

Publications

Publications are classified in the following manner:

- J Papers describing original research in refereed journals.
- R Critical reviews in journals, book chapters and reviews in books - providing each has been edited externally.
- P Published proceedings of contributions to conferences or learned societies (including published abstracts).
- T Technical reports, other publications.
- O Popular articles, other publications.

Allainguillaume, J., Wilkinson, M.J., Clulow, S.A. & Barr, S.N.R. 1997. Evidence that genes from the male parent may influence the morphology of potato dihaploids. *Theoretical and Applied Genetics* 94(2), 241-248. J

Anderson, A., McBratney, A. & Crawford, J.W. 1998. Applications of fractals to soil studies. *Advances in Agronomy* 63, 1-76. J

Anderson, A.R.A., Sleeman, B.D., Young, I.M. & Griffiths, B.S. 1996. Sensing of chemical gradients in a structurally heterogeneous environment by nematodes. *Abstract in 'Dynamics Days' Conference*, France. P

Anderson, A.R.A., Sleeman, B.D., Young, I.M. & Griffiths, B.S. 1997. Nematode movement along a chemical gradient in a structurally heterogeneous environment: 2. Theory. *Fundamental and Applied Nematology* 20, 165-172. J

Anderson, A.R.A., Young, I.M., Sleeman, B.D., Griffiths, B.S. & Roberston, W.M. 1997. Nematode movement along a chemical gradient in a structurally heterogeneous environment: 1. Experiment. *Fundamental and Applied Nematology* 20, 157-163. J0

Anderson, M., Cartinhow, S., Dicks, J., Bevan, M., Gale, M., Trick, M. & Waugh, R. 1997. UK CropNet. *Plant and Animal Genome V*, San Diego, January 1997. P

Anderson, M., Cartinhow, S., Dicks, J., Bevan, M., Gale, M., Trick, M. & Waugh, R. 1997. UK CropNet. *BBSRC PAGA Conference*, Warwick, April 1997. P

Anderson, M., Dicks, J., Gale, M., Cartinhow, C.H., Marshall, D., Waugh, R., Trick, S.M., Cardle, L., Couchman, M., Dickson, J., Hewitt, M., O'Malia, A. & Walsh, S. 1998. UK CropNet: getting to grips with plant genome data. *Plant and Animal Genome VI*, San Diego, January 1998. P

Angel, J. & Mayo, M.A. 1998. Resistencia transgenica para el control del virus motoso del enenismo de la frambuesa (raspberry bushy dwarf virus - RBDV). *Revista Colombiana de Biotecnología* 1, 35-44. J

Arli, M. & Torrance, L. 1996. Detection of potato mop-top virus in potato tubers. *Proceedings Crop Protection in Northern Britain 1996*, Dundee, 325-330. P

Armstrong, M.R., Blok, V.C. & Phillips, M.S. 1997. Multiple distinct circular mitochondrial sequences in European *Globodera pallida* populations. *Association of Applied Biology, Offered papers in Nematology*, London. P

Armstrong, M.R., Blok, V.C., Harrower, B.E., Phillips, M.S. & Trudgill, D.L. 1997. A mitochondrial DNA perspective on diversity in the potato cyst nematode, *Globodera pallida*. *Abstracts of the SON Nematology Conference*, Tuscon. P

Armstrong, M.R., Blok, V.C., Harrower, B.E., Phillips, M.S. & Trudgill, D.L. 1997. Evidence of extreme inter-population and intra-population sequence divergence in the mitochondrial genomes of *Globodera pallida* populations. *Abstracts of meeting, Parasitic Helminths from Genomes to Vaccines*, Edinburgh, 49. P

Ashman, M.R., Hallett, P.D., Brookes, P.C. & Dexter, A.R. 1996. Is the activity of microbial biomass controlled by their location? *British Society of Soil Science 1996 Meeting*, Dundee, UK. P

Avrova, A.O., Toth, R., Lyon, G.D. & Birch, P.R.J. 1998. Towards the molecular determination of durable resistance to *Phytophthora infestans* in the cultivated potato. *Proceedings of the IV European Conference on Fungal Genetics*, Leon, Spain. P

Ayivor, S. & Millam, S. 1998. Interaction of plasmid and plasmolysis on rates of transient gus expression in embryos of malting barley cultivars. *Proceedings of Joint COST Action 822 & 824 'Plant Embryogenesis Conference'*, Dublin, Ireland, 8. P

Azcón, R., Handley, L.L. & Scrimgeour, C.M. 1997. The $\delta^{15}\text{N}$ of lettuce and barley are affected by arbuscular mycorrhizal status and by external concentrations of N and P. *New Phytologist* 138, 19-26. J

Bachelier, C., Graham, J., Machray, G., Du Manoir, J., Roucou, F.F., McNicol, R.J. & Davies, H. 1997. Integration of an invertase gene to control sucrose metabolism in strawberry cultivars. *Acta Horticulturae* 439, 161-164. J

Badge, J., Robinson, D.J., Brunt, A.A. & Foster, G.D. 1997. 3'-terminal sequences of the RNA genomes of narcissus latent and Maclura mosaic viruses suggest that they represent a new genus of the Potyviridae. *Journal of General Virology* 78, 253-257. J

Baker, S., Newton, A.C. & Gurr, S.J. 1997. Temporary breakdown of *Mlo*-resistance to mildew in spring barley. *Abstracts of Approaches to Improving Disease Resistance to Meet Future Needs: Airborne Pathogens of Wheat and Barley*, 11-13 November, Prague, Czech Republic. P

Bandarra, N.M., Batista, I., Nunes, I.M.L., Empis, J.M. & Christie, W.W. 1997. Seasonal changes in lipid composition of sardine (*Sardina pilchardus*). *Journal of Food Science* 62, 40-42. J

Bardgett, R.D. & Griffiths, B.S. 1997. Ecology and biology of soil protozoa, nematodes and microarthropods. In: Van Elsas, J.D., Wellington, E.M.H. & Trevors, J.D. (eds.). *Modern Soil Microbiology*. Marcel Dekker, New York, 129-163. R

Barker, H. 1997. Extreme resistance to potato virus V in clones of *Solanum tuberosum* that are also resistant to potato

viruses Y and A: evidence for a locus conferring broad-spectrum potyvirus resistance. *Theoretical and Applied Genetics* 95, 1258-1262. J

Barker, H., Reavy, B., Webster, K.D., Dawson, S.M.S., Main, S., Sandgren, M. & Oxelfelt, P. 1996. Transgenic resistance to potato mop-top furovirus. *Proceedings of the 3rd Symposium of the International Working Group on Plant Viruses with Fungal Vectors*, Dundee 5-8 August 1996, 133-136. P

Barr, S.N.R., Payne, L.A., Dale, M.F.B. & Wilkinson, M.J. 1996. Predictive correlates of shoot regeneration from potato protoplast culture. *Plant Cell Reports* 15, 350-354. J

Barthels, N., Van Der Lee, F.M., Klap, J., Godijn, O.J.M., Ohl, S.A., Puzio, P., Grundler, F.M.W., Karimi, M., Robertson, L., Robertson, W.M., Lindsey, K., Van Montague, M., Gheysen, G. & Sijmons, P. 1998. Regulatory sequences of *Arabidopsis* driving reporter gene expression in nematode-feeding structures. *The Plant Cell* 10, 1-17. J

Baum, M., Erskine, W. & Ramsay, G. 1997. Lentil and faba bean. In: Watanabe, K. & Pehu, E. (eds.). *Plant Biotechnology and Plant Genetic Resources for Sustainability and Productivity*. RG Landes/Academic Press, 117-131. R

Baur, R., Birch, A.N.E., Hopkins, R.J., Griffiths, D.W., Simmonds, M.S.J. & Städler, E. 1996. Oviposition and chemosensory stimulation in the root flies *Delia radicum* and *D. floralis* in response to plants and extracts from four *Brassica* genotypes. *Entomologia Experimentalis et Applicata* 78, 61-75. J

Bedrock, C.N., Cheshire, M.V., Williams, B.L., Chapman, S.J., Chudek, J.A. & Goodman, B.A. 1996. Identification of nitrogenous components present in fungal and bacterial tissue using ^{15}N CPMAS NMR spectroscopy. *British Society of Soil Science Conference on 'Biological and Physical Interactions in Soils'*, Dundee, 52. P

Bedrock, C.N., Cheshire, M.V., Williams, B.L., Solntseva, I., Chapman, S.J., Chudek, J.A. & Goodman, B.A. 1998. Identification by ^{15}N CPMAS NMR spectroscopy of nitrogenous components of fungal and bacterial origin immobilised in wheat straw during decomposition in soil. *Soil Biology and Biochemistry* 30, 113-115. J

Begley, I.S. & Scrimgeour, C.M. 1997. High precision $\delta^2\text{H}$ and $\delta^{18}\text{O}$ measurement for water and volatile organic compounds by continuous-flow pyrolysis isotope ratio mass spectrometry. *Analytical Chemistry* 69, 1530-1535. J

Bengough, A.G. 1997. Modelling rooting depth and soil strength in a drying soil profile. *Journal of Theoretical Biology* 186, 327-338. J

Bengough, A.G. & McKenzie, B.M. 1997. Sloughing of root cap cells decreases the frictional resistance to maize (*Zea mays* L.) root growth. *Journal of Experimental Botany* 48, 885-893. J

Bengough, A.G., Croser, C. & Pritchard, J. 1997. A bio-physical analysis of root growth under mechanical stress. In: Anderson, H.M., Barlow, P.W., Clarkson, D.T., Jackson, M.B. & Shewry, P.R. (eds.). *Plant Roots - From Cells to Systems*. Kluwer Academic Publishers, Dordrecht, 107-116. R.

Bengough, A.G., Croser, C. & Pritchard, J. 1997. A bio-physical analysis of root growth under mechanical stress. *Plant and Soil* 189, 155-164. J

Bengough, A.G., Mullins, C.E. & Wilson, G. 1997. Estimating soil frictional resistance to metal probes and its relevance to the penetration of soil by roots. *European Journal of Soil Science* 48, 603-612. J

Benson, E.E., Reed, B., Harding, K., Millam, S. & Brennan, R. 1997. Developing cryopreservation strategies for genebanks of vegetatively propagated crop plants. *Society for In Vitro Biology Conference*, June 1998, Las Vegas, USA. P

Bentaleb, I., Fontugne, M., Grimalt, M., Hatte, C. & Johnston, A.M. 1996. Resultats preliminaires de la distribution de marqueurs moleculaires liquides le long de la radiale et des teneurs en carbone at azote particulaires (parametres JGOFS). *Colloque Antares-J-GOFS INSU*, Montpellier. P

Berdeaux, O., Christie, W.W., Gunstone, F.D. & Sebedio, J.L. 1997. Large-scale synthesis of methyl *cis*-9,*trans*-11-octadecadienoate from methyl ricinoleate. *Journal of the American Oil Chemists' Society* 74, 1011-1015. J

Bertheau, Y., Fréchon, D., Toth, I.K. & Hyman, L.J. 1998. DNA amplification by polymerase chain reaction. In: Pérombelon, M.C.M. & van der Wolf, J.M. (eds.). *Methods for the Detection and Quantification of Erwinia carotovora subsp. atroseptica on Potatoes: A Laboratory Manual*. Scottish Crop Research Institute Occasional Publication No.11, 39-55. R

Bingham, I.J., Bengough, A.G. & O'Sullivan, M.F. 1998. Response of cereal plants to spatial variation in soil strength. *Journal of Experimental Botany* 49, 35. P

Birch, P.R.J. 1998. Targeted differential display of abundantly expressed sequences from the basidiomycete *Phanerochaete chrysosporium* which contain regions coding for fungal cellulose-binding domains. *Current Genetics* 33, 70-76. J

Birch, P.R.J., Hyman, L.J., Taylor, R.A., Opio, A.F., Bragard, C. & Toth, I.K. 1997. RAPD PCR-based differentiation of *Xanthomonas campestris* pv. *phaseoli* and *Xanthomonas campestris* pv. *phaseoli* var. *fuscans*. *European Journal of Plant Pathology* 103, 809-814. J

Black, I., Newton, A.C. & Dodds, J. 1997. A glossary of computer terms and a brief history of the Internet. <http://www.bspp.org.uk/glossary> O

Blackman, L.M., Boevink, P., Santa Cruz, S., Palukaitis, P. & Oparka, K.J. 1998. The movement protein of cucumber mosaic virus traffics into sieve elements in minor veins of *Nicotiana glauca*. *Plant Cell* 10, 525-537. J

Blok, V.C., Cianci, C., Tibbles, K.W., Inglis, S.C., Krystal, M. & Digard, P. 1996. Inhibition of the influenza virus RNA-dependent RNA polymerase by antisera directed against the carboxy-terminal region of the PB2 sub-unit. *Journal of General Virology* 77, 1025-1033. J

Blok, V.C., Ehwaeti, M., Fargette, M., Kumar, A., Phillips, M.S., Robertson, W.M. & Trudgill, D.L. 1997. Evolution of resistance and virulence in relation to the management of nematodes with different biology, origins and reproductive strategies. *Nematologica* 43, 1-13. J

Blok, V.C., Malloch, G., Harrower, B.E., Phillips, M.S. & Vrain, T.C. 1998. Intraspecific variation in ribosomal DNA in populations of the potato cyst nematode *G. pallida*. *Journal of Nematology* 30, 262-275. J

Blok, V.C., Phillips, M.S. & Harrower, B.E. 1997. Comparison of British populations from continental Europe and South America using RAPDs. *Genome* 40, 286-293. J

Boag, B. 1997. The control of high densities of rabbits in a rabbit prone area in eastern Scotland: a case history. *Proceedings of the First European Vertebrate Pest Management Conference*, Central Science Laboratory, York, 1-3 September 1997, 6. P

- Boag, B. & Mlotkiewicz, J.A.** 1997. The repellent effect of a synthetic odour derived from lion faeces applied to rabbit burrows. *Proceedings of the First European Vertebrate Pest Management Conference*, Central Science Laboratory, York, 1-3 September 1997, 6. P
- Boag, B. & Neilson, R.** 1996. Distributions and ecology of *Rotylenchus* and *Paratylenchus* (Nematoda: Hoplolaimidae) in Great Britain. *Nematologica* 42, 98-108. J
- Boag, B. & Neilson, R.** 1996. Effects of potential climatic changes on plant-parasitic nematodes. *Aspects of Applied Biology* 45, 331-334. P
- Boag, B. & Yeates, G.W.** 1997. Soil nematode biodiversity in terrestrial ecosystems. *Biodiversity and Conservation* 196, 151-162. J
- Boag, B., Evans, K.A., Yeates, G.W., Brown, D.J.F. & Neilson, R.** 1997. Global potential distribution of European longidorid virus-vector nematodes. *Nematologica* 43, 99-106. J
- Boag, B., Hebden, P.M., Neilson, R. & Rodger, S.J.** 1996. Effect of different set-aside management regimes on soil nematode fauna. *Aspects of Applied Biology* 47, 463-466. P
- Boag, B., Jefferies, R.A., Vetrano, L.M., Wishart, J., Peneva, V. & Neilson, R.** 1997. Impact of diesel pollution on soil inhabiting nematodes. *Proceedings of the Second English Language International Nematology Symposium of the Russian Society of Nematologists*, Moscow, 4. P
- Boag, B., Jones, H.D. & Neilson, R.** 1998. The spread of the New Zealand flatworm (*Artioposthia triangulata*) within Great Britain. *European Journal of Soil Biology*, 33, 53-56. J
- Boag, B., Neilson, R., Robinson, D., Scrimgeour, C.M. & Handley, L.L.** 1997. Identifying host-parasite trophic relationships using $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$. *British Ecological Society Winter Meeting*, University of Warwick, December, 1997. P
- Boag, B., Palmer, L.F., Neilson, R., Legg, R. & Chambers, S.J.** 1997. Distribution, prevalence and intensity of earthworm populations in arable land and grassland in Scotland. *Annals of Applied Biology* 130, 153-165 J
- Bonants, J.M., Hagenaar De Veerd, M., Van Gent-Pelzer, M.P., Lacourt, I., Cooke, D.E.L. & Duncan, J.M.** 1997. Detection and identification of *Phytophthora fragariae* Hickman by the polymerase chain reaction. *European Journal of Plant Pathology* 103, 345-355. J
- Bradshaw, J.E., Dale, M.F.B. & Phillips, M.S.** 1996. Breeding for resistance to PCN at SCRI. *Potato Cyst Nematode Review Meeting*, SASA, Edinburgh. T
- Bradshaw, J.E., Gemmell, D.J. & Wilson, R.N.** 1997. Transfer of resistance to clubroot (*Plasmodiophora brassicae*) to swedes (*Brassica napus* L. var. *napobrassica* Peterm) from *B. rapa*. *Annals of Applied Biology* 130, 337-348. J
- Bremner, D.H., Benson, E.E., Prichard, H.W., Wood, C.B., Goodman, B.A. & Deighton, N.** 1996. Oxidative stress and seed desiccation sensitivity in *Aesculus hippocastanum* L. *Oxygen free radicals and environmental stress in plants, 2nd International Conference*, Vienna, 13. P
- Bremner, D.H., Magill, W.J., Deighton, N. & Benson, E.E.** 1997. An evaluation of the analytical methods for the detection of secondary oxidation products in dedifferentiated plant cultures. *Phyton* 37, 39-44. J
- Brenchley, J.L., Raven, J.A. & Johnston, A.M.** 1996. A comparison of reproductive allocation and reproductive effort between semelparous and iteroparous fucoids (Fucales, Phaeophyta). *Hydrobiologia* 327, 185-190. J
- Brenchley, J.L., Raven, J.A. & Johnston, A.M.** 1997. Resource acquisition in two intertidal fucoid seaweeds, *Fucus serratus* and *Himantalia elongata*: seasonal variation and effects of reproductive development. *Marine Biology* 139, 367-375. J
- Brendel, O., Wheeler, C.T., Tilak, M. & Handley, L.L.** 1997. A statistical comparison of the two-source $\delta^{15}\text{N}$ and ^{15}N isotope dilution methods for estimating plant N_2 -fixation using *Trifolium pratense* and *Lolium perenne*. *Australian Journal of Plant Physiology* 42, 631-636. J
- Brennan, R.M.** 1997. The future looks bright for SCRI black-currant varieties. *The Fruit Grower*, February 1997, 16. O
- Brennan, R.M., Goodman, B.A., Chudek, J.A. & Hunter, G.** 1997. Non-destructive visualisation in three dimensions of freezing events in flowers of *Ribes nigrum* L. using spin echo NMR microscopy. *Magnetic Resonance Imaging* 15, 1085-1090. J
- Brennan, R.M., Hunter, E.A. & Muir, D.D.** 1997. Descriptive sensory profiles of blackcurrant juice and genotypic effects on sensory quality. *Food Research International* 30, 381-390. J
- Brett, C.T., McDougall, G.J. & Baydoun, E.** 1996. Xylan biosynthesis in differentiating xylem in flax and pea. *Proceedings of the First International Conference on the Cellular and Molecular Aspects of Plant Cell Differentiation*, Beirut, Lebanon, 24-25. P
- Brett, C.T., McDougall, G.J. & Baydoun, E.** 1996. Xylan biosynthesis in pea and flax. *Proceedings of the 6th Scottish Cell Wall Group Meeting*, Edinburgh, 10. P
- Broda, P., Birch, P.R.J., Brooks, P.R. & Sims, P.F.G.** 1996. Gene families and gene expression in the basidiomycete *Phanerochaete chrysosporium*. *Proceedings of the Vth International Conference on Biotechnology in the Pulp and Paper Industry*. P
- Brough, C.L., Coventry, J.M., Christie, W.W., Kroon, J.T.M., Barsby, T.L. & Slabas, A.R.** 1997. Engineering trierucin into oilseed rape by the introduction of a 1-acyl-sn-glycerol-3-phosphate acyltransferase from *Limnanthes douglasii*. In: Williams, J.P., Khan, M.U. & Lem, N.W. (eds.). *Physiology, Biochemistry and Molecular Biology of Lipids*. Kluwer Academic Publishers, Boston, 392-394. P
- Brown, D.J.F.** 1997. The nematode transmitted viruses. In: Santos De A., M.S.N., Abrantes De O. I.M., Brown, D.J.F. & Lemos, R.J.V.C.M. (eds.). *An introduction to virus vector nematodes and their associated viruses*. Centro de Sistemática e Ecologia, Universidade de Coimbra, Coimbra, Portugal, 274-311. R
- Brown, D.J.F.** 1997. Transmission of viruses by nematodes. In: Santos, De A., M.S.N., Abrantes, De O. I.M., Brown, D.J.F. & Lemos, R.J.V.C.M. (eds.). *An introduction to virus vector nematodes and their associated viruses*. Centro de Sistemática e Ecologia, Universidade de Coimbra, Coimbra, Portugal, 355-380. R
- Brown, D.J.F.** 1997. TRV-Spraying, the threat to chipping crops. *Potato Review* 7, 34-36. O
- Brown, D.J.F.** 1997. Virus-vector nematodes and their associated nepo- and tobamoviruses. *Proceedings of the 3rd Hangzhou International Symposium on Plant Pathology and Biotechnology*, Hangzhou, China, 57. P
- Brown, D.J.F. & Boag, B.** 1997. Sampling for virus vector nematodes. In: Santos, De A. M.S.N., Abrantes, De O. I.M., Brown, D.J.F. & Lemos, R.J.V.C.M. (eds.). *An Introduction to Virus Vector Nematodes and their Associated Viruses*. Centro de Sistemática e Ecologia, Universidade de Coimbra, Coimbra, Portugal, 69-95. R

- Brown, D.J.F. & Halbrecht, J.M.** 1997. Identification of *Xiphinema* species. In: Santos, De A., M.S.N., Abrantes, De O. I.M., Brown, D.J.F. & Lemos, R.J.V.C.M. (eds). *An Introduction to Virus Vector Nematodes and their Associated Viruses*. Centro de Sistemática e Ecologia, Universidade de Coimbra, Coimbra, Portugal, 177-222. R
- Brown, D.J.F. & Trudgill, D.L.** 1997. Longidorid nematodes and their associated viruses. In: Santos, De A. M.S.N., Abrantes, De O. I.M., Brown, D.J.F. & Lemos, R.J.V.C.M. (eds.). *An Introduction to Virus Vector Nematodes and their Associated Viruses*. Centro de Sistemática e Ecologia, Universidade de Coimbra, Coimbra, Portugal, 1-40. R
- Brown, D.J.F. & Weischer, B.** 1996. Nematode-virus interactions. *Nematologica* 26, 196-197. P
- Brown, D.J.F. & Weischer, B.** 1998. Specificity, exclusivity and complementarity in the transmission of plant viruses by plant parasitic nematodes, an annotated terminology. *Fundamental and Applied Nematology* 21, 1-11. J
- Brown, D.J.F., Kyriakopoulou, P.E., Robertson, W.M.** 1997. Frequency of transmission of artichoke Italian latent nepovirus by *Longidorus fasciatus* (Nematoda: Longidoridae) from artichoke fields in the Iria and Kandia areas of Argolis in northeast Peloponnesus, Greece. *European Journal of Plant Pathology* 103, 501-506. J
- Brown, D.J.F., Neilson, R., Connolly, T. & Boag, B.** 1997. An assessment of morphometric variability between populations of *Longidorus vineacola* Sturhan & Weischer, 1964 (Nematoda: Longidoridae) and morphologically related species. *Systematic Parasitology* 37, 93-103. J
- Brown, D.J.F., Robertson, W.M., Neilson, R., Bem, F. & Robinson, D.J.** 1996. Characterization and vector relations of a serologically distinct isolate of tobacco rattle tobravirus (TRV) transmitted by *Trichodorus similis* in northern Greece. *European Journal of Plant Pathology* 102, 61-68. J
- Brown, D.J.F., Trudgill, D.L. & Robertson, W.M.** 1996. Nepoviruses: transmission by nematodes. In: Harrison, B.D. & Murrant, A.F. (eds.). *The Plant Viruses, Volume 5: Polyhedral Virions and Bipartite RNA Genomes*. Plenum Press, New York, 187-209. R
- Brown, D.J.F., Vassilakos, N., MacFarlane, S.A. & Weischer, B.** 1997. Exclusivity and complementarity of the transmission of tobraviruses by their respective trichodorid vector nematodes. *Proceedings of the 49th International Symposium on Crop Protection*, Gent, Belgium, 69. R
- Brown, J., Dale, M.F.B. & Mackay, G.R.** 1996. General adaptability of potato genotypes selected in the UK for the Mediterranean region. *Journal of Agricultural Science* 126, 441-448. J
- Brown, J.W.S. & Leader, D.J.** 1997. Process for producing stabilised RNA molecules within cells, RNA molecules thus produced and nucleic acid precursors of such molecules. *European Patent Application No: 97401480.5*. T
- Brown, J.W.S. & Shaw, P.J.** 1998. Small nucleolar RNAs (snoRNAs) and pre-ribosomal RNA processing. *Plant Cell* 10, 649-657. J
- Brown, J.W.S. & Simpson, C.G.** 1998. Splice site selection in plant pre-mRNA splicing. *Annual Reviews of Plant Physiology and Plant Molecular Biology* 49, 77-95. J
- Brown, J.W.S., Simpson, C.G., Hedley, P.E., McQuade, C.M., Lyon, J.M. & Machray, G.C.** 1998. *Third Annual Meeting of the RNA Society*, Madison, USA, May 1998. P
- Bruce, A., Wheatley, R.E., Hackett, C. & Kundzewicz, A.** 1997. Analyses of volatile organic compounds (VOCs) from *Trichoderma* spp.: effect of media composition on VOC production and level of inhibition of wood decay fungi. *27th Annual Meeting of the International Research Group on Wood Preservation*, Stockholm, Sweden. P
- Bryan, G.J., Collins, A.J., Stephenson, P., Smith, J.B., Orry, A & Gale, M.D.** 1997. Isolation and characterization of microsatellites from hexaploid bread wheat. *Theoretical and Applied Genetics* 94, 557-563. J
- Byrd, C.A., Jones, J.T., Quattro, J.M., Rogers, M.E., Brunjes, P.C. & Vogt, R.G.** 1996. Ontogeny of odorant receptor gene expression in the zebrafish *Danio rerio*. *Journal of Neurobiology* 24, 445-458. J
- Canto, T., Li, Q., Ryu, K.H., Prior, D.A.M. & Palukaitis, P.** 1997. Localization of movement-deficient cucumber mosaic virus mutants: subcellular localization of wildtype and mutant 3a proteins fused to the green fluorescent protein. *EMBO Workshop. Molecular mechanisms in the replicative cycle of viruses in plants*, Las Navas del Marqués, 1997, 41. P
- Canto, T., Prior, D.A.M., Hellwald, K-H., Oparka, K.J. & Palukaitis P.** 1997. Characterization of cucumber mosaic virus IV. Movement protein and coat protein are both essential for cell-to-cell movement of cucumber mosaic virus. *Virology* 237, 237-248. J
- Cardoso, M.A., Provan, J., Powell, W., Ferreira, P.C.G. & de Oliveira, D.E.** 1998. High genetic differentiation among remnant populations of the endangered *Caesalpinia echinata* Lam. (Leguminosae - Caesalpinoidea). *Molecular Ecology* 7, 601-608. J
- Chen, J., Shi, N-N., Wilson, T.M.A., Antoniwi, J.F., MacFarlane, S.A. & Adams, M.J.** 1996. Sequence analysis of wheat and oat furovirus capsid protein genes suggests that oat golden stripe virus is a strain of soil-borne wheat mosaic virus. *Virus Research* 41, 179-183. J
- Christie, W.W. (ed.)** 1997. *Advances in Lipid Methodology - Four*. The Oily Press, Dundee, 300 pp. R
- Christie, W.W.** 1997. Analysis of fatty acids by high-performance liquid chromatography. *Lipid Technology* 9, 124-126. O
- Christie, W.W.** 1997. Dimethyl disulphide derivatives in fatty acid analysis. *Lipid Technology* 9, 17-19. O
- Christie, W.W.** 1997. Some recent references in lipid methodology - 1995. In: Christie, W.W. (ed.). *Advances in Lipid Methodology - Four*. The Oily Press, Dundee, 253-272. R
- Christie, W.W.** 1997. Some recent references in lipid methodology - 1996. In: Christie, W.W. (ed.). *Advances in Lipid Methodology - Four*. The Oily Press, Dundee, 273-293. R
- Christie, W.W.** 1997. Structural analysis of fatty acids. In: Christie, W.W. (ed.). *Advances in Lipid Methodology - Four*. The Oily Press, Dundee, 119-169. R
- Christie, W.W.** 1997. The analysis of conjugated fatty acids. *Lipid Technology* 9, 73-75. O
- Christie, W.W.** 1998. Gas chromatography-mass spectrometry methods for structural analysis of fatty acids. *Lipids* 33, 343-353. R
- Christie, W.W.** 1998. Silver ion high-performance liquid chromatography: the mechanism. *Lipid Technology* 10, 17-19. O
- Christie, W.W.** 1998. Some recent advances in the chromatographic analysis of lipids. *Analysis* 126, M34-M40. R
- Christie, W.W., Dobson, G. & Gunstone, F.D.** 1997. Conjugated linoleic acid (CLA). *Lipids* 32, 1231. O

- Christie, W.W., Gill, S., Nordbäck, J., Itabashi, Y., Sanda, S. & Slabas, A.R.** 1998. New procedures for rapid screening of leaf lipid components from *Arabidopsis*. *Phytochemical Analysis* 9, 53-57. J
- Chudek, J.A., Geoghegan, I.E., Hunter, G., MacKay, R.L., Majerus, M.E.N., Moritz, S., McNicol, R.J. & Birch, A.N.E.** 1997. MRM, an alternative approach to the study of host/parasitoid relationships in insects. *4th International Conference on Magnetic Resonance Microscopy*, 'Heidelberg Conference in Albuquerque', 21-25 September, 66.
- Clegg, C.D., Anderson, J.M., Lappin-Scott, H.M. & van Elsas, J.D.** 1996. Biophysical processes affecting the transit of a genetically modified *Pseudomonas fluorescens* through the gut of the woodlouse *Porcellio scaber*. *Soil Biology and Biochemistry* 28, 997-1004. J
- Clegg, C.D., Ritz, K. & Griffiths B.S.** 1998. Broad-scale analysis of soil microbial community DNA from upland grasslands. *Antonie van Leeuwenhoek* 73, 9-14. R
- Clegg, C.D., Ritz, K. & Griffiths, B.S.** 1997. Extraction of microbial community DNA from humified upland grasslands. *Letters in Applied Microbiology* 25, 30-33. J
- Clegg, C.D., Ritz, K. & Griffiths, B.S.** 1998. A broadscale analysis of soil microbial community DNA. *Proceedings of ISME-8*, Halifax, Nova Scotia, 1480. P
- Clegg, C.D., Ritz, K., Griffiths, B.S. & Wheatley, R.E.** 1997. Analysis of soil microbial community DNA in upland grasslands: broad-scale and denitrification targeted approaches. *3rd UK Soil:Plant:Microbe Initiative Annual Meeting*, Oxford, UK. P
- Clegg, C.D., van Elsas, J.D., Anderson, J.M. & Lappin-Scott, H.M.** 1996. Survival of parental and genetically modified derivatives of a soil isolated *Pseudomonas fluorescens* under nutrient limiting conditions. *Journal of Applied Bacteriology* 81, 19-26. J
- Collins, A., Milbourne, D., Ramsay, L., Meyer, R., Chatot-Balandras, C., Bonnel, E. & Waugh, R.** 1998. Development of markers for detection of horizontal resistance to late blight in potato. *Plant and Animal Genome VI*, San Diego, January 1998. P
- Cooke, D.E.L.** 1997. FBPP update (People & Places section). *British Society for Plant Pathology Newsletter*, April 1997. O
- Cooke, D.E.L., Forster, J.W., Lewis, D.M., Jenkins, P.D. & Jones, D.G.** 1998. Analysis of interspecific variation in the genus *Alternaria* by the use of RAPD-PCR. *Annals of Applied Biology* 132, 197-209. J
- Cooke, D.E.L., Jenkins, P.D.J. & Lewis, D.M.** 1997. Production of phytotoxic spore germination liquids by *Alternaria brassicae* and *Alternaria brassicicola* and their effects on species of the family Brassicaceae. *Annals of Applied Biology* 131, 413-426. J
- Cooke, D.E.L., Kennedy, D.M., Guy, D.C., Russell, J., Unkles, S.E. & Duncan, J.M.** 1996. Relatedness of Group I species of *Phytophthora* as assessed by randomly polymorphic DNA (RAPDs) and sequences of ribosomal DNA. *Mycological Research* 100, 297-300. J
- Cooke, D.E.L., Lacourt, I., Murphy, J., Williams, N. & Duncan, J.M.** 1997. Detection of *Phytophthora* in soft fruit - the way ahead. *INTER-COST meeting Sampling and Identification of Parasitic and Pathogenic Microorganisms in Agrobiology*, Lisbon, Portugal, November 1997. P
- Cooke, R., Raynal, M., Laudie, M., Grellet, F., Delseny, M., Mooris, P., Guerrier, D., Giraudat, J., Quigley, F., Clabault, G., Li, Y.F., Mache, R., Krivitzky, M., Gy, J.J., Kreis, M., Lecharny, A., Parmentier, Y., Marbach, J., Fleck, J., Clement, B., Philipps, G., Herve, C., Bardet, C., Tremousaygue, D., Lescure, B., Lacomme, C., Roby, D., Jourjon, M.F., Chabrier, P., Charpentreau, J.L., Desprez, T., Amselem, J., Chiapello, H. & Hofte, H.** 1996. Further progress towards a catalogue of all *Arabidopsis* genes: analysis of a set of 5000 non-redundant ESTs. *Plant Journal* 9, 101-124. J
- Cowan, G.H., Torrance, L. & Reavy, B.** 1997. Detection of potato mop-top virus capsid readthrough protein in virus particles. *Journal of General Virology* 78, 1779-1783. J
- Craig, W., Anthony, P., O'Neill, C.M., Mathias, R.J., Power, J.B., Lowe, K.C. & Davey, M.R.** 1997. Cryopreservation of *Moricandia arvensis* (L.) DC (*Brassicaceae*) cell suspensions: beneficial effects of Pluronic F-68. *Cryo-Letters* 18, 201-208. J
- Craig, W., Weigand, A., O'Neill, C.M., Mathias, R.J., Power, J.B. & Davey, M.R.** 1997. Somatic embryogenesis and plant regeneration from stem explants of *Moricandia arvensis*. *Plant Cell Reports* 17, 27-31. J
- Crawford, J.W. & Young, I.M.** 1997. Comments on the relation between the moisture release curve and the structure of soil. *European Journal of Soil Science* 48, 189-191. J
- Crawford, J.W. & Young, I.M.** 1998. The interaction between soil structure & microbial dynamics. In: Baveye, P., Parlange, J.Y. & Stewart, B.A. (eds.). *Fractals in Soil Science. Advances in Soil Science Series*. Lewis Publishers, Boca Raton, Florida, 233-260. R
- Croser, C., Bengough, A.G. & Stewart, D.** 1997. FTIR analysis of cell walls from mechanically impeded pea roots. *Proceedings of the Scottish Cell Wall Group Meeting*, Aberdeen. P
- Croser, C., Bengough, G. & Stewart, D.** 1997. Mechanical impedance and its effect on root cell wall composition and structure. *Proceedings of the Sixth Scottish Cell Wall Group Meeting*, Aberdeen, 15. P
- Cruz, E., Euerby, M.R., Johnson, C.M. & Hackett, C.A.** 1997. Chromatographic classification of commercially available reverse-phase HPLC columns. *Chromatographia* 44, 151-161. J
- Dale, M.F.B., Cochrane, M.P.C., Cooper, A.M., Duffus, C.M., Ellis, R.P., Lynn, A., Morrison, I.M., Paterson, L., Prentice, R.D.M., Swanston, J.S. & Tiller, S.A.** 1996. UK-grown starches: composition and properties. *Starch: Structure and Function*, Cambridge. P
- Dale, M.F.B., Griffiths, D.W., Bain, H. & Goodman, B.A.** 1997. The effect of gamma irradiation on glycoalkaloid and chlorophyll synthesis in seven potato cultivars. *Journal of the Science of Food and Agriculture* 75(2), 141-147. J
- D'Arcy, C.J. & Mayo, M.A.** 1997. Luteovirus taxonomy and nomenclature proposals. *BYDV Newsletter* 6, 2-3. CIMMYT, Mexico. O
- D'Arcy, C.J. & Mayo, M.A.** 1997. Proposals for changes in luteovirus taxonomy and nomenclature. *Archives of Virology* 142, 1285-1287. J
- Davidson, F.A., Sleeman, B.D. & Crawford, J.W.** 1997. Travelling waves in a reaction-diffusion system modelling fungal mycelia. *IMA Journal of Applied Mathematics* 58, 237-257. J
- Davidson, F.A., Sleeman, B.D., Rayner, A.D.M., Crawford, J.W. & Ritz, K.** 1997. Travelling waves and pattern formation in a model for fungal development. *Journal of Mathematical Biology* 35, 589-608. J

- Davies, D.H.K., Christal, A., Fisher, N.M., Lawson, H.M. & Wright, G.McN.** 1998. Soil seedbank changes under non-rotational set-aside management and the relationship with vegetation development. *Weed Seedbanks: Determination, Dynamics and Manipulation. Aspects of Applied Biology* 51, 255-264. P
- Davies, H.V.** 1997. Emerging technologies in harvesting techniques: relevance of biotechnology. *Proceedings of the 16th Annual National Potato Council Seed Seminar*, Traverse City, Michigan, December 1997. P
- Davies, H.V.** 1997. Improving the storage characteristics of potatoes. *Proceedings of Symposium on Crop Protection and Food Quality: Meeting Company Needs*, SCI/BCPC Meeting, September 1997. P
- Davies, H.V.** 1997. Physiological mechanisms associated with the development of internal necrotic disorders of potato. *American Potato Journal* 75, 1-8. J
- Davies, H.V.** 1997. Prospects for improving fruit quality through the application of biotechnology. *Proceedings of the ADAS/HRI/EMRA Soft Fruit Conference 1997*, Ashford, Kent, November 1997, 63-65. P
- Davies, H.V., Harris, N., Taylor, M.A., Jarvis, S., Ross, H., Millam, S., Blundy, M., Burrell, M. & Viola, R.** 1998. Inhibition of starch biosynthesis in transgenic potato with down-regulated fructokinase activity. *Abstracts of AAB Conference 'Production and uses of starch'*, Edinburgh. P
- De Jong, W., Forsyth, A., Leister, D., Gebhardt, C. & Baulcombe, D.** 1997. A potato hypersensitive gene against potato virus X maps to a resistance gene cluster on chromosome 5. *Theoretical and Applied Genetics* 95, 246-252. J
- De Jong, W., Mise, K., Chu, A. & Ahlquist, P.** 1997. Effects of coat protein mutations and reduced movement protein expression on infection spread by cowpea chlorotic mottle virus and its hybrid derivatives. *Virology* 232, 167-173. J
- DeMaine, M.J.** 1997. The male fertility of primary and further generation dihaploids of *Solanum tuberosum*. *Potato Research* 40, 59-68. J
- DeMaine, M.J., Lees, A.K. & Bradshaw, J.E.** 1998. Soft-rot resistance combined with other tuber characters in long day-adapted *Solanum phureja*. *Potato Research* 41, 69-82. J
- Debon, S.J.J., Tester, R.F., Davies, H.V. & Millam, S.** 1998. Effect of temperature on the synthesis, composition and physical properties of potato microtuber starch. *Journal of Food, Science and Agriculture* 76, 599-607. J
- Deighton, N. & McDougall, G.J.** 1998. Coniferyl alcohol oxidase operates through a bound free radical intermediate. *Phytochemistry* 48, 601-606. J
- Deighton, N., Magill, W.J., Bremner, D.H. & Benson, E.E.** 1997. Malondialdehyde and 4-hydroxy-2-nonenal in plant tissue cultures: LC-MS determination of 2,4-dinitrophenylhydrazones derivatives. *Free Radical Research* 27, 255-265. J
- Dellagi, A., Kachadourian, R., Laurent J., Bricard, L., Kunesch, G. & Expert, D.** 1996. Desferrioxamine-dependent iron transport in *Erwinia amylovora* CFBP1430: cloning of the gene encoding the ferrioxamine receptor FoxR. *Biomaterials* 9, 143-150. J
- Dicks, J., Anderson, M., Cardle, L., Cartinhour, S., Cochman, M., Devos, K., Dickson, J., Gale, M., Hewitt, M., Howarth, C., Marshall D., O'Malia, A., Ougham, H., Trick, M., Walsh, S. & Waugh, R.** 1998. Comparative genome analysis within the UK CropNet. *Compositae Workshop, Plant and Animal Genome VI*, San Diego, January 1998. P
- Dobson, G.** 1998. Cyclic fatty acids: qualitative and quantitative analysis. In: Hamilton, R.J. (ed.). *Lipid Analysis in Oils and Fats*. Chapman and Hall, London, 136-180. R
- Dobson, G.** 1998. Identification of conjugated fatty acids by gas chromatography-mass spectrometry of 4-methyl-1,2,4-triazoline-3,5-dione adducts. *Journal of the American Oil Chemists' Society* 75, 137-142. J
- Dobson, G., Christie, W.W. & Sebedio, J.L.** 1997. Saturated bicyclic fatty acids formed in heated sunflower oils. *Chemistry and Physics of Lipids* 87, 137-147. J
- Duarte, I.M.N. Da R.D. & Brown, D.J.F.** 1997. Sampling, detection and identification of nematode transmitted viruses. In: Santos, De A. M.S.N., Abrantes, De O. I.M., Brown, D.J.F. & Lemos, R.J.V.C.M. (eds.). *An Introduction to Virus Vector Nematodes and their Associated Viruses*. Centro de Sistemática e Ecologia, Universidade de Coimbra, Coimbra, Portugal, 313-353. R
- Dumet, D.J., Benson, E.E., Reed, B., Harding, K., Millam, S. & Brennan, R.** 1998. Developing cryopreservation strategies for genebanks of vegetatively propagated crop plants. *Abstracts SIVB Conference, Las Vegas*. P
- Duncan, J.M.** 1997. *Phytophthora* diseases of soft fruit. *Proceedings of the Irish National Soft Fruit Conference*, 1997, Dublin, April 8, 1997, 10-19. P
- Duncan, J.M.** 1997. Raspberry diseases: *Phytophthora* root rot. *Proceedings of the Ninth National Berryfruit Conference*, Melbourne, Australia, 20-23 May 1997. P
- Duncan, J.M., Cooke, D.E.L., Birch, P. & Toth, R.** 1997. Molecular variation in sexually reproducing fungal plant pathogens. *Proceedings of EU-COST Workshop*, Evian, France, September, 1997. P
- Duncan, J.M., Cooke, D.E.L., Birch, P.R.J. & Toth, R.** 1998. Molecular variation in sexually reproducing fungal plant pathogens. In: Bridge P., Couteaudier, Y. & Clarkson, J. (eds.). *Molecular Variability of Fungal Pathogens*. CAB International. J
- Duncan, L.H., Robertson, L., Robertson, W.M. & Kusel, J.R.** 1997. Isolation and characterisation of secretions from the plant-parasitic nematode, *Globodera pallida*. *Parasitology* 115, 429-438. J
- Duncan, L.H., Robertson, W.M., Kusel, J.R. & Phillips, M.S.** 1998. A putative nematode auxin-binding protein from the potato cyst nematode, *Globodera pallida*. *Proceedings of the Third International Nematology Congress*, Guadeloupe, 116. P
- Durham, R.C., Allan, T. & Hackett, C.A.** 1997. On predicting improvement and relapse in generalised anxiety disorder following psychotherapy. *British Journal of Clinical Psychology* 36, 101-119. J
- Ehwaeti, M., Trudgill, D.L. & Phillips, M.S.** 1997. Relationship between population density of *Meloidogyne incognita* and different measures of damage to tomato. *Association of Applied Biology, Offered Papers in Nematology*, London. P
- Ehwaeti, M.E., Phillips, M.S. & Trudgill, D.L.** 1998. The effect on the viability of releasing eggs of *Meloidogyne incognita* using sodium hypochlorite. *Nematologica* 44, 207-217. J
- Ellis, R.P. & Marshall, B.** 1998. Growth, yield and grain quality of barley (*Hordeum vulgare*) in response to nitrogen uptake. II. Plant development and rate of germination. *Journal of Experimental Botany* 49, 1021-1029. J

- Ellis, R.P. & Marshall, B.** 1998. The relationship between plant development in barley and the subsequent rate of seed germination. *Journal of Experimental Botany* 48, 1021-1029. J
- Ellis, R.P., Cochrane, M.P., Dale, M.F.B., Duffus, C.M., Lynn, A., Morrison, I.M., Prentice, R.D.M., Swanston, J.S. & Tiller, S.A.** 1998. Starch production and industrial use. *Journal of the Science of Food and Agriculture* 77, 289-313. J
- Ellis, R.P., Forster, B.P., Waugh, R., Bonar, N., Handley, L.L., Robinson, D., Gordon, D.C. & Powell, W.** 1997. Mapping physiological traits in barley. *New Phytologist* 137, 149-157. J
- Ellis, R.P., McNicol, J.W., Baird, E., Booth, A., Lawrence, P., Thomas, W.T.B. & Powell, W.** 1997. The use of AFLPs to examine genetic relatedness in barley. *Molecular Breeding* 3, 359-369. J
- Ellis, R.P., Swanston, J.S., Rubio, A., Perez-Vendrell, A., Romagosa, I. & Molina-Cano, J.L.** 1997. The development of β -glucanase and degradation of β -glucan in barley grown in Scotland and Spain. *Journal of Cereal Science* 26, 75-82. J
- Evans, K.A. & Boag, B.** 1996. The New Zealand flatworm: will climate change make it a potentially European problem? *Aspects of Applied Biology* 45, 335-338. O
- Evans, K.A., Boag, B., Jones, H.D., Neilson, R. & Hughes, J.M.** 1996. Areas potentially at risk from the earthworm predator *Artioposthia triangulata*: the New Zealand flatworm. *Proceedings Crop Protection in Northern Britain*, Dundee, 1996, 57-62. P
- Fargette, D., Leslie, M. & Harrison, B.D.** 1996. Serological studies on the accumulation and localisation of three tomato leaf curl geminiviruses in resistant and susceptible *Lycopersicon* species and tomato cultivars. *Annals of Applied Biology* 128, 317-328. J
- Fargette, M., Phillips, M.S., Blok, V.C., Waugh, R. & Trudgill, D.L.** 1996. An RFLP study of relationships between species, populations and resistance-breaking lines of tropical *Meloidogyne* spp. *Fundamental & Applied Nematology* 19, 193-200. J
- Fenton, B.** 1996. Molecular ecology of currant mites. *Abstracts of the Ecological Genetics Group, 40th Meeting*, University of Southampton, Southampton. P
- Fenton, B.** 1997. rDNA diagnostics of mites and aphids. COST 823. *Abstracts of the Working Group Meeting Avertebrate Diagnosis: Methods and Techniques for the Diagnosis of Avertebrate Plant Pests and their Vector Status*, Einsiedeln, Switzerland. P
- Fenton, B., Malloch, G. & Germa, F.** 1998. A study of variation in rDNA ITS regions shows that two haplotypes co-exist within a single aphid genome. *Genome* 41, 1-9. J
- Fenton, B., Woodford, J.A.T. & Malloch, G.** 1997. *Myzus persicae* - genetic variation at last! *Abstracts of Entomology '97*, Royal Entomological Society, University of Newcastle, Newcastle. P
- Fitter, A.H., Graves, J.D., Watkins, N.K., Robinson, D. & Scrimgeour, C.M.** 1998. Carbon transfer between plants and its control in networks of arbuscular mycorrhizas. *Functional Ecology* 12, 406-412. J
- Flavell, A.J., Pearce, S.R., Heslop-Harrison, J.S. & Kumar, A.** 1997. The evolution of Ty1-copia retrotransposons in eukaryotic genome. *Genetica* 100, 185-195. J
- Folkertsma, R.T., Rouppe van der Voort, J.N.A.M., Armstrong, M., Harrower, B.E., Thierry, M., Morena da Cunha, M. J., Fullaondo, A., Helder, J., Phillips, M.S., Blok, V.C., Trudgill, D.L., Bossis, M., Mugniery, D., Santos, M.S.N. De A., Abrantes, I.M.O., Ritter, E., Salazar, A. & Gommers, F.J.** 1996. Genotyping potato cyst nematodes: a search after the initial introductions. *Abstracts of the Third International Nematology Conference*, Guadeloupe. 123. P
- Forbes, P., Millam, S., Hooker, J. & Harrier, L.** 1998. Transformation of arbuscular fungi by particle bombardment. *Mycological Research* 102, 497-501. J
- Forbes, P.J., Millam, S., Hooker, J.E. & Harrier, L.A.** 1997. Transformation of arbuscular mycorrhizal fungi by particle bombardment. *Crop Science Research Report (SAC)*, 10-13. O
- Forster, B.P.** 1997. Molecular marker associations with salt tolerance in barley. *Proceedings (Invited Paper) of the 1st Congress of the Genetics Society of Slovenia*, 43-42. P
- Forster, B.P., Lee, M.A. Lundqvist, U., Millam, S., Vamling, K. & Wilson, T.M.A.** 1997. Genetic engineering of crop plants: from genome to gene. *Experimental Agriculture* 33, 15-33. R
- Forster, B.P., Pakniyat, H., Ellis, R., Handley, L.L., Robinson, D., Scrimgeour, C.M., Hackett, C.A., Keith, R., Gordon, D. & Powell, W.** 1997. Locating genotypes and genes for abiotic stress tolerance in barley: maps, markers and the wild species. *Annual Report of the Scottish Crop Research Institute for 1996/97*. Scottish Crop Research Institute, Dundee, 88-91. O
- Forster, B.P., Pakniyat, H., Ellis, R.P., Handley, L.L., Nevo, E., Gordon, D.C., Keith, R. & Powell, W.** 1997. Strategies for locating genes for salt tolerance in barley: maps, markers and the wild species. *Plant and Animal Genome V*, 25. J
- Forster, B.P., Russell, J.R., Ellis, R.P., Handley, L.L., Robinson, D., Hackett, C.A., Nevo, E., Waugh, R., Gordon, D.C., Keith, R. & Powell, W.** 1997. Locating genotypes and genes for abiotic stress tolerance in barley: a strategy using maps, markers and the wild species. *New Phytologist* 137, 141-148. J
- Foster, G.N. & Woodford, J.A.T.** 1997. Melon and cotton aphid - a new threat? *SAC Potato Newsletter*, March 1997, 5-6. O
- Foster, G.N. & Woodford, J.A.T.** 1997. Melon and cotton aphid *Aphis gossypii* Glover: (Homoptera: Aphididae) as a potential new virus vector of potatoes in Scotland. *The Entomologist* 116, 175-178. J
- Franklin, M.F. & Hackett, C.A.** 1997. Specialised regression techniques: generalised additive models and generalised linear models. *BioSS Teaching Course Notes*, Edinburgh. O
- Frisch, D.A., Begum, D., Budiman, M., Choi, S., Tomkins, J., Waugh, R., Yu, Y., Zhu, H., Sasinowski, M., Dean, R. & Wing, R.** 1998. Establishment of a BAC library resource center for agricultural genomics. *Plant and Animal Genome VI*, San Diego, January 1998. P
- Geoghegan, I.E. & Majerus, M.E.N.** 1997. Notes on the coccinellid parasitoid *Dinocampus (Perilitus) coccinellae* in Scotland. *The Entomologist* 116(3), 179-184. J
- Ghislain, M., Trognitz, B., Herrera, R., Portal, L., Hurtado, A., Herrera, C., Eslava, M., Marcucci, S., Hopp, E., Meyer, R. & Waugh, R.** 1997. Genetic mapping of late blight resistance in diploid cultivated potato. *Plant and Animal Genome V*, San Diego, January 1997. P
- Gildow, F.E., Reavy, B., Mayo, M.A., Woodford, T. & Duncan, G.H.** 1997. Potato leafroll virus-like particles lacking readthrough protein are transmitted by *Myzus persicae*. *Phytopathology* 87, S33. P

- Glidewell, S.M., Williamson, B., Goodman, B.A., Chudek, J.A. & Hunter, G.** 1997. An NMR microscopic study of grape (*Vitis vinifera* L.). *Protoplasma* 198, 27-35. J
- Goodman, B.A.** 1996. Applications of EPR spectroscopy and NMR imaging techniques to the development of disease processes in potato tubers. *2nd International Conference on 'Oxygen, Free Radicals and Environmental Stress in Plants'*, Vienna. P
- Goodman, B.A.** 1996. NMR microimaging of healthy and diseased fruit. *International Workshop on 'Plant NMR: Towards Whole Plant Functional Imaging'*. The Royal Netherlands Academy of Arts and Sciences, Amsterdam. P
- Goodman, B.A.** 1997. NMR microimaging of plants and plant products: identification of optimum spectrometer field strength for the resolution of different types of imaging problem. In: Hemmings, M.A. (ed.). *Final report to the EU on use of the large-scale NMR facility*. Wageningen Agricultural University, The Netherlands. O
- Goodman, B.A.** 1997. Potential contributions to the ALFA programme from the Scottish Crop Research Institute. *ALFA Crocon Network Meeting*, Rosario, 27-29. P
- Goodman, B.A.** 1997. Recent advances in the use of EPR spectroscopy to study free radicals associated with biotic and abiotic stress processes in plants. *3rd International Conference on 'Oxygen, free radicals and environmental stress in plants'*, Pisa. P
- Goodman, B.A.** 1997. The use of EPR spectroscopy to characterise free radicals associated with stress and ageing processes in plants. *BBSRC Workshop on 'The science of ageing'*, Warwick. P
- Goodman, B.A. & Glidewell, S.M.** 1997. Use of magnetic resonance techniques in the study of disease and senescence processes in plants. *Phyton* 37, 81-94. J
- Goodman, B.A., Deighton, N. & Glidewell, S.M.** 1996. Use of magnetic resonance techniques in the study of disease and senescence processes. *2nd International Conference on 'Oxygen, Free Radicals And Environmental Stress In Plants'*, Vienna, 21. P
- Goodman, B.A., Williamson, B., Simpson, E.J., Chudek, J.A., Hunter, G. & Prior, D.A.M.** 1996. High field NMR microscopic imaging of cultivated strawberry fruit. *Magnetic Resonance Imaging* 14, 187-196. J
- Gordon, S.C., Cormack, M.R. & Hackett, C.H.** 1997. Arthropod contamination of red raspberry (*Rubus idaeus* L.) harvested by machine in Scotland. *Journal of Horticultural Science* 72, 677-685. J
- Gordon, S.C., Woodford, J.A.T. & Birch, A.N.E.** 1997. Arthropod pests of *Rubus* in Europe: pest status, current and future control strategies. *Journal of Horticultural Science* 72, 831-862. R
- Gordon, S.L. & Cormack, M.R.** 1996. Raspberry cultivar trial 1985-89. *Occasional Publication of the Scottish Society for Crop Research No. 10*. Scottish Crop Research Institute, Dundee, 24 pp. O
- Graham, J., Gordon, S.C. & McNicol, R.J.** 1997. The effect of the CpTi gene in strawberry against attack by vine weevil (*Otiorhynchus sulcatus* F. Coleoptera: Curculionidae). *Annals of Applied Biology* 131, 133-139. J
- Graham, J., Iasi, L. & Millam, S.** 1997. Genotype-specific regeneration from a number of *Rubus* cultivars. *Plant Cell Tissue and Organ Culture* 48, 167-173. J
- Graham, J., McNicol, R.J. & McNicol, J.W.** 1997. A comparison of methods for the estimation of genetic diversity in strawberry cultivars. *Theoretical and Applied Genetics* 93, 402-406. J
- Graham, J., Squire, G.R., Marshall, B. & Harrison, R.E.** 1997. Spatially dependent genetic diversity within and between colonies of wild raspberry *Rubus idaeus* detected using RAPD markers. *Molecular Ecology* 6, 1001-1008. J
- Graner, A., Streng, S., Schiemann, A., Bauer, E., Waugh, R. & Ordon, F.** 1998. Mining for genes conferring resistance to soil-borne viruses in barley. *Plant and Animal Genome VI*, San Diego, January 1998. P
- Graves, J.D., Watkins, N.K., Fitter, A.H., Robinson, D. & Scrimgeour, C.M.** 1997. Intraspecific transfer of carbon between plants linked by a common mycorrhizal network. *Plant and Soil* 192, 153-159. J
- Griffiths, B.S.** 1997. Bacterial-protozoan interactions in soil. *Abstracts of Bacterial Interactions with Eukaryotic Cells*, University of Warwick. P
- Griffiths, B.S.** 1997. Theoretical background - definitions, hypotheses, models. In: Wolters, V. (ed.). *Functional Implications of Biodiversity in Soil*. Ecosystems Research Report No. 24, European Commission, 13-16. P
- Griffiths, B.S. & Bardgett, R.D.** 1997. Interactions between microbial-feeding invertebrates and microorganisms. In: Van Elsas, J.D., Wellington, E.M.H. & Trevors, J.D. (eds.). *Modern Soil Microbiology*. Marcel Dekker, New York, 165-182. R
- Griffiths, B.S., Diaz-Rabira, M., Ritz, K., McNicol, J.W., Ebbelwhite, N. & Boath, E.** 1997. Community DNA hybridisation and %G+C profiles of microbial communities from heavy metal polluted soils. *FEMS Microbiology Ecology* 24, 103-111. J
- Griffiths, B.S., Ritz, K. & Wheatley, R.E.** 1997. Relationship between functional diversity and genetic diversity in complex microbial communities. In: Insam, H. & Ranggner, A. (eds.). *Microbial Communities: Functional Versus Structural Approaches*. Springer, Berlin, 1-9. R
- Griffiths, B.S., Ritz, K., Ebbelwhite, N., Paterson, E. & Killham, K.** 1997. Ryegrass-rhizosphere microbial community structure under elevated carbon dioxide concentrations, with observations on wheat rhizosphere. *Soil Biology and Biochemistry* 30, 315-332. J
- Griffiths, B.S., Young, I.M., Anderson, A.R.A., Sleeman, B.D. & Robertson, W.M.** 1997. Sensing of attractants in a heterogeneous environment by nematodes: experiment and simulation. *Abstracts of Society of Nematologists Annual Conference*, Tuscon, USA. P
- Griffiths, D.W. & Bain, H.** 1997. Photo-induced changes in the concentration of individual chlorogenic acid isomers in potato (*Solanum tuberosum*) tubers. *Potato Research* 40, 307-315. J
- Griffiths, D.W., Bain, H. & Dale, M.F.B.** 1997. The effect of low-temperature storage on the glycoalkaloid content of potato (*Solanum tuberosum*) tubers. *Journal of the Science of Food and Agriculture* 74, 301-307. J
- Griffiths, D.W., Birch, A.N.E. & Hillman, J.R.** 1997. Antinutritional compounds in the Brassicaceae: analysis, biosynthesis, chemistry and dietary effects. *Journal of Horticultural Science and Biotechnology* 73, 1-18. J
- Grundler, F.M.W., Gheysen, G., Robertson, W.M. & Ohi, S.** 1996. Identification of nematode responsive promoters and genes by the GUS reporter gene. *Proceedings of the Third International Nematology Congress*, Guadeloupe, 54-55. P

- Hackett, C.A.** 1997. Model diagnostics for fitting QTL models to trait and marker data by interval mapping. *Heredity* 79, 319-328. J
- Hackett, C.A. & Griffiths, B.S.** 1997. Statistical analysis of the time-course of Biolog substrate utilisation. *Journal of Microbiological Methods* 30, 63-69. J
- Hackett, C.A., Bradshaw, J.E., Meyer, R.C., McNicol, J.W., Milbourne, D. & Waugh, R.** 1997. Linkage analysis in tetraploid potato. In: *Biometrics in Plant Breeding: Advances in Biometrical Genetics. Proceedings of the Tenth Meeting of the EUCARPIA Section Biometrics in Plant Breeding*, Poznan, Poland. P
- Halbrendt, J.M., Brown, D.J.F., Robbins, R.T. & Vrain, T.C.** 1997. *Longidorus*, *Paralongidorus* and *Xiphinema* species with three juvenile development stages. *Mededelingen van de Faculteit Landbouwwetenschappen Rijksuniversiteit Gent* 62, 691-699. R
- Halbrendt, J.M., Brown, D.J.F., Robbins, R.T., Vrain, T.C.** 1997. The number of juvenile development stages as an indicator of evolutionary patterns of speciation in the Longidoridae. *Proceedings of the 49th International Symposium on Crop Protection*, Gent, Belgium, 68. P
- Halbrendt, J.M., Robbins, R.T., Vrain, T.C. & Brown, D.J.F.** 1997. Commonality between Longidoridae with only three juvenile developmental stages. *Proceedings of the 3rd Hangzhou International Symposium on Plant Pathology and Biotechnology*, Hangzhou, China, 59. P
- Halbrendt, J.M., Robbins, R.T., Vrain, T.C. & Brown, D.J.F.** 1998. Longidoridae with only three juvenile development stages. *Russian Journal of Nematology* 6, 63-64. P
- Hallett, P.D., Bird, N.R.A., Dexter, A.R. & Seville, J.P.K.** 1998. Application of fractals to the scaling of aggregate structure and strength. *European Journal of Soil Science* 49, 203-212. J
- Hallett, P.D., Dexter, A.R. & Seville, J.P.K.** 1997. Crack propagation in structured soil. *14th International Soil Tillage Research Organization Conference*, Pulawy, Poland. P
- Hallett, P.D., Dexter, A.R., Baumgartl, T., Seville, J.P.K. & Horn, R.** 1998. Changes to pore water pressure caused by indirect and direct tensile loading of unsaturated soil aggregates. *16th World Congress on Soil Science*, Montpellier, France (invited paper). P
- Hallett, P.D., Watts, C.W., Dexter, A.R., Ashman, M.R. & Brookes, P.C.** 1996. Soil mechanics and soil biology: an interdisciplinary approach. *British Society of Soil Science 1996 Meeting*, Dundee, UK. P
- Hallett, P.D. & Dexter, A.R.** 1996. Equilibration of soil at different water potentials for microbiological studies. *2nd International Symposium of Interactions of Soil Minerals and Organic Compounds Working Group*, Nancy, France. P
- Handley, L.L. & Scrimgeour, C.M.** 1997. Foliar $\delta^{15}\text{N}$ patterns are dependent on seasonal and spatial variations in lowland Scottish scrub. *Botanical Journal of Scotland* 49, 237-246. J
- Handley, L.L. & Scrimgeour, C.M.** 1997. Terrestrial plant ecology and $\delta^{15}\text{N}$ natural abundance: the present limits to interpretation for uncultivated systems with original data from a Scottish oil field. *Advances in Ecological Research* 27, 133-212. J
- Handley, L.L., Robinson, D., Scrimgeour, C.M., Gordon, D.C., Forster, B.P., Ellis, R.P. & Nevo, E.** 1997. Correlating molecular markers with physiological expression in *Hordeum*, a developing approach using stable isotopes. *New Phytologist* 37, 159-163. J
- Harding, K.** 1996. 9th Meeting on tissue cryopreservation. *In vitro conservation of Solanum tuberosum germplasm, V General Assembly of the Spanish Interdisciplinary Society of Cryobiology*, Oviedo, Asturias, Spain. P
- Harding, K.** 1996. Approaches to assess the genetic stability of plants recovered from *in vitro* culture. *Proceedings of the International Workshop on in vitro Conservation of Plant Genetic Resources*, Kuala Lumpur, Malaysia, 137-170. P
- Harding, K.** 1996. Biodiversity in Scotland: status, trends and initiatives. *Cryopreservation: Potential Applications for the Long-term Conservation of Potato Genetic Resources*. Edinburgh. P
- Harding, K.** 1996. The application of molecular techniques in *in vitro* cryopreserved plant genebanks: practical approaches. *Society for Low Temperature Biology, Symposium in Analytical Techniques in Low Temperature Biology*, University of Abertay, Dundee, Scotland. P
- Harding, K.** 1997. DNA methylation patterns: the hidden fingerprint. *Bulletin of the Genetics Society of Malaysia* 3(1), 1-3. J
- Harding, K.** 1997. Stability of the ribosomal RNA genes in *Solanum tuberosum* L. plants recovered from cryopreservation. *Cryo-Letters* 18, 217-230. J
- Harding, K. & Harris, P.S.** 1997. Risk assessment of the release of genetically modified plants: a review. *Agro-food-Industry, Hi-tech* 8(6), 8-13. J
- Harding, K., Benson, E.E. & Clacher, K.** 1997. Plant conservation biotechnology: an overview. *Agro-food-Industry, Hi-tech* 8(3), 24-29. J
- Harding, K., Benson, E.E. & Roubelakis-Angelakis, K.A.** 1996. Changes in genomic DNA and rDNA associated with the tissue culture of *Vitis vinifera*: a possible molecular basis for recalcitrance. *Vitis* 35(2), 79-85. J
- Harper, K. & Ziegler, A.** 1997. Applied antibody technology. *Trends in Biotechnology* 15, 41-42. J
- Harrison, B. & Wilson, M.** 1998. Tobacco mosaic virus: pioneering research for a century. *Society for General Microbiology Quarterly* 25, 9. O
- Harrison, B.D. & Murant, A.F. (eds.).** 1996. *The Plant Viruses, Volume 5: Polyhedral Virions and Bipartite RNA Genomes*. Plenum Press, New York, 326pp. R
- Harrison, B.D., Liu, Y.L., Khalid, S., Hameed, S., Otim-Nape, G.W. & Robinson, D.J.** 1997. Detection and relationships of cotton leaf curl virus and allied whitefly-transmitted geminiviruses occurring in Pakistan. *Annals of Applied Biology* 130, 61-75. J
- Harrison, B.D., Liu, Y.L., Zhou, X., Robinson, D.J., Calvert, L., Munoz, C. & Otim-Nape, G.W.** 1997. Properties, differentiation and geographical distribution of geminiviruses that cause cassava mosaic disease. *African Journal of Root and Tuber Crops* 2, 19-22. J
- Harrison, B.D., Zhou, X., Otim-Nape, G.W. & Robinson, D.J.** 1997. Naturally occurring interspecific recombination in cassava geminiviruses. *Abstracts of the EMBO Workshop on Molecular Mechanisms in the Replicative Cycle of Viruses in Plants*, Las Navas del Marqués, 1997. P
- Harrison, B.D., Zhou, X., Otim-Nape, G.W., Liu, Y. & Robinson, D.J.** 1997. Role of a novel type of double infection in the geminivirus-induced epidemic of severe cassava mosaic in Uganda. *Annals of Applied Biology* 131, 437-448. J
- Harrison, R., McNicol, R.J., Cooke, D.E.L. & Duncan, J.M.** 1998. Recent developments in *Phytophthora fragariae*

var. *rubi* research at the Scottish Crop Research Institute. *Seventh International Rubus-Ribes Symposium*, Australia and New Zealand, January 1998. P

Hayes, P.M., Chen, F.Q., Corey, A., Pan, A., Chen, T.H.H., Baird, E., Powell, W., Thomas, W.T.B., Waugh, R., Bedo, Z., Karsai, I., Blake, T. & Oberthur L. 1996. The Dicktoo x Morex population: a model for dissecting components of winter hardiness in barley. In: Li, P.H. & Chen, T.H. (eds.). *Plant Cold Hardiness*. Plenum Press, New York, USA. R

Hayes, P.M., Chen, T.H.H., Powell, W., Thomas, W., Bedo, Z., Kasari, I. & Meszaros, K. 1997. Dissecting the components of winter hardiness in barley. *Acta Agronomica Hungarica* 45, 241-246. J

Hebden, P., Rodger, S.J., Wright, G. & Squire, G.R. 1998. Effects of rotation and cropping system on dynamics of seed-bank species diversity. *Weed Seedbanks: Determination, Dynamics and Manipulation. Aspects of Applied Biology* 51, 243-248. P

Heilbronn, J., Miller, S.K., Hunter, A.M., Taylor, K., Lowe, R. & Lyon, G.D. 1996. Isozyme-specific antibodies raised against synthetic peptides: *Erwinia* and *Phytophthora infestans*/potato interactions. *Proceedings VIIIth International Congress of Molecular Plant-Microbe Interactions*, Knoxville, TN, USA, 1996, Abstract G-36. P

Hernandez, C., Visser, P.B., Brown, D.J.F. & Bol, J.F. 1997. Transmission of tobacco rattle virus isolate PpK20 by its nematode vector requires one of the two non-structural genes in the viral RNA 2. *Journal of General Virology* 78, 465-467. J

Heslop-Harrison, J.S., Brandes, A., Taketa, S., Schmidt, T., Vershinin, A.V., Alkhimova, E.G., Kamm, A., Doudrick, R.L., Schwarzacher, T., Katsiotis, A., Kubis, S., Kumar, A., Pearce, S.R., Flavell, A.J. & Harrison, G. 1997. The chromosomal distribution of Ty1-copia group retrotransposable elements in higher plants and their implications for genome evolution. *Genetica* 100, 197-204. J

Hillman, J.R. 1997. Potential of biotechnology for modification of higher plants. *Food Science and Technology Today* 11(3), 182-186. J

Hillman, J.R. 1998. International patterns and projections in agbiotech markets - Europe. *Agricultural Biotechnology International Conference*, Saskatoon, Saskatchewan, Canada, June 1998, 17. P

Hillman, J.R. 1998. Plant genetics. *Sustainable Use of Land and Water. Eighteenth Biennial Conference of The Royal Agricultural Society of the Commonwealth*, Darwin, Australia, April 1998, 1-3. P

Hillman, J.R. & Davies, H.V. 1997. Biotechnology threatened? *Chips* 11(2), 18-19. O

Hopkins, D.W., Wheatley, R.E. & Robinson, D. 1998. Stable isotope studies of nitrogen transformations in soils. In: Griffiths, H. (ed.). *Stable Isotopes and the Integration of Biological, Ecological and Geochemical Processes*. BIOS Scientific Publications, Oxford, 75-88. R

Hopkins, R.J., Griffiths, D.W., McKinlay, R.G. & Birch, A.N.E. 1996. Root flies and the root environment. *Proceedings of 7th IOBC-EUCARPIA Working Group 'Breeding for Resistance to Insects and Mites'*, Arnhem, September 1995, 39-43. P

Hopkins, R.J., Wright, F., McKinlay, R.G. & Birch, A.N.E. 1996. Analysis of sequential behaviour patterns: the oviposition decision of the turnip root fly, *Delia floralis*. *Entomologia Experimentalis et Applicata* 80, 93-96. J

Howell, P.M., Marshall, D.F. & Lydiate, D.J. 1996. Towards developing inter-varietal substitution lines in *Brassica napus* using marker assisted selection. *Genome* 39, 348-358. J

Hyman, L.J., Dewasmes, V., Toth, I.K. & Pérombelon, M.C.M. 1997. Improved PCR detection sensitivity of *Erwinia carotovora* subsp. *atroseptica* in potato peel extract by prior enrichment on a selective medium. *Letters in Applied Microbiology* 25, 143-147. J

Hyman, L.J., Toth, I.K. & Pérombelon, M.C.M. 1998. Isolation and identification of *Erwinia carotovora* subsp. *atroseptica*. In: Pérombelon, M.C.M. & van der Wolf, J.M. (eds.). *Methods for the Detection and Quantification of Erwinia carotovora subsp. atroreptica on Potatoes: A Laboratory Manual*. Scottish Crop Research Institute Occasional Publication No. 11, 60-66. R

Iannetta, P.P.M., Fry, S.C., Stewart, D., McDougall, G. & Davies, H.V. 1998. Raspberry (*Rubus idaeus* L.) fruit cell-wall composition: xyloglucan endotransglycosylase activity and xyloglucan content. *Proceedings of the Eighth International Cell-Wall Meeting*, Norwich, September 1997. P

Iannetta, P.P.M., James, E.K., Minchin, F.R., Simpson, C. & Williamson, B. 1997. Immunolocalisation of intercellular antigens in the inner-cortex of legume root nodules using a polyclonal antibody raised against raspberry polygalacturonase-inhibiting protein (PGIP). *Proceedings of the 7th Scottish Cell Wall Meeting*, 10-11 April, Aberdeen, 43. P

Iannetta, P.P.M., James, E.K., Minchin, F.R., Sprent, J.I., Simpson, C. & Williamson, B. 1997. Immunolocalisation of intercellular antigens in *Lupinus albus* root nodules using a polyclonal antibody raised against raspberry polygalacturonase-inhibiting protein (PGIP). *Proceedings of Biological Nitrogen Fixation for the 21st Century*, 301. P

Iannetta, P.P.M., James, E.K., Minchin, F.R., Sprent, J.I., Simpson, C. & Williamson, B. 1997. Intercellular localisation of polygalacturonase-inhibiting protein (PGIP) in the inner-cortex of legume nodules and its possible role in nodule O₂ diffusion. *Proceedings of the 11th International Conference on Nitrogen Fixation*, 20-25 July, Pasteur Institute, Paris. P

Iannetta, P.P.M., McMillan, G.P. & Sprent, J.I. 1997. Plant cell-wall degrading enzymes of *Rhizobium leguminosarum* bv. *viciae*: potential for host-plant-defence avoidance. *Soil Biology and Biochemistry* 29, 1019-1021. J

Iannetta, P.P.M., Stewart, D., Wheatley, R., van den Berg, J., McNicol, R.J. & Davies, H.V. 1997. Enhancing raspberry fruit quality. *Seminar and Exhibition on Modified Atmosphere Packaging Sponsored by Air Products and CVP Systems*, Dundee, September 1997. P

Iannetta, P.P.M., van den Berg, J., Wheatley, R.E., McMillan, G.P., McNicol, R.J. & Davies, H.V. 1997. The role of ethene and cell-wall modifying activities in the determination of raspberry (*Rubus idaeus* L.) fruit firmness. *Abstracts of the 7th Scottish Cell Wall Group Meeting*, Aberdeen, April 1997, 13. P

Iannetta, P.P.M., van den Berg, J., Wheatley, R.E., McMillan, G.P., McNicol, R.J. & Davies, H.V. 1997. The role of ethene and cell-wall modifying enzymes in raspberry fruit ripening. *Genetic and Environmental Manipulation of Horticultural Crops*, Wellesbourne, October 1997. P

Irving, P., Henry, M. & Fenton, B. 1997. A 2D-PAGE comparison of aphid gut proteins. *Abstracts of Entomology '97*, Royal Entomological Society, University of Newcastle, Newcastle. P

- James, E.K., Minchin, F.R., Iannetta, P.P.M. & Sprent, J.I.** 1997. Temporal relationships between nitrogenase and intercellular glycoprotein in developing white lupin nodules. *Annals of Botany* 79, 493-503. J
- Jarvis, S.B., Taylor, M.A. & Davies, H.V.** 1997. Factors regulating the expression of seed-dormancy-related genes from Douglas fir (*Pseudotsuga menziesii*). *Journal of Plant Physiology* 151, 457-464. J
- Jefferies, R.A.** 1996. Evaluation of seedling selection for salinity tolerance in potato (*Solanum tuberosum* L.). *Euphytica* 86, 207-213. J
- Jefferies, R.A., Boag, B., Neilson, R., Crabb, D., Wheatley, R.E., Ritz, K. & Duncan, H.** 1998. Impact of diesel pollution on soil microbial activity and nematode communities. *Proceedings of 6th International FZK/TNO Conference on Contaminated Soil*, Edinburgh 17-21 May 1998, 883-884. P
- Jennings, J.M., Newton, A.C. & Buck, K.W.** 1997. Detection of polymorphism in *Puccinia hordei* using RFLP, RAPD and differential cultivars and analysis of the intergenic spacer region of rDNA. *Journal of Phytopathology* 145, 511-519. J
- Joh, Y-G., Elenkov, I.J., Stefanov, K.L., Popov, S.S., Dobson, G. & Christie, W.W.** 1997. Novel di-, tri- and tetraenoic fatty acids with bis-methylene-interrupted double bond systems from the sponge *Haliciona cinerea*. *Lipids* 32, 13-17. J
- Johnston, A.M.** 1996. The effect of environmental variables on $\delta^{13}\text{C}$ discrimination by two marine phytoplankton. *Marine Ecology Progress Series* 132, 257-263. J
- Johnston, A.M. & Kennedy, H.** 1996. Carbon stable isotope fractionation in marine systems: open ocean studies and laboratory studies. In: Griffiths, H. (ed.). *Stable Isotopes and the Integration of Biological, Ecological and Geochemical Processes*. R
- Johnston, A.M. & Raven, J.A.** 1996. Inorganic carbon accumulation by the marine diatom *Phaeodactylum tricornutum*. *European Journal of Phycology* 31, 285-290. J
- Johnston, A.M., Bentaleb, I., Hatte, C. & Fontugne, M.** 1996. $\delta^{13}\text{C}_{\text{DIC}}$: spatial variations in the Southern Ocean. *Colloque Antares-J-GOFS INSU*, Montpellier. P
- Jones, A.T. & McGavin, Wendy J.** 1998. Infectibility and sensitivity of UK raspberry, blackberry and hybridberry cultivars to *Rubus* viruses. *Annals of Applied Biology* 132, 239-251. J
- Jones, C.S., Davies, H.V., McNicol, R.J. & Taylor, M.A.** 1997. Analysis of genes differentially expressed during fruit ripening in raspberry (*Rubus idaeus*). *Genetic and Environmental Manipulation of Horticultural Crops*, HRI Wellesbourne, October 1997. P
- Jones, C.S., Iannetta, P.P.M., Woodhead, M., Davies, H.V., McNicol, R.J. & Taylor, M.A.** 1997. The isolation of RNA from raspberry (*Rubus idaeus*) fruit. *Molecular Biotechnology* 8, 219-221. J
- Jones, E.R.L., Newton, A.C. & Clifford, B.C.** 1996. *Rhynchosporium* of barley. *United Kingdom Cereal Pathogen Virulence Survey Annual Report for 1995*. T
- Jones, H.D. & Boag, B.** 1996. The distribution of New Zealand and Australian terrestrial flatworms (Platyhelminthes: Turbellaria: Tricladida: Terricola) in the British Isles - the Scottish survey and megalab worms. *Journal of Natural History* 30, 959-975. J
- Jones, J.T. & Harrower, B.E.** 1998. A comparison of the efficiency of differential display and cDNA-AFLPs as tools for the isolation of differentially expressed parasite genes. *Fundamental and Applied Nematology* 21, 81-88. J
- Jones, J.T. & Robertson, W.M.** 1997. Nematode secretions. In: Grundler, F., Ohl, S. & Fenoll, C. (eds.). *Cellular and molecular basis of plant-nematode interactions*. Kluwer Academic Publishers, Dordrecht, The Netherlands, 98-106. R
- Jones, J.T., Phillips, M.S. & Armstrong, M.R.** 1996. Molecular approaches to plant nematology. *Fundamental and Applied Nematology* 20, 1-14. J
- Jones, J.T., Prior, A.E., Kennedy, M.W., Robertson, L., Burrows, P.R. & Robertson, W.M.** 1997. Isolation and characterisation of a secreted molecule from the potato cyst nematode *Globodera pallida* with homologues in free living and animal parasitic nematodes. *Abstracts of the SON Meeting 1997*, Tucson. P
- Kaplan, I.B., Gal-On, A. & Palukaitis, P.** 1997. Characterization of cucumber mosaic virus. III. Localization of sequences in the movement protein controlling systemic infection in cucurbits. *Virology* 230, 343-349. J
- Kearsey, M.J., Ramsay, L.D., Jennings, D., Lydiate, D.J., Bohuon, E. & Marshall, D.F.** 1996. Higher recombination frequencies in female compared to male meioses in *Brassica oleracea*. *Theoretical and Applied Genetics* 92, 363-367. J
- Kemp, R., Brennan, R., Lanham, P.G., Slater, R. & Jones, H.** 1997. Cloning cold-inducible, dehydrin-like genes from blackcurrant (*Ribes nigrum* L.) using RT-PCR. *Molecular Biotechnology* 7, 99-102. J
- Kerby, N.W. & McNicol, R.J.** 1996. Symphony - a new strawberry cultivar. *Acta Horticulturae* 439, 97. J
- Kerby, N.W., McNicol, R.J., Davies, H.V. & Hillman, J.R.** 1997. Enhancing competitiveness through plant biotechnology. *1st International Convention on Food Ingredients*. New Technologies, 285-291. P
- Kim, C-H. & Palukaitis, P.** 1997. The plant defense response to cucumber mosaic virus in cowpea is elicited by the viral polymerase gene and affects virus accumulation in single cells. *EMBO Journal* 16, 4060-4068. J
- King, I.P., Forster, B.P., Law, C.N., Cant, K.A., Orford, S.E., Gorham, J., Reader, S. & Miller, T.E.** 1997. Introgression of salt-tolerance genes from *Thinopyrum bessarabicum* into wheat. *New Phytologist* 137, 75-82. J
- Kirby, J.M., Bengough, A.G. & O'Sullivan, M.F.** 1997. Influence of soil strength on root growth: experiments and analysis using a critical state model. *Third International Conference on Soil Dynamics*, Tiberias, Israel, August 3-7. P
- Kirby, J.M., Bengough, A.G. & O'Sullivan, M.F.** 1997. Why do roots grow thicker in hard soil? *International Soil Tillage Research Organisation*, Poland. P
- Kokko, H., Cooke, D.E.L., Virtaharju, O., Karenlampi, S., Williams, N.A. & Williamson, B.** 1998. Downy mildew (*Peronospora rubi*) in *Rubus arcticus*: a threat to commercial berry production in Finland. *Seventh International Rubus-Ribes Symposium*, Australia and New Zealand, January, 1998. P
- Korb, R.E., Saville, P.J., Johnston, A.M. & Raven, J.A.** 1997. Sources of inorganic carbon for photosynthesis by three species of marine diatom. *Journal of Phycology* 33, 433-440. J
- Kuklev, D.V., Christie, W.W., Durand, T., Rossi, J.C., Vidal, J.P., Kasyanov, S.P., Akulin, V.N. & Bezuglov, V.V.** 1997. Synthesis of keto- and hydroxydienoic compounds from linoleic acid. *Chemistry and Physics of Lipids* 85, 125-134. J

- Kumar, A. & Minocha, S.C.** 1998. Transgenic manipulation of polyamine metabolism. In: Lindsey, K. (ed.). *Transgenic Research in Plants*. Harwood Academic Publishers, UK, 189-199. R
- Kumar, A., Altabella, T., Taylor, M.A. & Tiburcio, A.F.** 1997. Recent advances in polyamine research. *Trends in Plant Science* 2, 124-130. J
- Kumar, A., Macleod, M.R., Mad Arif, S.A., Davies, H.V. & Taylor, M. A.** 1998. A molecular approach to study the role of polyamines and ethylene in plant development. In: Bardocz, S., White, A. & Tiburcio, A.F. (eds.). *Biogenically active amines in food*. Office for Official Publications of the European Communities, L-2985 Luxembourg, 43-52. R
- Kumar, A., Pearce, S.R. & Flavell, A.J.** 1996. The Ty1-copia group of retrotransposons in plants. *Abstracts of Evolution and Role of Transposable Elements, European Science Foundation*, Gif-sur-Yvette, France. P
- Kumar, A., Pearce, S.R., McLean, K., Harrison, G., Heslop-Harrison, J.S., Waugh, R. & Flavell, A.J.** 1997. The Ty1-copia group of retrotransposons in plants: genomic organisation, evolution and use as molecular markers. *Genetica* 100, 205-217. J
- Lacomme, C. & Roby, D.,** 1996. Molecular cloning of a sulfotransferase in *Arabidopsis thaliana* and regulation during development and in response to infection with pathogenic bacteria. *Plant Molecular Biology* 30, 995-1008. J
- Lacomme, C., Smolenska, L. & Wilson T.M.A.** 1998. Genetic engineering and the expression of foreign peptides or proteins using plant virus-based vectors. In: Setlow, J.K. (ed.). *Genetic Engineering: Principles and Methods. Volume 20*. Plenum Press, New York, 225-237. R.
- Lamberti, F., Iovev, T., Choleva, B., Brown, D.J.F., Agostinelli, A. & Radicci, V.** 1997. Morphometric variation and juvenile stage of some longidorid nematodes from Bulgaria with comments on the number of juvenile stages of *Longidorus africanus*, *L. closelongatus* and *Xiphenema santos*. *Nematologica mediterranea* 25, 213-237. J
- Lanham, P.G. & Brennan, R.M.** 1998. Characterisation of genetic resources of redcurrant (*Ribes rubrum*: *Ribes*) using anchored microsatellite markers. *Theoretical and Applied Genetics* 96, 917-921. J
- Lanham, P.G., Brennan, R.M. & Jones, A.T.** 1997. The use of molecular markers to characterise suspect blackcurrant (*Ribes nigrum* L.) plants in experimental field plots assessing resistance to the gall mite (*Cecidophyopsis ribis* Westw.). *Journal of Plant Diseases and Protection* 104, 576-580. J
- Larson, S., Bryan, G., Dyer, W. & Blake, T.** 1996. Evaluating gene effects of a major barley seed dormancy QTL in reciprocal backcrosses using STS-PCR. *Journal of Quantitative Trait Loci*, Volume 2, Article 4 (<http://probe.nalusda.gov:8000/otherdocs/jqtl>). J
- Latvala, S., Susi, P., Lemmetty, A., Cox, S., Jones, A.T. & Lehto, K.** 1997. *Ribes* host range and erratic distribution within plants of blackcurrant reversion associated virus provides further evidence for its role as the causal agent of reversion disease. *Annals of Applied Biology* 131, 283-295. J
- Laurie, D.A., Bryan, G.J. & Snape, J.W.** 1997. Genome relationships, conserved synteny and wide-hybrids. In: Callow, J.A., Ford-Lloyd, B.V. & Newbury, H.J. (eds.). *Biotechnology and Plant Genetic Resources: Conservation and Use*. CAB International, Oxon, 77-101. R
- Lawrence, M.J. & Marshall, D.F.** 1997. The population genetics of *in situ* conservation. In: Maxted, N. & Ford-Lloyd, B.V. (eds.). *In Situ Conservation*. Chapman and Hall. R
- Lazarova, S., Peneva, V. & Neilson, R.** 1998. Nematodes of the genus *Tripyla* Bastian, 1865 (Enoplida) from woodlands in Bulgaria. *Russian Journal of Nematology* 6, 165-174. J
- Leader, D.J., Boag, J., Watters, J.A., Simpson, C.G., Watkins, N.J., Maxwell, E.S. & Brown, J.W.S.** 1998. Processing of vertebrate box C/D snoRNAs in plant cells. *European Journal of Biochemistry* 253, 154-160. J
- Leader, D.J., Clark, G.P., Watters, J., Beven, A.F., Shaw, P.J. & Brown, J.W.S.** 1997. Clusters of different small nucleolar RNA genes in plants are expressed as and processed from polycistronic pre-snoRNAs. *EMBO Journal* 16, 5742-5751. J
- Leader, D.J., Clark, G.P., Watters, J., Beven, A.F., Shaw, P.J. & Brown, J.W.S.** 1997. Clusters of multiple different small nucleolar RNA genes in plants are processed from polycistronic pre-snoRNAs. *The Ribosome: Its (Nucleolar) Synthesis and Structure*, Holland, 61. P
- Leader, D.J., Clark, G.P., Watters, J., Beven, A.F., Shaw, P.J. & Brown, J.W.S.** 1998. U14snoRNAs of the fern, *Asplenium nidus*, contain large sequence insertions compared with those of higher plants. *Biochimica et Biophysica Acta* 1397, 325-330. J
- Lees, A.K., Monnington, S.J., Nicolson, M., McDonald, S. & Cullen, D.W.** 1998. Resistance to skin blemish diseases and variation in pathogen populations. *Proceedings of the 1998 EAPR Pathology Section meeting*, Robacksdalen meddalar, Sweden. P
- Légorburu, J., Harper, K., Toth, R. & Torrance, L.** 1998. Application of recombinant antibodies in the routine detection of potato leafroll luteovirus (PLRV). *Spanish Society for Phytopathology*, Salamanca, October 1998. P
- Légorburu, J., van den Bovenkamp, G., Browning, I., Darling, M., de Haan, E.G., Harper, K., Pereira, L.G.C., Serra, C., Toth, R. & Torrance, L.** 1998. Routine detection of PLRV by recombinant antibodies. Prospects for inter-laboratory standardization. *European Association for Potato Research*. Baden, Austria, July 1998. P
- Li, Q. & Palukaitis, P.** 1996. Comparison of the nucleic acid and NTP binding properties of the movement proteins of cucumber mosaic cucumovirus and tobacco mosaic tobamovirus. *Virology* 216, 71-79. J
- Li, Q., Ryu, K.H. & Palukaitis, P.** 1996. Cucumber mosaic virus 3a gene: analysis of site-directed mutants that affect movement, RNA binding, and host range. *Abstracts of the VIIIth International Congress of Virology*, Jerusalem, 1996, 34. P
- Liskova, M., Robbins, R.T. & Brown, D.J.F.** 1997. Descriptions of three new *Longidorus* species from Slovakia (Nematoda, Longidoridae). *Journal of Nematology* 29, 336-348. J
- Liu, J. & Crawford, J.W.** 1996. Stability of a glycolytic system in the presence of noise. *Abstract for 7th Conference for Mathematics Applied in Medicine and Biology*, Oxford. P
- Liu, J. & Crawford, J.W.** 1997. Stability of an autocatalytic system under noise perturbations and its dependence on the basin of attraction. *Proceedings of the Royal Society of London Series A* 453, 1195-1203. J
- Liu, J. & Crawford, J.W.** 1997. Transition and new dynamical states induced by noise in a multiply regulation biochemical system. *Biophysical Chemistry* 69, 97-106. J
- Liu, J., Crawford, J.W. & Viola, R.** 1996. Dynamical and thermodynamical analysis of an enzymatic system. *Abstract for Mathematical Biology Conference*, Bath. P

- Liu, J., Crawford, J.W. & Viola, R.** 1997. A theoretical analysis of the role of pyrophosphate, fructose 6-P, 1-phosphotransferase in the energy dissipation of plant metabolism. *Journal of Biological Systems* 5, 389-401. J
- Liu, Y., Robinson, D.J. & Harrison, B.D.** 1998. Defective forms of cotton leaf curl virus DNA-A that have different combinations of sequence deletion, duplication, inversion and rearrangement. *Journal of General Virology* 79, 1501-1508. J
- Lopez-Moya, J. J., Canto, T., Lopez-Abella, D. & Diaz-Ruiz, J. R.** 1996. Transmission by aphids of purified plum pox virus isolates with the aid of potato virus Y helper component. *Journal of General Virology* 76, 2293-2297. J
- Lynn, A., Prentice, R.D.M., Cochrane, M.P., Cooper, A.M., Dale, F., Duffus, C.M., Ellis, R.P., Morrison, I.M., Paterson, L., Swanston, J.S. & Tiller, S.A.** 1997. Cereal starches: properties in relation to industrial uses. In: Campbell, G.M., Webb, C. & McKee, S.L. (eds.). *Cereals: Novel Uses and Processes*. Plenum Press, New York, 69-77. P
- Lyon G.D.** 1997. Metabolic pathways of the diseased potato. *British Society for Plant Pathology Newsletter* 31, 16. O
- Lyon, G.D.** 1996. Report on 8th International Congress on Molecular Plant-Microbe Interactions, Knoxville, TN, USA, 1996. *British Society for Plant Pathology Newsletter* 29, 16-18. O
- Lyon, G.D.** 1997. Disease resistance mechanisms. Metabolic pathways of the diseased potato. <http://www.scri.sari.ac.uk/bpp/chartxt.htm> O
- Lyon, G.D.** 1997. Disease resistance-related proteins in potato. <http://www.scri.sari.ac.uk/bpp/protein.htm> O
- Lyon, G.D.** 1997. Plant/pathogen interactions at the cellular level: a summary and model. <http://www.scri.sari.ac.uk/bpp/celltext.htm> O
- Lyon, G.D. & Birch, P.R.J.** 1998. Plant defence mechanisms: animal genes in defence of the plant? *Potato Review* May/June 1998, 12-14. O
- Lyon, G.D. & Newton, A.C.** 1997. Do resistance elicitors offer new opportunities in integrated disease control strategies? *Plant Pathology* 46, 636-641. J
- Lyon, G.D. & Newton, A.C.** 1997. Induced plant disease resistance: an alternative method of controlling plant diseases. <http://www.scri.sari.ac.uk/bpp/yeast2.htm> O
- Lyon, G.D., Forrest, R.S. & Newton, A.C.** 1996. SAR - the potential to immunise plants against infection. *Proceedings Brighton Crop Protection Conference*, Brighton, 1996. British Crop Protection Council, 939-946. R
- Macaulay, M., Ramsay, L., Russell, J., McLean, K., Fuller, J., Powell, W. & Waugh, R.** 1998. Development and application of SSR-based markers in barley. *Plant and Animal Genome VI*, San Diego, January 1998. P
- Macaulay, M., Ramsay, L.D., McLean, K., Fuller, J., Cardle, L., Edwards, K., Tuveson, S., Powell, W. & Waugh, R.** 1997. Development of a framework simple sequence repeat based linkage map of barley. *Proceedings of the Seventh International Triticeae Mapping Initiative*, Clermont-Ferrand, France, June 1997. P
- Macaulay, M., Stevenson, P., Gale, M. & Waugh, R.** 1997. Development and evaluation of SSRs in wheat and barley. *BBSRC PAGA Conference*, Warwick, April 1997. P
- MacFarlane, S.A.** 1997. Natural recombination among plant virus genomes: evidence from tobamoviruses. In: Mayo, M.A. (ed.). *Aspects of ssRNA virus genome organization. Seminars in Virology* 8. Academic Press, 25-31. R
- Machray, G.C., Hedley, P.E., Meyer, R.C. & Maddison, A.** 1997. Polynucleotide-invertase promoter. *British Patent Application No: 9705694.9*. T
- Mackay, G.R.** 1996. An agenda for future potato research. *Potato Research* 39, 387-394. J
- Mackay, G.R.** 1997. A Global Initiative on Late Blight. *CHIPS* March/April, 1997, 43-45. O
- Mackay, G.R.** 1997. Developments in technology and production of new varieties and opportunities for new markets. (Abstract) *Proceedings of The Scottish Potato 1997 - New Markets, New Technology*, Aberdeen, February 1997, 1-2. P
- Mackay, G.R.** 1997. Peruvian treasures. *The Garden - Journal of Royal Horticultural Society* 122, 562-565. O
- MacKerron, D.K.L. & Gluska, A.U.** 1996. Tolerance of potato plants to water deficits, role of root systems, irrigation problems - report on techniques of measuring plant responses to water stress and an experimental investigation. *Report to the Commission of the European Communities, DGX11*. Contract Reference: ERBCIPACT922164. T
- MacKerron, D.K.L. & Ingram, J.** 1997. GCTE Focus 3 Potato Network: 1996 Model and Experimental Metadata. *Global Change and Terrestrial Ecosystems Report No. 9*, GCTE Focus 3 Office, Wallingford, 93 pp. R
- Mackie, A. & Wheatley, R.E.** 1997. Soil microbial interactions mediated by volatile organic compounds. *4th Annual Meeting UK Soil:Plant:Microbe Interaction Initiative*, Oxford, UK. P
- Mackie, A. & Wheatley, R.E.** 1997. The occurrence of soil microbial interactions mediated by volatile organic compounds. *2nd Annual Meeting UK Soil:Plant:Microbe Interaction Initiative*, St Andrews, UK. P
- MacLeod, M.R., Davies, H.V., George, L., Kumar, A. & Taylor, M.A.** 1997. Molecular basis of tuberisation in the potato (*Solanum tuberosum*, L.). *Genetic and Environmental Manipulation of Horticultural Crops*, HRI Wellesbourne, October 1997. P
- MacLeod, M.R., Davies, H.V., George, L., Kumar, A. & Taylor, M.A.** 1997. Molecular basis of tuberisation in the potato (*Solanum tuberosum* L.). *Phytosphere '97*, April 1997, Dublin. P
- Maddison, A.** 1997. Organisation and expression of invertase genes in potato. *Ph.D. Thesis*, University of Dundee. O
- Maddison, A., Bournay, A-S., Meyer, R., Hedley, P. & Machray, G.** 1996. Regulation of invertase gene expression in potato. *Annual Report of the Scottish Crop Research Institute for 1995*. Scottish Crop Research Institute, Dundee, 52. O
- Maddison, A., Meyer, R., Hedley, P. & Machray, G.** 1997. A potato pollen-specific promoter. *Annual Report of the Scottish Crop Research Institute for 1996/97*. Scottish Crop Research Institute, Dundee, 100-110. O
- Malloch, G.M. & Fenton, B.** 1997. Genetic variation in the European raspberry beetle *Byturus tomentosus*. *Abstracts of Entomology '97*, Royal Entomological Society, University of Newcastle, Newcastle. P
- Marriott, C.A., Hudson, G., Hamilton, D., Neilson, R., Boag, B., Handley, L.L., Wishart, J., Scrimgeour, C.M. & Robinson, D.** 1997. Spatial variability of soil total C and N and their stable isotope signatures in an upland grassland system. *Plant and Soil* 196, 151-162. J

- Marshall, B.** 1996. Review of Ministry of Agriculture Fisheries and Food's Nitrate Research and Development Programme. *External Reviewer's Report to MAFF*, September 1996, 32 pp. O
- Marshall, B. & Ellis, R.P.** 1998. Growth, yield and grain quality of barley (*Hordeum vulgare*) in response to nitrogen uptake. I. A low cost, controlled nutrient supply system. *Journal of Experimental Botany* 49, 1049-1057. J
- Marshall, D.F.** 1996. Training in molecular methods for the analysis of diversity. *Discussion Meeting*, IPGR, Rome. P
- Matthews, D., Harding, K., Wilkinson, M.J. & Millam, S.** 1997. A slot blot hybridisation method for screening somatic hybrids. *Plant Molecular Biology Reporter* 15, 62-70. J
- Matthews, D., McNicoll, J., Harding, K. & Millam, S.** 1997. The detection of alien DNA sequences in somatic hybrids. *Plant Molecular Biology Reporter* 15(1), 62-70. J
- Mayes, S., Jack, P.L., Corley, R.H.V. & Marshall D.F.** 1997. Construction of a RFLP linkage map for oil palm (*Elaeis guineensis* Jacq). *Genome* 40, 116-122. J
- Mayo, M.A.** 1997. (Guest Editor) Aspects of ssRNA Virus genome Organization. *Seminars in Virology* 8, Issue 1. Academic Press. R
- Mayo, M.A.** 1997. Introduction. Aspects of ssRNA Virus genome Organization. In: Mayo, M.A. (ed.). *Seminars in Virology* 8, 1-2. Academic Press. R
- Mayo, M.A. & Naidu, R.A.** 1997. Peanut Clump Disease: an overview. Groundnut virus diseases in Africa. In: Reddy, D.V.R., Delfosse, P., Lenné, J.M. & Subrahmanyam, P. (eds.). *Summary and Recommendations of the Sixth Meeting of the International Working Group*, 18-19 March 1996, Agricultural Research Council, Plant Protection Research Institute, Pretoria, South Africa, 22-23. P
- Mayo, M.A. & Pringle, C.R.** 1998. Virus taxonomy - 1997. *Journal of General Virology* 79, 649-657. R
- McCafferty, H.R.K. & Talbot, N.J.** 1996. Characterisation of genes expressed during the pathogenesis of *Magnaporthe grisea*. *Proceedings of the 8th International Congress of Molecular Plant-Microbe Interactions*, Knoxville, 2, 11. P
- McDougall, G.J.** 1996. Coniferyl alcohol oxidases as target enzymes for the genetic manipulation of lignin deposition in conifers. *Proceedings of the 16th Tree Biotechnology Group Meeting*, Bath, 6. P
- McDougall, G.J.** 1996. Key lignin biosynthetic enzyme isolated. *Industrial Bioprocessing, Pulp and Paper Alert*, December 1996. John Wiley & Co. Ltd, NJ, USA. T
- McDougall, G.J.** 1997. Procedure for selection of cell-wall-associated glycoproteins. *Phytochemistry* 45, 633-636. J
- McEwan, M. & Macfarlane Smith, W.H.** 1998. Identification of volatile organic compounds emitted in the field by oilseed rape (*Brassica napus* ssp *oleifera*) over the growing season. *Chemical and Experimental Allergy* 28, 336-342. J
- McGuire, G. & Wright, F.** 1998. TOPAL: a package to detect recombination in DNA and protein sequences. *Bioinformatics* 14, 219-220. J
- McGuire, G., Wright, F. & Prentice, M.J.** 1997. A graphical method for detecting recombination in phylogenetic data sets. *Molecular Biology and Evolution* 14, 1125-1131. J
- McNicol, R.J., Graham, J. & Kerby, N.** 1997. Recent developments in strawberry breeding and product development at SCRI. *Acta Horticulturae* 439, 129-132. J
- Meyer, R., Milbourne, D., Collins, A., Ramsay, L., Dewar, H., Gebhardt, C. & Waugh, R.** 1997. Development of potato microsatellite markers and application in mapping and genotyping of diploid and tetraploid potato. *Plant and Animal Genome V*, San Diego, January 1997. P
- Meyer, R.C., Milbourne, D., Collins, A.J., Ramsay, L.D., Gebhardt, C. & Waugh, R.** 1997. Simple sequence repeat marker location on a genetic linkage map of potato. *Annual Report of the Scottish Crop Research Institute for 1996/97*. Scottish Crop Research Institute, Dundee, 96-98. O
- Milbourne, D., Meyer, R., Bradshaw, J.E., Baird, E., Bonar, N., Provan, J., Powell, W. & Waugh, R.** 1997. Comparison of PCR-based marker systems for the analysis of genetic relationships in cultivated potato. *Molecular Breeding* 3, 127-136. J
- Milbourne, D., Meyer, R., Hackett, C., Bradshaw, J., McNicol, J.W. & Waugh, R.** 1997. Towards marker-assisted selection for quantitative disease resistance. *Plant and Animal Genome V*, San Diego. P
- Millam, S.** 1997. Quantification of the asynchronous development of microspores in potato. *Proceedings of COST824 Working Group 2 'Gametic embryogenesis in dicotyledonous plants'*, Sjusoen, Norway, 26. P
- Millam, S.** 1997. Regeneration pressure effects on phenotypic variation in potato. *Proceedings of COST822 Working Group 5 'Mechanisms and Markers of regeneration and genetic stability'*, Giessen, Germany. P
- Millam, S.** 1997. Targeted plant breeding by limited chromosome transfer. *Proceedings of MAFF/DTI/BBSRC Agro-Food Quality LINK Programme*, London, UK. P
- Millam, S., Mitchell, S., Moscheni, E., Angelini, L. & Craig, A.** 1997. *In vitro* manipulation as a means for the accelerated improvement of a number of potential oil crops. *Industrial Crops and Products* 6, 213-219. J
- Millam, S., Mitchell, S.M., Moscheni, E. & Lyon, J.E.** 1997. The establishment and regeneration of a range of *Cuphea* germplasm *in vitro*. *Plant Cell, Tissue and Organ Culture* 48, 143-146. J
- Millar, L.J., Smith, J., Heck, I.S., Boxer, D.H., Kinghorn, J.R. & Unkles, S.E.** 1997. The *Aspergillus nidulans* *cnxABC* locus encodes a protein consisting of two domains, required for synthesis of precursor Z., an intermediate in molybdenum cofactor biosynthesis. *Abstracts of the Fourth International Symposium on Nitrogen Assimilation: Molecular and Genetic Aspects*, University of South Florida, Tampa. P
- Miller, A.C.E., Lutman, P.J.W., Wright, K.J. & Wright, G.McN.** 1998. A preliminary report on patterns of seedbank decline and the relationship between seedbank and seedling emergence for seven arable weed species in winter wheat. *Weed Seedbanks: Determination, Dynamics and Manipulation. Aspects of Applied Biology* 51, 59-67. P
- Miller, J.S., Damude, H., Robbins, M.A., Reade, R.D. & Rochon, D.M.** 1997. Genome structure of cucumber leaf spot virus: sequence analysis suggests it belongs to a distinct species within the tombusviridae. *Virus Research* 52, 51-60. J
- Miller, J.S., Damude, H., Robbins, M.A., Reade, R.D. & Rochon, D.M.** 1996. The genome organisation and RNA sequence of cucumber leaf spot virus (CLSV), a tombus-like virus. *Proceedings of the 3rd Symposium of the International Working Group on Plant Viruses with Fungal Vectors*, Dundee, 5-8 August 1996, 21-24. P

- Miller, S.K. & Lyon, G.D.** 1996. The ability of elicitors to induce resistance in potatoes. *Proceedings 13th Triennial Conference of the European Association for Potato Research*, Netherlands, 1996, 462-463. P
- Momchilova, S., Alexandrova, I. & Robertson, G.W.** 1997. Characterisation of lipids produced by a strain of the non-oleaginous yeast *Saccharomyces lactis*-T3. *Analytical Laboratory* 6, 3-7. J
- Momchilova, S., Nikolova-Damyanova, B. & Christie, W.W.** 1997. Silver ion high-performance liquid chromatography of isomeric *cis* and *trans* octadecenoic acids: effect of the ester moiety and mobile phase composition. *Journal of Chromatography A* 793, 275-287. J
- Mudie, A. & Duncan, J.** 1997. Integrated control of raspberry root rot. *Bulletin to SSFG Growers*, Mylnefield Research Services Ltd, June 1997. P
- Mueller, A-M., Mooney, A.L. & MacFarlane, S.A.** 1997. Replication of *in vitro* tobavirus recombinants shows that the specificity of template recognition is determined by 5' non-coding but not 3' non-coding sequences. *Journal of General Virology* 78, 2085-2088. J
- Muller, W.E.G., Scheffer, U., Perovic, S., Forrest, J.M.S. & Schroder, H.C.** 1997. Interaction of prion protein mRNA with CBP35 and other cellular proteins. Possible implications for prion replication and age-dependent changes. *Archives of Gerontology and Geriatrics* 25, 41-58. J
- Munir, A., Phillips, M.S. & Trudgill, D.L.** 1997. Differences in hatching activity for *Globodera pallida* and *G. rostochiensis*, to root diffusates from host and non-host *Solanaceous* spp. *Association of Applied Biology, Offered Papers in Nematology*, London. P
- Murant, A.F., Jones, A.T., Martelli, G.P. & Stace-Smith, R.** 1996. Nepoviruses: general properties, diseases, and virus identification. In: Harrison, B.D. & Murant, A.F. (eds.). *The Plant Viruses Vol. 5*. Plenum Press, New York & London, 99-137. R
- Murant, A.F., Robinson, D.J. & Taliansky, M.E.** 1997. Current research on the causal agents of groundnut rosette disease and their diagnosis. *Groundnut virus diseases in Africa: Summary & Recommendations of the 6th Meeting of the International Working Group*, Pretoria, 1996, 5-6. P
- Nateshan, H.M., Muniyappa, V., Swanson, M.M. & Harrison, B.D.** 1996. Host range, vector relations and serological relationships of cotton leaf curl virus from southern India. *Annals of Applied Biology* 128, 233-244. J
- Neilson, R., Boag, B. & Brown, D.J.F.** 1998. Nematodes from permanent pasture and scrubland in the UK. In: De Goede, R.G.M. & Bongers, T. (eds.). *Nematode Communities of Northern Temperate Grassland Ecosystems*, Wageningen, Netherlands, DEGREE, 189-221. R
- Neilson, R., Boag, B., Robinson, D., Scrimgeour, C.M. & Handley, L.L.** 1997. Natural abundances of $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ indicate trophic-level relationships between nematode and cestode parasites and their wild rabbit (*Oryctolagus cuniculus*) host. *ASI 97 20 Jahrestagung der Arbeitsgemeinschaft Stabile Isotope*, 6-8 October 1997, Munich. P
- Neilson, R., Boag, B., Robinson, D., Scrimgeour, C.M. & Handley, L.L.** 1997. Natural abundances of $\delta^{15}\text{N}$ and $\delta^{13}\text{C}$ indicate trophic-level relationships between nematode and cestode parasites and their wild rabbit (*Oryctolagus cuniculus*) host. *Proceedings of the Second English Language International Nematology Symposium of the Russian Society of Nematologists*, Moscow, 19. P
- Neilson, R., Handley, L.L., Robinson, D., Scrimgeour, C.M. & Brown, D.J.F.** 1998. Pest and pathogen induced biotic stress in plants as indicated by natural abundance values of $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$. *Proceedings of the VII International Congress of Ecology*, Italy. P
- Neilson, R., Robinson, D., Handley, L.L. & Brown, D.J.F.** 1998. Nematode feeding and infection cause potential biotic stress in plants as indicated by natural abundance values of $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$. *Russian Journal of Nematology* 6, 69-70. J
- Neilson, R., Robinson, D., Handley, L.L. & Brown, D.J.F.** 1997. Natural abundance values of the stable isotopes $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ as potential indicators of pathogen-induced (virus-vector nematodes and their associated viruses) biotic stress in plants. *Proceedings of the Third Hangzhou International Symposium on Plant Pathology and Biotechnology*, Hangzhou, China, 17. P
- Newton, A.C.** 1997. 'BSPPWeb' - a mine of information. *British Society for Plant Pathology Newsletter* 30, 42. O
- Newton, A.C.** 1997. Crop mixtures: towards ecologically balanced agriculture. <http://www.bspp.org.uk/mix> O
- Newton, A.C.** 1997. Happy Birthday MPPOL. *BSPP Newsletter* 31, 72-73. O
- Newton, A.C.** 1997. Prospects for the development of information technology in plant pathology. In: Bridge, P., Jeffries, P., Morse, D.R. & Scott, P.R. (ed.). *Information Technology, Plant Pathology and Biodiversity*. CAB International, Wallingford, Oxford, 129-134. R
- Newton, A.C.** 1997. The pick of the crop. Switzerland's "clean" agriculture could become a model for the EU. *New Scientist*, 15 November, 1997, 55. O
- Newton, A.C. & Dashwood, E.P.** 1998. The interaction of humidity and resistance elicitors on expression of polygenic resistance of barley to mildew. *Journal of Phytopathology* 146, 123-130. J
- Newton, A.C., Ellis, R.P., Hackett, C.A. & Guy, D.C.** 1997. The effect of component number on *Rhynchosporium secalis* infection and yield in mixtures of winter barley cultivars. *Plant Pathology* 45, 930-938. J
- Newton, A.C., Guy, D.C. & Gacek, E.** 1997. Malting quality mixtures of spring barley cultivars: trials in Scotland and Poland. *Proceedings of COST Action 817 Working Group 2 Workshop on Variety Mixtures*, Grignon, June 1997. O
- Newton, A.C., Miller, S.K., Lyon, G.D. & Reglinski, T.** 1997. Resistance elicitors as crop protectants. *Phytopathology* 87, S69. P
- Newton, A.C., Osbourn, A.E. & Caten, C.E.** 1998. Heterokaryosis and vegetative incompatibility in *Stagonospora nodorum*. *Mycologia* 90, 215-255. J
- Newton, A.C., Scott, P.R. & Whitehead, D.** 1997. Molecular Plant Pathology On-Line: an international peer-reviewed on-line journal edited and published by the British Society for Plant Pathology. *British Society for Plant Pathology Newsletter* 30, 9-10. O
- Newton, A.C., Swanson, J.S., Ellis, R.P. & Guy, D.C.** 1997. The effect of component number on severity of scald, yield and malting quality in mixtures of winter barley cultivars. *Phytopathology* 87, S69-70. P
- Newton, A.C., Swanson, J.S., Guy, D.C. & Ellis, R.P.** 1998. The effect of cultivar mixtures on malting quality in winter barley. *Journal of the Institute of Brewing* 104, 41-45. J

- Nicholson, P., Lees, A.K., Maurin, N., Parry, D.W. & Rezanoor, H.N.** 1996. Development of a PCR assay to identify and quantify *Microdochium nivale* var. *nivale* and *Microdochium nivale* var. *majus* in wheat. *Physiological and Molecular Plant Pathology* 48, 257-271. J
- Nordbäck, J., Lundberg, E. & Christie, W.W.** 1998. Separation of lipid classes from marine particulate material by HPLC on a polyvinyl alcohol-bonded stationary phase using dual-channel evaporative light-scattering detection. *Marine Chemistry* 60, 165-175. J
- Nyange, N.E., McNicol, R.J. & Williamson, B.** 1997. Plant regeneration from suspension culture protoplasts established from hypocotyl-derived callus of two *Coffea arabica* genotypes. *Proceedings of the 17th International Conference on Coffee (ASIC)*, Nairobi, 20-25 July. P
- Nyange, N.E., Williamson, B., Lyon, G.D., McNicol, R.J. & Connolly, T.** 1997. Responses of cells and protoplasts of *Coffea arabica* genotypes to partially purified culture filtrates produced by *Colletotrichum kahawae*. *Plant Cell Reports* 16, 763-769. J
- O'Donnell, A.G. & Ritz, K.** 1997. Microbial dimensions to the functional implications of soil biodiversity. In: Wolters, V. (ed.). *Functional Implications of Biodiversity in Soil*. Ecosystems Research Report 24, European Commission Directorate General, Science, Research and Development, Brussels, 23-26. R
- Oleson, T., Griffiths, B.S., Henriksen, K., Moldrup, P. & Wheatley, R.E.** 1997. Modelling diffusion and reaction in soils: V. Nitrogen transformations in organic manure-amended soil. *Soil Science* 162, 157-168. J
- Oparka, K.J., Roberts A.G., Santa Cruz, S., Boevink, P., Prior, D.A.M. & Smallcombe, A.** 1997. Using GFP to study virus invasion and spread in plant tissues. *Nature* 338, 401-402. J
- Oparka, K.J., Santa Cruz, S., Prior, D.A.M., Padgett, H.S. & Beachy, R.N.** 1997. Gating of epidermal plasmodesmata is restricted to the leading edge of expanding infection sites of tobacco mosaic virus (TMV). *Plant Journal* 12, 781-789. J
- Pages, L. & Bengough, A.G.** 1997. Modelling minirhizotron observations to test experimental procedures. *Plant and Soil* 189, 81-89. J
- Pakniyat, H., Powell, W., Baird, E., Handley, L.L., Robinson, D., Scrimgeour, C.M., Nevo, E., Hackett, C.A., Caligari, P.D.S. & Forster, B.P.** 1997. AFLP variation in wild barley (*Hordeum spontaneum* C. Koch) with reference to salt tolerance and associated site-of-origin eco-geography. *Genome* 40, 332-341. J
- Pakniyat, H., Thomas, W.T.B., Caligari, P.D.S. & Forster, B.P.** 1997. Comparison of salt tolerance of *GPert* and non-*GPert* barleys. *Plant Breeding* 116, 189-191. J
- Palukaitis, P.** 1996. Conformational analysis of satellite RNAs of cucumber mosaic virus by TGGE. *Abstracts of the VIIIth International Congress of Virology*, Jerusalem, 1996, 207. P
- Palukaitis, P. & Kaplan, I.B.** 1997. Synergy of virus accumulation and pathology in transgenic plants expressing viral sequences. In: M. Tepfer & E. Balázs, (eds.). *Virus-Resistant Transgenic Plants: Potential Ecological Impact*. Springer Verlag, Berlin, 77-84. R
- Palukaitis, P. & Roossinck, M.J.** 1996. *In vivo* mutation and selection of a pathogenic satellite RNA of cucumber mosaic virus by passage in tobacco. *Abstracts of the VIIIth International Congress of Virology*, Jerusalem, 1996, 207. P
- Palukaitis, P. & Roossinck, M.J.** 1996. Spontaneous change of a benign satellite RNA of cucumber mosaic virus to a pathogenic variant. *Nature Biotechnology* 14, 1264-1268. J
- Palukaitis, P. & Zaitlin, M.** 1997. Replicase-mediated resistance to plant virus disease. *Advances in Virus Research* 48, 349-377. R
- Palukaitis, P. & Zhang, L.** 1997. Risk assessment of recombination and transcapsidation of tobacco mosaic virus with the cucumber mosaic virus coat protein. In: Levin, M., Grim, C. & Angle, J.S. (eds.). *Biotechnology Risk Assessment: USEPA/USDA/Environment Canada/Agriculture and Agri-Food Canada*. Proceedings of the Biotechnology Risk Assessment Symposium, June 23-25, 1996, Ottawa, Canada. University of Maryland Biotechnology Institute, 119-130. R
- Palukaitis, P., Canto, T. & Gal-On, A.** 1996. *In vivo* and *in vitro* analyses of the cucumber mosaic virus replicase using histidine-tagged viral-encoded proteins. *Abstracts of the IRBM Workshop on Molecular Mechanisms of RNA Replication*, Alghero, Sardinia, 1996, 16. P
- Palukaitis, P., d'Aquilio, M., Lisa, V. & Boccardo, G.** 1996. Infectivity and structure analysis of carnation stunt associated viroids. *Abstracts of the VIIIth International Congress of Virology*, Jerusalem, 1996, 21. P
- Palukaitis, P., Hellwald, K-H., Banerjee, N. & Zaitlin, M.** 1996. Mechanisms of replicase-mediated resistance to cucumber mosaic virus. *Abstracts of the VIIIth International Congress of Virology*, Jerusalem, 1996, 44. P
- Parratt, D., Macfarlane Smith, W.H. & Clark R.** 1997. Oilseed rape and allergy. *Allergy News (The British Allergy Foundation)* 19, 20-21. J
- Paterson, E., Hall, J.M., Rattray, E.A.S., Griffiths, B.S., Ritz, K. & Killham, K.** 1997. Effect of elevated CO₂ on rhizosphere carbon flow and soil microbial processes. *Global Change Biology* 3, 363-377. J
- Paul, S., Wachira, F.N., Powell, W. & Waugh, R.** 1997. Diversity and genetic differentiation among populations of Indian and Kenyan tea (*Camellia sinensis* (L.) O. Kuntze) revealed by AFLP markers. *Theoretical and Applied Genetics* 94, 255-263. J
- Pearce, S.R., Harrison, G., Flavell, A.J., Heslop-Harrison, J.S. & Kumar, A.** 1997. Characterisation and genomic organisation of the Ty1-copia group retrotransposons of rye (*Secale cereale*) genome. *Genome* 40, 617-625. J
- Pearce, S.R., Harrison, G., Li, D., Heslop-Harrison, J.S., Kumar, A. & Flavell, A.J.** 1997. The Ty1-Copia group retrotransposons in *Vicia* species. *Angiosperm Genome Size Discussion Meeting*, Royal Botanic Gardens, Kew, London, UK, 31. P
- Pearce, S.R., Stuart-Rogers, C., Mill, B., Vershinin, A.V., Knox, M., Heslop-Harrison, J.S., Jack, P., Ellis, N.H.R. Kumar, A. & Flavell, A.J.** 1997. Ty1-copia group retrotransposable elements as markers for genetic analysis and biodiversity assessment. *5th International Congress of Plant Molecular Biology*, Singapore, 255. P
- Peiris, D.R. & McNicol, J.W.** 1996. Modelling daily weather with multivariate time series. *Agriculture and Forest Meteorology* 79, 289-300. J
- Peneva, V.K., Neilson, R., Boag, B. & Brown, D.J.F.** 1997. Cricematidae (Nemata) from two nature reserves in Russia. *Proceedings of the Second English Language International Nematology Symposium of the Russian Society of Nematologists*, Moscow, 21. P

- Peneva, V.K., Orion, D., Shelvin, E., Bar-Eyal, M. & Brown, D.J.F.** 1997. Taxonomy and identification of a new *Longidorus* sp. (Nematoda, Longidoridae) from Israel. *Proceedings of the 3rd Hangzhou International Symposium on Plant Pathology and Biotechnology*, Hangzhou, China, 61. P
- Peneva, V.K., Orion, D., Shlevin, E., Bar-Eyal, M. & Brown, D.J.F.** 1998. Morphology and biology of a *Longidorus* sp. (Nematoda, Longidoridae) damaging carrot in Israel. *Russian Journal of Nematology* 6, 71. P
- Perera, L., Russell, J.R., Provan, J., McNicol, J.W. & Powell, W.** 1998. Evaluating the relationships between indigenous coconut (*Cocos nucifera* L.) accessions from Sri Lanka by means of AFLP profiling. *Theoretical and Applied Genetics* 96, 545-550. J
- Perry, K., Miller, J., Lister, R. & Mayo, M.A.** 1998. Luteovirus isolation and RNA extraction. In: Foster, G.D. & Taylor, S. (eds.). *Plant Virology Protocols. Methods in Molecular Biology Series 81*. Chapman & Hall, London, 231-239. R
- Perry, K.L., Zhang, L. & Palukaitis, P.** 1998. Amino acid changes in the coat protein of cucumber mosaic virus differentially affect transmission by aphids *Myzus persicae* and *Aphis gossypii*. *Virology* 242, 204-210. J
- Perry, R.N. & Jones, J.T.** 1998. The use of molecular biology techniques in plant nematology. Past present and future. *Russian Journal of Nematology* 101, 47-56. R
- Pesnyakevich, A.G. & Lyon, G.D.** 1998. Transformation of *Erwinia carotovora* subsp. *atroseptica* with the green fluorescent protein gene from *Aequorea victoria*. *Journal of Phytopathology* 146, 57-60. J
- Petersen, D.J., Zijlstra, C., Wishart, J., Blok, V.C. & Vrain, T.** 1997. Specific probes efficiently distinguish root-knot nematode species using signature sequences in the ribosomal intergenic spacer. *Fundamental and Applied Nematology* 20, 619-626. J
- Petz, C., Zunke, U., Heinicke, D. & Brown, D.J.F.** 1998. Trichodoriid vectors of serologically distinguishable strains of tobacco rattle tobavirus occurring in Germany. *Russian Journal of Nematology* 6, 72. P
- Phillips, M.S., Trudgill, D.L., Hackett, C.A., Hancock, M., Holliday, J.M. & Spaul, A.M.** 1998. A basis for prediction modelling of the relations of potato yields to population density of the potato cyst nematode *Globodera pallida*. *Journal of Agricultural Science* 130, 45-51. J
- Ploeg, A.T. & Brown, D.J.F.** 1997. (Para)trichodoriid nematodes and their associated viruses. In: Santos, De A. M.S.N., Abrantes, De O. I.M., Brown, D.J.F. & Lemos, R.J.V.C.M. (eds.). *An introduction to virus vector nematodes and their associated viruses*. Centro de Sistemática e Ecologia, Universidade de Coimbra, Coimbra, Portugal, 41-68. R
- Ploeg, A.T. & Brown, D.J.F.** 1997. Extraction of virus vector nematodes. In: Santos, De A. M.S.N., Abrantes, De O. I.M., Brown, D.J.F. & Lemos, R.J.V.C.M. (eds.). *An introduction to virus vector nematodes and their associated viruses*. Centro de Sistemática e Ecologia, Universidade de Coimbra, Coimbra, Portugal, 97-111. R
- Powell, W., Morgante, M., Doyle, J.J., McNicol, J.W., Tingey, S.V. & Rafalski, A.J.** 1996. Genepool variation in genus *Glycine* subgenus *soja* revealed by polymorphic nuclear and chloroplast microsatellites. *Genetics* 144, 793-803. J
- Powell, W., Thomas, W.T.B., Baird, E., Lawrence, P., Booth, A., Harrower, B., McNicol, J.W. & Waugh, R.** 1997. Analysis of quantitative traits in barley by the use of Amplified Fragment Length polymorphisms. *Heredity* 79, 48-59. J
- Power, R., Reynolds, S., Gore, D., Kingston, J., Harrison, I., Macintosh, A. & Tonberg, J.** 1997. Expert Provisioner: a range management aid. In: Macintosh, A. & Milne, R. (eds.). *Applications and Innovations in Expert Systems V*. BCS Expert Systems Group, Cambridge. R
- Preston, S., Griffiths, B.S. & Young, I.M.** 1996. An investigation into sources of soil crack heterogeneity using fractal geometry. *European Journal of Soil Science* 48, 31-37. J
- Prior, A.E., Kennedy, M.W., Blok, V.C., Robertson, W.M. & Jones, J.T.** 1997. Functional characterisation of a secreted protein from the potato cyst nematode *Globodera pallida*. *Abstracts of the Parasitic Helminths - from genomes to vaccines Meeting*, Edinburgh, September 1997. P
- Prior, A.E., Kennedy, M.W., Blok, V.C., Robertson, W.M., McDermott, L., Cooper, A. & Jones, J.T.** 1997. Functional characterisation of a secreted protein from the potato cyst nematode *Globodera pallida*. *Abstracts of the AAB offered papers in Nematology Meeting*, Linnean Society, London, 1997. P
- Prior, D.A.M., MacFarlane, S.A., Oparka, K.J. & Brown, D.J.F.** 1997. Infection, and symplastic and systemic invasion of plants with green fluorescent protein tagged tobacco rattle tobavirus transmitted by *Paratrichodorus pachydermus* nematodes. *Proceedings of the 3rd Hangzhou International Symposium on Plant Pathology and Biotechnology*, Hangzhou, China, 62. P
- Prior, D.A.M., MacFarlane, S.A., Oparka, K.J. & Brown, D.J.F.** 1998. Study of viral infection, and symplastic and systemic invasion of plants using green fluorescent protein tagged tobacco rattle tobavirus transmitted by *Paratrichodorus pachydermus* nematodes. *Russian Journal of Nematology* 6, 73. P
- Provan, J.** 1998. Development of database-derived simple sequence repeat markers in cultivated potato (*Solanum tuberosum* L.). *Ph.D. Thesis*, University of Dundee. O
- Provan, J., Corbett, G., McNicol, J.W. & Powell, W.** 1997. Chloroplast variability in wild and cultivated rice (*Oryza spp.*) revealed by polymorphic chloroplast simple sequence repeats. *Genome* 40, 104-110. J
- Provan, J., Wilson, N.J., Soranzo, N., McNicol, J.W., Morgante, M. & Powell, W.** 1998. The use of uniparentally inherited simple sequence repeat markers in plant population studies and systematics. In: Hollingsworth, P., Gornall, R. & Bateman, R. (eds.). *Advances in Plant Molecular Systematics*. Chapman and Hall, London. R
- Rafalski, J.A., Vogel, J.M., Morgante, M., Powell, W., Andre, C. & Tingey, S.V.** 1996. Generating and using DNA markers in plants. In: Birren, B. & Lai, E. (eds.). *Analysis of Non-Mammalian Genomes - A Practical Guide*. Academic Press, 75-134. R
- Ramanathan, V., Simpson, C.G., Thow, G., Iannetta, P.P.M., Johnston, D.J., Graham, J., McNicol, R.J. & Williamson, B.** 1997. cDNA cloning and expression of polygalacturonase-inhibiting protein (PGIPs) from red raspberry (*Rubus idaeus*). *Journal of Experimental Botany* 48, 1185-1193. J
- Ramsay, G.** 1997. Inheritance and linkage of a gene for testa-imposed seed dormancy in faba bean (*Vicia faba* L.). *Plant Breeding* 116, 287-289. J
- Ramsay, L., Kearsey, M.J., Jennings, D., Lydiate, D.J., Bohoun, E. & Marshall, D.F.** 1996. Construction of a substitution library of *Brassica oleracea* recombinant backcross lines for the precision mapping of quantitative trait loci *Genome* 39, 558-567. J

- Ramsay, L.M., Ritz, K., Crawford, J.W. & Gadd, G.M.** 1996. Growth responses of soil fungi to heavy metal stress in low-substrate environments. *British Society of Soil Science Biological and Physical Interactions in Soils Meeting*, Dundee. P
- Randhawa, G.J.** 1996. Manipulation of protein quality in potato tubers by genetic engineering. *Ph.D. Thesis*, University of Dundee. O
- Randhawa, G.J., Lyon, J., Harris, N., Davies, H.V. & Machray, G.C.** 1998. Manipulation of potato tubers protein quality through genetic engineering. In: Guegen, M.J. & Popineau, Y. (eds.). *Plant Proteins from European Crops: Food and Non-Food Applications*. Springer (Heidelberg) and INRA Editions (Versailles), 92-95. R
- Raven, J.A. & Scrimgeour, C.M.** 1997. The influence of anoxia on plants of saline habitats with special reference to the sulphur cycle. *Annals of Botany* 79, 79-86. J
- Reavy, B., Arif, M. & Torrance, L.** 1998. Early detection of the fungus-transmitted virus, potato mop-top virus. In: Manceau, C. & Spak, J. (eds.). *Advances in the Detection of Plant Pathogens by Polymerase Chain Reaction*. Office for Official Publications of the European Communities, Luxembourg, 17-21. R
- Reavy, B., Sandgren, M., Barker, H., Heino, P. & Oxelfelt, P.** 1997. A coat protein transgene from a Scottish isolate of potato mop-top virus mediates strong resistance against Scandinavian isolates which have similar coat protein genes. *European Journal of Plant Pathology* 103, 829-834. J
- Regalado, C.M., Sleeman, B.D. & Ritz, K.** 1997. Aggregation and collapse of fungal wall vesicles in hyphal tips: a model for the origin of the Spitzenkörper. *Philosophical Transactions of the Royal Society of London B* 352, 1963-1974. J
- Richardson, A. & McDougall, G.J.** 1997. An oxidase from lignifying xylem of Leyland cypress. *Proceedings of the 7th Scottish Cell Wall Group Meeting*, Aberdeen, 21. P
- Richardson, A. & McDougall, G.J.** 1997. An oxidase from lignifying xylem of Leyland cypress. *Proceedings of the 17th Tree Biotechnology Group Meeting*, Nottingham, 19. P
- Richardson, A. & McDougall, G.J.** 1997. Identification and partial characterisation of an oxidase from lignifying xylem of Leyland cypress (*Cupressocyparis leylandii*). *Trees* 12, 146-152. J
- Richardson, A. & McDougall, G.J.** 1997. Identification of a coniferyl alcohol oxidase from lignifying xylem of Sitka spruce. *Proceedings of the 7th Scottish Cell Wall Group Meeting*, Aberdeen, 22. P
- Richardson, A. & McDougall, G.J.** 1997. Identification of a coniferyl alcohol oxidase from lignifying xylem of Sitka spruce. *Proceedings of the 17th Tree Biotechnology Group Meeting*, Nottingham, 18. P
- Richardson, A. & McDougall, G.J.** 1998. Purification and characterisation of an oxidase from Sitka spruce. *Proceedings of the Eighth Scottish Cell Wall Group Meeting*, Dundee, UK, 17. P
- Richardson, A., Stewart, D. & McDougall, G.J.** 1997. Identification and partial characterisation of a coniferyl alcohol oxidase from lignifying xylem of Sitka spruce (*Picea sitchensis*). *Planta* 203, 35-43. J
- Ritz, K.** 1997. Report on the 1997 SPM Meetings. *BBSRC UK Soil:Plant:Microbe Newsletter* 3. O
- Ritz, K.** 1998. Molecular approaches to studying the effects of environmental factors on the structure and function of soil microbial communities. *Japanese Society of Soil Microbiology: Interactions between Soil Microorganisms and the Environment*, Tsukuba, Japan. P
- Ritz, K. & Burns, R.G.** 1996. The 1996 SPM Annual Meeting. *BBSRC UK Soil:Plant:Microbe Newsletter* 2. O
- Ritz, K. & Struwe, S.** 1996. Microbial dimensions to the functional implications of soil biodiversity. *Functional Implications of Biodiversity in Soil Meeting*, Giessen. P
- Ritz, K. & Struwe, S.** 1997. Methods and approaches in studying functional implications of biodiversity in soil. In: Wolters, V. (ed.). *Functional Implications of Biodiversity in Soil*. Ecosystems Research Report 24, European Commission Directorate General, Science, Research and Development, Brussels, 17-21. R
- Ritz, K., Griffiths, B.S., Torsvik, V.L. & Hendriksen, N.B.** 1997. Analysis of soil and bacterioplankton community DNA by melting profiles and reassociation kinetics. *FEMS Microbiology Letters* 149, 151-156. J
- Ritz, K., Millar, S.M. & Crawford, J.W.** 1996. Detailed visualisation of hyphal distribution in fungal mycelia growing in heterogeneous nutritional environments. *Journal of Microbiological Methods* 25, 23-28. J
- Roberts, A.G., Prior, D.A.M. & Smallcombe, A.** 1996. Using GFP to study viral invasion and spread throughout plant tissues. *BioRad Application Note*, 17. Bio-Rad Microscopy Division, Hemel Hempstead, UK. T
- Roberts, A.G., Santa Cruz, S., Roberts, I.M., Prior, D.A.M., Turgeon, R. & Oparka, K.J.** 1997. Phloem unloading in sink leaves of *Nicotiana benthamiana*. Comparison of a fluorescent solute with a fluorescent virus. *Plant Cell* 9, 1381-1396. J
- Roberts, I.M., Wang, D., Findlay, K. & Maule, A.J.** 1998. Ultrastructural and temporal observations of the cylindrical inclusions (Cis) shows that the CI protein acts transiently in aiding virus movement. *Virology* 245, 173-181. J
- Robertson, W.M., Birch, A.N.E., Geoghegan, I.E. & Griffiths, B.S.** 1997. Control of *Globodera* and *Meloidogyne* spp. with canavanine and its effect on bacterial feeders. *Proceedings of the 36th Annual Meeting of the Society of Nematologists*, Tucson, Arizona, USA, 63. P
- Robinson, D.** 1997. Variation in plant growth: from apex to ecosystem. *Trends in Ecology and Evolution* 12, 459-460. O
- Robinson, D. & Van Vuuren, M.M.I.** 1998. Responses of wild plants to nutrient patches in relation to growth rate and life-forms. In: Lambers, H., Poorter, H. & Van Vuuren, M.M.I. (eds.). *Inherent Variation in Plant Growth: Physiological Mechanisms and Ecological Consequences*. SBS Publishers, The Hague, 237-257. R
- Robinson, D., Handley, L.L. & Scrimgeour, C.M.** 1998. A theory for $^{15}\text{N}/^{14}\text{N}$ fractionation in nitrate-grown vascular plants. *Planta* 205, 397-406. J
- Robinson, D.J.** 1997. The complex of agents that cause groundnut rosette disease. *Abstracts of the 3rd Hangzhou International Symposium on Plant Pathology & Biotechnology*, Hangzhou, 1997, 31. P
- Robinson, D.J., Taliansky, M.E. & Murant, A.F.** 1997. Recent advances in understanding the causal agents of groundnut rosette disease. *Groundnut virus diseases in Africa: Summary & Recommendations of the 6th Meeting of the International Working Group*, Pretoria, 1996, 7-8. P
- Roossinck, M.J., Kaplan, I.B. & Palukaitis, P.** 1997. Support of a cucumber mosaic virus satellite RNA maps to a single amino acid proximal to the helicase domain of the helper virus. *Journal of Virology* 71, 608-612. J

- Russell, J.R., Fuller, J.D., Macaulay, M., Hatz, B.G., Jahoor, A., Powell, W. & Waugh, R. 1997. Direct comparison of levels of genetic variation among barley accessions detected by RFLPs, AFLPs, SSRs and RAPDs. *Theoretical and Applied Genetics* 95, 714-722. J
- Russell, J.R., Fuller, J.D., Young, G., Thomas, B., Taramino, G., Macaulay, M., Waugh, R. & Powell, W. 1997. Discriminating between barley genotypes using microsatellite markers. *Genome* 40, 442-450. J
- Russell, J.R., Machray, G.C. & Waugh, R. 1997. Primers: total DNA. In: Karp, A., Issac, P.G. & Ingram, D.S. (eds.). *Molecular Tools for Screening Biodiversity: Plants and Animals*. Chapman and Hall. R
- Russell, J.R., Milbourne, D. & Waugh, R. 1997. Comparison of PCR marker systems to examine genetic diversity. In: Karp, A., Issac, P.G. & Ingram, D.S. (eds.). *Molecular Tools for Screening Biodiversity: Plants and Animals*. Chapman and Hall. R
- Ryabov, E.V., Oparka, K.J., Santa Cruz, S., Robinson, D.J. & Taliany, M.E. 1998. Intracellular location of two groundnut rosette umbravirus proteins delivered by PVX and TMV vectors. *Virology* 242, 303-313. J
- Ryu, K.H., Kim, C-H. & Palukaitis, P. 1998. The coat protein of cucumber mosaic virus is a host range determinant for infection of maize. *Molecular Plant-Microbe Interactions* 11, 351-357. J
- Santos, M.S.N. De A., Abrantes, I.M. De O., Brown, D.J.F. & Lemos, R.J.V.C.M. (eds.). 1997. *An introduction to virus vector nematodes and their associated viruses*. Centro de Sistemática e Ecologia, Universidade de Coimbra, Coimbra, Portugal, 535 pp. R
- Sayanova, O., Smith, M.A., Lapinskas, P., Stobart, A.K., Dobson, G., Christie, W.W., Shewry, P.R. & Napier, J.A. 1997. Expression of a borage desaturase cDNA containing an N-terminal cytochrome b₅ domain results in the accumulation of high levels of D6-desaturated fatty acids in transgenic tobacco. *Proceedings of the National Academy of Sciences, USA*, 94, 4211-4216. J
- Schmidt, O., Scrimgeour, C.M. & Handley, L.L. 1997. Natural abundance of $\delta^{15}\text{N}$ and $\delta^{13}\text{C}$ in earthworms from a wheat and a wheat-clover field. *Soil Biology and Biochemistry* 29, 1301-1308. J
- Schmitt, C., Mueller, A-M., Mooney, A., Brown, D. & MacFarlane, S. 1998. Immunological detection and mutational analysis of the RNA2-encoded nematode transmission proteins of pea early-browning virus. *Journal of General Virology* 79, 1281-1288. J
- Scrimgeour, C.M. 1997. Analysis of stable isotopes in lipids. In: Christie, W.W. (ed.). *Advances in Lipid Methodology - Four*. The Oily Press, Dundee, 171-192. R
- Sébédo, J.L., Juanéda, P., Dobson, G., Berdeaux, O., Martin, J.C., Chardigny, J.M. & Christie, W.W. 1997. Conversion of conjugated linoleic acid isomers into long-chain fatty acids. *Abstracts 88th AOCS Annual Meeting and Expo*, 1997. AOCS Press, Champaign, IL, 94. P
- Sébédo, J.L., Juanéda, P., Dobson, G., Ramilison, I., Martin, J.C., Chardigny, J.M. & Christie, W.W. 1997. Metabolites of conjugated isomers of linoleic acid (CLA) in the rat. *Biochimica et Biophysica Acta* 1345, 5-10. J
- Shaw, P.J., Beven, A.F., Leader, D.J. & Brown, J.W.S. 1997. Nucleolar organisation of rRNA transcription complexes, rRNA processing and snoRNAs. *The Ribosome: Its (Nucleolar) Synthesis and Structure*, Holland, 105. P
- Shepherd, T., Robertson, G.W., Griffiths, D.W. & Birch, A.N.E. 1997. Effects of environment on the composition of epicuticular wax esters from kale and swede. *Phytochemistry* 46, 83-96. J
- Simpson, C.G., Lyon, J.M., McQuade, C.M. & Brown, J.W.S. 1997. Exon definition and cooperation between introns in plant pre-mRNA splicing. *2nd Annual Meeting of the RNA Society*, Alberta, Canada, 461. P
- Simpson, C.G., Lyon, J.M., McQuade, C.M. & Brown, J.W.S. 1997. Exon definition and cooperativity in plant pre-mRNA splicing. *Proceedings of the 1st Congress of the Genetics Society of Slovenia*, Slovenia, 35-36. P
- Simpson, C.G., Lyon, J.M., McQuade, C.M. & Brown, J.W.S. 1997. Exon scanning in plant pre-mRNA splicing. *Journal of Experimental Botany* 48, 44. J
- Simpson, C.G., McQuade, C.M., Lyon, J. & Brown, J.W.S. 1998. Exon definition in plant pre-mRNA processing. *International Arabidopsis Meeting*, Madison, USA, June 1998. P
- Snijder, A.J., Wastie, R.L., Glidewell, S.M. & Goodman, B.A. 1996. Free radicals and other paramagnetic ions in interactions between fungal pathogens and potato tubers. *Biochemical Society Transactions* 24, 442-446. J
- Soranzo, N., Provan, J. & Powell, W. 1998. Analysis of mitochondrial variation in Scots pine (*Pinus sylvestris* L.): occurrence of population differentiation within the Iberian Peninsula. *Proceedings of the Ecological Genetics Group Meeting*, University of St Andrews, April 1998. P
- Soranzo, N., Wright, F., Provan, J. & Powell, W. 1997. Phylogenetic relationships within the genus *Pinus* subgenus *Pinus* (hard pines) based on chloroplast DNA. *Advances in Plant Systematics: an International Meeting of the Systematics Association and the Linnean Society*, University of Glasgow, 13-15 August 1997. P
- Squire, G.R., Burn, D. & Crawford, J.W. 1997. A model for the impact of herbicide tolerance on the performance of oilseed rape as a volunteer weed. *Annals of Applied Biology* 131, 315-338. J
- Squire, G.R., Connolly, H., Crawford, J.W., Collinson, S. & Sesay, A. 1997. Linking vegetative and reproductive trait variability in landraces of bambara groundnut. *Proceedings of the International Bambara Groundnut Symposium*, University of Nottingham. European Union Life Sciences and Technologies for Developing Countries STD-3. P
- Squire, G.R., Marshall, B., Dunlop, G. & Wright, G. 1997. Genetic basis of rate-temperature characteristics for germination in oilseed rape. *Journal of Experimental Botany* 48, 869-875. J
- Stewart, D. & Morrison, I.M. 1997. Reed canary grass: effect of growth in Scottish conditions on cell wall composition and structure. *Aspects of Applied Biology* 49, 241-246. P
- Stewart, D., Azzini, A., Hall, A.T. & Morrison, I.M. 1997. Sisal fibres and their constituent non-cellulosic polysaccharides. *Industrial Crops and Products* 6, 17-26. P
- Stewart, D., Hall, A.T., Good, E., Willcock, J., Magan, N. & Morrison, I.M. 1997. Changes in wheat straw cell wall composition and structure during storage. *Aspects of Applied Biology* 49, 411-416. P
- Stewart, D., Iannetta, P.P.M. & Davies, H.V. 1997. Changes in raspberry cell-wall structure and composition during ripening. *Genetic and Environmental Manipulation of Horticultural Crops*, Wellesbourne, October 1997. P

- Stewart, H.E., Lees, A.K., Monnington, S.J. & Cullen, D.W.** 1998. Assessment of resistance to silver scurf (*Helminthosporium solani*) and variation in the pathogen population. *Proceedings of the 1998 EAPR Pathology Section Meeting*, Robacksdalen meddlar, Sweden. P
- Stewart, J. & Wheatley, R.E.** 1997. Effects of glyphosate on carbon mineralisation in disturbed peatlands. *Proceedings of 10th International Peat Congress*, Reims, France. P
- Struik, P.C., Askew, M.F., Sonnino, A., MacKerron, D.K.L., Bång, U., Ritter, E., Statham, O.J.H., Kirkman, M.A. & Umaerus, V.** 1997. Forty years of potato research: highlights, achievements and prospects. *Potato Research* 40, 5-18. J
- Susi, P., Ziegler, A. & Torrance, L.** 1998. Selection of single chain variable fragment antibodies to blackcurrant reversion associated virus from a synthetic phage display library. *Phytopathology* 88, 230-233. J
- Swanson, M.M., Valand, G.B., Muniyappa, V. & Harrison, B.D.** 1998. Serological detection and antigenic variation of two whitefly-transmitted geminiviruses: tobacco leaf curl and croton yellow vein mosaic viruses. *Annals of Applied Biology* 132, 427-435. J
- Swanston, J.S.** 1997. Waxy starch barley genotypes with reduced β -glucan contents. *Cereal Chemistry* 74, 452-455. J
- Swanston, J.S., Ellis, R.P. & Tiller, S.A.** 1997. Effects of the waxy and high amylose genes on total β -glucan and extractable starch. *Barley Genetics Newsletter* 27, 72-74. J
- Swanston, J.S., Ellis, R.P., Perez-Vendrell, A., Ramo, T., Voltas, J. & Molina-Cano, J.L.** 1997. Patterns of barley grain development in Spain and Scotland and their implications for malting quality. *Cereal Chemistry* 74, 456-461. J
- Swanston, J.S., Thomas, W.T.B., Powell, W., Meyer, R., Machray, G.C. & Hedley, P.E.** 1998. Breeding barley for malt whisky distilling - a genome based approach. *Proceedings of the Fifth Institute of Brewing Conference on Malting, Brewing and Distilling*, Aviemore. P
- Talbot, N.J., Kershaw, M.J., McCormack, B.J. & McCafferty, H.R.K.** 1996. Molecular genetics of infection-related development by the rice blast fungus *Magnaporthe grisea*. *Fungal Genetics Newsletter* 43, 42-43. J
- Talbot, N.J., McCafferty, H.R.K., Ma, M., Moore, K. & Hamer, J.E.** 1997. Nitrogen starvation of the rice blast fungus *Magnaporthe grisea* may act as an environmental cue for disease symptom expression. *Physiological and Molecular Plant Pathology* 50, 179-195. J
- Talbot, N.J., McCormack, B.J., Kershaw, M.J., Dixon, K.P. & McCafferty, H.R.K.** 1996. Investigating the mechanisms of infection-related development by the rice blast fungus *Magnaporthe grisea*. *Proceedings of the 8th International Congress of Molecular Plant-Microbe Interactions*, Knoxville, 2, 10. P
- Taliansky, M.E. & Robinson, D.J.** 1997. Down-regulation of groundnut rosette virus replication by a variant satellite RNA. *Virology* 230, 228-235. J
- Taliansky, M.E. & Robinson, D.J.** 1997. Trans-acting untranslated elements of groundnut rosette virus satellite RNA are involved in symptom production. *Journal of General Virology* 78, 1277-1285. J
- Taliansky, M.E., Robinson, D.J., Murant, A.F. & Ryabov, E.V.** 1997. The causal agents of groundnut rosette disease: understanding the complex. *Abstracts of the EMBO Workshop on Molecular Mechanisms in the Replicative Cycle of Viruses in Plants*, Las Navas del Marqués, 1997. P
- Taliansky, M.E., Ryabov, E.V. & Robinson, D.J.** 1998. Two distinct mechanisms of transgenic resistance mediated by groundnut rosette virus satellite RNA sequences. *Molecular Plant Microbe Interactions* 11, 367-374. J
- Taylor, C.E. & Brown, D.J.F.** 1997. *Nematode vectors of plant viruses*. Wallingford, England, CABI, 286 pp. R
- Taylor, M., Woodhead, M., Davies, H.V., Brennan, R.M. & McNicol, R.J.** 1996. Blackcurrant gene promoters. *Patent Application Nos.* 9522558.7, 9522559.2, 9522559.5, 9522560.3, 9522582.7 & 9522580.1. T
- Taylor, M.A., George, L.A., Ross, H.A. & Davies, H.V.** 1997. cDNA cloning and characterisation of an α -glucosidase gene from potato (*Solanum tuberosum* L.). *The Plant Journal* 13, 419-425. J
- Taylor, S.C., Mooney, A., MacFarlane, S.A., Twell, D. & Foster, G.D.** 1996. Investigation of silent plant virus replicons as a mechanism for engineering viral resistance. *Proceedings of the Xth International Congress of Virology*, Jerusalem, 11-16th August 1996. P
- Thomas, W.T.B.** 1997. Mapping disease resistance in spring barley. *Approaches to Improving Disease Resistance to Meet Future Needs: Airborne Pathogens of Wheat and Barley. COST Action 817*, Prague, November 1997, 48-51. P
- Thomas, W.T.B., Russell, J.R., Bonar, N., Booth, A., Fuller, J.D., Lawrence, P., Macaulay, M., Ramsay, L., Waugh, R. & Powell, W.** 1997. Simple sequence repeats (SSRs) and QTL mapping in barley crosses. In: Buerstmayr, H. & Ruckebauer, P. (eds.). *Application of Marker Aided Selection in Cereal Breeding Programs. Eucarpia Section Cereals Meeting*, Tulln, Austria, September 1997, 28-29. R
- Thongbai, P., Goodman, B.A. & Marschner, H.** 1997. Oxidative free radical generation as a result of post-anoxic injury in tolerant and susceptible varieties of rice (*Oryza sativa* L.) in an iron toxic soil. *3rd International Conference on 'Oxygen, free radicals and environmental stress in plants'*, Pisa. P
- Torrance, L.** 1997. Developments in serological methods to detect and identify plant viruses. In: Cassells, A.C. (ed.). *Pathogen and Microbial Contamination Management in Micropropagation*. Kluwer Academic Publishers, London, 370. R
- Torrance, L.** 1998. Developments in serological methods to detect and identify plant viruses. *Plant Cell, Tissue and Organ Culture* 52, 27-32. J
- Torrance, L.** 1998. Immunological detection and quantification methods. *Molecular Technologies for Safe Drinking Water. OECD Workshop*, Interlaken Switzerland, July 1998. P
- Torrance, L. & Mayo, M.A.** 1997. Proposed re-classification of furoviruses. *Archives of Virology* 142, 435-439. J
- Torrance, L. & Robinson, D.J.** 1998. Tobacco rattle and potato mop-top viruses: the causes of spraing disease in potato tubers. *SAC Potato Newsletter*, March 1998, 2-4. O
- Torrance, L., Ziegler, A., Harper, K., Macintosh, S.M., Zange, B., Kumari, S. & Mayo, M.** 1998. Novel molecular tools for plant virus detection: recombinant antibodies specific for luteoviruses and geminiviruses. *Proceedings of VII International Congress for Plant Pathology*, 9-16 August, Edinburgh, 1998. P
- Torrance, L., Ziegler, A., Macintosh, S., Cowan, G., Mayo, M.A. & Slabas, T.** 1996. Properties of scFv proteins exhibiting specific binding to the plant enzyme enoyl acyl carrier protein reductase. *Immunotechnology* 2, 293. P

- Toth, I. K. & Hyman, L.J.** 1998. Methods of 'phage typing'. *Patent Application No:* 9809414. T
- Toth, I.K., Hyman, L.J., Grevesse, C. & Pérombelon, M.C.M.** 1996. An update on *Erwinia* diagnostics. *Proceedings Crop Protection in Northern Britain 1996*, Dundee, 331-336. O
- Toth, I.K., Mulholland, V., Cooper, S., Bentley, Y-L., Pérombelon M.C.M. & Salmond, G.P.C.** 1997. Generalised transduction in the blackleg pathogen *Erwinia carotovora* subsp. *atroseptica* by bacteriophage fM1. *Microbiology* 143, 2433-2438. J
- Toth, R., Harper, K., Mayo, M. & Torrance, L.** 1998. Selection of scFv molecules specific for a plant virus, potato leafroll luteovirus, from naive phage display libraries and production of a standard assay for routine virus detection. *British Society for Immunology; International Conference on Phage Display Technology: Antibodies, Proteins and Peptides*, Cardiff, June 1998. P
- Trudgill, D.L., Brown, D.J.F. & Phillips, M.S.** 1997. Global positioning system, and sampling for and control of PCN and spraing in potatoes. *Potato Review* 6, 4-11. O
- Trudgill, D.L., Brown, D.J.F. & Phillips, M.S.** 1997. GPS systems for mapping of nematodes. *Potato Review* 5, 44-48. O
- Turley, D.B., Wright, G. & Hebden, P.** 1998. Changes in weed seedbanks during long term set-aside. *Weed Seedbanks: Determination, Dynamics and Manipulation. Aspects of Applied Biology* 51, 265-272. P
- Turner, A.S., Lees, A.K., Rezanoor, H.N. & Nicholson, P.** 1998. Refinement of PCR-detection of *Fusarium avenaceum* and evidence from DNA marker studies for phenetic relatedness to *Fusarium tricinctum*. *Plant Pathology* 47, 278-288. J
- Tzortzakakis, E.A., Trudgill, D.L. & Phillips, M.S.** 1997. Evidence for a dosage effect of the *Mi* gene on partially virulent lines of *Meloidogyne javanica*. *Journal of Nematology* 76, 76-80. J
- Unkles, S.E., Logsdon, J., Robinson, J.M., Kinghorn, J.R. & Duncan, J.M.** 1997. The triosephosphate isomerase and glyceraldehyde-3-phosphate dehydrogenase encoding genes are fused in the eukaryotic Oomycota. *Journal of Bacteriology* 179, 6816-6823. J
- Unkles, S.E., Smith, J., Kanan, G.J., Millar, L.J., Heck, I.S., Boxer, D.H. & Kinghorn, J.R.** 1997. The *Aspergillus nidulans* *cnxABC* locus is a single gene encoding two catalytic domains required for synthesis of precursor Z, an intermediate in molybdenum cofactor biosynthesis. *Journal of Biological Chemistry* 272(45), 28381-28390. J
- Van der Wolf, J.M., Hyman, L.J., Grevesse, C., Jones, D.A.C., van Beekhoven, J.R.C.M., van Vuurde, J.W.L. & Pérombelon, M.C.M.** 1996. Immunomagnetic separation of *Erwinia carotovora* subsp. *atroseptica* from potato peel extracts to improve detection sensitivity on a crystal violet pectate medium or by PCR. *Journal of Applied Bacteriology* 80, 487-495. J
- Van Regenmortel, M.H.V., Bishop, D.H.L., Fauquet, C.M., Mayo, M.A., Maniloff, J. & Calisher, C.H.** 1997. Guidelines to the demarcation of virus species. *Archives of Virology* 142, 1505-1518. J
- Van Vuuren, M.M.I., Robinson, D., Fitter, A.H. & Raven, J.A.** 1997. Root growth and nutrient uptake by plants at elevated CO₂. *Ecological Society of America Annual Meeting*, Albuquerque, August 1997. P
- Vassilakos, N., MacFarlane, S.A. & Brown, D.J.F.** 1997. Exclusivity and complementarity in the transmission of tobamoviruses by their respective trichodoriid vector nematodes. *Mededelingen van de Faculteit Landbouwwetenschappen Rijksuniversiteit, Gent* 62, 713-720. O
- Vassilakos, N., MacFarlane, S.A., Weischer, B. & Brown, D.J.F.** 1997. Vector nematode and virus association specificity, exclusivity and complementarity. *Proceedings of the 3rd Hangzhou International Symposium on Plant Pathology and Biotechnology*, Hangzhou, China, 63. P
- Vassilakos, N., MacFarlane, S.A., Weischer, B. & Brown, D.J.F.** 1998. Exclusivity and complementarity in the transmission of nepo- and tobamoviruses by their associated vector nematodes. *Russian Journal of Nematology* 6, 84.
- Vicente, M.L., Deighton, N., Empis, J.A. & Goodman, B.A.** 1997. EPR and LC-MS of PBN adducts of lipid methyl esters. *30th International Meeting of the Royal Society of Chemistry, Electron Spin Resonance Group and 5th International Symposium on Spin Trapping - ESR Spectroscopy of Radicals in Organic and Biological Systems*, Lancaster, 52. P
- Vicente, M.L., Empis, J.A., Deighton, N., Glidewell, S.M., Goodman, B.A. & Rowlands, C.C.** 1998. Use of EPR and ENDOR spectroscopy in conjunction with the spin-trapping technique to study the high temperature oxidative degradation of fatty acid methyl esters. *Journal of the Chemical Society Perkin Transactions 2*, 449-454. J
- Viola, R., Nyvall, P. & Pedersen, M.** 1997. A novel starch synthase from the red alga *Gracilaria tenuistipitata* which is selective for UDPglucose. Its characterisation and biotechnological potential. *Proceedings of the 4th IMBC International Marine Biotechnology Conference*, Naples, Italy, September 1997, 35-38. P
- Viola, R., Vreugdenhil, D., Davies, H.V. & Sommerville, L.** 1997. Accumulation of L-ascorbic acid in tuberising stolon tips of potato (*Solanum tuberosum* L.). *Journal of Plant Physiology* 152, 220-225. J
- Vogel, J.M., Rafalski, A., Powell, W., Morgante, M., Andre, C., Hanafey, M. & Tingey, S.V.** 1996. Application of genetic diagnostics to plant genome analysis and plant breeding. *HortScience* 31, 1107-1108. J
- Wachira, F.N., Powell, W. & Waugh, R.** 1997. An assessment of genetic diversity between cultivated tea (*Camellia sinensis* L.) and its wild relatives based on RAPD and organelle specific STS. *Heredity* 78, 603-611. J
- Walker, A.J., Ford, L., Majerus, M.E.N., Geoghegan, I.E., Birch, A.N.E., Gatehouse, J.A. & Gatehouse, A.M.R.** 1997. Characterisation of the mid-gut digestive proteinase activity of the two-spot ladybird (*Adalia bipunctata* L.) and its sensitivity to proteinase inhibitors. *Insect Molecular Biology and Biochemistry* 28, 173-180. J
- Wang, D., MacFarlane, S.A. & Maule, A.J.** 1997. Viral determinants of pea early browning virus seed transmission in pea. *Virology* 234, 112-117. J
- Wastie, R.L., Stewart, Helen E., Bradshaw, J.E. & Lees, A.K.** 1997. Assessing progenies of potato for resistance to skin spot (*Polyscytalum pustulans*) in the glasshouse. *Potato Research* 40, 383-389. J
- Watts, C.W., Hallett, P.D. & Dexter, A.R.** 1996. Effects of mechanical stresses and strains on soil respiration. *2nd International Symposium of Interactions of Soil Minerals and Organic Compounds Working Group*, Nancy, France. P
- Waugh, R.** 1997. SSR markers for potato. *Plant and Animal Genome V*, San Diego, January 1997. P

- Waugh, R.** 1998. A European Union perspective. *Plant and Animal Genome VI*, San Diego, January 1998. P
- Waugh, R., Bonar, N., Baird, E., Hayes, P., Graner, A., Thomas, W.T.B. & Powell, W.** 1997. AFLP product homology in three barley mapping populations. *Molecular and General Genetics* 255, 311-321. J
- Waugh, R., Mclean, K., Pearce, S.R., Flavell, A.J., Kumar, A., Thomas, B. & Powell, W.** 1997. Genetic distribution of BARE-1 retrotransposable elements in the barley genome revealed by sequence-specific amplification polymorphisms (S-SAP). *Molecular General Genetics* 253, 687-694. J
- Waugh, R., Meyer, R.C., Milbourne, D. & Collins, A.J.** 1997. Development and application of appropriate technologies for potato genetics. *Plant and Animal Genome V*, San Diego, California, USA. P
- Webster, K.D. & Barker, H.** 1998. Detection and quantification of transcript RNA in transgenic plants using digoxigenin-labelled cDNA probes. In: *Plant Virology Protocols: from Virus Isolation to Transgenic Resistance (Series: Methods in Molecular Biology, Vol. XX: Plant Virology)*. Humana Press, Totowa, NJ, USA, 437-445. R
- Wellington, E.M.H. & Toth, I.K.** 1996. Studying the ecology of actinomycetes in the soil and rhizosphere. In: Hall, G.S. (ed.). *Methods for the Examination of Organismal Diversity in Soils and Sediments*. CAB International, UNESCO and IUBS, 23-41. R
- Wheatley, R., Hackett, C.A., Bruce, A. & Kundzewicz, A.** 1997. Effect of substrate composition on production and inhibitory activity against wood decay fungi of volatile organic compounds from *Trichoderma* spp. *International Biodeterioration and Biodegradation* 39, 199-205. J
- Wheatley, R.E.** 1996. Effects of biomass and plant/root competition on nitrogen turnover. *Proceedings of Workshop on Fate of Nitrogen Applied to the Soil-Plant System*. Hydro Agri Centre for Plant Nutrition and Environmental Research, Dülmen, Germany. P
- Wheatley, R.E. & Mackie, A.E.** 1998. The occurrence of volatile organic compound mediated interactions between soil bacteria and fungi. *Proceedings of ISME-8*, Halifax, Nova Scotia, 1480. P
- Wheatley, R.E., Hackett, C., Bruce, A. & Kundzewicz, A.** 1997. Effect of substrate composition on production and inhibitory activity against wood decay fungi of volatile organic compounds from *Trichoderma* spp. *International Biodeterioration and Degradation* 39, 199-205. J
- Wheatley, R.E., Mackie, A.E., Robertson, G.W. & McDonald, S.** 1997. Early warning device for disease detection in stores. *Potato Marketing Board Report*. Potato Marketing Board, Oxford, 55 pp. T
- White, G.** 1997. The development and application of microsatellite markers in *Swietenia humilis*. *Proceedings of the 41st Meeting of the Ecological Genetics Group*, University of Leicester, March 1997. P
- White, G. & Powell, W.** 1997. Cross-species amplification of SSR loci in the Meliaceae family. *Molecular Ecology* 6, 1185-1197. J
- White, G. & Powell, W.** 1997. Isolation and characterisation of microsatellite loci in *Swietenia humilis* (Meliaceae): an endangered tropical hardwood species. *Molecular Ecology* 6, 851-860. J
- White, G., Booth, A. & Powell, W.** 1997. The application of SSRs in *Swietenia humilis* (Meliaceae). *Proceedings of International Symposium of the Systematics Association and the Linnean Society on Advances in Plant Molecular Systematics*, University of Glasgow, August 1997. P
- Williamson, B., Cooke, D.E.L., Duncan, J.M., Breese, W.A. & Shattock, R.C.** 1998. Fungal infections of micro-propagated plants at weaning: a problem exemplified by downy mildews in *Rubus* and *Rosa*. *Plant Cell, Tissue and Organ Culture* 52, 89-96. J
- Wilson, T.M.A. & Chapman, S.N.** 1997. 'Virus-like particle' (Chimeric pseudoviruses in bacteria). *UK Patent Application No: 9607899.3*. International PCT/GB97/01065. Published 23 October 1997. (IPN WO 97/39134). T
- Wilson, T.M.A., Santa Cruz, S., Oparka, K. & Chapman, S.N.** 1998. Peptide antibiotics. *UK Patent Application No 9420989.7*. 'Overcoat Protein', filed 9 June 1995. International Patent Application PCT/GB95/02457. 'Method of Producing Chimaeric Protein'. Published 25 April, 1996 (IPN WO 96/12027). T
- Wishart J., Blok, V.C. & Phillips, M.S.** 1996. *Meloidogyne chitwoodi* and related species: detection and characterisation of new pests of potato in Europe. *Association of Applied Biology, Offered Papers in Nematology*, London. P
- Wishart J., Blok, V.C., Duncan, L., Phillips, M.S., Robertson, W.M., Robertson, L. & Davies, K.G.** 1997. Differentiation of *Meloidogyne hapla* from *M. chitwoodi* and *M. fallax* using variation in the cuticle surface. *Association of Applied Biology, Offered Papers in Nematology*, London. P
- Wolff, R.L., Christie, W.W. & Coakley, D.** 1997. 14-Methylhexadecanoic acid in conifer seed oils. *Lipids* 8, 971-973. J
- Wolff, R.L., Christie, W.W. & Coakley, D.** 1997. Bishomopinolenic (7,11,14-20:3) acid in Pinaceae seed oils. *Journal of the American Oil Chemists' Society* 74, 1583-1586. J
- Woodford, J.A.T.** 1997. Comparison of sticky thread traps and yellow water traps for monitoring PVY vector aphids in potato fields. *Abstracts of Vth International Symposium on Aphids*, León, Spain, 89. P
- Woodford, J.A.T., Willmer, P.G., Hughes, J.P. & Gordon, S.C.** 1997. Feeding and oviposition cues determine the choice of raspberry flowers by the raspberry beetle, *Byturus tomentosus*. *Abstracts of Entomology'97*, Newcastle, England, 11. P
- Woodhead, M., Brennan, R., McNicol, R.J., Davies, H.V. & Taylor, M.A.** 1997. Differential gene expression during ripening in the fruit of blackcurrant (*Ribes nigrum* L.). *Genetic and Environmental Manipulation of Horticultural Crops*, HRI Wellesbourne, October 1997. P
- Woodhead, M., Taylor, M.A., Davies, H.V., Brennan, R. & McNicol, R.J.** 1997. Isolation of RNA from blackcurrant (*Ribes nigrum* L.) fruit. *Molecular Biotechnology* 7, 1-8. J
- Wright, F.** 1996. Phylogenetic trees and real datasets. *International Biometric Society and Institute of Mathematics and its Applications Meeting*, London, 14 May 1996. P
- Wright, F.** 1997. Phylogenetic trees from protein-coding DNA sequences. *Moredun Research Institute Biennial Scientific Report 1994-95*, 79-80. O
- Wright, K.M. & Oparka, K.J.** 1997. Metabolic inhibitors induce symplastic movement of solutes from the transport phloem of *Arabidopsis* roots. *Journal of Experimental Botany* 48, 1807-1814. J
- Yeates, G.W. & Boag, B.** 1997. Species richness in soil nematode assemblages. *Journal of Nematology* 29, 615-616. P

- Yeates, G.W., Boag, B. & Brown, D.J.F.** 1997. Two new species of Longidoridae (Nematoda) from New Zealand forests. *Systematic Parasitology* 38, 33-43. J
- Yeates, G.W., Boag, B. & Johns, P.M.** 1997. Observations on the feeding and population structure of five New Zealand terrestrial planarians which prey on lumbricid earthworms. *Annals of Applied Biology* 131, 351-358. J
- Yoneyama, T., Handley, L.L., Scrimgeour, C.M., Fisher, D.B. & Raven, J.A.** 1997. Variations of the natural abundances of nitrogen and carbon isotopes in *Triticum aestivum* L. with special reference to phloem and xylem exudates. *New Phytologist* 137, 205-213. J
- Yoneyama, T., Masuda, T., Fujiwara, H. & Handley, L.L.** 1997. The relations of $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ in phloem and xylem fluids and plant tissues. *Plant Cell Physiology (Suppl.)* 38, 112. P
- Young, I.M.** 1997. Biophysics of the soil environment. *PhD Autumn School, Soil Physics and Biology*, Wageningen University. P.
- Young, I.M.** 1998. Biophysical interactions at the root-soil interface: a review. *Journal of Agricultural Science, Cambridge* 130, 1-7. J
- Young, I.M. & Bengough, A.G.** 1997. Biophysics research at the soil-plant-microbe interface. *British Society of Soil Science Jubilee Meeting*, Newcastle University, September 1997. P
- Young, I.M. & Bengough, A.G.** 1997. Plant-soil interactions. *British Society of Soil Science Golden Jubilee Meeting*, Newcastle University, September 1997. P
- Young, I.M., Crawford, J.W., Anderson, A. & McBratney, A.** 1998. A comment on number-size distributions, soil structure and fractals. *Soil Science Society of America Proceedings* 61, 1798-1800. J
- Young, I.M., Montagu, K., Conroy, J. & Bengough, A.G.** 1997. Mechanical impedance of root growth directly reduces leaf elongation rates of cereals. *New Phytologist* 135, 613-619. J
- Young, M.W., MacKerron, D.K.L. & Davies, H.V.** 1997. Calibration of near infrared reflectance spectroscopy to estimate nitrogen concentration in potato tissues. *Potato Research* 40, 215-220. J
- Younis, A.M., Watt, D.E., Kilcoyne, S.H., Yacob, M. & Goodman, B.A.** 1997. Characterisation of soils from N.E. Libya using chemical methods and Mössbauer spectroscopy. *International Conference on Magnetism 1997*, Cairns, Australia, 52-56. P
- Zhang, L., Kaplan, I.B. & Palukaitis, P.** 1996. Effect of capsid protein deletions on movement RNA binding and assembly of cucumber mosaic virus. *Abstracts of the American Society for Virology, XVth Annual Meeting*, London, Ontario, 1996, 160. P
- Zhang, L., Kaplan, I.B. & Palukaitis, P.** 1996. Effects of cucumber mosaic virus capsid protein deletions on RNA binding and assembly. *Abstracts of the VIIIth International Congress of Virology*, Jerusalem, 1996, 62. P
- Zheng, H., Wicker, C., Huang, M., Palukaitis, P. & Zhang, L.** 1997. Sequence comparisons of alfalfa mosaic virus strains. *Abstracts of the American Society for Virology, XVth Annual Meeting*, Bozeman, MT, 1997, 210. P
- Zhou, X., Liu, Y., Calvert, L., Munoz, C., Otim-Nape, G.W., Robinson, D.J. & Harrison, B.D.** 1997. Evidence that DNA-A of a geminivirus associated with severe cassava mosaic disease in Uganda has arisen by interspecific recombination. *Journal of General Virology* 78, 2101-2111. J
- Zhou, X., Liu, Y., Robinson, D.J. & Harrison, B.D.** 1997. New type of geminivirus induces epidemic of severe cassava mosaic disease in Uganda. *Abstracts of the 3rd Hangzhou International Symposium on Plant Pathology & Biotechnology*, Hangzhou, 1997, 36. P
- Zhou, X., Liu, Y., Robinson, D.J. & Harrison, B.D.** 1998. Four DNA-A variants among Pakistani isolates of cotton leaf curl virus and their affinities to DNA-A of geminivirus isolates from okra. *Journal of General Virology* 79, 915-923. J
- Zhu, J., Gale, M.D., Quarrie, S., Jackson, M. & Bryan, G.J.** 1998. AFLP markers for the study of rice biodiversity. *Theoretical and Applied Genetics* 96, 602-611. J
- Ziegler, A. & Torrance, L.** 1998. A synthetic antigen from a peptide library can be an efficient positive control in immunoassays for the detection and identification of tomato yellow leafcurl virus. *Phage Club Meeting on 'The Biomedical and Biotechnological Use and Further Development of Phage Display'*, Maastricht, May 1998. P
- Ziegler, A., Macintosh, S.M., Torrance, L., Simon, W. & Slabas, A.R.** 1997. Recombinant antibody fragments that detect enoyl acyl carrier protein reductase in *Brassica napus*. *Lipids* 32, 805-809. J
- Ziegler, A., Torrance, L., Macintosh, S.M., Cowan, G.H., Harper, K. & Mayo, M.A.** 1996. Cucumber mosaic cucumovirus antibodies from a synthetic phage display library. *Immunotechnology* 2, 296. P
- Zijlstra, C., Blok, V.C. & Phillips, M.S.** 1997. Natural resistance: the assessment of variation in virulence in biological and molecular terms. In: Fennol, C., Ohl, S. & Grundler, F. (eds.). *The cellular and molecular basis for plant-nematode interactions*. Kluwer (The Netherlands). R