Donald Northcote

Bibliography

DH NORTHCOTE – PUBLICATIONS

Bell DJ & Northcote DH (1950). The structure of a cell-wall polysaccharide of baker's yeast. *Journal of the Chemical Society* (Resumed), 1944–1947.

Bell DJ & Northcote DH (1950). Observations on the polysaccharides composing the cell wall of baker's yeast. *Biochemical Journal*, 47, i–ii.

Greville, GD & Northcote DH (1952). A synthesis of 3:4:6-trimethyl glucose. *Journal of the Chemical Society* (Resumed), 1956–1957.

Greville GD & Northcote DH (1952). Reactions with periodate of 2: 3: 4: 6 -tetramethyl D-glucose, the trimethyl D-glucopyranoses, and other methoxy-compounds. *Journal of the Chemical Society* (Resumed), 1936–1945.

Northcote DH & Horne RW (1952). The chemical composition and structure of the yeast cell wall. *Biochemical Journal*, 51, 232–236.

Hill R, Northcote DH & Davenport HE (1953). Production of oxygen from chloroplast preparations: Active chloroplast preparations from *Chlorella pyrenoidosa*. *Nature*, 172, 948–949.

Northcote DH (1953). The sorption of water vapour by yeast cell wall and other polysaccharides. *Biochimica et Biophysica Acta*, 11, 471–479.

Northcote DH (1953). The molecular structure and shape of yeast glycogen. *Biochemical Journal*, 53, 348–352.

Northcote DH (1954). Electrophoresis of some neutral polysaccharides. *Biochemical Journal*, 58, 353–358.

Fuller KW & Northcote DH (1956). A micro method for the separation and determination of polysaccharides by zone electrophoresis. *Biochemical Journal,* 64, 657–663.

Hocevar BJ & Northcote, DH (1957). Preparative column electrophoresis of polysaccharides. *Nature*, 179, 488–489.

Northcote DH (1958). The cell walls of higher plants: their composition, structure and growth. *Biological Reviews*, 33, 53–102.

Northcote DH, Goulding KJ & Horne RW (1958). The chemical composition and structure of the cell wall of *Chlorella pyrenoidosa*. *Biochemical Journal*, 70, 391.

Myers FL & Northcote DH (1958). Partial purification and some properties of a cellulase from *Helix*. *Biochemical Journal*, 69, 749–756.

Myers FL & Northcote DH (1958). A survey of the enzymes from the gastro-intestinal tract of *Helix pomatia*. *Journal of Experimental Biology* 35, 639-648.

Lamport DTA & Northcote DH. (1960). Hydroxyproline in primary cell walls of higher plants. *Nature*, 188, 665–666.

Korn ED & Northcote DH (1960). Physical and chemical properties of polysaccharides and glycoproteins of the yeast-cell wall. *Biochemical Journal*, 75, 12–17.

Northcote DH, Goulding KJ & Horne RW (1960). The chemical composition and structure of the cell wall of *Hydrodictyon africanum* Yaman. *Biochemical Journal*, 77, 503–508.

Thornber JP & Northcote DH (1961). Changes in the chemical composition of a cambial cell during its differentiation into xylem and phloem tissue in trees. I. Main components. *Biochemical Journal*, 81, 449–455.

Thornber JP & Northcote DH (1961). Changes in the chemical composition of a cambial cell during its differentiation into xylem and phloem tissue in trees. II. Carbohydrate constituents of each main component. *Biochemical Journal*, 81, 455–464.

Baker PF, Northcote DH & Peters R. (1962). Structure and enzyme activity. Nature, 195, 661–662.

Olaitan SA & Northcote DH (1962). Polysaccharides of *Chlorella* pyrenoidosa. *Biochemical Journal*, 82, 509–519.

Thornber JP & Northcote DH (1962). Changes in the chemical composition of a cambial cell during its differentiation into xylem and phloem tissue in trees. 3. Xylan, glucomannan and alpha-cellulose fractions. *Biochemical Journal*, 82, 340–346.

Northcote DH (1963). The nature of plant cell surfaces. *Biochemical Society Symposium*, 22, 105–125.

Northcote DH (1963). The biology and chemistry of the cell walls of higher plants, algae, and fungi. *International Review of Cytology*, 14, 223–265.

Northcote DH (1963). Changes in the cell walls of plants during differentiation. *Symposia of the Society for Experimental Biology*, 17, 157–174.

Northcote DH (1963). The structure and organization of the polysaccharides of yeast. *Pure and Applied Chemistry*, 7, 669–676.

Northcote DH (1964). Polysaccharides. Annual Review of Biochemistry, 33, 51-74.

Wooding FBP & Northcote DH (1964). The development of the secondary wall of xylem in *Acer pseudoplatanus*. *Journal of Cell Biology*, 23, 327–337.

Pickett-Heaps JD & Northcote DH (1964). Relationship of cellular organelles to the formation and development of the plant cell wall. *Journal of Experimental Botany* 17, 20-26.

Wooding FBP & Northcote DH (1965). The fine structure and development of the companion cell of the phloem of *Acer pseudoplatanus*. *Journal of Cell Biology*, 24, 117–128.

Wooding FBP & Northcote DH (1965). An anomalous wall thickening and its possible role in the uptake of stem-fed tritiated glucose by *Pinus pinea. Journal of Ultrastructure Research*, 12, 463–472.

Wooding FBP & Northcote DH (1965). The fine structure of the mature resin canal cells of *Pinus pinea*. *Journal of Ultrastructure Research*, 13, 233–244.

Wooding FBP & Northcote DH (1965). Association of the endoplasmic reticulum and plastids of *Acer* and *Pinus. American Journal of Botany* 52, 526-531.

Barrett AJ & Northcote DH (1965). Apple fruit pectic substances. *Biochemical Journal*, 94, 617–627.

Northcote DH (1965). Qualitative, quantitative and preparative electrophoretic separations of neutral polysaccharides. In *Methods in carbohydrate chemistry* (Eds RL Whistler and ML Wolfson). New York: Academic Press, 5.

Pickett-Heaps JD & Northcote DH (1966). Cell division in the formation of the stomatal complex of the young leaves of wheat. *Journal of Cell Science*, 1, 121–128.

Pickett-Heaps JD & Northcote DH (1966). Organization of microtubules and endoplasmic reticulum during mitosis and cytokinesis in wheat meristems. *Journal of Cell Science*, 1, 109–120.

Northcote DH (1966). Carbohydrates and mucoid substances. *British Medical Bulletin*, 22(2), 180–184.

Northcote DH & Wooding FBP (1966). Development of sieve tubes in *Acer pseudoplatanus*. *Proceedings of the Royal Society, Series B,* 524-537.

Jeffs RA & Northcote DH (1966). Experimental induction of vascular tissue in an undifferentiated plant callus. *Biochemical Journal*, 101, 146–152.

Northcote DH & Pickett-Heaps JD (1966). A function of the Golgi apparatus in polysaccharide synthesis and transport in the root-cap cells of wheat. *Biochemical Journal*, 98, 159–167.

Burgess J & Northcote DH (1967). A function of the preprophase band of microtubules in *Phleum* pratense. Planta, 75, 319–326.

Northcote DH (1967). The living cell. St John's College, Cambridge, lecture series to the University of Hull.

Northcote DH (1967). Electron microscopy of frozen specimens. New Scientist 33, 658.

Jeffs RA & Northcote DH (1967). The influence of indol-3yl acetic acid and sugar on the pattern of induced differentiation in plant tissue culture. *Journal of Cell Science*, 2, 77–88.

Stoddart RW & Northcote DH (1967). Metabolic relationships of the isolated fractions of the pectic substances of actively growing sycamore cells. *Biochemical Journal*, 105, 45–59.

Stoddart RW & Northcote DH (1967). Separation and measurement of microgram amounts of radioactive polysaccharides in metabolic experiments. *Biochemical Journal*, 105, 61–63.

Stoddart RW, Barrett AJ & Northcote DH (1967). Pectic polysaccharides of growing plant tissues. *Biochemical Journal*, 102, 194–204.

Rubery PH & Northcote DH (1968). Site of phenylalanine ammonia-lyase activity and synthesis of lignin during xylem differentiation. *Nature*, 219, 1230–1234.

Sheldrake AR & Northcote DH (1968). Some constituents of xylem sap and their possible relationship to xylem differentiation. *Journal of Experimental Botany*, 19, 681–689.

Sheldrake AR & Northcote DH (1968). The production of auxin by autolysing tissues. *Planta*, 80, 227–236.

Northcote DH & Lewis DR (1968). Freeze-etched surfaces of membranes and organelles in the cells of pea root tips. *Journal of Cell Science*, 3, 199–206.

Northcote DH (1968). Structure and function of plant-cell membranes. *British Medical Bulletin*, 24, 107–112.

Northcote DH (1968). The organization of the endoplasmic reticulum, the Golgi bodies and microtubules during cell division and subsequent growth. In *Plant cell organelles* (Ed. J Pridham) 179-197. New York: Academic Press.

Burgess J & Northcote DH (1968). The relationship between the endoplasmic reticulum and microtubular aggregation and disaggregation. *Planta*, 80, 1–14.

Sentandreu R & Northcote DH (1968). The structure of a glycopeptide isolated from the yeast cell wall. *Biochemical Journal*, 109, 419–432.

Sheldrake AR & Northcote DH (1968). The production of auxin by tobacco internode tissues. *New Phytologist*, 67, 1–13.

Northcote DH (1969). The synthesis and metabolic control of polysaccharides and lignin during the differentiation of plant cells. *Essays in Biochemistry*, 5, 89–137.

Burgess J & Northcote DH (1969). Action of colchicine and heavy water on the polymerization of microtubules in wheat root meristem. *Journal of Cell Science*, 5, 433–451.

Northcote DH (1969). Fine structure of cytoplasm in relation to synthesis and secretion in plant cells. *Proceedings of the Royal Society of London, B,* 173, 21–30.

Sentandreu R & Northcote DH (1969). The characterization of oligosaccharides attached to threonine and serine in a mannan glycopeptide obtained from the cell wall of yeast. *Carbohydrate Research* 10, 584–585.

Sentandreu R & Northcote DH (1969). Yeast cell-wall synthesis. Biochemical Journal, 115, 231–240.

Sentandreu R & Northcote DH (1969). The formation of buds in yeast. *Journal of General Microbiology*, 55, 393–398.

Roberts K & Northcote DH (1970). Structure of the nuclear pore in higher plants. *Nature*, 228, 385–386.

Rubery PH & Northcote DH (1970). The effect of auxin (2,4-dichlorophenoxyacetic acid) on the synthesis of cell wall polysaccharides in cultured sycamore cells. *Biochimica et Biophysica Acta*, 222, 95–108.

Ogutuga DBA & Northcote DH (1970). Caffeine formation in tea callus tissue. *Journal of Experimental Botany*, 21, 258–273.

Roberts K & Northcote DH (1970). The structure of sycamore callus cells during division in a partially synchronized suspension culture. *Journal of Cell Science*, 6, 299–321.

Harris PJ & Northcote DH (1970). Patterns of polysaccharide biosynthesis in differentiating cells of maize root-tips. *Biochemical Journal*, 120, 479–491.

Northcote DH (1970). The Golgi apparatus. Endeavour, 30(109), 26–33.

Ogutuga DBA & Northcote DH (1970). Biosynthesis of caffeine in tea callus tissue. *Biochemical Journal*, 117, 715-720.

Northcote DH (1971). Organization of structure, synthesis and transport within the plant during cell division and growth. *Symposia of the Society for Experimental Biology*, 25, 51–69.

Roberts K & Northcote DH (1971). Ultrastructure of the nuclear envelope; structural aspects of the interphase nucleus of sycamore suspension culture cells. *Microscopica Acta*, 71, 102–120.

Harris PJ & Northcote DH (1971). Polysaccharide formation in plant Golgi bodies. *Biochimica et Biophysica Acta*, 237, 56–64.

Heath MF & Northcote DH (1971). Glycoprotein of the wall of sycamore tissue-culture cells. *Biochemical Journal*, 125, 953–961.

Northcote DH (1971). Organization of structure, synthesis and transport within the plant during cell division and growth. *Symposium of the Society of Experimental Biology* 25, 51-69.

Jones MGK & Northcote DH (1972). Multinucleate transfer cells induced in coleus roots by the rootknot nematode *Meloidogyne arenaria*. *Protoplasma*, 75, 381–395.

Wright K & Northcote DH (1972). Induced root differentiation in sycamore callus. *Journal of Cell Science*, 11, 319–337.

Roberts K & Northcote DH (1972). Hydroxyproline: observations on its chemical and autoradiographical localization in plant cell wall protein. *Planta*, 107, 43–51.

Hereward FV & Northcote DH (1972). Localization of freeze-fracture planes of yeast membranes. *Journal of Cell Science*, 10, 555–561.

Bowles DJ & Northcote DH (1972). The sites of synthesis and transport of extracellular polysaccharides in the root tissues of maize. *Biochemical Journal*, 130, 1133–1145.

Jones MGK & Northcote DH (1972). Nematode-induced syncytium-A multinucleate transfer cell. *Journal of Cell Science*, 10, 789–809.

Hereward FV & Northcote DH (1972). A simple freeze-substitution method for the study of ultrastructure of plant tissues. *Experimental Cell Research*, 70, 73–80.

Northcote DH (1972). Chemistry of the plant cell wall. *Annual Review of Plant Physiology*, 23, 113-132.

Northcote DH (1972). The Golgi complex. In *Cell Biology in Medicine,* 197-214. New York: John Wiley & Sons.

Hereward FV & Northcote DH (1973). Fracture planes of the plasmalemma of some higher plants revealed by freeze etch. *Journal of Cell Science*, 13, 621–635.

Brewin NJ & Northcote DH (1973). Variations in the amounts of 3', 5'-cyclic AMP in plant tissues. *Journal of Experimental Botany*, 24, 881–888.

Brewin NJ & Northcote DH (1973). Partial purification of a cyclic amp phosphodiesterase from soybean callus Isolation of a non-dialysable inhibitor. *Biochimica et Biophysica Acta*, 320, 104–122.

Anstis PJP & Northcote DH (1973). The initiation, growth, and characteristics of a tissue culture from potato tubers. *Journal of Experimental Botany*, 24, 425–441.

Anstis PJP & Northcote DH (1973). Development of chloroplasts from amyloplasts in potato tuber discs. *New Phytologist*, 72, 449–463.

Heath MF & Northcote DH (1973). A hydroxyproline containing glycopeptide released from the walls of sycamore tissue culture cells by hydrazinolysis. *Biochemical Journal*, 135, 327–329.

Wright K & Northcote DH (1973). Differences in ploidy and degree of intercellular contact in differentiating and non-differentiating sycamore calluses. *Journal of Cell Science*, 12, 37–53.

Northcote DH (1974). Complex envelope system. Membrane systems of plant cells. *Philosophical Transactions of the Royal Society of London, Series B, Biological Sciences*, 268, 119–128.

Northcote DH (1974). Sites of synthesis of the polysaccharides of the plant cell wall. In *Plant Carbohydrate Biochemistry*, (Ed. J Pridham). New York: Academic Press.

Northcote DH (1974). Differentiation in higher plants. Oxford Biology Readers 44, 1-32. Oxford University Press.

Anstis PJP & Northcote DH (1974). Chlorophyll accumulation by callus tissues of *Glycine max*. *Planta*, 116, 105–108.

Wright K & Northcote DH (1974). The relationship of root cap slimes to pectins. *Biochemical Journal*, 139, 525–534.

Bright SWJ & Northcote DH (1974). Protoplast regeneration from normal and bromodeoxyuridine resistant sycamore callus. *Journal of Cell Science*, 16, 445–463.

Bowles DJ & Northcote DH (1974). The amounts and rates of export of polysaccharides found within the membrane system of maize root cells. *Biochemical Journal*, 142, 139–144.

Hanke DE & Northcote DH (1974). Cell wall formation by soybean callus protoplasts. *Journal of Cell Science*, 14, 29–50.

Allen DM & Northcote DH (1975). The scales of Chrysochromulina chiton. *Protoplasma*, 83, 389–412.

Bright SWJ & Northcote DH (1975). A deficiency of hypoxanthine phosphoribosyltransferase in a sycamore callus resistant to azaguanine. *Planta*, 123, 79–89.

Anstis PJP & Northcote DH (1975). Cytokinin activity in potato tuber extracts. *Zeitschrift fur Pflanzenhphysiologie* 75,273-275.

Brett CT & Northcote DH (1975). The formation of oligoglucans linked to lipid during synthesis of β glucan by characterized membrane fractions isolated from peas. *Biochemical Journal*, 148, 107–117.

Marriott KM & Northcote DH (1975). The induction of enzyme activity in the endosperm of germinating castor bean seeds. *Biochemical Journal*, 152, 65–70.

Boffey SA & Northcote DH. (1975). Pectin synthesis during the wall regeneration of plasmolysed tobacco leaf cells. *Biochemical Journal*, 150, 433–440.

Yung KH & Northcote DH (1975). Some enzymes present in the walls of mesophyll cells of tobacco leaves. *Biochemical Journal*, 151, 141–144.

Marriott KM & Northcote DH (1975). The breakdown of lipid reserves in the endosperm of germinating castor beans. *Biochemical Journal*, 148, 139–144.

Hanke DE & Northcote DH (1975). Molecular visualization of pectin and DNA by ruthenium red. *Biopolymers*, 14, 1–17.

Haddon LE & Northcote DH (1975). Quantitative measurement of the course of bean callus differentiation. *Journal of Cell Science*, 17, 11–26.

Wright K & Northcote DH (1975). An acidic oligosaccharide from maize slime. *Phytochemistry*, 14, 1793–1798.

Branton D et al including Northcote DH (1975). Freeze etching nomenclature. Science 190, 54-56.

Haddon L & Northcote DH (1976). The influence of gibberellic acid and abscisic acid on cell and tissue differentiation of bean callus. *Journal of Cell Science*, 20, 47–55.

Haddon L & Northcote DH (1976). The effect of growth conditions and origin of tissue on the ploidy and morphogenic potential of tissue cultures of bean (*Phaseolus vulgaris* L). *Journal of Experimental Botany*, 27, 1031–1051.

Wright K & Northcote DH (1976). Identification of $\beta 1 \rightarrow 4$ glucan chains as part of a fraction of slime synthesized within the dictyosomes of maize root caps. *Protoplasma*, 88, 225–239.

Haddon L & Northcote DH (1976). Correlation of the induction of various enzymes concerned with phenylpropanoid and lignin synthesis during differentiation of bean callus (*Phaseolus vulgaris* L). *Planta*, 128, 255–262.

Bailey DS & Northcote DH (1976). Phospholipid composition of the plasma membrane of the green alga, *Hydrodictyon africanum. Biochemical Journal*, 156, 295–300.

Bowles DJ & Northcote DH (1976). The size and distribution of polysaccharides during their synthesis within the membrane system of maize root cells. *Planta*, 128, 101–106.

Wright K, Northcote DH & Davey RM (1976). Preparation of rat epididymal α -l-fucosidase free from other glycosidases: its action on root-cap slime from *Zea mays* L. *Carbohydrate Research*, 47, 141–150.

Bailey DS & Northcote DH (1977). An ultrastructural study of the relationship between the plasma membrane and the cell wall of the coenocytic alga *Hydrodictyon africanum*. *Journal of Cell Science*, 23, 141–149.

Marriott KM & Northcote DH (1977). The influence of abscisic acid, adenosine 3', 5' cyclic phosphate, and gibberellic acid on the induction of isocitrate lyase activity in the endosperm of germinating castor bean seeds. *Journal of Experimental Botany*, 28, 219–224.

Allfrey JM & Northcote DH (1977). The effects of the axis and plant hormones on the mobilization of storage materials in the ground nut (*Arachis hypogaea*) during germination. *New Phytologist*, 78, 547–563.

Dalessandro G & Northcote DH (1977). Changes in enzymic activities of UDP-D-glucuronate decarboxylase and UDP-D-xylose 4-epimerase during cell division and xylem differentiation in cultured explants of Jerusalem artichoke. *Phytochemistry*, 16, 853–859.

Dalessandro G & Northcote DH (1977). Changes in enzymic activities of nucleoside diphosphate sugar interconversions during differentiation of cambium to xylem in sycamore and poplar. *Biochemical Journal*, 162, 267–279.

Dalessandro G & Northcote DH (1977). Changes in enzymic activities of nucleoside diphosphate sugar interconversions during differentiation of cambium to xylem in pine and fir. *Biochemical Journal*, 162, 281–288.

Morris MR & Northcote DH (1977). Influence of cations at the plasma membrane in controlling polysaccharide secretion from sycamore suspension cells. *Biochemical Journal*, 166, 603–618.

Galbraith DW & Northcote DH (1977). The isolation of plasma membrane from protoplasts of soybean suspension cultures. *Journal of Cell Science*, 24, 295–310.

Dalessandro G & Northcote DH (1977). Possible control sites of polysaccharide synthesis during cell growth and wall expansion of pea seedlings (*Pisum sativum* L). *Planta*, 134, 39–44.

Muray RHA & Northcote DH (1978). Oligoarabinosides of hydroxyproline isolated from potato lectin. *Phytochemistry*, 17, 623-629.

Dudley K & Northcote DH (1978). Comparison of the *in vitro* translation products of mRNA isolated from suspension cultures of *Phaseolus vulgaris* grown on maintenance and induction medium. *Planta*, 138, 41–48.

Tomos AD & Northcote DH (1978). A protein-glucan intermediate during paramylon synthesis. *Biochemical Journal*, 174, 283–290.

Green JR & Northcote DH (1978). The structure and function of glycoproteins synthesized during slime-polysaccharide production by membranes of the root-cap cells of maize (*Zea mays*). *Biochemical Journal*, 170, 599–608.

Northcote DH (1979). The involvement of the Golgi apparatus in the biosynthesis and secretion of glycoproteins and polysaccharides. *Biomembranes*, 10, 51–76.

Northcote DH (1979). Polysaccharides of the plant cell during its growth. In *Polysaccharides in Food* (Eds JMV Blanshard & JR Mitchell), 3-13. London: Butterworths.

Bevan M & Northcote DH (1979). The interaction of auxin and cytokinin in the induction of phenylalanine ammonia-lyase in suspension cultures of *Phaseolus vulgaris*. *Planta*, 147, 77–81.

Dudley K & Northcote DH (1979). Regulation of induction of phenylalanine ammonia-lyase in suspension cultures of *Phaseolus vulgaris*. *Planta*, 146, 433–440.

Senanayake ND & Northcote DH (1979). A transglucosylase that forms soluble glucosides found in membranes of a haptophycean alga. *Phytochemistry*, 18, 741–748.

Green JR & Northcote DH (1979). Polyprenyl phosphate sugars synthesized during slimepolysaccharide production by membranes of the root-cap cells of maize (*Zea mays*). *Biochemical Journal* 178, 661-671.

Bevan MJ & Northcote DH (1979). The loss of morphogenetic potential and induction of phenylalanine ammonia-lyase in suspension cultures of *Phaseolus vulgaris*. *Journal of Cell Science*, 39, 339–353.

Green JR & Northcote DH (1979). Location of fucosyl transferases in the membrane system of maize root cells. *Journal of Cell Science*, 40, 235–244.

Baydoun EA & Northcote DH (1980). Isolation and characterization of membranes from the cells of maize root tips. *Journal of Cell Science*, 45, 147–167.

Baydoun EA & Northcote DH (1980). Measurement and characteristics of fusion of isolated membrane fractions from maize root tips. *Journal of Cell Science*, 45, 169–186.

Owens RJ & Northcote DH (1980). The purification of potato lectin by affinity chromatography on a fetuin-sepharose matrix. *Phytochemistry*, 19,1861–1862.

Chadwick CM & Northcote DH (1980). Partial characterization of the polyisoprenoid carrier of Nacetylglucosamine in *Glycine max* (soya bean). *Biochemical Journal*, 190, 255–261. Wilkinson MJ & Northcote DH (1980). A reliable method for obtaining matched replicas of freeze-fractured cell suspensions. *Journal of Cell Science*, 42, 389–400.

Wilkinson MJ & Northcote DH (1980). A simple apparatus for use in matched freeze-fracture replication. *Journal of Microscopy*, 119, 249–255.

Wilkinson MJ & Northcote DH (1980). Plasma membrane ultrastructure during plant protoplast plasmolysis, isolation and wall regeneration: a freeze-fracture study. *Journal of Cell Science*, 42, 401–415.

Chadwick CM & Northcote DH (1980). Glucosylation of phosphorylpolyisoprenol and sterol at the plasma membrane of soya-bean (*Glycine max*) protoplasts. *Biochemical Journal*, 186, 411–421.

Read SM & Northcote DH (1981). Minimization of variation in the response to different proteins of the Coomassie blue G dye-binding assay for protein. *Analytical Biochemistry*, 116, 53–64.

Bolwell GP & Northcote DH (1981). Control of hemicellulose and pectin synthesis during differentiation of vascular tissue in bean (*Phaseolus vulgaris*) callus and in bean hypocotyl. *Planta*, 152, 225–233.

Bevan M & Northcote DH (1981). Some rapid effects of synthetic auxins on mRNA levels in cultured plant cells. *Planta*, 152, 32–35.

Bevan M & Northcote DH (1981). Subculture-induced protein synthesis in tissue cultures of *Glycine* max and *Phaseolus vulgaris*. *Planta*, 152, 24–31.

Martin C & Northcote DH (1981). Qualitative and quantitative changes in mRNA of castor beans during the initial stages of germination. *Planta*, 151, 189–197.

Owens RJ & Northcote DH (1981). The location of arabinosyl:hydroxyproline transferase in the membrane system of potato tissue culture cells. *Biochemical Journal*, 195, 661–667.

Baydoun EA & Northcote DH (1981). The extraction from maize (*Zea mays*) root cells of membranebound protein with Ca2+-dependent ATPase activity and its possible role in membrane fusion in vitro. *Biochemical Journal*, 193, 781–792.

Jones DH & Northcote DH (1981). Induction by hormones of phenylalanine ammonia-lyase in beancell suspension cultures: inhibition and superinduction by actinomycin D. *European Journal of Biochemistry*, 116, 117–125.

Dalessandro G & Northcote DH (1981). Xylan synthetase activity in differentiated xylem cells of sycamore trees (*Acer pseudoplatanus*). *Planta*, 151, 53–60.

Dalessandro G & Northcote DH (1981). Increase of xylan synthetase activity during xylem differentiation of the vascular cambium of sycamore and poplar trees. *Planta*, 151, 61–67.

Martin C & Northcote DH (1982). The action of exogenous gibberellic acid on protein and mRNA in germinating castor bean seeds. *Planta*, 154, 168–173.

Northcote DH (1982). The synthesis and transport of some plant glycoproteins. *Philosophical Transactions of the Royal Society*, B, 300, 195-206.

Martin C & Northcote DH (1982). The action of exogenous gibberellic acid on isocitrate lyase -mRNA in germinating castor bean seeds. *Planta*, 154, 174–183.

Turnham E & Northcote DH (1982). The use of acetyl-CoA carboxylase activity and changes in wall composition as measures of embryogenesis in tissue cultures of oil palm (*Elaeis guineensis*). *Biochemical Journal*, 208, 323–332.

Northcote DH (1982). Macromolecular aspects of cell wall differentiation. In *Nucleic acids and proteins in plants. Encyclopaedia of Physiology, New Series* 14A, (Eds D Boulter & D. Pathier) 637-655. Berlin: Springer-Verlag.

Northcote DH (1982). Control of enzyme activity during plant cell development In *Differentiation* in vitro. *Symposium of the British Society for Cell Biology,* (Eds MM Yeoman & DES Trumen). Cambridge University Press.

Martin C & Northcote DH (1983). The action of exogenous gibberellic acid on polysome formation and translation of mRNA in germinating castor-bean seeds. *Planta*, 158, 16–26.

Read SM & Northcote DH (1983). Chemical and immunological similarities between the phloem proteins of three genera of the Cucurbitaceae. *Planta*, 158, 119–127.

Read SM & Northcote DH (1983). Subunit structure and interactions of the phloem proteins of *Cucurbita maxima* (pumpkin). *European Journal of Biochemistry*, 134, 561–569.

Turnham E & Northcote DH (1983). Changes in the activity of acetyl-CoA carboxylase during rapeseed formation. *Biochemical Journal*, 212, 223–229.

Bolwell GP & Northcote DH (1983). Arabinan synthase and xylan synthase activities of *Phaseolus vulgaris*. Subcellular localization and possible mechanism of action. *Biochemical Journal*, 210, 497–507.

Bolwell GP & Northcote DH (1983). Induction by growth factors of polysaccharide synthases in bean cell suspension cultures. *Biochemical Journal*, 210, 509–515.

Fry SC & Northcote DH (1983). Sugar-nucleotide precursors of arabinopyranosyl, arabinofurarosyl and zylopyranosyl residues in spinach polysaccharides. *Plant Physiology* 73, 1055-1061.

Jones DH & Northcote DH (1984). Stability of the complex formed between French bean (*Phaseolus vulgaris*) phenylalanine ammonia-lyase and its transition-state analog. *Archives of Biochemistry and Biophysics*, 235, 167–177.

Shirras AR & Northcote DH (1984). Molecular cloning and characterisation of cDNAs complementary to mRNAs from wounded potato (*Solanum tuberosum*) tuber tissue. *Planta*, 162, 353–360.

Bolwell GP & Northcote DH (1984). Demonstration of a common antigenic site on endomembrane proteins of *Phaseolus vulgaris* by a rat monoclonal antibody - tentative identification of arabinan synthase and consequences for its regulation. *Planta*, 162, 139–146.

Martin C, Beeching JR & Northcote DH (1984). Changes in levels of transcripts in endosperms of castor beans treated with exogenous gibberellic acid. *Planta*, 162, 68–76.

Northcote DH (1984). Control of cell wall assembly during differentiation. *Giornale Botanico Italiano*, 118, 41–51.

Turnham E & Northcote DH (1984). The incorporation of [1-14C] acetate into lipids during embryogenesis in oil palm tissue cultures. *Phytochemistry*, 23, 35–39.

Gould J & Northcote DH (1985). Characteristics of plant surfaces. In *Bacterial Adhesion* (Eds DC Savage & M Fletcher) 89-110. New York and London: Plenum Press.

Dommes J & Northcote DH (1985). The action of exogenous abscisic and gibberellic acids on gene expression in germinating castor beans. *Planta*, 165, 513–521.

Dommes J & Northcote DH (1985). The action of exogenous abscisic acid on malate-synthase synthesis in germinating castor-bean seeds. *Planta*, 165, 550–556.

Northcote DH (1985). Cell organelles and their function in biosynthesis of cell wall components: control of cell wall assembly during differentiation. In *Biosynthesis and degradation of wood components* (Ed. T Higuchi) 87-108. New York and London: Academic Press.

Jacob SR & Northcote DH (1985). *In vitro* glucan synthesis by membranes of celery petioles: the role of the membrane in determining the type of linkage formed. *Journal of Cell Science*, Supplement, 2, 1–11.

Dixon WT & Northcote DH (1985). Plant cell secretory processes. In *Developments in cell biology;* secretory processes (Eds RT Dean & R Stahl) 77-98. London: Butterworths.

Northcote DH (1985). Control of cell wall formation during growth. (Eds C Brett & S Hillman). Society for Experimental Biology Seminar Series 28, 177-197.

Bolwell GP, Dalessandro G & Northcote DH (1985). Decrease of polygalacturonic acid synthase during xylem differentiation in sycamore. *Phytochemistry*, 24, 699–702.

Northcote DH (1986). Molecular and cell biology of plant cells. *Journal of Cell Science*. Supplement, 4, 115–135.

Gould J & Northcote DH (1986). Cell-cell recognition of host surfaces by pathogens. The adsorption of maize (*Zea mays*) root mucilage by surfaces of pathogenic fungi. *Biochemical Journal*, 233, 395–405.

Dalessandro G, Piro G & Northcote DH (1986). Glucomannan-synthase activity in differentiating cells of *Pinus sylvestris* L. *Planta*, 169, 564-574.

Beeching JR & Northcote DH (1987). Nucleic acid (cDNA) and amino acid sequences of isocitrate lyase from castor bean. *Plant Molecular Biology*, 471–475.

Rodriguez D, Dommes J & Northcote DH (1987). Effect of abscisic and gibberellic acids on malate synthase transcripts in germinating castor bean seeds. *Plant Molecular Biology*, 9, 227–235.

Sham M-H & Northcote DH (1987). Transcription and translation of phloem protein (PP2) during phloem differentiation in *Cucurbita maxima*. *Planta*, 170, 392–399.

Burlion N & Northcote DH (1987). Electrical fusion of protoplasts from sycamore mutants and hybrid selection on hypoxanthine-aminopterin-thymidine (HAT) medium. *Protoplasma*, 138, 23–31.

Northcote DH (1987). Hormonal and development control of gene expression in castor beans. *Biochemical Society Transactions*, 15, 11–12.

Ramsden L & Northcote DH (1987). Glucomannan synthase from suspension cultures of *Pinus sylvestris*. *Phytochemistry*, 26, 2679–2683.

McLaughlin LF, Northcote DH & Roberts K. (1987). Arabinosyl:hydroxyproline transferase activity in *Chlamydomonas reinhardtii. Phytochemistry*, 26, 921–925.

Dalessandro G, Piro G & Northcote DH (1988). A membrane-bound enzyme complex synthesising glucan and glucomannan in pine tissues. *Planta*, 175, 60–70.

Piro G, Dalessandro G & Northcote DH (1988). Biosynthesis of glucans and glucomannans in differentiating pine tissues. *Giornale Botanico Italiano*, 122, Supplement 2, 124-125.

Thelen MP & Northcote DH (1989). Identification and purification of a nuclease from *Zinnia elegans* L: a potential molecular marker for xylogenesis. *Planta*, 179, 181–195.

Northcote DH, Davey R & Lay J (1989). Use of antisera to localize callose, xylan and arabinogalactan in the cell-plate, primary and secondary walls of plant cells. *Planta*, 178, 353–366.

Northcote DH & Gould J (1989). The mucilage secreted by roots and its possible role in cell-cell recognition for the adhesion of fungal pathogens to root surfaces of *Zea mays* L. *Symposia of the Society for Experimental Biology* (Eds E Chandler & NA Ratcliffe) 43, 429–447.

Stanford A, Bevan M & Northcote DH (1989). Differential expression within a family of novel wound-induced genes in potato. *Molecular General Genetics*, 215, 200–208.

Lin Q & Northcote DH (1990). Expression of phenylalanine ammonia-lyase gene during trachearyelement differentiation from cultured mesophyll cells of *Zinnia elegans* L. *Planta*, 182, 591–598.

Rodriguez D, Ginger RS, Baker A & Northcote DH (1990). Nucleotide sequence analysis of a cDNA clone encoding malate synthase of castor bean (*Ricinus communis*) reveals homology to DAL7, a gene involved in allantoin degradation in *Saccharomyces cerevisiae*. *Plant Molecular Biology*, 15, 501–504.

Stanford AC, Northcote DH & Bevan MW (1990). Spatial and temporal patterns of transcription of a wound-induced gene in potato. *EMBO Journal*, 9, 593–603

Blanton RL & Northcote DH (1990). A 1,4- β -D-glucan-synthase system from *Dictyostelium discoideum*. *Planta*, 180, 324–332.

Northcote DH (1991). Site of cellulose synthesis. In *Biosynthesis and Biodegradation of Cellulose* (Eds CH Haigler & PL Weimer) 165-176. New York: Marcel Dekker Inc.

Northcote DH (1991). Helen Kemp Porter. *Biographical Memoirs of the Royal Society*, 37, 401-409.

Northcote DH. (1991). Markers for plant cell differentiation. *Giornale Botanico Italiano*, 125, 62-68.

Piro G, Zuppa A, Dalessandro G & Northcote DH (1993). Glucomannan synthesis in pea epicotyls: the mannose and glucose transferases. *Planta*, 190, 206–220.

Northcote DH (1995). Aspects of vascular tissue differentiation in plants: parameters that may be used to monitor the process. *International Journal of Plant Sciences*, 156, 245–256.