith W J, Martens M E, Gross C L, Clark O E & Cowan F M 1998 Biochemical and flow cytometric studies of the mechanism of action of sulfur mustard using human cells in culture. In : Salem H (Ed.). *Advances in Animal Alternatives for Safety and Efficacy Testing* (pp. 99-103). Taylor & Francis Co., USA.
- Tewari A N, Rathi K S, Singh S K & Singh B 1998 Weed control by herbicides in potato intercropped with Indian mustard. *Indian Journal of Agronomy* 43 (3) : 407-411.
- Werriein R J, MadrenWhalley J S, Kirby S D & Mol M A E 1998 Confocal microscopy and calcium images of keratinocytes exposed to sulfur mustard. In : Salem H (Ed.). *Advances in Animal Alternatives for Safety and Efficacy Testing* (pp. 409-417). Taylor & Francis Co., USA.
- Nutmeg (*Myristica fragrans*)**
- Ehlers D, Kirchhoff D, Gerard D & Quirin K W 1998 High-performance liquid chromatography analysis of nutmeg and mace oils produced by supercritical CO₂ extraction - comparison with steam distilled oils comparison of East Indian, West Indian and Papuan oils. *International Journal of Food Science and Technology* 33 (3) : 215-225.
- Rema J & Krishnamoorthy B 1998 Effect of packing materials and storage of scions on graft success in nutmeg. *Journal of Spices and Aromatic Crops* 7 (2) : 147-148.
- Oregano (*Origanum vulgare*)**
- Omer E A 1998 Response of wild Egyptian Oregano to nitrogen fertilization in sandy soil. *Egyptian Journal of Horticulture* 25 (3) : 295-307.
- Parsley (*Parseleneum crispum*)**
- Khadhur A H, Kawchuk L M, Taillon R C & Botar G 1998 Detection and molecular characterisation of an aster yellows phytoplasma in parsley. *Canadian Journal of Plant Pathology* 20 (1) : 55-61.
- Kretschmer M 1998 Seed characteristics : Parsley. *Gemuse (Munchen)* 234 (10) : 593.
- Paul R U, Holk A & Scherer G F E 1998 Fatty acids and lysophospholipids as potential second messengers in auxin action. Rapid activation of phospholipase A (2) activity by auxin in suspension cultured parsley and soybean cells. *Plant Journal* 16 (5) : 601-613.
- Siegrist J, Muhlenbeck S & Buchenauer H 1998 Cultured parsley cells, a model system for the rapid testing of abiotic and natural substances as inducers

of systemic acquired resistance. *Physiological and Molecular Plant Pathology* 53 (4) : 223-239.

Rosemary (*Rosmarinus officinalis*)

Guntensperger B, Hammerli Meier D E & Escher F E 1998 Rosemary extract and precooking effects on lipid oxidation in heat-sterilized meat. *Journal of Food Science* 63 (6) : 955-958.

Hori M 1998 Repellency of rosemary oil against *Myzus persicae* in a laboratory and in a screenhouse. *Journal of Chemical Ecology* 24 (9) : 1425-1432.

Moretti M D L, Peana A T, Passino G S & Solinas V 1998 Effects of soil properties on yield and composition of *Rosmarinus officinalis* essential oil. *Journal of Essential Oil Research* 10 (3) : 261-267.

Mulai M, Brigaglia N & Cani M R 1998 Clone selection from spontaneous germplasm to improve *Rosmarinus officinalis* L. crop. *Acta Horticulturae* No. 457 : 287-294.

Saffron (*Crocus sativus*)

DiazMarta G L A, Fernandez M R S, Fernandez M A S & Alonso J G 1998 Mineral composition of saffron from Spain and other countries - application to differentiation (in Spanish). *Agrochimica* 42 (3-4) : 263-273.

Ebrahizadeh A, Abrishamachi P & Saboora A 1998 Investigation on ontogenetic changes in saffron by study of soluble proteins in corn and bud tissues. *Seed and Plant* 14 (2) : 28-36.

Saito K, Miyakawa K I, Murata T & Enomoto Y 1998 Phytohormone - mediated induction of red colour in the flower florets of a cultivar of dyers saffron. *Zeitschrift fur Naturforschung. Section C. Biosciences* 53 (9/10) : 828-832.

Turmeric (*Curcuma* spp.)

Ajith Kumar N & Sankaran P G 1998 Instability in turmeric production in India. *Journal of Spices and Aromatic Crops* 7 (1) : 19-22.

Began G, Sudarshan E & Rao A G A 1998 Inhibition of lipoxygenase 1 by phosphatidyicholine micelles - bound curcumin. *Lipids* 33 (12) : 1223-1229.

Chatterjee S, Padwal Desai S R & Thomas P 1998 Effect of γ - irradiation on the colour power of turmeric and red chillies during storage. *Food Research International* 31 (9) : 625-629.

Chezhiyan N, Thangaraj T, Vijayakumar M, Mohanalakshmi M & Ramar A 1998 Evolution and selection for yield in turmeric. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998 (p. 11). Indian Society for Spices, Calicut.

Dikshit N, Dabas B S & Gautam 1998 Genetic variation in turmeric germplasm of Kandhamal District of Orissa. In : Abstracts, Golden Jubilee National

Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998 (p. 9). Indian Society for Spices, Calicut.

Gupta C R & Sengur S S 1998 Effect of varying levels of nitrogen and potassium fertilization on growth and yield of turmeric under rain fed conditions. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds). *Water and Nutrient Management for Sustainable Production and Quality of Spices*. (pp. 47-51). Indian Society for Spices, Calicut.

Kapoor A 1998 Antifungal activities of fresh juice and aqueous extracts of turmeric and ginger. *Journal of Phytological Research* 10 (1-2) : 59-62.

Krishnaswamy K & Raghuramu N 1998 Bioactive phytochemicals with emphasis on dietary practices. *Indian Journal of Medical Research* 108 : 167-181.

Mohanty D C, Patnaik A K, Senapati A K & Dash D K 1998 Ecological implication of turmeric cultivation in the Eastern Ghats of Orissa. *Environment and Ecology* 16 (2) : 468-470.

Narain P, Singh R K, Sindhwal N S & Joshie P 1998 Agroforestry for soil and water conservation in the western Himalayan Valley region of India. 1. Runoff soil and nutrient losses. *Agroforestry Systems* 39 (2) : 175-189.

Narain P, Singh R K, Sindhwal N S & Joshie P 1998 Agroforestry for soil and water conservation in the western Himalayan Valley region of India. 2. Crop and tree production. *Agroforestry Systems* 39 (2) : 191-203.

Patra S K 1998 Fertilizer management in turmeric under rainfed farming system. *Environment and Ecology* 16 (2) : 480-482.

Pereira A S & Stringheta P C 1998 Considerations on turmeric culture and processing. *Horticultura Brasileira* 16 (2) : 102-105.

Sherlija K K, Remashree A B, Unnikrishnan K & Ravindran P N 1998 Comparative rhizome anatomy of four species of *Curcuma*. *Journal of Spices and Aromatic Crops* 7 (2) : 103-109.

Velayudhan K C & Asha K I 1998 Genetic resources of turmeric and its relatives in India. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity, Conservation and Utilization, Calicut, 10-12 August., 1998 (p. 2). Indian Society for Spices, Calicut.

Venkatesha J, Khan M M & Faroogi A A 1998 Effect of major nutrients (NPK) on growth, yield and quality of turmeric cultivars. In : Sadanandan A K, Krishnamurthy K S, Kandiannan K and Korikanthimath V S (Eds). *Water and Nutrient Management for Sustainable Production and Quality of Spices* (pp. 52-58). Indian Society for Spices, Calicut.

Verma S P, Golden B R & Lin P S 1998 The inhibition of the estrogenic effects of pesticides and environmental chemicals by curcumin and isoflavonoids. *Environmental Health Perspectives* 106 (12) : 807-813.

R

Gu

H

M

M

S

I

I

Zachariah T J, Sasikumar B & Nirmal Babu K 1998 Diversity for quality components in ginger and turmeric germplasm and interaction with environment. In : Abstracts, Golden Jubilee National Symposium on Spices, Medicinal and Aromatic Plants : Biodiversity, Conservation and Utilization, Calicut, 10-12 August 1998 (p. 6). Indian Society for Spices, Calicut.

Vanilla (*Vanilla* spp.)

Gehrig H, Faist K & Kluge M 1998 Identification of phosphoenolpyruvate carboxylase isoforms in leaf, stem and roots of the obligate CAM plant *Vanilla planifolia* Salib.: A physiological and molecular approach. Plant Molecular Biology 38 (6) : 1215-1225.

INDIAN INSTITUTE OF SPICES RESEARCH
CALICUT - 673 012

Accession No: B 2987
Date 29/12/06