

BIBLIOGRAPHY

B I B L I O G R A P H Y

- Amrhein, N. and Zenk, M. H. (1971). Untersuchungen Zur Rolle der Phenylalanine Ammonium-Lyase (PAL) bei der Regulation der Flavonoidsynthese im Buchweizen (Fagopyrum esculentum Moench). Z. Pflanzenphysiol. 64 : 145-168.
- Arya, H. C., Hilderbrandt, A. C. and Riker, A. J. (1962). Clonal variation of grape stem and phylloxera gall callus growing in vitro in different concentrations of sugars. Amer. J. Bot. 49 : 368-372.
- Atkinson, D.E. (1966). Ann. Rev. Biochem. 35 : 85-124.
- Attridge, T. H. , Stewart, G. R. and Smith, H. (1971). End-product inhibition of Pisum phenylalanine ammonia-lyase by the Pisum flavonoids. FEBS Lett. 17 : 84.
- Ball, E. (1950). Differentiation in a callus culture of Sequoia sempervirens. Growth 14 : 295.
- Ball, E. (1953). Hydrolysis of sucrose by autoclaving media, a neglected aspect in the technique of culture of plant tissues. Bull. Torrey Bot. Club 80 : 409.
- Becker, H. (1969). Stoffproduktion in Pflanzlichen callus - und organkulturen. Mitt. Dtsch. Pharm. Ges. 39 : 273-279.

- Beers, R. F. and Sizer, I. W. (1952). A spectrophotometric method for measuring breakdown of hydrogen peroxide by catalase. *J. Biol. Chem.* 195 : 133-140.
- Bendaña, F. E., Galston, A. W., Kaur-Sawhney, R. and Penny, P. J. (1965). Recovery of labelled ribonucleic acid following administration of labelled auxin to green pea stem sections. *Pl. Physiol.* 40 : 977-983.
- Bergman, L. (1959). Plant viruses in tissue culture. *Trans. N. Y. Acad. Sci. Ser. II* 21 : 227.
- Bhatt, P. H., Fadia, V. P. and Mehta, A. R. (1973-74). Tissue culture studies on cucurbits. IV. Effect of nitrogen source on growth of Benincasa tissue cultured in vitro. *J. M. S. Univ. Baroda* 22-23 : 17-21.
- Birecka, H. and Galston, A. W. (1970). Peroxidase ontogeny in a dwarf pea stem as affected by gibberellin and decapitation. *J. Exp. Bot.* 21 : 735-745.
- Biswas, B. B. and Sen, S. P. (1959). Relation between auxins and nucleic acid synthesis in coleoptile tissue. *Nature* 183 : 1824-1825.
- Blakely, L. M. and Steward, F. C. (1961). Growth induction in cultures of Haplopappus gracilis. 1. The behaviour of cultured cells. *Amer. J. Bot.* 48 : 351-358.

- Bolduc, R. J., Cherry, J. H. and Blair, B. O. (1970). Increase in indoleacetic acid oxidase activity of winter wheat by cold treatment and gibberellic acid. *Pl. Physiol.* 45 : 461-464.
- Borthwick, H. (1972). The biological significance of phytochrome. In : *Phytochrome* (K. Mitrakos and W. Shropshire, eds.). Academic Press, New York. pp. 27-44.
- Brian, P. W. and Hemming, H. G. (1958). Complementary action of gibberellic acid and auxins in pea internode extension. *Ann. Bot.* 22 : 1-17.
- Brown, S. A. (1961). Chemistry of lignification. *Science* 134:305.
- Burris, R. H. (1959). Nitrogen nutrition. *Ann. Rev. Pl. Physiol.* 10 : 301-328.
- * Butenko, R. G. (1968). In : *Plant Tissue Culture and Plant Morphogenesis* (M. Kh. Chailakhyan, ed.). Israel Programme for scientific translations, Jerusalem.
- Cadman, C. H. (1960). Inhibition of plant virus infection by tannins. In : *Phenolics in Plants in Health and Disease* (J.B.Pridham, ed.). Pergamon Press, Oxford. pp. 101-105.
- Chan, W. N. and Staba, E. J. (1965). Alkaloid production by Datura callus and suspension tissue cultures. *Lloydia* 28 : 55-61.

- Chance, B. (1954). Enzyme mechanisms in living cells. In :
A symposium on the Mechanism of Enzyme Action. McCollum-
Pratt. Inst. Johns Hopkins Univ., Contrib. No. 70:399-460.
- Chandra, G. R. and Varner, J. E. (1965). Gibberellic acid
controlled metabolism of RNA in aleurone cells of barley.
Biochem. Biophys. Acta 108 : 583-592.
- Cheng, C. K. and Marsh, H. V. (1968). Gibberellic acid promoted
lignification and phenylalanine ammonia-lyase activity in
a dwarf pea (Pisum sativum). Pl. Physiol. 43 : 1755-1759.
- Chokshi, S. J. (1975). Studies on growth and alkaloid content
in Datura metel L. callus and cell suspension cultures.
Ph. D. Thesis, M. S. Univ. Baroda, Baroda (India).
- Clarkson, D. T. and Hillman, W. S. (1967). Modification of
apparent phytochrome synthesis in Pisum by inhibitors and
growth regulators. Pl. Physiol. 42 : 933-940.
- Cleland, R. E. (1958). A separation of auxin-induced cell wall
loosening into its plastic and elastic components.
Physiol. Plant. 11 : 599-609.
- Cleland, R. E. (1969). The gibberellins. In : The Physiology
of Plant Growth and Development (M.B. Wilkins, ed.). Tata
McGraw-Hill Publishing Co. Ltd., Bombay-New Delhi. pp. 49-79.

- Constabel, F. (1963). Phenolics in tissue cultures derived from Juniperus communis L. Studies on tannin synthesis. In : Proc. Int. Conf. Plant Tissue Culture. Penn. State Univ. P. 183.
- Constabel, F. (1968). Gerbstoff produktion der calluskulturen von Juniperus communis L. Planta 79 : 58-64.
- Constabel, F., Shyluk, J. P. and Gamborg, O. L. (1971). The effect of hormones on anthocyanin accumulation in cell cultures of Haplopappus gracilis. Planta 96 : 306-316.
- Creasy, L. L. (1968 a). The increase in phenylalanine ammonia-lyase (PAL) activity in strawberry leaf disk and its correlation with flavonoid synthesis. Phytochem. 7: 441-446.
- Creasy, L. L. (1968 b). The significance of carbohydrate metabolism in flavonoid synthesis. Phytochem. 7 : 1743-1749.
- Creasy, L. L. (1971). Role of phenylalanine in the biosynthesis of flavonoids and cinnamic acids in strawberry leaf disks. Phytochem. 10 : 2705-2711.
- Creasy, L. L. (1974). Anomalous effects of cycloheximide on phenylalanine ammonia-lyase : Role of synthesis and inactivation in leaf disks of Helianthus annuus. Phytochem. 13 : 2117-2124.

- Cruickshank, I.A. and Perrin, D.R. (1964). Pathological function of phenolic compounds in plants. In : Biochemistry of phenolic Compounds (J.B. Harborne, ed.). Academic Press, London. pp. 511-539.
- Danks, M.L., Fletcher, J.S. and Rice, E.L. (1975). Effects of phenolic inhibitors on growth and metabolism of glucose-UL- ^{14}C in Paul's scarlet rose cell-suspension cultures. Amer. J. Bot. 62 : 311-317.
- Datta, P. and Gest, T. (1965). Homoserine dehydrogenase of Rhodospirillum rubrum. J. Biol. Chem. 240 : 3023.
- Davies, M.E. (1972 a). Polyphenol synthesis in cell suspension cultures of Paul's scarlet rose. Planta 104 : 50-65.
- Davies, M.E. (1972 b). Effect of auxin on polyphenol accumulation and the development of phenylalanine ammonia-lyase activity in dark grown suspension cultures of Paul's scarlet rose. Planta 104 : 66-77.
- Davis, B. D. (1958). On the importance of being ionized. Arch. Biochem. Biophys. 78 : 497.
- Davis, B. J. (1964). Disc electrophoresis. II. Method and application to human serum protein. Ann. N.Y. Acad. Sci. U.S.A. 121 : 404-427.
- Demos, E.K., Woolwine, M., Wilson, R.H. and McMillan, C. (1975). The effects of ten phenolic compounds on hypocotyl growth and mitochondrial metabolism of mung bean. Amer. J. Bot. 62 : 97-102.

- Digby, J. and Wareing, P. F. (1966). The effect of growth substances on cell division and expansion in liquid suspension cultures of Acer pseudoplatanus. J. Exp. Bot. 17 : 718-728.
- Dormer, K. J. and Street, H. E. (1949). The carbohydrate nutrition of tomato roots. Ann. Bot. 13 : 199-217.
- Durst, F. and Mohr, H. (1966). Phytochrome mediated induction of enzyme synthesis in mustard seedlings (Sinapsis alba L.). Naturwissenschaften 53 : 531-532.
- Ellis, B. E. and Towers, G.H.N. (1970). Degradation of aromatic compounds by sterile plant tissues. Phytochem. 9: 1457-1461.
- Ellis, R. J. and Mac Donald, I.R. (1970). Specificity of cycloheximide in higher plants. Pl. Physiol. 46 : 227-232.
- Engelsma, G. (1967 a). Photoinduction of phenylalanine deaminase in gherkin seedlings. I. Effect of blue light. Planta 75 : 207-219.
- Engelsma, G. (1967 b). Photoinduction of phenylalanine deaminase in gherkin seedlings. II. Effect of red and far-red light. Planta 77 : 49-57.
- Engelsma, G. (1974). On the mechanism of the changes in phenylalanine ammonia-lyase activity induced by ultraviolet and blue light in gherkin hypocotyls. Pl. Physiol. 54 : 702-705.

- Engelsma, G. and Meijer, G. (1965). The influence of light of different spectral regions on the synthesis of phenolic compounds in gherkin hypocotyls in relation to photomorphogenesis. I. Biosynthesis of phenolic compounds. Acta Bot. Neerl. 14 : 51-72.
- Fadia, V. P. and Mehta, A. R. (1973). Tissue culture studies on cucurbits. III. Growth and nutrition of Cucumis callus cultures. Ind. J. Exp. Biol. 11 : 424-427.
- Fang, S. C. and Butts, J. S. (1957). Studies on carboxyl-C¹⁴-labeled 3-indoleacetic acid in plants. Pl. Physiol. 32:253-259.
- Feenstra, W. J. (1960). The genetic control of the formation of phenolic compounds in the seedcoat of Phaseolus vulgaris L. In : Phenolics in Plants in Health and Disease (J.B.Pridham, ed.). Pergamon Press, London. pp. 127-131.
- Filner, P. (1965). Studies on exponential cultures of plant cells. Ph. D. Thesis, California Institute of Technology, California (U.S.A.).
- Filner, P. (1966). Regulation of nitrate reductase in cultured tobacco cells. Biochem. Biophys. Acta 118 : 299-310.
- Filner, P. and Varner, J. E. (1967). A test for de novo synthesis of enzymes; density labeling with N₂O¹⁸ of barley

α -amylase induced by gibberellic acid, P.N.A.S. 58:1520-1526.

Forrest, G.I. (1969). Studies on Polyphenol metabolism of tissue cultures derived from the tea plant (Camellia sinensis L.). Biochem. J. 113 : 765-772.

Fosket, D.E. and Torrey, D.E. (1969). Hormonal control of cell proliferation and xylem differentiation in cultured tissues of Glycine max var. Biloxi. Pl. Physiol. 44 : 871-880.

Fox, J. E. (1966). Incorporation of a kinin, N⁶-benzyladenin into soluble RNA. Pl. Physiol. 41 : 75-82.

Freudenberg, K. (1959). Biosynthesis and constitution of lignin. Nature 183 : 1152-1155.

* Freudenberg, K., Harkin, J.B., Reichert, M. and Fukuzumi, T. (1958). Chem. Ber. 91 : 581.

Fritig, B., Hirth, L. and Ourisson, G. (1970). Biosynthesis of the coumarins : Scopoletin formation in tobacco tissue cultures. Phytochem. 9 : 1963-1975.

* Furuya, T. (1968). Kitasato Arch. Exp. Med. 41 : 47.

Galston, A. W. (1950). Riboflavin, light, and the growth of plants. Science 111 : 619-624.

Galston, A. W. (1960). Letter to the Editor. Sci. Amer. 202:12-15.

- Galston, A. W. (1969). Flavonoids and photomorphogenesis in peas. In : Perspectives in Phytochemistry (J.B.Harborne and T. Swain, eds.). Academic Press, London and New York. pp. 193-204.
- Galston, A. W. and Baker, R.S. (1951). Studies in the physiology of light action. III. Light activation of a flavoprotein enzyme by reversal of a naturally occurring inhibitor. Amer. J. Bot. 38 : 190-195.
- Galston, A.W., Bonner, J. and Baker, R.S. (1953): Flavoprotein and peroxidase as components of the indoleacetic acid oxidase system of peas. Arch. Biochem. Biophys. 42 :456-470.
- Galston, A.W. and Dalberg, L.Y. (1954). The adaptive formation and physiological significance of indoleacetic acid oxidase. Amer. J. Bot. 41 : 373-380.
- Galston, A.W. and McCune, D.C. (1961). An analysis of gibberellin-auxin interaction and its possible metabolic basis. In : Plant Growth Regulators. Iowa State Univ. Press, Ames, Iowa. pp. 611-625.
- Gamborg, O.L. (1966). Aromatic metabolism in plants. II. Enzymes of the shikimate pathway in suspension cultures of plant cells. Can. J. Biochem. 44 : 791-799.

- Gamborg, O.L. (1970). The effect of amino acids and ammonium on the growth of plant cells in suspension cultures. *Pl. Physiol.* 45 : 372-375.
- Gamborg, O.L. and Keeley, F.W. (1966). Aromatic metabolism in plants. I. A study of the prephenate dehydrogenase from bean plants. *Biochem. Biophys. Acta* 115 : 65-72.
- Gamborg, O.L., Miller, R.A. and Ojima, K. (1968). Nutrient requirements of suspension cultures of soybean root cells. *Exp. Cell Res.* 50 : 151-158.
- Gamborg, O.L. and Wetter, L.R. (1963). An aromatic amino acid transaminase from mung bean. *Can.J. Biochem. Physiol.* 41 : 1733-1740.
- Gautheret, R.J. (1939). Sur la possibilite' de realiser la culture indefinite des tissus de tubercule de carotte. *C.R. Acad. Sci. Paris* 208 : 118-120.
- Gautheret, R.J. (1942). Hetero-auxines et cultures de tissus vegetaux. *Bull. Soc. Chem. Biol. Paris* 24 : 13.
- Gautheret, R.J. (1945). Une voie nouvelle en biologie vegetale. La culture des tissus. Gallimard, Paris.
- Gautheret, R.J. (1955). The nutrition of plant tissue culture. *Ann. Rev. Pl. Physiol.* 6 : 433.

- Gautheret, R.J. (1959). La culture des tissus vegetaux techniques et realisations. Masson, Paris.
- Givan, C.V. and Collin, H.A. (1967). Studies on the growth in culture of plant cells. II. Changes in respiration rate and nitrogen associated with the growth of Acer pseudo-platanus L. cells in suspension culture. J. Exp. Bot. 18 : 321-331.
- Glass, A.D.M. (1974). Influence of phenolic acids upon ion uptake. II. A structure-activity study of the inhibition of phosphate uptake by benzoic acid derivatives. In : Mechanisms of Regulation of Plant Growth, Bulletin 12 (R.L. Bielecki, A.R. Ferguson and M.M. Cresswell, eds.). The Royal Soc. New Zealand, Wellington. pp. 159-164.
- Goldacre, P.L. (1951). Hydrogen peroxide in the enzymic oxidation of heteroauxin. Austral. J. Sci. Res. B. 4: 293-302.
- Goldacre, P.L., Galston, A.W. and Weintraub, R.L. (1953). The effect of substituted phenols on the activity of the indoleacetic acid oxidase of peas. Arch. Biochem. Biophys. 43 : 358-373.
- Goldstein, J.L. and Swain, T. (1963). Changes in tannins in ripening fruits. Phytochem. 2: 371-383.

Gordon, S.A. and Webber, R.P. (1951). Colorimetric estimation of indoleacetic acid. *Pl. Physiol.* 26 : 192-195.

Gortner, W.A. and Kent, M.J. (1958). Ferulic and p-coumaric acids in pineapple tissue as modifiers of pineapple indoleacetic acid oxidase. *Nature* 181 : 630-631.

Grewal, S. and Atal, C.K. (1976). The utility of plant tissue culture technique in applied Botany. In : A symposium on Cultivation and Utilization of Medicinal and Aromatic Plants. Regional Research Laboratory, C.S.I.R., Jammu-Tawi (India).

* Grisebach, H. (1967). In : Biosynthetic Patterns in Micro-organisms and Higher Plants. Wiley, New York. pp. 1-31.

Gross, G. G. and Zenk, M. H. (1966). Darstellung und Eigenschaften von Coenzym A-Thiolester substituerter Zimtsäuren. *Z. Naturforsch.* 21b : 683-690.

Hadwiger, L.A. and Schwochau, M.E. (1971 a). Ultra-violet light-induced formation of pisatin and phenylalanine ammonia-lyase. *Pl. Physiol.* 47 : 588-590.

Hadwiger, L.A. and Schwochau, M.E. (1971 b). Specificity of deoxyribonucleic acid intercalating compounds in the control of phenylalanine ammonia-lyase and pisatin. *Pl. Physiol.* 47 : 346-351.

Hahlbrock, K. (1974). Correlation between nitrate uptake, growth and changes in metabolic activities of cultured plant cells. In : Plant Culture and Plant Science (H.E. Street, ed.). Academic Press, London. pp. 363-378.

Hahlbrock, K. and Grisebach, H. (1970). Formation of coenzyme A esters of cinnamic acids with an enzyme preparation from cell suspension cultures of parsley. F E B S Lett. 11 : 62-64.

* Hahlbrock, K. and Kuhlen, E. (1972). Planta 108 : 271-278.

Hahlbrock, K., Kuhlen, E. and Lindl, T. (1971). Änderungen von Enzymaktivitäten während des Wachstums von Zellsuspensionskulturen von Glycine max : phenylalanin ammonium-lyase and p-coumarat : CoA ligase. Planta 99 : 311-318.

Hahlbrock, K. and Wellmann, E. (1970). Light-induced flavone biosynthesis and activity of phenylalanine ammonia-lyase and UDP-apiose synthetase in cell suspension cultures of Petroselinum hortense. Planta 94 : 236-239.

Harborne, J. (1965). Flavonoid pigments. In : Plant Biochemistry (J. Bonner and J.E. Varner, eds.). Academic Press, New York. pp. 618-640.

- Haskins, F.A. (1955). Changes in the activities of several enzymes during germination and seedling development in corn (Zea mays L.). Pl. Physiol. 30 : 74-78.
- Havir, E. A. and Hanson, K.R. (1968 a). L-Phenylalanine ammonia-lyase. I. Purification and molecular size of the enzyme from potato tubers. Biochem. 7 : 1896-1903.
- Havir, E.A. and Hanson, K.R. (1968 b). L-Phenylalanine ammonia-lyase. II. Mechanism and kinetic properties of the enzyme from potato tubers. Biochem. 7 : 1904-1914.
- Havir, E.A. and Hanson, K.R. (1973). L-Phenylalanine ammonia-lyase (maize and potato). Evidence that the enzyme is composed of four subunits. Biochem. 12 : 1583-1591.
- Heller, R. (1953). Recherches sur la nutrition minerale des tissus vegetaux cultives in vitro. Ann. Sci. Natl. Bot. Biol. Veg. 14 : 1-233.
- Henshaw, G.G. (1975). Technical aspects of tissue culture storage for genetic conservation. In : Crop Genetic Resources for Today and Tomorrow (International Biological Programme, vol. 2). Cambridge Univ. Press. pp. 349-357.
- Henshaw, G.G., Jha, K.K., Mehta, A.R., Shakeshaft, D.J. and Street, H.E. (1966). Studies on the growth in culture plant cells. I. Growth pattern in batch propagated suspension cultures. J. Exp. Bot. 17 : 362-372.

- Higuchi, T. (1966). Role of phenylalanine deaminase and tyrase in the lignification of Bamboo. *Agric. Biol. Chem.* 30 : 667.
- Higuchi, T. and Ito, Y. (1958). Dehydrogenation products of coniferyl alcohol formed by the action of mushroom phenol oxidase, rhus-laccase and radish peroxidase. *J. Biochem.* 45 : 575-576.
- Hilderbrandt, A.C. (1958). Stimulation or inhibition of virus infected and insect gall tissues and single cell-clones. *Proc. Natl. Acad. Sci. U.S.A.* 44 : 351.
- Hilderbrandt, A.C. and Riker, A.J. (1949). The influence of various carbon compounds on the growth of marigold, paris-daisy, perlwinkle, sunflower and tobacco tissue in vitro. *Amer. J. Bot.* 36 : 74-85.
- Hilderbrandt, A.C. and Riker, A.J. (1953). Influence of concentrations of sugars and polysaccharides on callus tissue growth in vitro. *Amer. J. Bot.* 40 : 66-76.
- Hinman, R.L. and Lang, J. (1965). Peroxidase catalyzed oxidation of indole-3-acetic acid. *Biochem.* 4 : 144-158.
- Hofstee, B.H.J. (1959). Non-inverted versus inverted plots in enzyme kinetics. *Nature* 184 : 1296-1298.

- Hyodo, H. and Yang, S.F. (1971). Ethylene-enhanced synthesis of phenylalanine ammonia-lyase in pea seedlings. *Pl. Physiol.* 47 : 765-770.
- Iredale, S.E. and Smith, H. (1974). Properties of phenylalanine ammonia-lyase extracted from Cucumis sativus hypocotyls. *Phytochem.* 13 : 575-583.
- Jacobson, J.V. and Varner, J.E. (1967). Gibberellic acid-induced synthesis of protease by isolated aleurone layers of barley. *Pl. Physiol.* 42 : 1596-1600.
- Johri, M.M. and Varner, J.E. (1968). Enhancement of RNA synthesis in isolated pea nuclei by gibberellic acid. *Proc. Natl. Acad. Sci. U.S.A.* 59 : 269-276.
- Kalghatgi, K.K. and Subba Rao, P.V. (1975). Microbial L-phenylalanine ammonia-lyase. Purification, subunit structure and kinetic properties of the enzyme from Rhizoctonia solani. *Biochem. J.* 149 : 65-72.
- Katunuma, N., Okada, M. and Nishii, Y. (1966). Regulation of the urea cycle and TCA cycle by ammonia. In : *Advances in Enzyme Regulation* (E.G. Webber, ed.) vol. 4. Pergamon Press, New York. pp. 317-355.
- Kefeli, V. I. and Kadyrov, C.S. (1971). Natural growth inhibitors, their chemical and physiological properties. *Ann. Rev. Pl. Physiol.* 22 : 185-196.

- Key, J.L. and Shannon, J.C. (1964). Enhancement by auxin of ribonucleic acid synthesis in excised hypocotyl tissue. *Pl. Physiol.* 39 : 360-364.
- Klein-ende, D., Rollin, P. and Huault, C. (1974). Effects of some translation and transcription inhibitors on the development of the phenylalanine ammonia-lyase activity induced by light in radish cotyledons. *Plant Sci. Lett.* 2:1-8.
- Koblitz, H. (1969). Die Pflanzenzelle in vitro und ihr biochemisches potential. *Biol. Rdsch.* 7 : 241-244.
- Koblitz, H., Koblitz, D. and Hagen, I. (1965). *Flora* 155 :544-557.
- Koukol, J. and Conn, E. E. (1961). The metabolism of aromatic compounds in higher plants. IV. Purification and properties of the phenylalanine-deaminase of Hordeum vulgare. *J. Biol. Chem.* 236 : 2692-2698.
- Krikorian, A.D. and Berquam, D.L. (1969). Plant Cell and tissue culture : the role of Haberlandt. *Bot. Rev.* 35 : 59-88.
- Krilkorian, A.D. and Steward, F.C. (1969). Biochemical differentiation : the biosynthetic potentialities of growing and quiescent tissue. In : *Plant Physiology - a treatise* (F. C. Steward, ed.) vol. 5B. Academic Press, London, New York. pp. 227-326.

- Kumari, S., Kapur, K.K. and Atal, C.K. (1966). Occurrence of a high monocrotaline yielding strain of Crotalaria retusa. Curr. Sci. 35 : 546-547.
- Kuraishi, S. and Muir, R.M. (1963). Mode of action of growth retarding chemicals. Pl. Physiol. 38 : 19-24.
- Kuraishi, S. and Muir, R.M. (1964). The mechanism of gibberellin action in the dwarf pea. Plant Cell Physiol. 5 : 259-271.
- Lalchandani, I.G. (1970). Studies on the growth in culture of plant cells. Ph. D. Thesis, M.S. Univ. Baroda, Baroda (India).
- Lavee, S. and Galston, A.W. (1968). Hormonal control of peroxidase activity in cultured Pelargonium pith. Amer. J. Bot. 55 : 890-893.
- Lavollay, J. and Neumann, J. (1959). In : The Pharmacology of Plant Phenolics (J.W. Fairbairn, ed.). Academic Press, New York.
- Lee, T.T. (1971 a). Promotion of indoleacetic acid oxidase isoenzymes in tobacco callus cultures by indoleacetic acid. Pl. Physiol. 48 : 56-59.
- Lee, T.T. (1971 b). Increase of indoleacetic acid oxidase isoenzymes by gibberellic acid in tobacco callus cultures. Can. J. Bot. 49 : 687-693.

- Lee, T.T. (1971 c). Cytokinin-controlled indoleacetic acid oxidase isoenzymes in tobacco callus cultures. *Pl. Physiol.* 47 : 181-185.
- Lee, T.T. (1972). Interaction of cytokinin, auxin, and gibberellin on peroxidase isoenzyme in tobacco tissues cultured in vitro. *Can.J. Bot.* 50 : 2471-2477.
- Lee, T.T. and Skoog, K. (1965 a). Effects of substituted phenols on bud formation and growth of tobacco tissue culture. *Physiol. Plant.* 18 : 386-402.
- Lee, T.T. and Skoog, K. (1965 b). Effects of hydroxybenzoic acids on indoleacetic acid inactivation by tobacco callus extracts. *Physiol. Plant.* 18 : 577-585.
- Leopold, A.C. and Plummer, T.H. (1961). Auxin-phenol complexes. *Pl. Physiol.* 35 : 589-592.
- Levitzi, A. and Koshland, D.E. (1969). Negative cooperativity in regulatory enzyme. *Proc. Natl. Acad. Sci. U.S.A.* 62 : 1121.
- Lichstein, H.C., Gunsalus, I.C. and Umbreit, W.W. (1945). Function of the vitamin B₆ group. Pyridoxal phosphate (codecarboxylase) in transamination. *J. Biol. Chem.* 161: 311.
- Lindl, T., Kreuzaler, F. and Hahlbrock, K. (1973). Synthesis of p-coumaroyl coenzyme A with a partially purified p-coumarate : CoA ligase from cell suspension cultures of soybean (Glycine max). *Biochem. Biophys. Acta* 302 : 457-464.

- Linsmaier, E.M. and Skoog, F. (1965). Organic growth factor requirements of tobacco tissue cultures. *Physiol. Plant.* 18 : 100-127.
- * Linweaver, H. and Burk, D. (1934). *J. Amer. Chem. Soc.* 56: 658.
- Liverman, J.L. and Bonner, J. (1953). The interaction of auxin and light in the growth responses of plants. *Proc. Natl. Acad. Sci. U.S.A.* 39 : 905-916.
- Lockhart, J.A. (1961). Interactions between gibberellin and various environmental factors on stem growth. *Amer. J. Bot.* 48 : 516-525.
- Loftfield, R.B. and Eigner, E.A. (1969). Molecular order of participation of inhibitors (or activators) in biological systems. *Science* 164 : 305-308.
- Lowry, O.H., Rosebrough, G., Farr, A.L. and Randall, R.J. (1951). Protein measurements with Folin-phenol reagent. *J. Biol. Chem.* 193 : 265-275.
- Maehly, A.C. and Chance, B. (1954). The assay of catalases and peroxidases. In : *Methods of Biochemical Analysis* (David Glick, ed.) vol. 1. Interscience Publishers Inc., New York. pp. 358-428.
- Maier, V.P. and Hasegawa, S. (1970). L-Phenylalanine ammonia-lyase activity in naringenin glycoside accumulation in developing grape fruit. *Phytochem.* 9 : 139-144.
- Mason, H.S., Onopryenko, I. and Buhler, D. (1957). Hydroxylation : the activation of oxygen by peroxidase. *Biochem. Biophys. Acta* 24 : 225-226.

- Marsh, H. V. Jr., Havir, E.A., and Hanson, K. R. (1968).
L-Phenylalanine ammonia-lyase. III. Properties of the
enzyme from maize seedlings. *Biochem.* 7: 1915-1918.
- * Masquelier, J. (1959). In : The Pharmacology of Plant Phenolics
(J.W.Fairbairn, ed.). Academic Press, New York.
- Mazelis, M. (1962). The pyridoxal phosphate-dependent oxidative
decarboxylation of methionine by peroxidase. *J. Biol. Chem.*
237 : 104-108.
- McCready, C.C. (1963). Movement of growth regulators in plants. I.
Polar transport of radioactivity from indoleacetic acid (^{14}C)
and 2,4-dichlorophenoxyacetic acid -(^{14}C) in petioles of
Phaseolus vulgaris. *New Phytol.* 62 : 19-34.
- McCune, D.C. (1961). Multiple peroxidases in corn. *Ann. N.Y. Acad.*
Sci. U.S.A. 94 : 723-730.
- Mehta, A.R. (1965). Recent advances in free cell cultures of
plants. In : Tissue Culture (C.V.Ramakrishnan, ed.).
Dr. W. Junk Publishers, Hague. pp. 305-313.
- Mehta, A.R., Subbaiah, K.V. and Shah, R.R. (1974). In vitro
growth and polyphenol production by tissue culture of
Datura and Cassia. In : Genetic Manipulations with Plant
Material (L.Ledoux, ed.). Plenum Press, New York. p. 570.

- Meudt, W. J. (1967). Studies on the oxidation of indole-3-acetic acid by peroxidase enzymes. *Ann. N.Y. Acad.Sci. U.S.A.* 144 : 118-128.
- Miller, C.O. (1969). Control of deoxyisoflavone synthesis in soyabean tissue. *Planta* 87 : 26-35.
- Minamikawa, T. and Uritani, I. (1965). Phenylalanine ammonia-lyase in sliced sweet potato roots. *J. Biochem.* 57 : 678-688.
- Misawa, M., Sakato, K., Tanaka, H., Hayashi, M. and Samejima, H. (1974). Production of physiologically active substances by plant cell suspension cultures. In : *Tissue Culture and Plant Science* (H.E. Street, ed.). Academic Press, London. pp. 405-432.
- Mohr, H. (1966). Differential gene activation as a mode of action of phytochrome 730. *Photochem. Photobiol.* 5 : 469-483.
- Morel, G. (1948). Recherches sur la culture associee de parasites obligatoires et de tissus vegetaux. *Ann. Epiphyt.* 14 : 1.
- Muir, W.H.A., Hilderbrandt, A.C. and Riker, A.J. (1954). Plant tissue cultures produced from single isolated cells. *Science* 119 : 877-878.
- Murashige, T. and Skoog, F. (1962). A revised medium for rapid growth bioassay with tobacco tissue culture. *Physiol. Plant.* 15 : 473-497.

- Nari, J., Mouttet, C., Fouchier, F. and Ricard, J. (1974).
Subunit interactions in enzyme catalysis. Kinetic analysis
of subunit interactions in the enzyme L-phenylalanine
ammonia-lyase. Eur. J. Biochem. 41 : 499-515.
- Nari, J., Mouttet, C., Pinna, M.H. and Ricard, J. (1972). Some
physico-chemical properties of L-phenylalanine ammonia-
lyase of wheat seedlings. F E B S Lett. 23 : 220-224.
- Nash, D.T. and Davies, M.E. (1972). Some aspects of growth and
metabolism of Paul's scarlet rose cell suspensions. J. Exp.
Bot. 23 : 75-91.
- Neish, A.C. (1960). Biosynthetic pathways of aromatic compounds.
Ann. Rev. Pl. Physiol. 11 : 55-80.
- Neish, A.C. (1961). Formation of m- and p-coumaric acids by
enzymatic deamination of the corresponding isomers of
tyrosine. Phytochem. 1 : 1-24.
- Neish, A.C. (1964). Major pathways of biosynthesis of phenols.
In : Biochemistry of Phenolic compounds (J.B.Harborne, ed.).
Academic Press, London. pp. 295-359.
- Nicholls, P. (1965). Oxidation and peroxidation. J. Gen. Physiol.
49 : 131-147.

- Nickell, L. G. (1958). Gibberellin and the growth of plant tissue cultures. *Nature* 181 : 499-500.
- Nickell, L. G. (1962). Submerged growth of plant cells. *Adv. Appl. Microbiol.* 4 : 213-236.
- Nickell, L.G. and Maretzki, A. (1969). Growth of suspension cultures of sugarcane cells in chemically defined media. *Physiol. Plant.* 22 : 117-125.
- Nickell, L.G. and Tulecke, W. (1959). Responses of plant tissue cultures to gibberellin. *Bot. Gaz.* 120 : 245-250.
- Nitsch, C. and Nitsch, J. P. (1966). Effect of light on the induction of phenylalanine deaminase in the tuber tissues of Helianthus tuberosus. *C.R. Acad.Sci. Paris* 262 : 1102-1105.
- Nitsch, J. P. and Nitsch, C. (1957). Auxin dependent growth of excised Helianthus tuberosus tissues. II. Organic nitrogenous substances. *Amer. J. Bot.* 44 : 555-564.
- Nitsch, J. P. and Nitsch, C. (1959). Modification du metabolisme des auxins par l'acide gibberellique. *Bull. Soc. Fr. Physiol. Veg.* 5 : 20-23.
- Nitsch, J. P. and Nitsch, C. (1962). Composes phenoliques et croissance vegetale. *Ann. Physiol. Vegetale* 4 : 211-225.

- Nobecourt, P. (1939). Sur les radicules naissant des cultures de tissus du tubercule de carotte. C.R. Soc. Biol. Paris 130 : 1271.
- Noodén, L. D. and Thimann, K. V. (1963). Evidence for a requirement for protein synthesis for auxin induced cell enlargement. Proc. Natl. Acad. Sci. U.S.A. 50 : 194-200.
- Ockerse, R., Webber, J. and Mescher, M.F. (1970). The promotion of IAA oxidation by GA_3 in terminal pea buds. Pl. Physiol. 46(suppl.) : 47.
- O'Neal, D. and Keller, C. J. (1970). Partial purification and some properties of phenylalanine ammonia-lyase of tobacco (Nicotiana tabacum). Phytochem. 9 : 1373-1383.
- Oser, B. L. (1965). In : Hawk's physiological Chemistry. Tata McGraw Hill Publishing Co., Ltd., Bombay, New Delhi, pp.1083-1085.
- Pilet, P. E. (1957). Action des gibberellines sur l'activité auxin-oxydasique de tissus cultivés in vitro. Compt. Rend. Acad. Sci. France 245 : 1327-1328.
- Puhan, Z. and Martin, S.M. (1971). The industrial potential of plant cell culture. Prog. Ind. Microbiol. 9 : 13-39.
- Racker, E. de la Haba, G. and Leder, I.G. (1953). Thiamine pyrophosphate, a coenzyme of transketolase. J. Amer. Chem. Soc. 75 : 1010.

- RajBhandary, S.B., Collin, H.A., Thomas, E. and Street, H.E. (1969). Root, Callus and cell suspension cultures from Atropa belladonna L. and Atropa belladone, cultivar lutea Doll. J. Exp. Bot. 17 : 362-377.
- Ramwell, P.W., Sherratt, H.S.A. and Leonard, B.E. (1964). The Physiology and pharmacology of phenolic compounds in animals. In : Biochemistry of Phenolic Compounds (J.B.Harborne, ed.). Academic Press, London. pp. 457-510.
- Rao, K., Malakondaiah, N. and Ramanā, K.V.R. (1969). Effect of light and darkness on some oxidizing enzymes of Riccia, a Bryophyte. Z. Pflanzenphysiol. 61 : 168-169.
- Rao, N.M. and Mehta, A.R. (1968). In vitro growth and nutrition of Datura anther callus. Ind. J. Pl. Physiol. 11 : 181-187.
- Reid, P.D. and Marsh, M.Z. (1969). Z. Pflanzenphysiol. 61 : 170-172.
- Rhodes, M.J. and Woollorton, L.S.C. (1973). Stimulation of phenolic acid and lignin biosynthesis in swede root tissue by ethylene. Phytochem. 12 : 107.
- Riov, J., Monselise, S.P. and Khan, R.S. (1968). Effect of gamma radiation on phenylalanine ammonia-lyase activity and accumulation of phenolic compounds in citrus fruit peel. Radiat. Bot. 8 : 463-466.

- Roubaix, De, J. and Lazar, O. (1960). The inhibitory substances contained in sugar beat glomerules. In : Phenolics in Plants in Health and Disease (J.B.Pridham, ed.). Pergamon Press, Oxford, pp. 35-41.
- Rubery, P.H. and Fosket, D.E. (1969). Changes in phenylalanine ammonia-lyase activity during xylem differentiation in Coleus and soybeans. Planta 87 : 54-62.
- Rubery, P.H. and Northcote, D.H. (1968). Site of phenylalanine ammonia-lyase activity and synthesis of lignin during xylem differentiation. Nature 219 : 1230-1234.
- Schafer, P. L. and Wender, S.H. (1970). Plant tissue culture studies on the metabolism of phenolic compounds. Ann. Okla. Acad. Sci. 1 : 72-83.
- Schenk, R.V. and Hilderbrandt, A.C. (1972). Medium and techniques for induction and growth of monocotyledonous and dicotyledonous plant cell cultures. Can. J. Bot. 50 : 199-204.
- Scherf, H. and Zenk, M.H. (1967). Induction of anthocyanin and phenylalanine ammonia-lyase formation by a high energy light reaction and its control through phytochrome system. Z. Pflanzenphysiol. 57 : 401.
- Schopfer, P. and Plachy, C. (1972). Die photodeterminati on der peroxidasentwicklung durch phytochrom im Senfkeimling (Sinapis alba L.). Z. Naturforsch.

- Shah, R.R. and Mehta, A.R. (1975). Initiation and growth of seedling callus of Crotalaria juncea L. J.M.S.Univ. Baroda 25
- Shah, R.R., Chokshi, S.J. and Mehta, A.R. (1975). Changes in polyphenol content and development of peroxidase activity in tissue culture of Cassia. In : 62nd Ind. Sci. Cong., Delhi, India.
- Shah, R.R., Rao, S. and Mehta, A.R. (1976 a). Distribution of polyphenols and the development of peroxidase activity during germination in Crotalaria. Ind. J. Exp. Biol. 14 : 299-301.
- Shah, R.R., Subbaiah, K.V. and Mehta, A.R. (1976 b). Hormonal effect on polyphenol accumulation in Cassia tissues cultured in vitro. Can. J. Bot. 54 : 1240-1245.
- Siegelman, H.W. (1964). Physiological studies on phenolic biosynthesis. In : Biochemistry of Phenolic Compounds (J.B.Harborne, ed.). Academic Press, London. pp. 437-456.
- Sizer, I.W. (1943). Effect of temperature on enzyme kinetics. Adv. Enzymol. 3 : 35-62.
- Skoog, F. and Robinson, B. J. (1950). A direct relationship between indoleacetic acid effects on growth and reducing sugar in tobacco tissue. Proc. Soc. Exp. Biol. Med. 74 : 565-568.
- Smith, H. (1970). Phytochrome and photomorphogenesis in plants. Nature 227 : 665-668.

- Srivastava, B.I.S. (1966). Metabolism of kinetin in excised barley leaves and in tobacco pith tissue culture. Pl. Physiol. 41 : IXii-IXiii.
- Staba, E. J. (1962). Production of cardiac glycosides by plant tissue cultures. I. Nutritional requirements in tissue cultures of Digitalis lanata and Digitalis purpurea. J. Pharm. Sci. 51 : 249-254.
- Staba, E. J. (1963). Developments in Ind. Microbiol. 4 : 193-198.
- Staba, E.J. (1969). Plant tissue culture as a technique for the phytochemist. Recent Adv. Phytochem. 2 : 75-106.
- Stafford, H.A. (1974). The metabolism of aromatic compounds. Ann. Rev. Pl. Physiol. 25 : 459-486.
- Steinhart, C.E. (1961). Nutrient requirements for in vitro growth of spruce tissue. Amer. J. Bot. 48 : 465-470.
- Steinhart, C., Anderson, L. and Skoog, F. (1962). Growth promoting effect of cyclitols on spruce tissue cultures. Pl. Physiol. 37 : 60-66.
- Steward, F.C. (1969). In : Plant Physiology (F.C. Steward, ed.). Allied Press, New York.
- Steward, F.C., Bidwell, R.G.S. and Yemm, E.W. (1958 a). Nitrogen metabolism, respiration and growth of cultured plant tissue. J. Exp. Bot. 9 : 11.

- Steward, F. C., Mapes, M. O. and Mears, K. (1958 b). Growth and organised development of cultured cells. II. Organisation in cultures grown from freely suspended cells. Amer. J. Bot. 45 : 705-708.
- Steward, F.C. and Shantz, E.M. (1955). The chemical induction of growth in plant tissue cultures. In : The Chemistry and Mode of Action of Plant Growth Substances (R.L.Wain and F.Wightman, eds.). Academic Press, New York. pp. 165-186.
- Street, H.E. (1965). Plant tissue culture is in an interesting condition. In : Tissue Culture (C.V.Ramakrishnan, ed.). Dr. W. Junk Publishers, Hague. pp. 398-408.
- Street, H.E. (1966). The nutrition and metabolism of plant tissue and organ cultures. In : Cells and Tissues in Culture : Methods, Biology and Physiology (E.N.Willmer, ed.). vol. 3. Academic Press, London. pp. 533-629.
- Street, H.E., Collin, H.A., Short, K.C. and Simpkins, I. (1969). Hormonal control of cell division and expansion in suspension cultures of Acer pseudoplatanus L. The action of kinetin. In : Biochemistry and Physiology of Plant Growth Substances (F.Wightman and G.Setterfield, eds.). Runge Press, Ottawa. pp. 489-504.
- Street, H.E., Henshaw, G.A. and Buiatti, M.C. (1965). The culture of isolated plant cells. Chemistry and Industry 27-33.

- Stuart, R. and Street, H.E. (1969). Studies on the growth in culture of plant cells. IV. The initiation of division in suspensions of stationary-phase cells of Acer pseudoplatanus. J. Exp. Bot. 20 : 556-571.
- Stutz, R.E. and Watanable, R. (1957). The gibberellings. II. The effect of gibberellic acid and photoperiod on indoleacetic acid oxidase in Lupinus albus L. Argonne Natl. Lab., Biol. Med. Res. Div., Semiannual Report. Jan-June. pp. 107-109.
- Subbaiah, K.V. (1974). Physiological and biochemical studies on plant tissues grown in sterile cultures. Ph. D. Thesis, The M. S. Univ. Baroda (India).
- Subbaiah, K.V., Mehta, A.R. and Shah, R.R. (1974). Studies on polyphenol content in tissue cultures of Datura and Cassia grown on defined medium. In : The 3rd Int. Cong. Plant Tissue and Cell Culture, Univ. Leicester, England.
- Sumere Van, C. E. (1960). Germination inhibitors in plant materials. In : Phenolics in Plants in Health and Disease (J.B.Pridham, ed.). Pergamon Press, Oxford. pp. 25-34.
- Suri, O.P. and Atal, C.K. (1967). Isolation of monocrotaline and crispatine from Crotalaria lechnauti. Curr. Sci. 36(22) : 614-615.
- Swain, T. (1962). The biosynthesis of polyphenols. In : Wood Extractives (W.E.Hillis, ed.). Academic Press, New York.p.277.

- Swain, T. and Hillis, W.E. (1959). The phenolic constituents of Prunus domestica. I. The quantitative analysis of phenolic constituents. J. Sci. Fd. Agric. 10: 63-68.
- Szweykowska, A. (1959). The effect of nitrogen feeding on anthocyanin synthesis in isolated red cabbage embryos. Acta Soc. Bot. Polon. 28 : 539-549.
- Tagawa, T. and Bonner, J. (1957). Mechanical properties of the Avena coleoptile as related to auxin and to ionic interactions. Pl. Physiol. 32 : 207-212.
- Tang, V.W. and Bonner, J. (1947). The enzymatic inactivation of indoleacetic acid. I. Some characteristics of the enzyme contained in pea seedling. Arch. Biochem. 13 : 11-25.
- Teuscher, E. (1973). Probleme der produktion sekundärer pflanzenstoffe mit hilfe von Zellkulturen. Pharmazie 28 : 6.
- Tomaszewski, M. (1964). The mechanism of synergism effect between auxin and some natural phenolic substances. In : Regulateurs naturels de la roissance vegetale, Colloq. Int. Centre Natl. Rech. Sci. No. 123 : 335-351.
- Tomkins, G.M., Gelehrter, T.D., Garner, D., Martin, T. Jr., Samuels, H.H. and Thompson, E.B. (1969). Control of specific gene expression in higher organisms. Science 166:1474.

- Torrey, J.G. (1957). Cell division in isolated single plant cells in vitro. Proc. Natl. Acad. Sci. U.S.A. 43 : 887-891.
- Torrey, J.G. and Reinert, J. (1961). Suspension cultures of higher plant cells in synthetic media. Pl. Physiol. 36 : 483-491.
- Tulecke, W. (1966). Continuous cultures of higher plant cells in liquid media : the advantages and potential use of phytostat. Ann. N.Y. Acad. Sci. U.S.A. 139 : 162-175.
- Tulecke, W. and Nickell, L.G. (1960). Methods, problems and results of growing plant cell under submerged conditions. Trans. N.Y. Acad. Sci. Ser. II 22: 196-206.
- Tuli, V. and Moyed, H.S. (1969). The role of 3-methyleneoxindole in auxin action. J. Biol. Chem. 244 : 4916-4920.
- Uritani, I. and Stahmann, M. A. (1961). Changes in nitrogen metabolism in sweet potato with black rot. Pl. Physiol. 36 : 770-782.
- Vajranabhaiah, S. N. and Mehta, A.R. (1976). Studies on nucleic acid metabolism in suspension cultures of Cucumis melo L. Ann. Bot. 40 : 339-346.
- Vasil, I. K. and Hilderbrandt, A.C. (1966). Growth and chlorophyll production in plant tissues grown in vitro. Planta 68 : 69-82.

- Vollmer, K. O., Reisener, H. J. and Grisebach, H. (1965). The formation of acetic acid from p-hydroxycinnamic acid during its degradation to p-hydroxybenzoic acid in wheat shoots. *Biochem. Biophys. Res. Commun.* 21 : 221-225.
- Wagenknecht, A.C. and Burris, R.H. (1950). Indoleacetic acid oxidizing enzymes from bean roots and pea seedlings. *Arch. Biochem.* 25 : 30-53.
- Wald, G. (1960). Letter to the Editor. *Sci. Amer.* 202 : 15.
- Walton, D.C. and Sondheimer, E. (1968). Effects of abscisin II on phenylalanine ammonia-lyase activity in excised bean axes. *Pl. Physiol.* 43 : 467-469.
- Walton, E. and Butt, V.S. (1971). The demonstration of cinnamyl-CoA synthetase activity in leaf extracts. *Phytochem.* 10 : 295-304.
- Webber, K. and Osborn, M. (1969). The reliability of molecular weight determination by dodecyl sulphate - polyacrylamide gel electrophoresis. *J. Biol. Chem.* 244 : 4406-4412.
- Westcott, R.J. and Henshaw, G.G. (1974). Phenolic metabolism in suspension cultures of Acer pseudoplatanus L. In : The 3rd Int. Cong. Plant Tissue and Cell Culture, Univ. Leicester, England.

- White, P. R. (1939). Potentially unlimited growth of excised plant callus in an artificial nutrient. Amer. J. Bot. 26 : 59-64.
- White, P. R. (1954). The Cultivation of Animal and Plant Cells. Thames and Hudson, London.
- Wiggans, S. C. (1954). Growth and organ formation in callus tissues derived from *Daucus carota*. Amer. J. Bot. 41 : 321-326.
- Wong, P.P., Zucker, M. and Creasy, L.L. (1974). Induction of phenylalanine ammonia-lyase in strawberry leaf disks. Action spectra and effects of wounding, sucrose and light. Pl. Physiol. 54 : 659-665.
- Yoshida, S. (1969). Biosynthesis and conversion of aromatic amino acids in plants. Ann. Rev. Pl. Physiol. 20 : 41-62.
- Young, M. (1973). Studies on the growth in culture of plant cells. XVI. Nitrogen assimilation during nitrogen-limited growth of Acer pseudoplatanus L. cells in chemostat culture. J. Exp. Bot. 24 : 1172-1185.
- Yu, L.M. and Hampton, R.E. (1964). Biochemical changes in tobacco infected with Colletotrichum destructivum. I. Fluorescent compounds, phenols, and some associated enzymes. Phytochem. 3 : 269-272.

- Zenk, M.H. (1968). The action of light on the metabolism of auxin in relation to phototropism. In : Biochemistry and Physiology of Plant Growth Substances (F.Wightman and G.Setterfield, eds.). The Runge Press, Ottawa. pp. 1109-1128.
- Zenk, M.H., El-Shagi, H. and Schulte, U. (1975). Anthroquinone production by cell suspension cultures of Morinda citrifolia. Planta Med. (suppl.) 79-101.
- Zenk, M.H. and Muller, G. (1963). In vitro destruction of exogenously applied indolyl-3-acetic acid as influenced by naturally occurring phenolic acids. Nature 200 : 761-763.
- Zucker, M. (1965). Induction of phenylalanine deaminase by light and its relation to chlorogenic acid synthesis in potato tuber tissue. Pl. Physiol. 40 : 779-785.
- Zucker, M. (1968). Sequential induction of PAL and a lyase-inactivating system in potato tuber disks. Pl. Physiol. 43 : 365-374.
- Zucker, M. (1969). Induction of phenylalanine ammonia-lyase in Xanthium leaf disks : photosynthetic requirement and effect of day length. Pl. Physiol. 44 : 912-922.
- Zucker, M. (1972). Light and enzymes. Ann. Rev. Pl. Physiol. 23 : 133-156.

* Original not referred to.