

## **BIBLIOGRAPHY**

---

- Abdel, R.S., Belal, M.H. and Gupta, G. (1991) : Photosynthesis inhibition of soybean leaves by insecticides. J. Environmental pollution. 74(3) : 245-250.
- Agrawal, P.K. and Soam, S.K. (1988) : Effect of thiodon 35 E.C. on germination and growth of pea. Pesticides, 22(3) : 15-16.
- Akao, S. (1991) : Nitrogen fixation and metabolism in soyben plants. JARQ, 25 : 83-87.
- Alacevic, M. (1980) : Progress in environmental mutagenesis. Elsevier North- Holland biomedical press New York.
- Arnon, D.I (1949) : Copper enzymes in isolated chloroplstsasts. Polyphenol oxidase in Beta vulgaris. Plant physiol. 24 : 1-15.
- Attri, B.S. and Rattan, L. (1974) : Residues and residual toxicity of ethyl and methyl parathion on cabbage. Indian J. Entomol., 34 : 335-346.
- Backman, P.A. and J.J. Jacobsen (1992) : Soybean disease management : Chemical and biological control in temperate regions. In: Pest Management in Soybean (Eds. L.G.Copping, M.b.Green & R.T.Rees) Pb. Elsevier Applied Science. pp. 155-163.
- Beevers, L.D. and Hageman, R.H. (1969) : Nitrate reduction in higher plants. Annu. Rev. Plant Physiol., 20 : 495-522.
- Beevers, L.D.; Peterson, D.M.; Shannon, J.C. and Hageman, R.H. (1963) : Comparative effects of 2,4-D on nitrate metabolism in corn and cucumbers. Plant Physiol., 38 : 675-679.
- Bernard, R.F. (1963) : Studies on the effects of DDT on birds. Biol. Ser., 2 : 155-162.
- Bhatnagar, S.P. and S.P. Tiwari (1995) : Technology for increasing soybean production in India. Pb. NRC for Soybean, ICAR, Indore.

Bishop.N.J. (1966) : Partial reactions of photosynthesis and photoreduction  
Ann. Rev. Plant Physiol. (17) : 185-208.

Block, R.J.E.; C. Durrum and G. Zweig (1955) : A manual of paper chromatography, Academic Press Publ.

Brown, A.W.A. (1962-63) : Effects of insecticides on wild life :  
Conservationist, 17 : 8-11.

Bullock, D.G. (1990) ; Grain yield, Seed weight, seed N concentration and nodule activity of soybean as influenced by defoliation and N fertilizer. Journal of Plant Nutrition. 13(7) : 887-902.

Camhffri, P.; Bowyer, J.R. and Mcneh, P.H. (1987) : Herbicides affecting chloroplast functions. Schrift fiir Naturforschung Biosciences, 42(6) : 829-833.

Carson, R. (1962) : Silent Sprint, Hamish Hamilton, London.

Chakraborty, S.K., Jana, B.K. and D.C. Khatua (1985) : Effect of fungicides on rhizobia, nodulation and seeding pathogen of legumes.  
Pesticides : 74-76.

Chen, H.M.; Muramoto, K. and Yamuchi, F. (1995) : Structural analysis of antioxidative peptides from soybean beta-conglycinin. Journal of agricultural and food chemistry. 45(3) : 574-578.

Chen, Yi; Luan-Xiaoyan and Huang-Chengyun (1993) : Analysis of peroxidase and esterase isoenzyme in soybean varities with the different level of resistance to viruses and their F<sub>1</sub> generation : Soybean Science (China) 12(1) : 30-36.

Chou, C.H. and Muller C.H. (1972) : Allelopathic mechanism of Arctostaphylos glandulosa var. Zazaerisis. Am. Mid. Nat., 88 : 324-347.

- Chung, K.W. and Ju J.I. (1993) : Effect of fungicide benoram seed treatment on germination growth, and yield in summer type soybean : Korean J. of Crop Science, 38(2) : 166-173.
- Cooley, W.E. and C.L. Foy (1992) : Effect of SC-0224 and Glyphosate on free amino acids, soluble protein, and Protein synthesis in inflated Duckweed (Lemna gibba) : Weed Sci. 40(3) : 345-350.
- Copping, L.G.; Green, M.B. and Rees, R.T. (1992) : Pest management in soybean. Pb. Elsevier Applied Science, London.
- Cottom, C. (1965) : The ecologist's role on problems of pesticide pollution. Bioscience, 15 : 457-463.
- Crafts-brander, S.J. (1992) : Phosphorus nutrition influence on starch and sucrose accumulation, and activities of ADP-glucose pyrophosphorylase and sucrose-phosphate synthetase during the grain filling period in soybean. Plant Physiol. 93(3) : 1133-1138.
- Dalton, D.A. (1992) : Effect of paraquat on the oxygen free radical biology of soybean root nodules. Bull. Environ. Cont. Toxicology, 48(5) : 721-726.
- Das, V.S.R. (1977) ; Proc. Symp. on basic sciences and Agric., Indian Natl. Sci. Acad. 160. C.F. Das V.S.R. and Raghavendra A.S. (1982). Stomata ; The physiology and biochemistry of their regulation in leaves. Curr. Sci., 51(12) : 586-593.
- Das and Raghavendra, A.S. (1979) : Outlook Agric. 10:92, C.F. Das V.S.R. and Raghavendra, A.S. (1982). Stomata ; The physiology and biochemistry of their regulation in leaves. Curr. Sci., 51(12) : 586-593.
- Das, V.S.R. and Santakumari, M. (1975) : Proc. Indian Acad. Sci. : B82 : 108  
C.F.Das V.S.R. and Raghavendra A.S. (1982). Stomata ; The physiology and biochemistry of their regulation in leaves. Curr. Sci., 51(12) : 586-593.

- Deng, R.F. (1990) : Effect of Mo, W and Cr on nitrogen fixation of soybean nodules and activity of nitrate reductase. Plant Physiol. Comm., 1 : 37-39.
- Deshpande, A.A. and Swamy, G.S. (1987) : Induction of proline accumulation by methylparathion in sorghum (Sorghum bicolor). Curr. Sci., 56(20) : 1068-1070.
- Devlin, R.M. and F.H. Withman (1986) : Pigment and structure of photosynthetic apparatus. In : Plant Physiology. Pb. CBS Publishers and Distributors, Delhi, India, pp. 222-242.
- Djekoun, A.; Planchon, C. (1992) : Stomatal conductance, Photosynthesis and acetylene reduction rate in soybean. : Canadian Jour of Plant Sci., 72(2) : 383-390.
- Douglas, D.R.; Walter, J.R. and David, R.J. (1978) : Nodule nitrate reductase as a source of reduced nitrogen in soybean, Glycine max. Physiol. Plant., 44 : 325-328.
- Durand, M. and Lacan, D. (1994) : Sodium partitioning within the shoot of soybean. Physiol. Plantarum. 91 : 65-71.
- Ebel, J.; Casio, E.G.; Frey, T. and Mord, A. (1990) : Stimulation of the phytoalexin defense response in soybean by a fungal pathogen and fungal glucan. 15. Journees internationales groupe polyphenols. Strasbourg (France) 9-11.
- Edens, R.M.; Anand, S.C. and Bolla, R.I. (1995) : Enzymes of the phenyl-propanoid pathway in soybean infected with Meloidogyne incognita or Heterodera glycines : Journal of nematology. 27(3) : 292-303.
- Elder, T.C. and Kenworthy, W.J. (1995) : Physiological responses of an insect-resistant soybean line to light and nutrient stress. Journal of economic entomology, BB(2), 430-436.

- EL Sheekh; Kotkat, H.M. and Hammouda, O.H.E. (1994) : Effect of atrazine herbicide on growth, photosynthesis, protein synthesis and fatty acid composition in the unicellular green alga (Chlorella Kessleri) : Ecotoxicology and Environmental Safety, 29(3) : 349-358.
- Estabrook, E.M.; Sengupta-Gopalan, C. (1991) : Differential expression of phenylalanine ammonia-lyase and chalcone synthase during soybean nodule development. : The Plant Cell (USA), 3(3) 299-308.
- Finlayson, D.G. and MacCarthy, H.R. (1973) : Pesticide residue in plants. In : Environmental pollution by Pesticides (Ed.) C.A. Edwards, Plenum Press, New York, 57-86.
- Folin, O. and Denis, W. (1915) : A colorimetric method for the determination of phenols (and phenol derivatives) in urine. J. Biol. Chem., 22 : 305-308.
- Funderburk, J., Marunaik, J.; Boucias, D. and Garcia-Canedo, A. (1992) : Efficacy of Baculoviruses and their impaction pest management programs. In. Pest Management in Soybean (Eds. L.G. Copping, M.B. Green and R.T. Rees), Pb. Elsevier Applied Science, London, pp. 88-97.
- Gianfagna, T.J.; Lawton, M.A. (1995) : Specific activation of soybean defense gene by the phosphoprotein phosphatase inhibitor okadaic acid. Plant Science (Limerick) 109(2) : 165-170.
- Goring, C.A.I. and Laskowski, D.A. (1982) : The effect of pesticides on nitrogen transformations in soils. Agronomy, 22 : 689-720.
- Grahm, M.Y.; Graham, T.L. (1991) : Rapid accumulation of anionic peroxidases and phenolic polymers in soybean cotyledon tissues following treatment with Phytophthora megasperma f. sp. Glycinea wall glucan. : Plant Physiology (USA) 97(4) : 1445-1455.

- Grant, W.F. (1970) : Pesticides and heredity. Mac Donald J., 31 : 211-214.
- Grant, W.F. (1971) : The case of mutagenic testing of chemical pollutants. Can. Field Nat., 85 : 203-204.
- Green, M.D.; Hartley, G.S. and West, T.F. (1987) : Chemicals for crop improvement and pest management. 3rd Ed., Pergamon Press, Oxford. C.F. Lydon J. and Duke S.O. (1989) : Pesticide effects on secondary metabolism of higher plants. Pestic. Sci., 25 : 36 -37.
- Griffin, J.L.; Habetz, R.J. and Regan, R.P. (1989) : Soybean tolerance to herbicide : Loussiana Agri 32 (2) : 6-7.
- Gupta, R.C. and Beg, M.U. (1987) : Influence of endosulfan spray on mineral status in mungbean plants and pods. Pestology, XI (5) : 11-17.
- Gupta, R.C., Beg, M.U. and Chandel, P.S. (1983) : Effect of endosulfon on the seed germination and seedling growth of Vigna radiata (Linn). Willezeck and Triticum vulgare (Linn.), Pestology, 7(3) : 25-28.
- Gurrero, M.G.; Vega, J.M. and Losada, M. (1981) ; The assimilatory nitrate reducing system and its regulation. Ann. Rev. Plant Physiol., 32 169-204.
- Hawk, P.B.; Oser, B.L. and Summerson, W.H. (1948) ; Practical physiological chemistry. Publ. The Blackiston Company, U.S.A.
- Heckmann, M.O.; Drevon, J.J.; Saglio, P. and Salsac, L. (1989) : Effect of oxygen and malate on NO<sub>3</sub> - inhibition of nitrogenase in soybean nodules : Plant Physiol. (USA) 90(1) :224-229.
- Hoagland, R.E. (1985) : Influence of glyphosate on nitrate reductase activity in Soybean (Glycine max). Plant and Cell Physiol., 26(3) : 565-570.
- Homeyer, U.; Schulze, D. and Schultz, G. (1985) : On the specificity of the herbicide chlorsulfuron in intact spinach chloroplasts. Z. Naturforsch., C :Biosci., 40 c (11-12) : 917-918.

Hussey, N.W. and Scopes, N. (1985) : Biological pest control, Balnford Press, Poole, Dorset : 8-10.

Ismunadji, M.; Manshuri, A.G. (1989) : Soybean chlorosis caused by deficiency of potash. Better Crops International, 5(1) : 8-10.

Ito, M.F.; Mascarenhas, H.A.A.; Tanka, M.A.S.; Dudinas, C.; Tanka, R.T.; Gallo, P.B. and Miranda, M.A.C. (1994) : Residual effects of potassium and liming on the incidence of Phomopsis spp. in soybean seeds. Rev. Plant Pathol., 73 (12) :

Janardhanan, K. (1992) : Triacontanol promoted seed germination, seedling growth and chloroplast pigment content in leguminous crops. Advances in Plant Sciences. 5 (Special Issue) : 290-295.

Jarvis, P.G. (1971) : The estimation of resistance of carbondioxide transfer. In : Plant photosynthetic production. Manual of methods. (Eds.) Z. sestak, J. Catsky and P.G. Jarvis, Dr. W.Junk Pb. The Hague : 566-631.

Jaworski, E.G. (1972) : The mode of action of N-Phosphonomethyl-glycine : inhibition of aromatic amino acid biosynthesis. J. Agri. Food. Chem., 20 : 1195-1198.

Jensen, A. (1978). In : Hand book of Physiological Methods - Chlorophylls and carotenoids. Pb. Cambridge Univ. Press, London, 56-70.

Kandpal, B.M. and Chandel, A.S. (1993) : Effect of gypsum pyrite as a source of sulphur on nitrogen fixation, dry matter yield and quality of soybean. Indian J. Agronomy, 38(1) : 137-139.

Karadge, B.A. and Karne, A.V. (1985) : Influence of systemic fungicides bavistin and calixin on L. esculentum Mill. Leaves. Biovigyanum 11(2) : 166-168.

- Kaur, P. and Grover, I.S. (1985) : Cytological effects of some organo-phosphorus pesticides II. Meiotic effects, Cytologia, 50 : 199-211.
- Kawale, B.R.; Kurundkar, B.P.; Thombre, P.A. (1989) : Effect of fungicide, insecticide, weedicide on emergence and yield of soybean [Glycine max (L) Merrill] : Oil seeds research, 6(2) : 357-359.
- Khan, A. (1988) : Zinc in soybeans. Chemical nature and bioavailability. Dissertation abstracts International B Sciences and Engineering, 50(5) : 1623-1624.
- Khare, N.M. (1976) : Diseases of important pulse crop and their possible control. Proc. Plant Prot. Workshop, 70-94.
- Kinloch, R. (1992) : Management of root knot nematodes in soybean. In : Pest Management in Soybean (Eds. L.J. Coping, M.B. Green and R.T. Rees). Pb. Elsevier Applied Science, London, pp.147-154.
- Klepper, L.A. (1975) : Inhibition nitrite reduction by photosynthetic inhibitors. Weed. Sci., 23 : 188-190.
- Klepper, L.A. (1988) : Synergistic levels of Nox emissions from soybean leaves caused by a combination of salicylic acid and photosynthetic inhibitor herbicides. Pestic Biochem. Physiol., 32 : 173-179.
- Klepper, L.A.; Flesher, D. and Hageman, R-H. (1971) : Generation of reduced nicotinamide adenine dinucleotide for nitrate reduction in green leaves. Plant Physiol., 48 : 580-590.
- Krishnamurty, P. and Rao, D. (1980) : Effect of sumithion on leaf variations in Phaseolus vulgaris L. Geobios 7(1) : 35-36.

Kulkarni K.K. (1989) : Physiological effects of pesticides and residue analysis in some vegetables. M.Phil. Dissertation approved by Shivaji University, Kolhapur.

Lee, Y.S.; Jin, Y.M. and Im, J.N. (1989) : Effect of photosynthetically active radiation and leaf water potential on stomatal diffusive resistance of soybeans under field conditions. : Research reports of the rural development administration soil and fertilizer. 31(3) : 22-26.

Li, Y.C. and Gupta, G. (1993) : Photosynthetic changes in soybean with and without nitrogen and increased CO<sub>2</sub>. Plant Science, 89(1) : 1-4.

Lydon, J. and Duke, S.O. (1989) : Pesticide effects on secondary metabolism of higher plants. Pestic. Sci., 25 : 361-373.

Mann, S.K. (1977) : Cytological and genetical effects of dithane fungicide on A. Cepa. Environ. and Expt. Bot. 17(1) : 7-12.

Mengel, K. and Krikby, E.A. (1982) : Principles of plant nutrition. Published by International Potash, Bern, Switzerland.

Misra, S.G. and Gupta, A.K. (1985) : Effect of organophosphorus insecticides on nitrogen metabolism during germination of Mung and cowpea. Pesticides. 19(10) : 31-33.

Mitidieri A. (1992) : Soybean Weed problems in Argentina and their control. In: pest Management in Soybean (Eds. L.G. Coping, M.B. Green and R.T. Rees) Pb. Elsevier Applied Science, London. pp. 272-281.

Mohandas, S.; Wallace, W. and Nicholas, D.J.D. (1978) : Effect of atrazine on the assimilation of inorganic nitrogen in cereals. Photochemistry, 17 : 1021-1028.

Morton H.V. (1992) : Fungicides as part of an Integrated System in the Management of Soybean Diseases. In : Pest Management in

Soybean (Eds. L.G. Coping, M.B. Green & R.T. Rees) Pb. Elsevier Applied Science, London, pp. 232-241.

Mymford, F.E.; Stark, H.M. and Smith, D.H. (1962) : A naturally occurring cofactor for IAA oxidase. Plant Physiol. (37). XIV.

Nandihalli, U.B. and Bhowmik, P.C. (1992) : Photosynthetica; 26(3) : 355-362.

Narayanan, A.; Raman, E.V. and Reddy, G.L. (1993) : Iron deficiency symptom of food legumes in relation to manganese accumulation. Plant Physiol. and Biochem., 19(2) : 85-87.

Neyra, C.A. and Hageman, R.H. (1976) : Relationship between carbon dioxide, malate and nitrate accumulation and reduction in corn (Zea mays L.) seedlings. Plant Physiol. 58 : 726-730.

Noguchi, K. (1992) : Upland Weeds and their management in soybean in Japan. In: Pest Management in Soybean (Eds. L.G. Coping, M.B. Green & R.T. Rees). Pb. Elsevier Applied Science London, pp. 299-307.

Oya, K.L.; Sanosh, J.B.D.; Dos, and Teixeira, N.T. (1994) : Influence of systemic insecticides on the contents of nitrogen, phosphorus and potassium in the aerial parts of tomato plants. (Lycopersicum esculentum) Horticulture Abstract, 64(6) Ecossistema (1991) 16 104-110.

Ozair, C.A.; Moshier, I.J. (1988) : Effect of soil incorporated trifluralin and selected herbicide on growth, nodulation and  $N_2$  fixation of soybean. Pakistan journal of Agricultural Research, 9(3) : 316-320.

Ozair, C.A.; Moshier, L.J. and Chaudhary, A.H. (1992) : Greenhouse evaluation of selected herbicide for their effect on soybean growth, nodulation and nitrogenase activity. Soybean Abstract, 15 : 15.

- Palawa, S.K. and Jaiprakash (1992) : Effect of some herbicides on the growth, Nodulation and nitrogen fixation in chickpea (Cicer arietinum L.) : Ind. J. Plant Physiol., XXXV (3), 207-212.
- Pardeshi, V.F.; Reddy, V.G. and Nalwandikar, P.K. (1989) : Effect of different fungicides on seedling vigour and seed viability in soybean. Journal of Maharashtra Agriculture Universities, 14(1) : 33-36.
- Parrott, W.L.; McCarty, J.C. Jr.; Lane, H.C.; Jenkins, J.N. and Hedin, P.A. (1983) : South Western Entomologist, 8 : 94-97. C.F. Lydon, J. and Duke, S.O. (1989) : Pesticide effects on secondary metabolism of higher plants. Pestic Sci., 25 : 36-373.
- Pathak, B.K. and Mukherji, S. (1986) : Sevin induced stimulation of growth and metabolism of mung-bean Vigna radiata Seedlings. Curr. Sci., 55 (7) : 866-867.
- Patil, N.A. (1995) : Physiological studies on drought tolerance in legume crop Arachis hypogea. Ph.D. Thesis approved by Shivaji University, Kolhapur.
- Patil, T.M. and Kulkarni, K.K. (1989) : Stomatal response to organophosphorus pesticide spray in Lycopersicon esculentum Mill. Geobios, 16 : 82-85.
- Patil, T.M.; Shirashyad, V.S. (1989) : Effect of methylparathion and phosphamidon on seed germination and on the activity of peroxidase and  $\alpha$ -amylase in some vegetable seeds. Geobios, 16 : 57-60.
- Patil, T.M.; Kore, B.A. and Hegde, B.A. (1991) : Influence of foliar application of bipyridylum herbicides on stomatal regulation, carbon assimilation and carboxylating enzymes in the leaves of a noxious weed Parthenium hysterophorus L. Biol. Ind. 2 (1&2) : 45-50.
- Patil, V. (1995) : Kharif soybean cultivation. Shetkari (June-95): 29-34.

- Paul, P.K.; Varshney,V. and P.D. Sharma (1995) : Monocrotophos induced changes in amino acid and nonsaccharide contents of tobacco leaves. Indian Journal of Experimental Biology, 33 : 449-455.
- Pedigo, L.P.(1992) : Integrating preventive and therapeutic tactics in soybean insect management. In : Pest Management in Soybean (Eds. L.G. Coping, M.B. Green and R.T. REES). Pb. Elsevier Applied Science, London, pp. 10-19.
- Pfthgrfw, W.G.; Hesrfth, J.D. and Pfters, D.B. (1990) : CO<sub>2</sub> saturated photosynthesis as affected by phosphate stress. Photosynthetica, 24(2) : 209-216.
- Pitelli, R.A. (1992) : Weed-Soybean Interference Studies in Brazil. In: Pest Management in Soybean (Eds. L.G. Coping, M.B. Green & R.T. Rees) Pb. Elsevier Applied Science London, pp. 282-290.
- Pozuelo, J.M.; Fernandez-Pascual, M.; Lucas, M.M. and De Felipe, M.R. (1989) : Effect of eight herbicides from five different chemical groups on nitrogen fixation and grain yield in Lupinus albus L. grown in semi-arid zones. Weed Res., 29 : 419-425.
- Prapharsi, Mori. S. and Chino, M. (1992) ; Excess Copper Induces a cytosolic Cu, Zn-Superoxide Dismutase in soybean roots. Plant Cell Physiol. 33(3) : 239-244.
- Prasad, B.N. and Mathur, S.N. (1983) : Effects of metasystox and Cuman-L on seed germination, reducing sugar content and amylase activity in Vigna munyo (L.) Hopper. Indian J. Plant Physiol., 26(2) : 209-213.
- Price, C.A.; Clark, H.E. Funkhouser, H.E. (1972) : Functions of micronutrients in plants. In : Micronutrients in agriculture. Soil Sci. Soc. of America, Madison/Wisconsin : 731-742.

- Purkayastha, R.P.; Ghosh, S. (1992) : Heavy metal salt inducing disease resistance and altering specific antigen of soybean leaves : International Journal of tropical Plant Diseases. 10(1) : 131-142.
- Rajukkannu, K.; Raju, R.R.; Asaf, A.K. and Krishnamurthy, K.K. (1976) : Residues of Endrin, Parathion, Carbaryl and Endosulfan in Vegetables. Pesticides, 10 : 19-20.
- Rao, I.M.; Swamy, P.M. and Das, V.S.R. (1977) : The reversal of scotoactive stomatal behaviour in some woody weeds by paraquat and 2,4,5-T. Weed Sci., 25 : 469-472.
- Reddy, J.K. and Vidyavati (1983) : Effect of fungicide on the growth and seedling metabolism of Dolichos biflorus L. Geobios, 10(4) : 174-178.
- Reddy, N.V. and Rao, K.R. (1985) : Accumulation of nitrite as influenced by fluchloralin and benthiocarb in two tropical weed species. Proc. Indian Acad. Sic. (Plant Sciences), 94(1) : 41-44.
- Reddy, T.M.; Gupta, A.K. and Varshney M.L. (1986) : The effect of pesticides on plant growth, nodulation, nitrogen fixation and protein content in fresh Peas (Pisum sativum L) : Pesticides, 36-38.
- Reddy, N.V.R.; Ramaiah, K.R.; Reddy, K.B. and Rao, K.R. (1983) : Nitrate and nitrite reduction as influenced by S-(4-chlorobenzyl)N-N-diethyl thiocarbamate in two tropical weed species. Proc. Indian Acad. Sci. (Plant Sciences), 92 : 393-396.
- Riggs R.D. (1992) : Management of Nematode problems on soybean in the United States of America. In : Pest management in soybean (Eds. L.G.Copping, M.B.Green and R.T.Rees) Pb. Elsevier Applied Science, London, pp. 128-136.
- Ritenour, G.L.; Joy, K.W.; Bunning J.J. and Hageman, R.H. (1967) : Ultracellular location of nitrate reductase, nitrite reductase and

- glutamic dehydrogenase in green leaf tissue. Plant Physiol., 42: 233-237.
- Romera, J.M. and Gomez, M. (1991) : Influence of manganese and different ambient temperatures on growth and manganese uptake in soybeans (Glycine max (L.) Merr.) Suelo Y. Planta, 1(2) : 215-225.
- Rosa, L.M.; Dillenburg, L.R. and Forseth, I.N. (1991) : Responses of soybean leaf angle, photosynthesis and stomatal conductance to leaf and soil water potential : Annals of Bot., 67(1) : 51-58.
- Roy, K.W.; Keith, B.C. and Andrews, C.H. (1994) : Resistance of hard seeded soybean lines to seed infection by Phomopsis : Canadian Journal of Plant Pathology, 16(2) : 122-128.
- Sadasivam, S. and A. Manikam (1992) : Biochemical method for Agricultural Sciences. Pb. Wiley Eastern Limited, New Delhi.
- Santakumari, M.; Reddy, C.S. and Das, V.S.R. (1977) : Proc. Indian Acad. Sci. B 86, 143, C.F. Das, V.S.R. and Raghvendra, A.S. (1982) : Stomata: The physiology and biochemistry of their regulation in leaves. Curr. Sci., 51(12) : 586-593.
- Santoro, L.G.; Magalhaes, A.C.N. (1983) : Changes in nitrate reductase activity during development of soybean leaf. Zeitschrift fur Pflanzen Physiologie, 112 : 113-121.
- Sawada, S.; Usada, H. and Tsukui, T. (1992) : Participation of inorganic orthophosphate in regulation of the ribulose-1,5 bisphosphate carboxylase activity in response to change in the photosynthetic sink balance. Plant Cell Physiol., 33(7) : 943-949.
- Saxena, R.P. and Beg, M.U. (1989) : Effect of lindane on growth and differentiation of Vigna unguiculata L. (LOBIA) embryo in vitro. : Ind. Jour. of Agri. Chem. XXV(3) : 193-195.

- Schon, M.K. (1990) : Physiological roles of boron in higher plants. Dissertaion abstracts International B. Sciences and Engineering, 50(11) : 4828B.
- Sekine, T.; Sasakawa, T.; Morita, S.; Kimura, T. and Kuratom, K. (1965) : cf. Laboratory manual for physiological studies of Rice (Eds. Yoshida S., Forno, D., Cook, J.B. and Gomez, K.A.) Publ. International Rice Research Institute, Manila, 1972.
- Sengupta, P.K.; Charkrabarty, A. and Banerjee, S.K. (1988) : Carboxyl toxicity in germinating seeds of Vigna sinensis : Effects of gibberellic acid Supplementation, Curr. Sci., 57(8) : 415-417.
- Shaner, D.L. (1992) : Herbicide Resistant Weeds in soybeans. In : Pest Management in Soybean (Eds. L.G. Copping, M.B. Green & R.T. Rees) Pb. Elsevier Applied Science London, pp. 339-347.
- Sharma, C.B.S.R.(1986) : Pesticide genotoxicity in plants : Implication and perspectives. In : Mutagenesis basis and applied. (Ed.) A.B. Prasad, Pb. Print House India (Lucknow) : pp. 237-251.
- Sharma, P.B. and Chopra, S.L. (1970) : Persistance of malathion residues on Cauliflower crop. J. Res. Punjab Agric. Univ. (7) : 216-220.
- Sherman, M.E.; Thompson, L. and Wilkinson, R.E. (1983) : Weed Sci. 31 : 622-627. C.F. Lydon, J. and Duke, S.O. (1989) : Pesticide effects on secondary metabolism of higher plants. Pestic. Sci., 25 : 36-373.
- Shirashyad, V.S. (1988) : Physiological and cytological effects of pesticides on germination and growth in some vegetables. M.Phil. Thesis, Shivaji University, Kolhapur.
- Singh, B. and Salunkhe, D.K. (1970) : Some metabolic responses of bush bean plants to a sub-herbicidal concentration of certain Triazine compounds. Can. J. Bot., 48 : 2213-2217.

- Singh, K.J.; Singh, O.P. and Dubey, S.K. (1991) : Effect of insecticides on nodulation in soybean. Ind. J. of Agric. Sic. 61(5) : 343-344.
- Singh, B.D.; Singh, R.B.; Singh, R.M.; Singh, Y. and Singh, J. (1979) : Effect of insecticide on germination, early growth and cytogenetic behaviour of barley (Hordeum vulgare). Environ. & Expt., 19 : 127-132.
- Slipcevic, V.; Vedrina-dragojevic, I.; Balint, L. and Culjatj, M. (1992) ; Dynamics of the cumulation of macroelements, phosphorus, potassium, calcium and magnesium during development to maturity of soybean seed. J. of Agronomy & Crop Sci. 168(2) : 73-84.
- Smith, I.K. (1985) : Stimulation of glutathion synthesis in photorespiring plants by catalase inhibitors. Plant Physiol., 79(4) : 1044-1047.
- Somashekhar, R.K. and Sreenath, K.P. (1986) : Effect of carbamate pesticide dithane M-45 on crop plants. Pesticide, 20(4) : 44-45.
- Soskic, M.; Manitasevic, J.; Jakovljevic, M.; Redzepovic,S. and Sikora, S. (1991) : The effect of imazaquin on the content of photosynthetic pigments and nondulation of soybean. Zonost, Praksan Polijop rivedi i Prehrambenoj Tehnologiji. 21 : 71-77.
- Srivastava, S.K.; Thakur, M.P. and Singh, P.P. (1991) : Effect of nitrogen, phosphorus and potassium on Myrothecium leaf spot (Myrothecium roidum) of soybean (Glycine max) Indian J. Agril. Sci., 61(5) : 341-342.
- Stidham, M.A. (1991) : Herbicides that inhibit acetohydroxy-acid synthetase. Weed Sci., 39 : 428-434.
- Stoinova, E. and Lilovd, T.T. (1991) : Effect of fusicoccin on photosynthesis, transpiration and stomatal state of soybean leaves : Soybean Abstract. 14(4).

- Sukul, P. and S.K. Handa (1986) : Effect of synthetic pyrethroids on the chlorophyll, nutrient and protein content of chickpea. Ind. Journal of Agricultural Chem. XXVII (1) : 24-27.
- Sundaresh, H.N. and Hiremath, P.C. (1993) : Effect of chemical seed treatment on germination and yield of soybean in Karnataka. Pesticides, 22.
- Suo, B.H.; Wu, D.W. (1988) : The effect of spraying of phosphate on soybean leaf surface in the flowering and podding period. Acta Agriculture Univestatis Jilinensis, 10(4) : 51-54.
- Tanaka, A. (1990) : Effect of soil hydralulic conductivity on transpiration rate of soybean. Bulle of the Faculty of Agri., Saga Univ. No.68 : 25-32.
- Taylor, D.M.; Morgan, P.W.; Joham, H.E. and Amin, J.V. (1968) : Influence of substrate and tissue manganese on IAA oxidase system in cotton. Plant Physiol., 43 : 243-247.
- Thirumarna, D. and Xavier, A. (1987) : Effect of methyl parathion (Metacid-50) on growth, protein, free amino acids and total phenol content of black gram (Vigna mungo L.) seedlings : Indian Journal of Plant Physiol. 30(3) : 289-292.
- Thombre, P.A.; Kurundkar, B.P. and Kawale, B.R. (1989) : J. of Oilseeds Research, 6(2) : 253-356.
- Toth, S.J.; Prince, A.I.; Wallace, A. and Mikkelsen, D.S. (1948) : Rapid qualitative determinaion of eight mineral elements in plant tissue by systemic procedure involving use of a flame photometer. Soil Sci. 66 : 459-466.
- Tsui, C. (1948) : Role of zink in auxin synthesis in tomato plant. Amer. J. Bot., 35 : 172-179.

- Turkhede, A.B.; Khedekar, P.K. and Shinde, V.U. (1991) : Effect of nitrogen and phosphorus on grain yield and quality of soybean varieties. PKV Res. Journal, 15(2) : 117-119.
- Voli, E.; Gazziero, D.L.P. and Menosso, O.G. (1988) : Herbicide sensitivity in soybean cultivars and strains. In : Sensibilidade de cultívaras e linhagens de soja a herbicidas. Documentos Centro Nacional de pesquisa de soja EMBRAPA, 36 : 317-325.
- Waisel, Y.; Neumann, R. and Eshel, Y. (1966) : Mineral uptake of plants (In Hebrew). Mada, 10 : 273-278.
- Wang, D. (1961) : The nature of starch accumulation at the rust infection site in the leaves of pinto bean plants. Can.J.Bota., 39 : 1595-1608.
- Wang, Z.B. and Yi, S.Q. (1991) : Effect of paclobutrazol (PP<sub>333</sub>) on agronomic and physiological characteristics of soybean. Soybean Science 10(1) : 69-72.
- Weaver D.B. and R. Rodriguez-Kabana (1992) : Disease Management in Soybean : Use of Cultural Technique and Genetic Resistance. In : Pest Management in Soybean (Eds. L.G. Coping, M.B. Green & R.T. Rees) Pb. Elsevier Applied Science, London, pp. 214-223.
- Ye, M.J.; Tang, W.F. and Pan, C.M. (1991) : The effect of molybdenum, boron rare earth elements and multieffect triazoles on the botanical characters and yield of spring soybean. Zhejiany Nongye Kexue, 5 : 231-232.
- Yorinori, J.T. (1992) : Management of Foliar Fungal Diseases in Soybean in Brazil. In : Pest management in soybean (Eds. L.G. Coping, M.B. Green and R.T. Rees) Pb. Elsevier Applied Science, London, pp. 185-195.

- Young, L.D. (1992) : Management of the Soybean Cyst Nematode, *Heterodera glycines* in Soybeans. In: Pest management in Soybean (Eds. L.G.Copping, M.B. Green and R.T. Rees) Pb. Elsevier Applied Science London, pp. 137-146.
- Zhuang-Bingchans; Xu-Bao and Lu-Qinhua (1988) : Distribution of superoxide dismutase in soybean leaves and seed of different nodes. Oil Crops of China (China), 3 : 25-28.
- Zhuang-Bingchang; Yue-Derong and Wang-Yunmin (1992) : Oil Crops of China, 3 : 18-20.
- Zwoliniska, S.Z. (1984) : Studies on some essential amino acids of potato leaf and tuber protein after plant treatment with herbicide Sencor (metribuzin) and insecticide Furadoen 5 G (Carbofuron). Pr.Nauk.Inst.Ochr.Rosl. 26(2) : 155-161.