

References

Abee T (1995), Pore-forming bacteriocins of Gram-positive bacteria and self-protection mechanisms of producer organisms. *FEMS Microbiology Letters*, 129:1–10

Al-Hiti MMA, Gilbert P (1983), A note on inoculum reproducibility: a comparison between solid and liquid culture. *Journal of Applied Bacteriology* 55:173–175

Alio VB, Oleas TB, Dawson TE, Ullrey DE, Cook RM (1994), Effect of sorghum grain and propionic acid bacteria on fermentation pattern, dry matter loss, and aerobic stability of orange pulp silage. *Journal of Agricultural and Food Chemistry*, 42(3):762–765

Al-Zoreky N, Ayres JW, Sandine WE (1990), Antimicrobial activity of Microgard™ against food spoilage and pathogenic microorganisms. *Journal of Dairy Science* 74:758–763

Anders RF, Hogg DM, Jago GR (19970), Formation of hydrogen peroxide by Group N streptococci and its effect on their growth and metabolism. *Applied Microbiology*, 19:608–612

Anon (1996), Sigma Chemical Catalogue: Biochemicals, organic compounds and diagnostic reagents. Sigma-Aldrich Company Ltd., Dorset, England.

Anon. (1988), Silage additives supplement, *Farmers Weekly* February 19, 1988.

Anon. (1993), Statistics. Survey of Agriculture, 1 December 1992. Ministry of Agriculture, Fisheries and Food, London

Archibald FS, Fridovich I (1981), Manganese and defenses against oxygen toxicity in *Lactobacillus plantarum*. *Journal of Bacteriology*, 145(1):442–451

Aries V, Cheney PA, Mossel DAA (1982), Ecological studies on the occurrence of bacteria utilizing lactic acid at pH values below 4.5. *Journal of Applied Bacteriology*, 52:345–351

Ashbell G, Lisker N (1988), Aerobic deterioration in maize silage stored in a bunker silo under farm conditions in a subtropical climate. *Journal of the Science of Food and Agriculture*, 45:307–315.

Ashbell G, Weinberg ZG, Azrieli A, Hen Y, Horev B (1991), A simple system to study the aerobic determination of silages. *Canadian Agricultural Engineering*, 33:391–393

Axelsson LT, Chung TC, Dobrogosz WJ, Lindgren SE (1989), Production of a broad spectrum antimicrobial substance by *Lactobacillus reuteri*. *Microbial Ecology in Health and Disease*, 2:131–136

Barnett JA (1983), *Yeasts: characterisation and identification*. Cambridge University Press, UK.

Barry TN, Di Menna ME, Webb PR, Parle JN (1980), Some observations aerobic deterioration in untreated silages and in silages made with formaldehyde-containing additives. *Journal of the Science of Food and Agriculture*, 31:133–146

Batish VK, Grover S, Lal R (1989), Screening lactic starter cultures for antifungal activity. *Cultured Dairy Products Journal*, 24(2):21–25

Beck Th (1978), In *Fermentation of Silage — a Review*. Ed. McCullough ME. National Feed Ingredients Association, Iowa, USA.

Berthier F (1993), On the screening of hydrogen peroxide-generating lactic acid bacteria. *Letters in Applied Microbiology*, 16:150–153

Beuchat LB (1983), Influence of water activity on growth, metabolic activities and survival of yeasts and moulds. *Journal of Food Protection*, 46:135–141

Biddle AD (1995), The metabolism of ribose as a sole fermentable carbon source and its correlation with colony morphology in *Lactobacillus acidophilus*, *Lb. gallinarum* and *Lb. amylovorus*. PhD Thesis, Cranfield Biotechnology Centre, Cranfield, Bedfordshire UK.

Bonestroo MH, Dewit JC, Kusters BJM, Rombouts FM (1993), Inhibition of the growth of yeasts in salads. *International Journal of Food Microbiology*, 17(4):311–320

Bottazzi V (1988), An introduction to rod shaped bacteria. *Biochimie* 70:303–315.

Brady MS, Katz, SE (1990), Factors influencing optimization of Diffusion Assays for Antibiotics. *J. Assoc. Off. Anal. Chem.*, 73(2):202–205

Britt DG, Huber JT, Rogers AL (1975), Fungal growth and acid production during fermentation and refermentation of organic acid treated corn silages. *Journal of Dairy Science*, 58(4):532–539

Brookes RM (1990), Method for assessing the aerobic stability of silage. *Proceedings of the 9th Silage Conference*, University of Newcastle, paper 30, pp56–57

Brookes RM, Buckle AE (1992), Lactic Acid Bacteria in plant silage. In *The Lactic Acid Bacteria, Volume 1: The Lactic Acid Bacteria in Health and Disease*. Ed. Wood BJB. Elsevier Science Publishers Ltd.

Charmley E, Veira DM (1991), The effect of heat treatment and gamma radiation on the composition of unwilted and wilted lucerne silages. *Grass and Forage Science*, 46:381–390

Chung TC, Axelsson L, Lindgren SE, Dobrogosz WJ (1989), *In vitro* studies on reuterin synthesis by *Lactobacillus reuteri*. *Microbial Ecology in Health and Disease*, 2:137–144

Coallier-Ascah J, Idziak ES (1985), Interaction between *Streptococcus lactis* and *Aspergillus flavus* on the production of aflatoxin. *Applied and Environmental Microbiology*, 49(1):163–167

Collins EB, Hardt P (1980), Inhibition of *Candida albicans* by *Lactobacillus acidophilus*. *Journal of Dairy Science*, 63:830–832

Condon S (1987), Responses of lactic acid bacteria to oxygen. *FEMS Microbiology Reviews*, 46:269–280

Courtin MG, Spoelstra SF (1990), A simulation model of the microbiological and chemical changes accompanying the initial stage of aerobic deterioration of silage. *Grass and Forage Science*, 45:153–165

Cox RP, Thomsen JK (1990), Computer aided identification of lactic acid bacteria using the API 50 CHL system. *Letters in Applied Microbiology* 10:257–259

Crawshaw R, Thorne DM, Llewelyn RH (1980), The effect of formic and propionic acids on the aerobic deterioration of grass silage in laboratory units. *Journal of the Science of Food and Agriculture*, 31:685–694

Cunningham DF (1994), Viability Counts in Silage Inoculants. Llysfasi College, Ruthin, Clwyd, Wales.

Daeschel MA, Andersson RE, Fleming HP (1987), Microbial ecology of fermenting plant materials. *FEMS Microbiology Reviews* 46:357–367

Davies OD (1991), The effect of an additive on the aerobic stability and subsequent intake of grass silages. *Proceedings of the British Society of Animal Production*, winter meeting. Paper 159.

Davies OD (1993), Silage aerobic stability – A guide to intake potential? Silage Research 1993. Proceedings of the 10th International Conference on Silage Research. Ed. O’Kiely P, O’Connell M, Murphy J. Dublin City University, Dublin.

Dawson RMC, Elliott DC, Elliot WH, Jones KM (1986), Data for biochemical research, Oxford University Press.

Dawson TE, Rust SR, Yokoyama MT (1993), Manipulation of silage fermentation and aerobic instability by propionic acid bacteria. In Silage Production from Feed to Animal. Proceedings of the National Silage Production Symposium, Syracuse, New York State, USA.

Dawson TE, Rust SR, Yokoyama MT (1994), Propionic acid-producing bionoculant improves the aerobic stability of ensiled high-moisture corn. *Journal of Animal Science*, 72 Supplement 1:66

De Figueiredo M, Marais JP (1994), The effect of bacterial inoculants on kikuyu silage quality. *Journal of Agricultural Science, Cambridge* 122:53–60.

de Mann JC, Rogosa M, Sharp ME (1960), A medium for the cultivation of *Lactobacilli*. *Applied Bacteriology*, 23:130–135

Demirci A, Pometto AL (1992). *Journal of Industrial Microbiology*, 11(1):23–28

di Menna ME, Parle JN, Lancaster RJ (1981), The effects of some additives on the microflora of silage. *Journal of the Science of Food and Agriculture*, 32:1151–1156

Dicks LMT (1994), The control of post-harvest disease of fresh fruit by an antifungal compound produced by a *Lactobacillus* sp. Poster presentation at Lactic ’94, an international symposium on lactic acid bacteria, Caen, Normandy, France.

Dirar H, Collins EB (1973), Aerobic utilisation of low concentrations of galactose by *Lactobacillus plantarum*. *Journal of General Microbiology*, 78:211–215

Donald S, Fenlon DR, Seddon B (1993), A novel system for monitoring the influence of oxygen tension on the microflora of grass silage. *Letters in Applied Microbiology* 17:253–255

Dykes GA, von Holy A (1994), Strain typing in the genus *Lactobacillus*. *Letters in Applied Microbiology*, 19:63–66.

Ely LO, Max Sudweeks E, Moon NJ (1981), Inoculation with *Lactobacillus plantarum* of alfalfa, corn, sorghum and wheat silages. *Journal of Dairy Science*, 64:2378–2387

Fenton MP (1987), An investigation into the sources of lactic acid bacteria in grass silage. *Journal of Applied Bacteriology*, 62:181–188

Fiddaman PJ, Rossall S (1993), Production of antifungal volatiles by *Bacillus subtilis*. *Journal of Applied Bacteriology*, 74:119–126

Frey L, Hubert JC (1993), Lactobacille, oxygène, métabolisme et antagonisme. *Lait*, 73:133–144

Gavrilova NN, Zakharenko LI (1987), Antagonistic activity of lactic acid bacteria and propionic bacteria from “Kazakhsil” starters. *FEMS Microbiology Reviews*, 46:P67

Gill M, Rook AJ, Thiago LRS (1988), Factors affecting the voluntary intake of roughages by the dairy cow. In *Nutrition and Lactation in the Dairy Cow*. Ed. Garnsworthy PC. Butterworths, England

Goodman SA (1993), Development of novel silage inoculants. PhD Thesis, Cranfield Biotechnology Centre, Cranfield, Bedfordshire, UK.

Götz F, Sedewitz B, Elstner EF (1980), Oxygen utilisation by *Lactobacillus plantarum*. 1. Oxygen consuming reactions. *Archives of Microbiology*, 125:209–214

Gourama H, Bullerman LB (1995), Inhibition of growth and aflatoxin production of *Aspergillus flavus* by *Lactobacillus* spp. *Journal of Food Protection*, 58(11):1249–1256

Grant MA, Eklund CA, Shields SC (1995), Monitoring Dairy Silage for five bacterial groups with potential for human pathogenesis. *Journal of Food Protection*, 58(8):879–883

Gribbon EM, Shoemith JG, Cunliffe WJ, Holland KT (1994), The microaerophily and photosensitivity of *Propionibacterium acnes*. *Journal of Applied Bacteriology*, 77:583–590

Haigh PM (1995), Chemical composition and energy value of big bale silages made in England, 1984–1991. *Journal of Agricultural Engineering Research*, 60:211–216.

Haigh PM, Peers, DG (1992), A note on the chemical composition of big-bale silage on Welsh farms. *Irish Journal of Agricultural and Food Research*, 31(2):193–197

Haikara A, Niku-Paavola, M-L (1994), Fungicidal substances produced by lactic acid bacteria. VTT Biotechnology and Food Research, Espoo, Finland

Haikara H, Skyttä E, Raaska L, Minna L, Mattila-Sandholm T (1994), The microbicidal activities of *Lactobacillus* and *Pediococcus* species in combination with other starters against process contaminants and pathogens. Poster presentation at Lactic '94, an international symposium on lactic acid bacteria, Caen, Normandy, France.

Harris ELV (1989), Concentration of the extract. In Protein Purification Methods, a Practical Approach. Ed. Harris ELV, Angal S. Oxford University Press.

Harrison JH, Soderlund SD, Loney KA (1989), Effect of inoculation rate of selected strains of lactic acid bacteria on fermentation and *in vitro* digestibility of grass–legume forage. *Journal of Dairy Science*, 72:2421–2426

Hellings Ph, Bertin G, Vanbelle M (1985), Effect of lactic acid bacteria on silage fermentation. 15th International Grassland Congress, Kyoto

Henderson AR (1987), Silage making: Biotechnology on the farm. *Outlook on Agriculture* 16(2):89–94

Henderson AR, Ewart JM, Robertson GM (1979), Studies on the aerobic stability of commercial silages. *Journal of the Science of Food and Agriculture*, 30:223–228

Hettinga DH, Reinbold GW (1972), The propionic-acid bacteria – a review. II Metabolism. *Journal of Milk and Food Technology*, 35(6):358–372

Hickey MW, Hillier AJ, Jago GR (1986), Transport and metabolism of lactose, glucose, and galactose in homofermentative lactobacilli. *Applied and Environmental Microbiology*, 51(4):825–831.

Hill JE (1989), Method and inoculant for preserving agricultural products for animal feed. US Patent Application 4,842,871

Hogg GM, Patterson MF, Barr JG (1987), Correlation between antibiotic sensitivity testing by conventional and conductivity measurements. *Journal of Applied Bacteriology* 62:189–195

Holden ANG, Blackburn F (1987), The role of yeasts in the aerobic deterioration of grass silage. Eighth Silage Conference, summary of papers. AFRC Institute for Grassland and Animal Production. Hurley, Maidenhead, Berkshire, England.

Holden ANG, PhD Thesis, University of Newcastle Upon Tyne, 1987.

Holzappel WH, Geisen R, Schillinger U (1995), Biological preservation of foods with reference to protective cultures, bacteriocins and food grade enzymes. *International Journal of Food Microbiology*, 24:343–362

Hugenholtz J (1993), Citrate metabolism in lactic acid bacteria. *FEMS Microbiology Reviews*, 12:163–178

Jay JM (1982), Antimicrobial properties of Diacetyl. *Applied and Environmental Microbiology*, 44(3):525–532

Johnson BF, Walker T, Calleja GB, Seligy VL (1988), Sexual co-flocculation and asexual self-flocculation in budding and fission yeasts: experimental establishment of a fundamental difference. *Canadian Journal of Microbiology*, 34:1105–1107

Jonsson A, Lindberg H, Sundås S, Lingvall P, Lindgren S (1990), Effect of additives on the quality of big-bale silage. *Animal Feed Science and Technology*, 31:139–155

Jonsson A, Pahlow G (1984), Systematic classification and biochemical characterisation of yeasts growing in grass silage inoculated with *Lactobacillus* cultures. *Animal Research and Development (Tübingen)*, 20:7–22

Kandler O (1983), Carbohydrate metabolism in lactic acid bacteria. *Antonie van Leeuwenhoek*, 49:209–224

Kandler O, Weiss N (1990), Regular, non-sporing Gram-positive rods. In *Bergey's Manual of Systematic Bacteriology*, Sneath PHA, Mair NS, Sharp ME, Holt JG. Williams and Wilkins, Baltimore, Volume 2.

Karunaratne A, Wezenberg E, Bullerman LB (1990), Inhibition of mold growth and aflatoxin production by *Lactobacillus* spp. *Journal of Food Protection*, 53(3):230–236

Katz E, Demain AL (1977), The peptide antibiotics of *Bacillus*: Chemistry, biogenesis and possible functions. *Bacteriological Reviews*, 41(2):449–474

Kennes C, Dubourgier HC, Albagnac G, Nyns EJ (1991), Citrate metabolism by *Lactobacillus plantarum* isolated from orange juice. *Journal of Applied Bacteriology*, 70:380–384

Kennes C, Veiga MC, Dubourguier HC, Touzel JP, Albagnac G, Naveau H, Nyns EJ (1991), Trophic relationships between *Saccharomyces cerevisiae* and *Lactobacillus plantarum* and their metabolism of glucose and citrate. *Applied and Environmental Microbiology*, 57(4):1046–1051

King SW, Fowler GG, Vandeburgh PA (1986), Method for inhibiting fungi. European Patent Application EP 0 221 499 A2

Kreger-van Rij NJW (1984), The yeasts, a taxonomic study. Elsevier Science Publishers, Amsterdam.

Kugler M, Loeffler W, Rapp, C, Kern A, Jung G (1990), Rhizoctin A, an antifungal phosphono-oligopeptide of *Bacillus subtilis* ATCC 6633: Biological properties. Archives of Microbiology 153:276–281

Kung L Jr., Tung RS, Maciorowski K (1991), Effect of a microbial inoculant (Ecosyl™) and/or a glycopeptide antibiotic (vancomycin) on fermentation and aerobic stability of wilted alfalfa silage. Animal Feed Science and Technology, 35:37–48

Lebbadi M, Gálvez A, Maqueda M, Martínez-Beuno M, Valdivia E (1994), Fungicin M4: a narrow spectrum peptide antibiotic from *Bacillus licheniformis* M-4. Journal of Applied Bacteriology, 77:49–53

Lee IH, Frederickson AG, Tsuchiya HM (1976), Dynamics of mixed cultures of *Lactobacillus plantarum* and *Propionibacterium shermanii*. Biotechnology and Bioengineering, 18:513–526

Lewus CB, Montville TJ (1991), Detection of bacteriocins produced by lactic acid bacteria. Journal of Applied Bacteriology 23:130–135

Lindgren S, Bromander A, Pettersson (1988), Evaluation of silage additives using scale-model silos. Swedish Journal of Agricultural Research, 18:41–49

Lindgren S, Lingvall P, Pettersson K (1987), Relation between chemical quality and microbial composition in silages. Eighth silage conference, summary of papers. AFRC Institute for Grassland and Animal Production. Hurley, Maidenhead, Berkshire.

Lindgren S, Pettersson K, Kaspersson A, Jonsson A, Lingvall P (1985), Microbial dynamics during aerobic deterioration of silages. Journal of the Science of Food and Agriculture, 36:765–774

Lindgren SE, Axelsson LT, McFeeters RF (1990), Anaerobic L-lactate degradation by *Lactobacillus plantarum*. FEMS Microbiology Letters, 66:209–214

Lindgren SE, Dobrogosz WJ (1990), Antagonistic activities of lactic acid bacteria in food and feed fermentations. FEMS Microbiology Reviews 87:149–164

- Lisker N, Taari E, Ashbell G (1989)**, Chemical and microbiological changes occurring in wheat silage maintained under modified atmospheres. *Journal of the Science of Food and Agriculture*, 47:125–127
- Liu JAP, Moon NJ (1982)**, Commensalistic interaction between *Lactobacillus acidophilus* and *Propionibacterium shermanii*. *Applied and Environmental Microbiology*, 44(3):715–722
- Lunden Petterson K, Lindgren S (1990)**, The influence of the carbohydrate fraction and additives on silage quality. *Grass and Forage Science*, 45:223–233
- Makanjuola DB, Tymon A, Springham DG (1992)**, *Enzyme Microb. Technol.*, 14:350–357
- Marth EH, Hussong RV (1963)**, Effect of skimmilks cultured with different strains of *Leuconostoc citrovorum* on growth of some bacteria and yeasts. *Journal of Dairy Science*, 46:1033–1037
- Martínez-Anaya MA, Llin ML, Macías MP, Collar C (1994)**, Regulation of acetic acid production by homo- and heterofermentative lactobacilli in whole-wheat sourdoughs. *Zeitschrift für Lebensmittel-Untersuchung und -Forschung*, 199:186–190
- Mäyrä-Mäkinen, AK, Kristianinkatu A, Suomalainen TV (1994)**, A novel microorganism strain, bacterial preparations comprising said strain, and use of said strain and preparations for the controlling of yeasts and moulds. *European Patent Application 0 576 780 A2*
- McAllister TA, Sellinger LB, McMahon LR, Bae HD, Lysyk TJ, Oosting SJ, Cheng KJ (1995)**, *Canadian Journal of Animal Science*, 75(3):425–432
- McDonald P, Henderson N, Heron S (1991)**, *The Biochemistry of Silage*, Second Edition. Chalcombe Publications, Marlow, Buckinghamshire, England.
- McDonald P, Sterling AC, Henderson AR, Dewar WA, Stark GH, Davie WG, MacPherson HT, Reid AM, Slater J (1960)**, Studies on ensilage. Technical bulletin 24, The Edinburgh School of Agriculture.
- McFall SM, Montville TJ (1989)**, pH-mediated regulation of pyruvate catabolism in *Lactobacillus plantarum* chemostat cultures. *Journal of Industrial Microbiology*, 4:335–340
- McGechan MB, Williams AG (1994)**, A model of air infiltration losses during silage storage. *Journal of Agricultural Engineering Research*, 57:237–249

Michener HD, Snell N (1949), Two antifungal substances from *Bacillus subtilis* cultures. Archives of Biochemistry, 22:208–214

Middlehoven WJ, Franzen MM (1986), The yeast flora of ensiled whole crop maize. Journal of the Science of Food and Agriculture, 37:855–861

Middlehoven WJ, van Baalen AHM (1988), Development of the yeast flora of whole-crop maize during ensiling and subsequent aerobiosis. Journal of the Science of Food and Agriculture, 42:199–207

Miller YA, Shulz GE (1993), Structure of the thiamine dependent and flavin-dependent enzyme pyruvate oxidase. Science, 259(5097):965–967

Mir Z, Jan EZ, Robertson JA, Mir PS, McCartney DH (1994), Effects of microbial inoculant and moisture content on preservation and quality of round baled alfalfa. Canadian Journal of Animal Science, 75:15–23

Momose H, Iwano K, Tonoike R (1969), Studies on the aggregation of yeast caused by lactobacilli. Journal of General and Applied Microbiology, 15:19–26

Moon NJ, Ely LO, Sudweeks EM (1980), Aerobic deterioration of wheat, lucerne and maize silages prepared with *Lactobacillus acidophilus* and a *Candida* spp.

Moran JP, O’Kiely P, Wilson RK (1990), Enumeration of lactic acid bacteria on grass and on silage-making machinery. Irish Journal of Agricultural Research, 29(1):88

Moran JP, Pullar D, Owen TR (1993), The development of a novel bacterial inoculant to reduce mould spoilage and improve the silage fermentation in big bale silage. In Silage Research 1993. The proceedings of the 10th International Conference on Silage Research. Ed. O’Kiely P, O’Connell M, Murphy J. Dublin City University, Dublin. pp85–86

Muck RE, Huhnke RL (1995), Oxygen infiltration from horizontal silo unloading practices. Transactions of the American Society of Agricultural Engineers, 38(1):23–31

Muck RE, O’Kiely P (1994), Lysozyme as a potential silage additive. Irish Journal of Agricultural and Food Research, 33:157–167

Muck RE, Pitt RE (1993), Progression of aerobic deterioration relative to the silo face. Silage Research 1993. Proceedings of the 10th International Conference on Silage Research. Ed. O’Kiely P, O’Connell M, Murphy J. Dublin City University, Dublin.

- Muck RE, Pitt RE, Liebensperger RY (1991)**, A model of aerobic growth in silage. 1. Microbial characteristics. *Grass and Forage Science*, 46:283–299
- Muller T, Behrendt U, Muller M (1996)**, Antagonistic activity in plant-associated lactic-acid bacteria. *Microbiological Research*, 151(1):63–70
- Murphy MG, Condon S (1984a)**, Correlation of oxygen utilisation and hydrogen peroxide accumulation with oxygen induced enzymes in *Lactobacillus plantarum* cultures. *Archives of Microbiology*, 138:44–48
- Murphy MG, Condon S (1984b)**, Comparison of aerobic and anaerobic growth of *Lactobacillus plantarum* in a glucose medium. *Archives of Microbiology*, 138:49–53
- Murphy MG, O'Connor L, Walsh D, Condon S (1985)**, Oxygen dependent lactate utilisation by *Lactobacillus plantarum*. *Archives of Microbiology*, 141:75–79
- Niku-Paavola M-L, Latva-Kala K, Laitila A, Mattila-Sandholm T, Haikara A (1996)**, Poster presentation at the Fifth Symposium on Lactic Acid Bacteria: Genetics, Metabolism and Applications, Veldhoven, The Netherlands.
- Nout MJR, Bouwmeester HM, Haaksma J, van Dijk H (1993)**, Fungal growth in silages of sugarbeet press pulp and maize. *Journal of Agricultural Science, Cambridge*, 121:323–326.
- Nout NJR, Bonants-van Laarhoven TMG, Zwankken RHG (1987)**, Inhibition of microbial growth by *Pediococcus* spp. *FEMS Microbiology Reviews* 46:67
- O'Kiely P (1989a)**, Aerobic stability of farm silage. *Irish Journal of Agricultural Research*, 28:102–103 (Abstract)
- O'Kiely P (1989b)**, Deterioration of silage at feeding time. *Farm and Food Research*, 20(2):4–5.
- O'Kiely P, Muck RE, O'Connor PL (1987)**, Aerobic deterioration of alfalfa and maize silage. *Journal of the Irish Grassland and Animal Production Association*, 21:145
- O'Leary J, Hemken RW (1985)**, Effect of inoculation with different lactic acid bacterial types on corn silage fermentation. *Journal of Dairy Science*, 68 Supplement 1:125
- Ohmomo S, Katayama N, Potacharoen W, Tanaka O, Sirianuntapiboon S, Atthasampunna P (1995)**, Screening of lactic acid bacteria suitable for silage-making in tropical regions. *Japanese Agricultural Research Quarterly* 29:251–256.

Ohmomo S, Kitamoto HK, Nakajima T (1994), Detection of roquefortines in *Penicillium roqueforti* isolated from moulded maize silage. *Journal of the Science of Food and Agriculture* 51:211–214

Ohyama Y, Hara S (1975), Growth of yeasts isolated from silages on various media and its relationship to aerobic deterioration of silage. *Japanese Journal of Zootechnical Science*, 46(12):713–721

Ohyama Y, Hara S, Masaki S (1980), Analysis of the factors affecting aerobic deterioration of grass silages. *Proceedings of the European Grassland Federation*, Brighton, England.

Ohyama Y, Hara S, Masaki S (1981a), Effects of added glucose and starch on the occurrence of aerobic deterioration in grass silage. 6th Silage Conference, Queen Margaret College, Edinburgh. Paper 4, pp7–8

Ohyama Y, Hara S, Masaki S (1981b), Effects of dry matter contents of silages and maximum environmental temperature during ensilage on the occurrence of aerobic deterioration. *Japanese Journal of Zootechnical Sciences*, 52(11):789–797

Ohyama Y, Masakai S, Hara, S (1975), Factors influencing aerobic deterioration of silages and changes and changes in chemical composition after opening silos. *Journal of the Science of Food and Agriculture*, 26:1137–1147

Olsen EB, Russell JB, Henick-Kling T (1991), Electrogenic L-malate transport by *Lactobacillus plantarum*: a basis for energy derivation from malolactic fermentation. *Journal of Bacteriology* 173(19):6199–6206

Pahlow G (1981), Estimation of the aerobic stability of silages by measuring the biochemical oxygen demand (B.O.D). *Proceedings of the 6th Silage Conference*, Queen Margaret College, Edinburgh, paper 33, pp 65–66

Pahlow G, Zimmer E (1985), Effect of a *Lactobacillus* inoculant on fermentation and aerobic stability of grass silage. *Proceedings of the 15th International Grassland Conference*, Kyoto. pp877–879

Piard JC, Desmazeaud M (1991a), Inhibiting factors produced by lactic acid bacteria. 1. Oxygen metabolites and catabolism end-products. *Lait*, 71:525–541

Piard JC, Desmazeaud M (1991b), Inhibiting factors produced by lactic acid bacteria. 2. Bacteriocins and other antibacterial substances. *Lait*, 72:113–142

Piddock LJV (1990), Techniques for the determination of antimicrobial resistance and sensitivity in bacteria. *Journal of Applied Bacteriology*, 68:307–318

Pitt RE, Muck RE, Pickering NB (1991), A model of aerobic fungal growth in silage. 2. Aerobic stability. *Grass and Forage Science* 46:301–312

Pusey PL (1989), Use of *Bacillus subtilis* and related organisms in biofungicides. *Pesticide Science*, 27:133–140

Rex JA, Pfaller MA, Rinaldi MG, Polak A, Galgiani JN (1993), Antifungal susceptibility testing. *Clinical Microbiology Reviews* 6(4):367–381

Rooke JA (1990a), Chemical composition and aerobic stability of grass silages inoculated with yeasts and *Acetobacter aceti*. Proceedings of the 9th Silage Conference, University of Newcastle, paper 57, pp109–111

Rooke JA (1990b), The numbers of epiphytic bacteria on grass at ensilage on commercial farms. *Journal of the Science of Food and Agriculture*, 51:525–533

Rooke JA, Maya FM, Arnold JA, Armstrong DG (1988), The chemical composition and nutritive value grass silages prepared with no additive or with the application of additives containing either *Lactobacillus plantarum* or formic acid. *Grass and Forage Science*, 43:87–95

Rooke JA, Sharon LB, Armstrong DG (1985), The chemical composition of grass silages prepared with and without pre-treatment with inoculants containing *Lactobacillus plantarum*. *Animal Feed Science and Technology*, 13:269–279.

Rossall, S (1989), Antibiotic. European Patent Application number 0 332 369

Rust SR, Kim HS, Enders GL (1989), Effect of a microbial inoculant fermentation characteristics and nutritional value of corn silage. *J. Prod. Agric.*, 2(3):235–240.

Ruxton GD, Gibson GJ (1993), A critical introduction to mathematical modelling of the aerobic deterioration of silage. *Journal of the Science of Food and Agriculture*. 63(3):209–217

Ruxton GD, Gibson GJ (1995), A mathematical model of the aerobic deterioration of big-bale silage and its implications for the growth of *Listeria monocytogenes*. *Grass and Forage Science*, 50:331–344.

Ruxton IB, McDonald P (1974), Influence of oxygen on ensilage. I. Laboratory Studies. *Journal of the Science of Food and Agriculture*, 25:107–115

- Saier MH Jr, Chauvaux S, Cook GM, Deutscher J, Paulsen IT, Reizer J, Ye JJ (1996)**, Catabolite repression and inducer control in Gram-positive bacteria. *Microbiology*, 142:217–230
- Saier MH Jr, Chauvaux S, Deutscher J, Reizer J, Ye JJ (1995)**, Protein phosphorylation and regulation of carbon metabolism in Gram-negative versus Gram-positive bacteria. *Trends in Biochemical Science*, 20:267–271
- Saier MH Jr, Ramseier TM (1996)**, The catabolite repressor/activator (Cra) protein of enteric bacteria. *Journal of Bacteriology*, 178(12):3411–3417
- Santos MT, Yokoya F (1993)**, Characteristics of yeast cell flocculation by *Lactobacillus fermentum*. *Journal of Fermentation and Bioengineering*, 75(2):151–154
- Seale DR (1986)**, Bacterial inoculants as silage additives. *Journal of Applied Bacteriology Symposium Supplement*, 9S–26S
- Sebastian S, Phillip LA, Fellner V, Idziak ES (1996)**, Comparative assessment of bacterial inoculation and propionic acid treatment on aerobic stability and microbial populations of ensiled high-moisture ear corn. *Journal of Animal Science*, 74:447–456
- Sedewitz B, Schleifer KH, Götz F (1984a)**, Purification and biochemical characterisation of pyruvate oxidase from *Lactobacillus plantarum*. *Journal of Bacteriology*, 160(1):273–278
- Sedewitz B, Schleifer KH, Götz F (1984b)**, Physiological role of pyruvate oxidase in the aerobic metabolism of *Lactobacillus plantarum*. *Journal of Bacteriology*, 160(1):462–465
- Selmer-Olsen I (1990)**, Aerobic stability of enzyme treated silage. *Proceedings of the 9th Silage Conference*, University of Newcastle, pp54–55
- Sharpe R, Hooper PG, Armstrong DG (1994)**, The digestion of grass silages produced using inoculants of lactic acid bacteria. *Grass and Forage Science*, 49:42–53.
- Spoelstra SF, Courtin MG, van Beers JAC (1988)**, Acetic acid bacteria can initiate aerobic deterioration of whole crop maize silage. *Journal of Agricultural Science, Cambridge*, 111:127–132
- Stratford M (1992)**, Yeast flocculation: A new perspective. In *Advances In Microbial Physiology*, volume 33, pp1–71. Ed. Rose AH. Academic Press Ltd, London.

Stratford M (1996), Induction of flocculation in brewing yeasts by change in pH value. *FEMS Microbiology Letters* 136:13–18

Suomalainen T, Mäyrä-Mäkinen, A (1995), Lactic acid starter culture in the preservation of fermented milk products. Poster presentation at the European Commission Biotechnology and FAIR Programmes Conference on Lactic Acid Bacteria, Cork, Ireland

Talarico TL, Axelsson LT, Novotny J, Fiuzat M, Dobrogosz WJ (1990), Utilization of glycerol as a hydrogen acceptor by *Lactobacillus reuteri*: Purification of 1,3-Propanediol:NAD⁺ Oxidoreductase. *Applied and Environmental Microbiology* 56(4):943–948

Talarico TL, Dobrogosz WJ (1989), Chemical characterisation of an antimicrobial substance produced by *Lactobacillus reuteri*. *Antimicrobial Agents and Chemotherapy*, 33(5):674–679

Tanaka O, Ohmomo S (1994), A repeatable model system for silage fermentation in culture tubes. *Biosci. Biotech. Biochem.*, 58(8)1407–1411

Tautorius TE, Townsley PM (1984), Analysis of an effective antibiotic (Chaetomacin) isolated from a thermophilic *Bacillus* sp. against Olive Green Mold. *Applied and Environmental Microbiology*, 47(4):775–779

Toba T, Samant SK, Itoh T (1991), Assay system for detecting bacteriocins in microdilution wells. *Letters in Applied Microbiology*, 13(2)102–104

Tseng CP, Montville TJ(1990), Enzyme activities affecting end product distribution by *Lactobacillus plantarum* in response to changes in pH and O₂. *Applied and Environmental Microbiology*, 56(9):2761–2763

Tseng CP, Montville TJ (1992), Enzymatic regulation of glucose catabolism by *Lactobacillus plantarum* in an aerobic chemostat. *Biotechnological Progress*, 8:126–131

Vandenburgh PA, Kanka BS (1989), Antifungal product. United States Patent Number 4,877,615

Vignolo GM, Dekairuz MN, Holgado AAPD (1995), Influence of growth conditions on the production of lactocin 705, a bacteriocin produced by *Lactobacillus casei* CRL-705. *Journal of Applied Bacteriology*, 78(1):5–10

Von Maiworm K, Höltershinken M, Scholz H (1995), Auswirkungen verdobener mais-silage auf fermentationsvorgänge im pansensaft des rindes (*in vitro*). *Tierärztl. Umschau*, 50:283–290

Vreman K, Bosma AH (1987), Heating and losses in heavily wilted grass silage and in maize silage. Proceedings of the 7th Silage Conference, University of Belfast, Northern Ireland. Paper 36, pp73–74.

Walton RB, Woodruff HB (1949), A crystalline antifungal agent, mycosubtilin, isolated from subtilin broth. *Journal of Clinical Investigations*, 28:924–926

Weinberg ZG, Ashbell G, Bolsen KK, Pahlow G, Hen Y, Azrieli A (1995), The effect of a propionic acid bacterial inoculant applied at ensiling, with or without lactic acid bacteria, on the aerobic stability of pearl millet and maize silages. *Journal of Applied Bacteriology*, 78:430–436

Weinberg ZG, Ashbell G, Hen Y, Azrieli A (1993), The effect of applying lactic acid bacteria at ensiling on the aerobic stability of silages. *Journal of Applied Bacteriology*, 75:512–518.

Weinberg ZG, Ashbell G, Hen Y, Azrieli A (1995), The effect of a propionic acid bacterial inoculant applied at ensiling on the aerobic stability of wheat and sorghum silages. *Journal of Industrial Microbiology*, 15:493–497

Williams AG, Critten DL, Reynolds AM (1995), A mathematical model of the aerobic deterioration of silage. *Grass and Forage Science*, 50:132–146

Woolford MK (1975), Microbiological screening of the straight chain fatty acids (C₁-C₁₂) as potential silage additives. *Journal of the Science of Food and Agriculture*, 26:219–228

Woolford MK (1978), The aerobic deterioration of silage. *ARC Research Review*, 4(1):8–12

Woolford MK (1984a), *The silage fermentation*. Marcel Dekker, New York

Woolford MK (1984b), The antimicrobial spectra of organic compounds with respect to their potential as hay preservatives. *Grass and Forage Science*, 39:75–79

Woolford MK (1990), The detrimental effects of air on silage. *Journal of Applied Bacteriology*, 68:101–116

Woolford MK, Cook JE, Hall DM, Bonis A (1980), The use of pimaricin as an additive to improve the aerobic stability of silage. *Journal of the Science of Food and Agriculture*, 31:558–566

Woolford MK, Sawcycz MK (1984), An investigation into the effect of cultures of lactic acid bacteria on fermentation in silage. 1. Strain selection. *Grass and Forage Science*, 39:139–148

Woolford MK, Wilkie AC (1984), Investigations into the role of specific microorganisms in the aerobic deterioration of maize silage. *Journal of Agricultural Science, Cambridge*, 102:97–104

Woolford Mk, Wilkins RJ (1974), Preliminary experiments with simulated silage. *Journal of the Science of Food and Agriculture*, 26:141–148

Wyman J, Chamberlain DG, Williams AG (1995), A comparison of the ensilage, in an anaerobic cabinet, of grass, either fresh or when thawed after deep freezing. *Grass and Forage Science*, 50:71–74.

Yang R, Ray B (1994), Factors influencing production of bacteriocins by lactic acid bacteria. *Food Microbiology*, 11:281–291

Yousten AA, Johnson JL, Salin M (1975), Oxygen metabolism of catalase-negative and catalase-positive strains of *Lactobacillus plantarum*. *Journal of Bacteriology*, 123(1):242–247