

## **REPORTS AND PUBLICATIONS**

### **THESES**

Murphy, D.P.L. (1984). The merits of the use of cereal cultivar mixtures under Irish conditions. Thesis presented to the Faculty of Agricultural Science (M.Agr.Sc.), University College, Dublin.

Murphy, D.P.L. (1994).

Crop structure and crop productivity in winter barley (*Hordeum sativum*). Ph.D. thesis. University of Newcastle upon Tyne.

### **FORMALLY REFERRED JOURNAL PUBLICATIONS, MONOGRAPHS and REPORTS**

Much of the research work in Germany was published in two refereed monographs listed below (\*)

Murphy, D.P.L., Dahab, M.H., Hossain, S., Wyseure, G.C.L. and O'Callaghan, J.R. (1994).

The simulation of the effects of shading on the growth and yield of winter barley (*Hordeum sativum*). *Computers in Agriculture* 10:169-174.

Haneklaus, S., Murphy, D.P.L., Novak, G. and Schnug, E. (1994).

Effects of the timing of sulphur application on grain yield and yield components of wheat. *Journal for Soil Science and Plant Nutrition* 158:83-85.

Thylen, L. and Murphy, D.P.L. (1996).

The control of errors in momentary yield data from combine harvesters. *Journal of Agricultural Engineering Research* 64: 271-278.

(\*)Murphy, D.P.L., Behring, H., und Jäger, Ch. (1999). Perspektiven für Dämmstoffen aus heimischen nachwachsenden Rohstoffen (Prospects for insulation materials as industrial crop products). *Landbauforschung Völkenrode* (Refereed monograph 272pp). ISBN 3-933140-25-0.

(\*)Murphy, D.P.L., Roever, M. and Heinemeyer, O. (Editors) (1998). Bewertung der Verfahren der ökologischen und konventionellen landwirtschaftlichen Produktion im Hinblick auf den Energieeinsatz und bestimmte Schadgasemissionen. Evaluation of the conventional and organic agricultural production in terms of primary energy consumption and pollution gas emissions. *Landbauforschung Völkenrode* ISBN 3-933140-33-1(Refereed monograph, 206pp).

### **REPORTS – REVIEWED BY OTHER EXPERTS**

Murphy-Bokern, D. (2010). Environmental impacts of the UK food economy with particular reference to WWF Priority Places and the North-east Atlantic. WWF UK.

Audsley, E., Brander, M., Chatterton, J., Murphy-Bokern, D., Webster, C., and Williams, A. (2009). An assessment of greenhouse gas emissions from the UK food system and the scope for reduction by 2050. How low can we go?. WWF-UK and the FCN.

Audsley, E., Chatterton, J., Graves, A., Morris, J., Murphy-Bokern, D., Pearn, K., Sandars, D. and Williams, A. (2010). Food, land and greenhouse gases. The effect of changes in UK food consumption on land requirements and greenhouse gas emissions. The Committee on Climate Change.

### **SCIENTIFIC PUBLICATIONS - NOT EXTERNALLY REFEREED**

Murphy, D.P.L., Evans, E.J. and Sanderson, Anne. (1990).

The effect of nitrogen timing on winter barley. Proceedings of the First Congress of the European Society for Agronomy, Paris.

Kloepfer, F., Murphy, D. und Schnug, E. (1992).  
Ertragskartierung zur gezielteren Düngung (Yieldmapping for targeted fertiliser application).  
Landtechnik 47: 177-178.

Murphy, D.P.L., Evans, E.J. and Schnug, E. (1992).  
A multivariate approach to the analysis of cereal crop structure at harvest. In: Proceedings of the  
Second Congress of the European Society for Agronomy, Warwick University, England.

Murphy, D.P.L., Frost, D. and Evans, E.J. (1993).  
Grain yield and development of winter wheat as influenced by sowing date and cultivar. Aspects of  
Applied Biology 34: 99-104.

Murphy, D.P.L., Knight, S. and Evans, E.J. (1992).  
Spikelet sterility and grain yield in five cultivars of winter wheat (*Triticum aestivum*). Tests of  
Agrochemicals and Cultivars 13: 132-133. Supplement to Annals of Applied Biology.

Schnug, E., Murphy, D.P.L. and Evans, E.J. (1992). Evaluation of yield mapping techniques for use in  
combinable crops. In: Proceedings of the Second Congress of the European Society for Agronomy,  
Warwick University, England. 206-207.

Schnug, E., Murphy, D., Evans, E. Haneklaus, S., and Lamp, J. (1993).  
Yield mapping and the application of yield maps to computer aided local resource management. In:  
Soil Specific Crop Management, 87-93. Eds. Roberts, P.C., Rust, R.H. and Larson, W.E. American  
Society of Agronomy, Madison, Wisconsin.

Schnug, E., Murphy, D. and Haneklaus, S. (1993).  
Local Resource Management in CAF (Computer Aided Farming), a new approach for sustainable  
agriculture. In: Soil Specific Crop Management pp 94 - 100. Eds. Roberts, P.C., Rust, R.H. and  
Larson, W.E. American Society of Agronomy, Madison, Wisconsin.

Schnug, E., Murphy, D.P.L., Haneklaus, S. and Evans, E.J. (1992).  
Advanced approaches to local resource management in crop production. In: Proceedings of the  
Second Congress of the European Society for Agronomy, Warwick University, England. 372-374.

Murphy, D. and Schnug, E. (1993).  
Applications of Geotechnics and Geostatistics in Agriculture.  
Proc. Geotechnica'93: 162-163. Internationale Fachmesse und Kongreß für Geowissenschaften und  
Geotechnik, Köln, Germany. The Alfred Wegener Foundation, Bonn.

Murphy, D.P. and Schnug, E und Haneklaus S (1994).  
Innovative soil sampling and analysis procedures for the local resource management of agricultural  
soils. Proceedings of the XV<sup>th</sup> Congress of the International Society of Soil Science 6b: 613-630.

Schnug, E. Haneklaus, S. and Murphy, D. (1993). Impact of sulphur supply on the breadmaking  
quality of wheat. Aspects of Applied Biology 36: 337-345.

Schnug, E., Haneklaus, S and Murphy, D. (1994).  
Equifertiles - an innovative concept for efficient sampling in the local resource management of  
agricultural soils. Aspects of Applied Biology 37: 63-72.

Murphy, D.P.L. and Scheski, A. (1994).  
Impacts of unification and CAP reform on German agriculture. Aspects of Applied Biology 40: 27-34.

Schwarz, K.U., Schnug, E. and Murphy, D.P.L. (1994).  
Studies of the growth and yield of *Miscanthus x Giganteus* in Germany. Aspects of Applied Biology  
40: 533-540.

Schnug, E. Heym, F and Murphy, D.P. (1995). A boundary line determination technique (BOLIDES).  
Proceedings of the Second International Conference on Site-Specific Management for Agricultural  
Systems 899-908. American Society of Agronomy, Madison, WI.

Murphy, D.P., Schnug, E. and Haneklaus, S.

Yield mapping - a guide to improved techniques and strategies. Proceedings of the Second International Conference on Site-specific Management for Agricultural Systems 33-48. American society of Agronomy, Madison, WI.

Murphy, D.P., Schnug, E and Oestergaard, Hans. (1994).

Lokales Ressourcenmanagement - Ergebnisse und Ausblick (Local resource management - results and outlook). Proceedings of a national conference on the management of spatial variation in crops and soils (Technik und Verfahren der kleinräumigen Bestandesführung), 90-101. Kuratorium für Technik und Bauwesen in der Landwirtschaft. Darmstadt, Germany .

Murphy, D.P.L., J.-G. Krentler and H. Georg. (1995). Schnell nachwachsende Rohstoffe im Bauwesen (Arable crop materials in construction). Landtechnik 50: 342 and 355.

Murphy, D. P. L. and Helal, M. H. (1996).

Farming for Energy - Agronomic Principles and Environmental Impacts. 41 - 111. In: Murphy, D.P.L., Bramm, A. und Walker, K. Energy from Crops. Semundo Limited, Cambridge, England. 362pp.

Murphy, D.P.L., Gründel H., Sonnenberg H. und Bramm A. (1997). Biomass for materials and energy - setting priorities for the use of limited resources. Aspects of Applied Biology 49: 261-268.

Murphy, D.P.L., Georg, H. und Bockisch, F.-J. (1997). Development of a fibre crop processing infrastructure. Aspects of Applied Biology 49:321-326.

Thylen, L. and Murphy, D. P. L. (1997). Improving the quality of data for yield mapping. Proceedings of the First European Conference in Precision Farming. Ed. J. V. Stafford. BIOS Scientific Publishers. pp 743-750.

Murphy, D. P. L., Behring, H. and Wieland, H. (1997). The use of flax and hemp materials for insulating buildings. Proceedings of the FAO symposium 'Flax and other bast fibre plants'. Institute for Natural Fibres, Posnan, Poland, 79 - 84.

Murphy, D. P. L., Georg, H. and Bockisch, F.-J. (1997). Infrastructure for the exploitation of bast fibre crops in industry. Proceedings of the FAO symposium 'Flax and other bast fibre plants'. Institute for Natural Fibres, Posnan, Poland 162 - 164.

Wieland, H. and Murphy, D. P.L. (1997). Durability of flax fibre insulation materials in buildings. Proceedings of the FAO symposium 'Flax and other bast fibre plants'. Institute for Natural Fibres, Posnan, Poland 160 - 161.

Behring, H. and Murphy, D. P. L. (1997). Are flax based insulation products environmentally friendly? Proceedings of the FAO symposium 'Flax and other bast fibre plants'. Institute for Natural Fibres, Posnan, Poland 157 - 159.

Murphy, D.P.L., Behring, H., Wieland, H. Höppner, H. (1997). Hanf im Bauwesen (Building with hemp). Tagungsdokumentation der Veranstaltung am 28.8.1997 in Haus Düsse. Landwirtschaftskammer Westfalen-Lippe (Proceedings of a conference held by the agricultural advisory service Hannover in Haus Düsse).

Murphy, D.P.L. und Behring, H. (1998). Arable crop materials for insulation in buildings. Proceedings of the 10<sup>th</sup> European Congress 'Biomass for Energy and Industry' Würzburg 176 - 179.

Murphy, D.P.L. und Behring, H. (1998). The environmental impact of the use of arable crop materials in insulation. Proceedings of the 10<sup>th</sup> European Congress 'Biomass for Energy and Industry' Würzburg 747 - 748.

Murphy, D.P.L., Behring, H., Georg, H. und Wieland, H. Thermal insulation quality of bast fibres. Proceedings of Ag. Eng '98, Oslo.

Murphy, D.P.L., Georg, H. und Bockisch, F.-J. (1998). Processing infrastructure for technical bast

fibres. Proceedings of Ag. Eng '98, Oslo.

Behring, H., Murphy, D.P.L. (1998). Environmental impacts of the use of flax for insulation. Proceedings of Ag. Eng '98, Oslo.

Murphy-Bokern, D (2001)  
How can crop physiology support MAFF policy?  
<http://www.defra.gov.uk/science/Publications/st0146.pdf>

Murphy-Bokern, D. (2010)  
Understanding the carbon footprint of our food. Complete nutrition 10/5: 61-63

## **BOOKS**

Murphy, D.P.L., Bramm, A. and Walker, K (1996). Energy from Crops. ISBN 0 9529190 01. Semundo Limited, Cambridge, England. 362pp.

## **CONSULTATION RESPONSES**

Murphy-Bokern, D. (2008). Response to consultation informing the Royal Society study on biological approaches to enhance food-crop production ([www.murphy-bokern.com](http://www.murphy-bokern.com) )

Murphy-Bokern, D. (2009). Response to the FSA's review of its advice on fish consumption. ([www.murphy-bokern.com](http://www.murphy-bokern.com) )

Murphy-Bokern, D. (2009). Written evidence to the House of Commons Select Committee on Environment, Transport and Rural Affairs. Securing food supplies up to 2050: the challenges faced by the UK.  
<http://www.publications.parliament.uk/pa/cm200809/cmselect/cmenvfru/213/213we72.htm>

Annex 2

**LECTURES PUBLIC PRESENTATIONS**

**Lectures or oral contributions to scientific meetings (additional to 'in-house' lectures and talks to farmer groups).**

Mechanised management of local resources in agriculture. Annual meeting of the Institute of Agricultural Engineers, May 1992, Silsoe, Bedfordshire.

Applications of Geotechnics and Geostatistics in Agriculture. Geotechnica. Internationale Fachmesse und Kongreß für Geowissenschaften und Geotechnik. Köln, May 5, 1993.

Impact of sulphur supply on the baking quality of wheat. Association of Applied Biology Conference: Cereal Quality III, Churchill College, Cambridge, December 15, 1993.

Equifertiles - an innovative concept for efficient sampling in the local resource management of agricultural soils. Sampling to make decisions. Association of Applied Biologists, Churchill College, Cambridge, March 21, 1994

Yield mapping - a guide to improved techniques and strategies. International Conference on Site-Specific Management for Agricultural Systems. Second International Conference on Site-specific Management for Agricultural Systems. American society of Agronomy, Minneapolis, March 27, 1994.

A boundary line determination technique (BOLIDES). International Conference on Site-Specific Management for Agricultural Systems. Second International Conference on Site-Specific Management for agricultural Systems. American Society of Agronomy Minneapolis, March 30, 1994

Lokales Ressourcenmanagement - Ergebnisse und Ausblick (Local resource management - results and outlook). Conference organised by the Kuratorium für Technik und Bauwesen in der Landschaft. Institut für Agratechnik Bornim, Potsdam, Germany. April 14, 1994.

The environmental challenge - a threat or an opportunity for Irish farmers. Address to the Irish Tillage and Land Use Society at Braunschweig, June 15, 1994.

Impacts of unification and CAP reform in East Germany. Meeting of the Association of Applied Biologists on CAP reform, Cambridge, December 12, 1994.

Studies of the growth and yield of *Miscanthus x giganteus* in Germany. Meeting of the Association of Applied Biologists on CAP reform, Cambridge, December 14, 1994.

Hanf Fasern im Bauwesen (Hemp fibres in buildings). Tagung Gesellschaft der Freunden der FAL. (Conference of the Society of the Friends of the FAL). Forum der FAL, Braunschweig, March 21, 1996.

Nachwachsende Rohstoffe als Baustoffe (Industrial crop materials in buildings). Tagung zur Ausstellung „Zukunftsprodukte aus nachwachsenden Rohstoffen (Conference associated with the exhibition 'Future industrial crop products'. TAT Transferzentrum für Angepasste Technologien GmbH. Rheine, Oktober 9, 1996.

Biomass for materials and energy - setting priorities for the use of limited resources. Association of Applied Biology biomass and energy conference. Royal Agricultural College, Cirencester, England. April 8, 1997.

Hanf im Bauwesen (Building with hemp). Hanftag am 28.8.1997 im Haus Düsse. Landwirtschaftskammer Westfalen-Lippe.

Produktionsoptionen (Production options). Workshop organised to discuss the results of the project 'Perspektiven von Dämmstoffen aus nachwachsenden Rohstoffen' (Prospects for insulation materials from industrial crop products). Bundesforschungsanstalt für Landwirtschaft Braunschweig-Völkenrode, March 16 - 17, 1998.

Eignung biogener Fasern für die Wärmedämmung. Markt Innovation HANF Symposium. nova-Institut Hürth, and Faserinstitut Uni. Bremen (FIBRE) funded by European Social Funds. Bremen. December 9, 1998.

Dämmstoffe aus Hanf- und Flachsfasern: Konkurrenzsituation zu Agrar-Sekundärrohstoffen. Markt Innovation HANF Symposium. nova-Institut Hürth and TAT Transferzentrum für angepaßte Technologie GmbH funded by European Social Funds. Rheine, December 9, 1998.

Poultry production – a life-cycle approach to appraisal and development. British Poultry Council Annual Meeting, Westminster London, 1 May, 2007. [www.poultry.uk.com](http://www.poultry.uk.com)

From research results to policy outcomes: delivering a return on public investment in research. Thoughts on public sector research management and 'bridging the gap'. Presentation to the 4th 'Bridging the Gap' conference on 15 May 2008 in Slovenia. [www.murphy.bokern.com](http://www.murphy.bokern.com)

Global environmental challenges and the poultry sector. Presentation to the World Poultry 2009 Conference. 14 May London. [www.murphy.bokern.com](http://www.murphy.bokern.com) .

An assessment of greenhouse gas emissions from the UK food system and the scope for reduction by 2050. How low can we go? Presentation to a special meeting of the UK Food and Climate Change Network and WWF UK. 22 June, 2009. Unilever House, London

Biogas und Klima. Presentation to citizens of Damme in Germany. 19 January 2010.