

Index to Volume 72

Author Index

Page numbers of errata are in italics.

- Abdel-Aal, E.-S. M., P. Hucl, and F. W. Sosulski. Compositional and nutritional characteristics of spring einkorn and spelt wheats, 621
- Abecassis, J. *See* A. S. Contamine, 516
- Ablett, S. *See* S. L. Duce, 105
- Acquistucci, R., M. G. D'Egidio, and V. Vallega. Amino acid composition of selected strains of diploid wheat, *Triticum monococcum* L., 213
- Almaer, S. *See* R. Ruan, 308
- Andrews, D. C., R. A. Caldwell, and K. J. Quail. Sulfhydryl analysis. I. Determination of free sulfhydryls in wheat flour doughs, 326
- , —, and —. Sulfhydryl analysis. II. Free sulfhydryl content of heated doughs from two wheat cultivars and effect of potassium bromate, 330
- Archer, T. R., and T. J. Siebenmorgen. Milling quality as affected by brown rice temperature, 304
- Arason, J. T. *See* S. S. Miller, 421
- Audet, J. *See* P. Gélinas, 151
- Aussenac, T. *See* L. El Haddad, 598
- Autio, K. *See* J. Räsänen, 637
- Baik, B.-K., Z. Czuchajowska, and Y. Pomeranz. Discoloration of dough for oriental noodles, 198
- Bariana, H. *See* M. Ciaffi, 465
- Barlow, E. W. R. *See* C. Blumenthal, 135, 539
- Bean, M. M. *See* S. R. Delwiche, 182
- Bean, S. R. *See* G. L. Lookhart, 42, 312, 527
- Bekes, F. *See* C. Blumenthal, 135, 539
- Belitz, H.-D. *See* P. Schropp, 406
- Bello, A. B., R. D. Waniska, M. H. Gomez, and L. W. Rooney. Starch solubilization and retrogradation during preparation of T6 (a food gel) from different sorghum cultivars, 80
- BeMiller, J. N. *See* M. Obanni, 436
- Berglund, P. T. *See* S. H. Yoon, 187
- Berland, S., and B. Launay. Rheological properties of wheat flour doughs in steady and dynamic shear: Effect of water content and some additives, 48
- Beta, T., L. W. Rooney, and R. D. Waniska. Malting characteristics of sorghum cultivars, 533
- Bettge, A. D. *See* G. A. Greenblatt, 172
- Bhatnagar, S. *See* K. Takamine, 385
- Bhatty, R. S. *See* W. M. Ingledew, 147
- *See* T. Vasanthan, 379
- Bietz, J. A. *See* F. R. Huebner, 341, 504
- *See* A. Lapveteläinen, 259
- *See* R. C. Pratt, 162
- Blumenthal, C., F. Bekes, P. W. Gras, E. W. R. Barlow, and C. W. Wrigley. Identification of wheat genotypes tolerant to the effects of heat stress on grain quality, 539
- , P. W. Gras, F. Bekes, E. W. R. Barlow, and C. W. Wrigley. Communication to the Editor: Possible role for the *Glu-D1* locus with respect to tolerance to dough-quality change after heat stress, 135
- Bockholt, A. J. *See* C. D. Floyd, 488
- Bregitzer, P., M. Poulson, and B. L. Jones. Malting quality of barley lines derived from tissue culture, 433
- Bushuk, W. *See* Y. Inoue, 221, 334
- *See* H. R. Kim, 450
- Byers, F. M. *See* N. D. Turner, 589
- Caldwell, R. A. *See* D. C. Andrews, 326, 330
- Campbell, M. R., L. M. Pollak, and P. J. White. Genetic variation for starch thermal and functional properties among nonmutant maize inbreds, 281
- , P. J. White, and L. M. Pollak. Properties of sugary-2 maize starch: Influence of exotic background, 389
- Cavalieri, B. *See* R. Iori, 176
- Cerletti, P. *See* L. Eynard, 594
- Chambers, E., IV. *See* C.-Y. Chang, 237
- Champagne, E. T., and C. C. Grimm. Stabilization of brown rice products using ethanol vapors as an antioxidant delivery system, 255
- Chang, C.-Y., L. M. Seitz, and E. Chambers IV. Volatile flavor components of breads made from hard red winter wheat and hard white winter wheat, 237
- Chelkowski, J. *See* J. Perkowski, 205
- Chen, J., and J. Jane. Effectiveness of granular cold-water-soluble starch as a controlled-release matrix, 265
- Chen, Y. R., S. R. Delwiche, and W. R. Hruschka. Classification of hard red wheat by feedforward backpropagation neural networks, 317
- *See* S. R. Delwiche, 243
- Chenoweth, W. L. *See* P. Ummadi, 564
- Cherian, G., A. Gennadios, C. Weller, and P. Chinachoti. Thermomechanical behavior of wheat gluten films: Effect of sucrose, glycerin, and sorbitol, 1
- Chinachoti, P. *See* G. Cherian, 1
- Chung, D. S. *See* Y. J. Wang, 523
- Ciaffi, M., D. Lafiandra, T. Turchetta, S. Ravaglia, H. Bariana, R. Gupta, and F. MacRitchie. Breadbaking potential of durum wheat lines expressing both X- and Y-type subunits at the *Glu-A1* locus, 465
- Clauwaert, W. *See* H. Jacobs, 480
- Contamine, A. S., J. Abecassis, M.-H. Morel, B. Vergnes, and A. Verel. Effect of mixing conditions on the quality of dough and biscuits, 516
- Curran, S. P. *See* D. M. Trigo-Stockli, 470
- Czuchajowska, Z. *See* B.-K. Baik, 198
- *See* N. Erdogdu, 70, 76
- Dale, B. E. *See* N. D. Turner, 589
- D'Appolonia, B. L. *See* A. Debbouz, 128
- Darke, A. H. *See* S. L. Duce, 105
- Davis, E. A. *See* M. N. Tsoubeli, 64
- Debbouz, A., W. J. Pitz, W. R. Moore, and B. L. D'Appolonia. NOTE: Effect of bleaching on durum wheat and spaghetti quality, 128
- D'Egidio, M. G. *See* R. Acquistucci, 213
- *See* B. M. Mariani, 194
- Delcour, J. A. *See* H. Jacobs, 480
- *See* C. J. A. Vinkx, 227, 334, 411
- Delwiche, S. R. Single wheat kernel analysis by near-infrared transmittance: Protein content, 11
- , M. M. Bean, R. E. Miller, B. D. Webb, and P. C. Williams. Apparent amylose content of milled rice by near-infrared reflectance spectrophotometry, 182
- , Y.-R. Chen, and W. R. Hruschka. Differentiation of hard red wheat by near-infrared analysis of bulk samples, 243
- *See* Y. R. Chen, 317
- Desbois, P. *See* D. Le Botlan, 191
- Dexter, J. E. *See* J. E. Fajardo, 291
- Dhas, A. *See* K. C. Thomas, 360
- Dong, W., and R. C. Hoseney. Effects of certain breadmaking oxidants and reducing agents on dough rheological properties, 58
- Doublier, J.-L., and P. J. Wood. Rheological properties of aqueous solutions of (1→3)(1→4)-β-D-glucan from oats (*Avena sativa* L.), 335
- D'Ovidio, R., M. Simeone, S. Masci, E. Porceddu, and D. D. Kasarda. Nucleotide sequence of a γ-type glutenin gene from a durum wheat: Correlation with a γ-type glutenin subunit from the same biotype, 443
- Duce, S. L., S. Ablett, A. H. Darke, J. Pickles, C. Hart, and L. D. Hall. Nuclear magnetic resonance imaging and spectroscopic studies of wheat flake biscuits during baking, 105
- Eckhoff, S. R. *See* N. Singh, 344
- *See* B. E. Zehr, 491
- Erlingen, R. C. *See* H. Jacobs, 480
- El Haddad, L., T. Aussenac, J.-L. Fabre, and A. Sarrafi. Relationships between polymeric glutenin and the quality characteristics for seven common wheats (*Triticum aestivum*) grown in the field and greenhouse, 598
- Eoff, L. A. *See* D. A. Sampson, 217
- Erdogdu, N., Z. Czuchajowska, and Y. Pomeranz. Wheat flour and defatted milk fractions characterized by differential scanning calorimetry. I. DSC of flour and milk fractions, 70
- , —, and —. Wheat flour and defatted milk fractions characterized by differential scanning calorimetry. II. DSC of interaction products, 76
- Eynard, L., N. Guerrieri, and P. Cerletti. Modifications of starch during baking: Studied through reactivity with amyloglucosidase, 594
- Fabre, J.-L. *See* L. El Haddad, 598
- Fajardo, J. E., J. E. Dexter, M. M. Roscoe, and T. W. Nowicki. Retention of ergot alkaloids in wheat during processing, 291

- Fastnaught, C. E. *See* S. H. Yoon, 187
- Finney, P. L. *See* C. S. Gaines, 233
- . *See* A. L. McKendry, 142
- Flores, R. A. *See* W. Wang, 38
- Floyd, C. D., L. W. Rooney, and A. J. Bockholt. Measuring desirable and undesirable color in white and yellow food corn, 488
- Freeman, T. P. *See* P. Rayas-Duarte, 268
- Frolich, W. *See* E. K. Molteberg, 88
- Fulcher, R. G. *See* S. S. Miller, 421, 428
- Gaines, C. S., A. Kassuba, and P. L. Finney. A soup model study comparing flour peak viscosity during heating and viscosity of flour gels during reheating, 233
- García, M. A., M. N. Martino, and N. E. Zaritzky. Comparison of amylose enrichment procedures for food applications, 552
- Geiger, H. H. *See* J. Perkowski, 205
- Gélinas, P., J. Audet, O. LaChance, and M. Vachon. Fermented dairy ingredients for bread: Effects on dough rheology and bread characteristics, 151
- , and O. LaChance. Development of fermented dairy ingredients as flavor enhancers for bread, 17
- Gelroth, J. A. *See* G. S. Ranhotra, 30, 139, 365
- Gennadios, A. *See* G. Cherian, 1
- . *See* V. M. Ghorpade, 559
- Ghorpade, V. M., A. Gennadios, M. A. Hanna, and C. L. Weller. Soy protein isolate/poly(ethylene oxide) films, 559
- Glaser, B. K. *See* G. S. Ranhotra, 30, 365
- Glenn, G. M., and D. W. Irving. Starch-based microcellular foams, 155
- Gnanasambandam, R. *See* M. H. Lee, 352
- Gomez, M. H. *See* A. B. Bello, 80
- . *See* E. L. Suhendro, 122
- Gordon, J. *See* M. N. Tsoubeli, 64
- Gras, P. W. *See* C. Blumenthal, 135, 539
- Graybosch, R. A. *See* Y. W. Seo, 252
- Greenblatt, G. A., A. D. Bettge, and C. F. Morris. Relationship between endosperm texture and the occurrence of friabilin and bound polar lipids on wheat starch, 172
- Grimm, C. C. *See* E. T. Champagne, 255
- Grobet, P. J. *See* C. J. A. Vinkx, 411
- Gruppen, H. *See* C. J. A. Vinkx, 227, 334, 411
- Guerrieri, N. *See* L. Eynard, 594
- Gupta, R. *See* M. Ciaffi, 465
- Habben, J. E. *See* B. R. Hamaker, 583
- . *See* G. L. Moro, 94
- Hall, L. D. *See* S. L. Duce, 105
- Hamaker, B. R., A. A. Mohamed, J. E. Habben, C. P. Huang, and B. A. Larkins. Procedure for extracting maize and sorghum kernel proteins, producing high prolamin contents, 583
- . *See* G. L. Moro, 94
- Hanna, M. A. *See* V. M. Ghorpade, 559
- . *See* K. Takamine, 385
- Härkönen, H. *See* J. Räsänen, 637
- Hart, C. *See* S. L. Duce, 105
- Hatcher, D. W. *See* J. E. Kruger, 33
- Hazelton, J. L., and C. E. Walker. NOTE: Sample frequency effects on mixograms, 368
- Henke, G. E. *See* A. L. McKendry, 142
- Henriksson, K. *See* J. Jaskari, 625
- Hettiarachchy, N. S. *See* M. H. Lee, 352
- Hoseney, R. C. *See* W. Dong, 58
- . *See* K. E. Petrofsky, 53
- . *See* R. R. Roach, 578, 571
- . *See* S. N. Subrahmanyam, 7
- . *See* C. A. Thomasson, 616
- Hou, G., and P. K. W. Ng. Quantification of glutenin subunits by sequential acetone precipitation and by sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS-PAGE) coupled with densitometry using a known quantity of glutenins as a standard, 545
- Howes, N. K. *See* M. I. P. Kovacs, 85
- Hruschka, W. R. *See* Y. R. Chen, 317
- . *See* S. R. Delwiche, 243
- Huang, C. P. *See* B. R. Hamaker, 583
- Huang, C. T. *See* W. Wang, 38
- Hucl, P. *See* E.-S. M. Abdel-Aal, 621
- Huebner, F. R., and J. A. Bietz. Rapid and sensitive wheat protein fractionation and varietal identification by narrow-bore reversed-phase high-performance liquid chromatography, 504
- , T. C. Nelsen, and J. A. Bietz. Differences among gliadins from spring and winter wheat cultivars, 341
- . *See* A. Lapveteläinen, 259
- Ikeda, K., Y. Matsuda, A. Katsumaru, M. Teranishi, T. Yamamoto, and M. Kishida. Factors affecting protein digestibility in soybean foods, 401
- Inglede, W. M., A. M. Jones, R. S. Bhatti, and B. G. Rossnagel. Fuel alcohol production from hull-less barley, 147
- . *See* K. C. Thomas, 360
- Inoue, Y., H. D. Sapirstein, and W. Bushuk. Studies on frozen doughs. IV. Effect of shortening systems on baking and rheological properties, 221, 334
- Iori, R., B. Cavalieri, and S. Palmieri. Cathodic peroxidases of durum wheat flour, 176
- Irving, D. W. *See* G. M. Glenn, 155
- Jackson, D. S. *See* J. P. Mua, 508
- . *See* D. L. Shandera, 371
- Jacobs, H., R. C. Eerlingen, W. Clauwaert, and J. A. Delcour. Influence of annealing on the pasting properties of starches from varying botanical sources, 480
- Jane, J. *See* J. Chen, 265
- . *See* T. Kasemsuwan, 457
- Jaskari, J., K. Henriksson, A. Nieminen, T. Suortti, H. Salovaara, and K. Poutanen. Effect of hydrothermal and enzymic treatments on the viscous behavior of dry- and wet-milled oat brans, 625
- Johansson, E., and G. Svensson. Contribution of the high molecular weight glutenin subunit 21* to breadmaking quality of Swedish wheats, 287, 512
- Johnson, L. A. *See* M. Ö. Raeker, 167, 299
- Jones, A. M. *See* W. M. Inglede, 147
- Jones, B. L. *See* P. Bregitzer, 433
- Kasarda, D. D. *See* R. D'Ovidio, 443
- . *See* S. Masci, 100
- . *See* W. H. Vensel, 356
- Kasemsuwan, T., J. Janes, P. Schnable, P. Stinard, and D. Robertson. Characterization of the dominant mutant amylose extender (*Ael-5180*) maize starch, 457
- Kassuba, A. *See* C. S. Gaines, 233
- Katsumaru, A. *See* K. Ikeda, 401
- Keeling, P. L. *See* B. E. Zehr, 491
- Kim, H. R., and W. Bushuk. Changes in some physicochemical properties of flour proteins due to partial reduction with dithiothreitol, 450
- Kishida, M. *See* K. Ikeda, 401
- Klopfenstein, C. F. *See* C. Sanchez, 25
- Koskimies, S. *See* M.-L. Lähdeaho, 475
- Kovacs, M. I. P., N. K. Howes, D. Leisle, and J. Zawistowski. Effect of two different low molecular weight glutenin subunits on durum wheat pasta quality parameters, 85
- Kruger, J. E., and D. W. Hatcher. FY sedimentation test for evaluation of flour quality of Canadian wheats, 33
- LaChance, O. *See* P. Gélinas, 17, 151
- LaFiandra, D. *See* M. Ciaffi, 465
- . *See* S. Masci, 100
- Lähdeaho, M.-L., E. Vainio, M. Lehtinen, P. Parkkonen, J. Partanen, S. Koskimies, and M. Mäki. Activation of celiac disease immune system by specific α -gliadin peptides, 475
- Lambert-Guilois, S. *See* L. Meric, 609
- Langemeier, J. M., and D. E. Rogers. Rapid method for sugar analysis of doughs and baked products, 349
- . *See* G. S. Ranhotra, 139
- Lapveteläinen, A., J. A. Bietz, and F. R. Huebner. Reversed-phase high-performance liquid chromatography of oat proteins: Application to cultivar comparison and analysis of the effect of wet processing, 259
- Larkins, B. A. *See* B. R. Hamaker, 583
- . *See* G. L. Moro, 94
- Launay, B. *See* S. Berland, 48
- Le Botlan, D., and P. Desbois. Starch retrogradation study in presence of sucrose by low-resolution nuclear magnetic resonance, 191
- Lee, M. H., N. S. Hettiarachchy, R. W. McNew, and R. Gnanasambandam. Physicochemical properties of calcium-fortified rice, 352
- Lehtinen, M. *See* M.-L. Lähdeaho, 475
- Leisle, D. *See* M. I. P. Kovacs, 85
- Lew, E. J.-L. *See* S. Masci, 100
- Lii, C.-Y., Shao, Y.-Y., and K.-H. Tseng. Gelation mechanism and rheological properties of rice starch, 393
- Lookhart, G. L., and S. R. Bean. A fast method for wheat cultivar differentiation using capillary zone electrophoresis, 42
- , and ———. Rapid differentiation of oat cultivars and of rice cultivars by capillary zone electrophoresis, 312
- , and ———. Separation and characterization of wheat protein fractions

- by high-performance capillary electrophoresis, 527
- Lopes, M. A. *See* G. L. Morro, 94
- Lorenz, K. *See* D. A. Sampson, 217
- Louis-Alexandre, A. *See* C. Mestres, 652
- MacRitchie, F. *See* M. Ciaffi, 465
- Mäki, M. *See* M.-L. Lähdeaho, 475
- Mariani, B. M., M. G. D'Egidio, and P. Novaro. Durum wheat quality evaluation: Influence of genotype and environment, 194
- Martino, M. N. *See* M. A. García, 552
- Masci, S., E. J.-L. Lew, D. LaFiandra, E. Porceddu, and D. D. Kasarda. Characterization of low molecular weight glutenin subunits in durum wheat by reversed-phase high-performance liquid chromatography and N-terminal sequencing, 100
— *See* R. D'Ovidio, 443
- Masi, P. *See* L. Piazza, 320
- Matencio, F. *See* C. Mestres, 652
- Matsuda, Y. *See* K. Ikeda, 401
- McDonough, C. M. *See* N. D. Turner, 589
- McKendry, A. L., G. E. Henke, and P. L. Finney. Effects of Septoria leaf blotch on soft red winter wheat milling and baking quality, 142
- McNew, R. W. *See* M. H. Lee, 352
- Meric, L., S. Lambert-Guilois, O. Neyreneuf, and D. Richard-Molard. Cryoresistance of baker's yeast *Saccharomyces cerevisiae* in frozen dough: Contribution of cellular trehalose, 609
- Mestres, C., F. Matencio, and A. Louis-Alexandre. Mechanical behavior of corn kernels. Development of a laboratory friability test that can predict milling behavior, 652
- Mettler, E., and W. Seibel. Optimizing of rye bread recipes containing monodiglyceride, guar gum, and carboxymethylcellulose using a maturograph and an ovenrise recorder, 109
- Miedaner, T. *See* J. Perkowski, 205
- Miller, K. *See* R. C. Pratt, 162
- Miller, R. A. *See* C. A. Thomasson, 616
- Miller, R. E. *See* S. R. Delwiche, 182
- Miller, S. S., and R. G. Fulcher. Oat endosperm cell walls: II. Hot-water solubilization and enzymatic digestion of the wall, 428
—, —, A. Sen, and J. T. Arnason. Oat endosperm cell walls: I. Isolation, composition, and comparison with other tissues, 421
- Mohamed, A. A., and P. Rayas-Duarte. Composition of *Lupinus albus*, 643
—, and —. Nonstarchy polysaccharide analysis of cotyledon and hull of *Lupinus albus*, 648
— *See* B. R. Hamaker, 583
- Molteberg, E. K., G. Vogt, A. Nilsson, and W. Frolich. Effects of storage and heat processing on the content and composition of free fatty acids in oats, 88
- Moore, W. R. *See* A. Debbouz, 128
- Morel, M.-H. *See* A. S. Contamine, 516
- Morgan, J. E., and P. C. Williams. Starch damage in wheat flours: A comparison of enzymatic, iodometric, and near-infrared reflectance techniques, 209
- Moro, G. L., M. A. Lopes, J. E. Habben, B. R. Hamaker, and B. A. Larkins. Phenotypic effects of *opaque2* modifier genes in normal maize endosperm, 94
- Morris, C. F. *See* G. A. Greenblatt, 172
- Mua, J. P., and D. S. Jackson. NOTE: Fractionation of regular corn starch: A comparison of aqueous leaching and aqueous dispersion methods, 508
- Müller, H.-M. *See* J. Perkowski, 205
- Nelsen, T. *See* R. C. Pratt, 162
- Nelsen, T. C. *See* F. R. Huebner, 341
- Neyreneuf, O. *See* L. Meric, 609
- Ng, P. K. W. *See* G. Hou, 545
— *See* P. Ummadi, 564
- Nieminen, A. *See* J. Jaskari, 625
- Nilsson, A. *See* E. K. Molteberg, 88
- Novaro, P. *See* B. M. Mariani, 194
- Nowicki, T. W. *See* J. E. Fajardo, 291
- Obanni, M., and J. N. BeMiller. Identification of starch from various maize endosperm mutants via ghost structures, 436
- Palmieri, S. *See* R. Iori, 176
- Parkhurst, A. M. *See* D. L. Shandera, 371
- Parkkonen, P. *See* M.-L. Lähdeaho, 475
- Partanen, J. *See* M.-L. Lähdeaho, 475
- Partridge, J. E. *See* G. Yang, 568
- Paulis, J. W. *See* R. C. Pratt, 162
- Pedersen, J. R. *See* D. M. Trigo-Stockli, 470
- Perkowski, J., T. Miedaner, H. H. Geiger, H.-M. Müller, and J. Chelkowski. Occurrence of deoxynivalenol (DON), 3-acetyl-DON, zearalenone, and ergosterol in winter rye inoculated with *Fusarium culmorum*, 204
- Peterson, C. J. *See* Y. W. Seo, 252
- Peterson, D. M. Oat tocots: Concentration and stability in oat products and distribution within the kernel, 21
- Petrofsky, K. E., and R. C. Hoseney. Rheological properties of dough made with starch and gluten from several cereal sources, 53
- Piazza, L., and P. Masi. Moisture redistribution throughout the bread loaf during staling and its effect on mechanical properties, 320
- Pickles, J. *See* S. L. Duce, 105
- Pitz, W. J. *See* A. Debbouz, 128
- Pollak, L. M. *See* M. R. Campbell, 281, 389
- Pomeranz, Y. *See* B.-K. Baik, 198
— *See* N. Erdogdu, 70, 76
- Porceddu, E. *See* R. D'Ovidio, 443
— *See* S. Masci, 100
- Poulson, M. *See* P. Bregitzer, 433
- Poutanen, K. *See* J. Jaskari, 625
- Pratt, R. C., J. W. Paulis, K. Miller, T. Nelsen, and J. A. Bietz. Association of zein classes with maize kernel hardness, 162
- Quail, K. J. *See* D. C. Andrews, 326, 330
- Raeker, M. Ö., and L. A. Johnson. Cake-baking (high-ratio white layer) properties of egg white, bovine blood plasma, and their protein fractions, 299
—, and —. A micro method for cake baking (high ratio, white layer), 167
- Ranhotra, G. S., J. A. Gelroth, and B. K. Glaser. Energy value of blends of polydextrose and a synthetic fat, 30
—, —, and —. Levels of medium-chain triglycerides and their energy value, 365
—, —, J. Langemeier, and D. E. Rogers. Stability and contribution of beta carotene added to whole wheat bread and crackers, 139
- Räsänen, J., H. Härkönen, and Autio, K. Freeze-thaw stability of fermented frozen lean wheat doughs: Effect of flour quality and fermentation time, 637
- Ravaglia, S. *See* M. Ciaffi, 465
- Rayas-Duarte, P., S. F. Robinson, and T. P. Freeman. In situ location of a starch granule protein in durum wheat endosperm by immunocytochemistry, 269
— *See* A. A. Mohamed, 643, 648
- Richard-Molard, D. *See* L. Meric, 609
- Roach, R. R., and R. C. Hoseney. Effect of certain surfactants on the starch in bread, 578
—, and —. Effect of certain surfactants on the swelling, solubility, and amylograph consistency of starch, 571
- Robertson, D. *See* T. Kasemsuwan, 457
- Robinson, S. F. *See* P. Rayas-Duarte, 268
- Robutti, J. L. Maize kernel hardness estimation in breeding by near infrared transmission analysis, 632
- Rogers, D. E. *See* J. M. Langemeier, 349
— *See* G. S. Ranhotra, 139
- Rooney, L. W. *See* A. B. Bello, 80
— *See* T. Beta, 533
— *See* C. D. Floyd, 488
— *See* E. L. Suhendro, 122
- Roscoe, M. M. *See* J. E. Fajardo, 291
- Rosnagel, B. G. *See* W. M. Ingledew, 147
— *See* K. C. Thomas, 360
- Ruan, R., S. Almaer, and J. Zhang. Prediction of dough rheological properties using neural networks, 308
- Salovaara, H. *See* J. Jaskari, 625
- Sampson, D. A., L. A. Eoff, X. L. Yan, and K. Lorenz. Analysis of free and glycosylated vitamin B6 in wheat by high-performance liquid chromatography, 217
- Sanchez, C., C. F. Klopfenstein, and C. E. Walker. Use of carbohydrate-based fat substitutes and emulsifying agents in reduced-fat shortbread cookies, 25
- Sapirstein, H. D. *See* Y. Inoue, 221, 334
- Sarrafi, A. *See* L. El Haddad, 598
- Sathe, S. K. *See* D. F. Steenson, 275
- Schnable, P. *See* T. Kasemsuwan, 457
- Schropp, P., H.-D. Belitz, W. Seilmeier, and H. Wieser. Reoxidation of high molecular weight subunits of glutenin, 406
- Seguchi, M. Surface staining of wheat starch granules with Remazolbrilliant blue R dye and their extraction with aqueous solution dodecyl sulfate/mercaptoethanol, 602
- Seib, P. A. *See* P. Yang, 498

- Seibel, W. See E. Mettler, 109
- Seilmeier, W. See P. Schropp, 406
- Seitz, L. M. See C.-Y. Chang, 237
- Sen, A. See S. S. Miller, 421
- Seo, Y. W., R. A. Graybosch, C. J. Peterson, and D. R. Shelton. Assessment of enzyme-linked immunoassay of rye secalins as a tool in the prediction of IRS wheat quality, 252
- Shandera, D. L., A. M. Parkhurst, and D. S. Jackson. Interactions of sulfur dioxide, lactic acid, and temperature during simulated corn wet milling, 371
- Shao, Y.-Y. See C.-Y. Lii, 393
- Shelton, D. R. See Y. W. Seo, 252
- . See G. Yang, 568
- Siebenmorgen, T. J. See T. R. Archer, 304
- Simeone, M. See R. D'Ovidio, 443
- Singh, N., and S. R. Eckhoff. Hydrocyclone procedure for starch-protein separation in laboratory wet milling, 344
- Singh, S. K. See B. E. Zehr, 491
- Sosulski, F. W. See E.-S. M. Abdel-Aal, 621
- Spillman, C. K. See Y. J. Wang, 523
- Steenon, D. F., and S. K. Sathe. Characterization and digestibility of Basmati rice (*Oryza sativa* L. var. Dehraduni) storage proteins, 275
- Stevens, I. See C. J. A. Vinkx, 411
- Stinard, P. See T. Kasemsuan, 457
- Stringfellow, A. C. See V. V. Wu, 132
- Subrahmanyam, S. N., and R. C. Hosney. Shear thinning properties of sorghum starch, 7
- Suhendro, E. L., R. D. Waniska, L. W. Rooney, and M. H. Gomez. Effects of polyols on the processing and qualities of wheat tortillas, 122
- Suortti, T. See J. Jaskari, 625
- Svensson, G. See E. Johansson, 287, 512
- Takamine, K., S. Bhatnagar, and M. A. Hanna. Effect of eggshell on properties of corn starch extrudates, 385
- Tarr, G. E. See W. H. Vensel, 356
- Teranishi, M. See K. Ikeda, 401
- Thomas, K. C., A. Dhas, B. G. Rosnagel, and W. M. Ingledew. Production of fuel alcohol from hull-less barley by very high gravity technology, 360
- Thomasson, C. A., R. A. Miller, and R. C. Hosney. Replacement of chlorine treatment for cake flour, 616
- Trigo-Stockli, D. M., S. P. Curran, and J. R. Pedersen. Distribution and occurrence of mycotoxins in 1993 Kansas wheat, 470
- Tseng, K.-H. See C.-Y. Lii, 393
- Tsubelli, M. N., E. A. Davis, and J. Gordon. Dielectric properties and water mobility for heated mixtures of starch, milk protein, and water, 64
- Turchetta, T. See M. Ciaffi, 465
- Turner, N. D., C. M. McDonough, F. M. Byers, and B. E. Dale. Nutrient and microstructural indices of maize and sorghum responses to ammonia pressurization/depressurization, 589
- Ummadi, P., W. L. Chenoweth, and P. K. W. Ng. Changes in solubility and distribution of semolina proteins due to extrusion processing, 564
- Vachon, M. See P. Gélinas, 151
- Vainio, E. See M.-L. Lähdeaho, 475
- Vallega, V. See R. Acquistucci, 213
- Vasanthan, T., and R. S. Bhaty. Starch purification after pin milling and air classification of waxy, normal, and high amylose barleys, 379
- Vensel, W. H., G. E. Tarr, and D. D. Kasarda. C-Terminal and internal sequences of a low molecular weight (LMW-s) type of glutenin subunit, 356
- Verbruggen, M. A. See C. J. A. Vinkx, 227, 334
- Verel, A. See A. S. Contamine, 516
- Vergnes, B. See A. S. Contamine, 516
- Vinkx, C. J. A., I. Stevens, H. Gruppen, P. J. Grobet, and J. A. Delcour. Physicochemical and functional properties of rye nonstarch polysaccharides. VI. Variability in the structure of water-unextractable arabinoxylans, 411
- , J. A. Delcour, M. A. Verbruggen, and H. Gruppen. NOTE: Rye water-soluble arabinoxylans also vary in their 2-monosubstituted xylose content, 227, 334
- Vogt, G. See E. K. Molteberg, 88
- Walker, C. E. See J. L. Hazelton, 368
- . See C. Sanchez, 25
- Wang, W., R. A. Flores, and C. T. Huang. Physical properties of two biological cushioning materials from wheat and corn starches, 38
- Wang, Y. J., D. S. Chung, and C. K. Spillman. Physical properties of soybean meal, 523
- Waniska, R. D. See A. B. Bello, 80
- . See T. Beta, 533
- . See E. L. Suhendro, 122
- Webb, B. D. See S. R. Delwiche, 182
- Wehling, R. L. See G. Yang, 568
- Weller, C. See G. Cherian, 1
- Weller, C. L. See V. M. Ghorpade, 559
- Werner, W. E. Ferguson plot analysis of high molecular weight glutenin subunits by capillary electrophoresis, 248
- White, P. J. See M. R. Campbell, 281, 389
- Wieser, H. See P. Schropp, 406
- Williams, P. C. See S. R. Delwiche, 182
- . See J. E. Morgan, 209
- Wolf, W. J. Gel electrophoresis and amino acid analysis of the nonprotein nitrogen fractions of defatted soybean and almond meals, 115
- Wood, P. J. See J.-L. Doublier, 335
- Wrigley, C. W. See C. Blumenthal, 135, 539
- Wu, V. V., and A. C. Stringfellow. NOTE: Enriched protein and β -glucan fractions from high-protein oats by air classification, 132
- Yamamoto, T. See K. Ikeda, 401
- Yan, X. L. See D. A. Sampson, 217
- Yang, G., R. L. Wehling, M. G. Zeece, J. E. Partridge, and D. R. Shelton. NOTE: Characterization of hard red winter wheat storage proteins by two-dimensional electrophoresis, and their correlations with selected quality parameters, 568
- Yang, P., and P. A. Seib. Low-input wet-milling of grain sorghum for readily accessible starch and animal feed, 498
- Yoon, S. H., P. T. Berglund, and C. E. Fastnaught. Evaluation of selected barley cultivars and their fractions for β -glucan enrichment and viscosity, 187
- Zaritzky, N. E. See M. A. García, 552
- Zawistowski, J. See M. I. P. Kovacs, 85
- Zeece, M. G. See G. Yang, 568
- Zehr, B. E., S. R. Eckhoff, S. K. Singh, and P. L. Keeling. Comparison of wet-milling properties among maize inbred lines and their hybrids, 491
- Zhang, J. See R. Ruan, 308

Subject Index

Page numbers of errata are in italics. Acknowledgment of reviewers, v

- Additives, effect on wheat flour dough viscoelastic properties (Berland and Launay), 48
- Alcohol, fuel
—from hull-less barley (Thomas et al), 360
—production from hull-less barley (Ingledeu et al), 147
- Almonds, determination and characterization of nonprotein nitrogen in defatted meal (Wolf), 115
- Alveograph *W*, additive genotype effect (Mariani et al), 194
- Amino acid
—composition; of diploid wheat (Acquistucci et al), 213
—sequences, of low-molecular-weight glutenin subunit (Vensel et al), 356
—sequencing; characterization of in durum wheat biotypes differing in quality (Masci et al), 100
- α -Amylase
—soup model study comparing flour peak viscosity during heating and viscosity of flour gels during reheating (Gaines et al), 233
—sprout damage influence on FY sedimentation test (Kruger and Hatcher), 33
- Amylose
—content in rice; measured by NIR reflectance spectroscopy (Delwiche et al), 182
—enrichment procedures compared with food application procedures (García et al), 552
- Arabinoxylans
—from rye, structure (Vinkx et al), 227, 334
—rye, structure of water-unextractable arabinoxylans (Vinkx et al), 411
- Baking
—bread, potential of durum wheat lines (Ciaffi et al), 465
—cake, properties of egg white, bovine blood plasma, and their protein fractions (Raeker and Johnson), 299
—micro method for (Raeker and Johnson), 167
—Septoria leaf blotch effect on soft red winter wheat (McKendry et al), 142
—shortening system effect on (Inoue et al), 221, 334
—starch modification during (Eynard et al), 594
—wheat flake biscuits; NMR imaging and spectroscopic studies (Duce et al), 105
- Barley
—fractionation for β -glucan enrichment (Yoon et al), 187
—hull-less for fuel alcohol production (Thomas et al), 360
—hull-less, fuel alcohol from (Ingledeu et al), 147
—tissue culture; malting quality of (Bregitzer et al), 433
—waxy, normal, and high amylose, prime starch purification (Vasanthan and Bhatti), 379
- Bread and breadmaking
—baking potential of durum wheat lines (Ciaffi et al), 465
—effects of HMW subunit 21* found in Swedish wheats (Johansson and Svensson), 287, 512
—effect of oxidizing and reducing agents on dough rheological properties (Dong and Hosney), 58
—flavor and fermented dairy ingredients (Gélinas et al), 151
—flavor components (Chang et al), 237
—moisture redistribution during staling (Piazza and Masi), 320
—optium formulation for rye bread (Mettler and Seibel), 109
—starch in, effect of surfactants on (Roach and Hosney), 578
—whole wheat bread, stability and contribution of β -carotene addition (Ranhotra et al), 139
- Brown rice
—stabilization with ethanol vapors as antioxidant delivery system (Champagne and Grimm), 255
—temperature; milling quality as affected by (Archer and Siebenmorgen), 304
- Cakes
—baking; properties of egg white, bovine blood plasma, and their protein fractions (Raeker and Johnson), 299
—flour, replacement of chlorine treatment (Thomasson et al), 616
—micro method for baking (Raeker and Johnson), 167
 β -Carotene, stability and contribution of to whole wheat bread and crackers (Ranhotra et al), 139
- Celiac disease, activation of immune system by specific α -gliadin peptides (Lähdeaho et al), 475
- Cell walls, oat endosperm
—isolation and composition (Miller et al), 421
—solubilization and enzymatic digestion (Miller and Fulcher), 428
- Cereal grains, wheat, vitamin B6 content of (Sampson et al), 217
- Chromatography, of *Fusarium* mycotoxins (Perkowski et al), 205
- Color, corn, subjective and objective measurements (Floyd et al), 488
- Cookies, reduced fat shortbread (Sanchez et al), 25
- Corn
—effects of *opaque2* modifier genes (Moro et al), 94
—kernel hardness association with zein classes (Pratt et al), 162
—kernels; laboratory friability test to predict milling behavior (Mestres et al), 652
—measurement of color (Floyd et al), 488
—properties of extruded products (Wang et al), 38
—starch microscopy (Obanni and BeMiller), 436
—wet milling; hydrocyclone procedure for starch-protein separation (Singh and Eckhoff), 344
—wet milling; interactions of sulfur dioxide, lactic acid, temperature (Shandera et al), 371
- Corn starch
—eggshell effect on properties of (Takamine et al), 385
—fractionation of, aqueous leaching and aqueous dispersion methods compared (Mua and Jackson), 508
—properties of extruded products (Wang et al), 38
—thermal and functional properties from inbreds (Campbell et al), 281
- Crackers, stability and contribution of β -carotene addition (Ranhotra et al), 139
- Dielectric properties, for heated mixtures of starch, milk protein, and water (Tsubeli et al), 64
- Differential scanning calorimetry
—of corn starch from nonmutant inbreds (Campbell et al), 281
—of flour and milk fractions (Erdogdu et al), 70
—of interaction products (Erdogdu et al), 76
—of su-2 corn starch (Campbell et al), 389
- Dough
—frozen, cryoresistance of baker's yeast in (Meric et al), 609
—frozen, lean wheat, freeze-thaw stability of, effect of flour quality and fermentation time (Räsänen et al), 637
—frozen, shortening system effect on baking and rheological properties (Inoue et al), 221, 334
—heated wheat flour, free sulfhydryl content of (Andrews et al), 330
—mixing condition effect on quality (Contamine et al), 516
—noodle, discoloration of (Baik et al), 198
—rapid analysis of sugars (Langemeier and Rogers), 349
—rheological properties (Ruan et al), 308
—rheology and fermented dairy ingredients (Gélinas et al), 151
—wheat flour, determination of free sulfhydryls in (Andrews et al), 326
—wheat flour, viscoelastic properties of; effect of water content and of some additives (Berland and Launay), 48
- Electrophoresis
—capillary, Ferguson plot analysis of high molecular weight glutenin subunits by (Werner), 248
—capillary, of oat and rice prolamins (Lookhart and Bean), 312
—capillary zone of prolamins fractions (Lookhart and Bean), 42
—characterization of proteins in durum wheat biotypes differing in quality (Masci et al), 100
—for hard red winter wheat storage protein characterization (Yang et al), 568
- Emulsifiers, effects on rye bread quality (Mettler and Seibel), 109
- Endosperm, physical and chemical analysis of corn modified normal genotypes (Moro et al), 94
- Energy value
—of blends of polydextrose and a synthetic fat (Ranhotra et al), 30
—of medium-chain triglycerides (Ranhotra et al), 365
- Enzymes, soup model study comparing flour peak viscosity during heating and viscosity of flour gels during reheating (Gaines et al), 233
- Ergosterol, in rye kernels (Perkowski et al), 205
- Ergot alkaloids, retention in wheat during processing (Fajardo et al), 291
- Errata
—vol. 72, no. 2, pp. 226, 228, 334
—vol. 72, no. 3, pp. 287-288, 512
- Ethanol
—high concentrations from hull-less barley (Thomas et al), 360

- production from hull-less barley (Ingledeu et al), 147
- vapors; for stabilization of brown rice products (Champagne and Grimm), 255
- Extrusion
 - processing; changes in solubility and distribution of semolina proteins (Ummadi et al), 564
 - properties of extruded wheat and corn starches (Wang et al), 38
- Fat substitutes, use in shortbread cookies (Sanchez et al), 25
- Flour
 - cake, replacement of chlorine treatment (Thomasson et al), 616
 - determination of damaged starch (Morgan and Williams), 209
 - durum wheat, cathodic peroxidases of (Iori et al), 176
 - high-protein oat, influence of wet processing on protein composition (Lapveteläinen et al), 259
 - quality evaluation using FY sedimentation test (Kruger and Hatcher), 33
 - soup model study comparing flour peak viscosity during heating and viscosity of flour gels during reheating (Gaines et al), 233
 - wheat, determination of free sulfhydryls in (Andrews et al), 326
 - wheat, free sulfhydryl content of heated doughs (Andrews et al), 330
- Fractionation
 - of barley for β -glucan enrichment (Yoon et al), 187
 - of regular corn starch; aqueous leaching and aqueous dispersion methods compared (Mua and Jackson), 508
- Friabilin, relation with endosperm texture on wheat starch (Greenblatt et al), 172
- Gelation, rice starch, rheological properties during heating and cooling (Lii et al), 393
- α -Gliadin, peptides; celiac disease immune system activation (Lähdeaho et al), 475
- Gliadin
 - fast CE procedure for identifying cultivars (Lookhart and Bean), 42
 - separation by RP-HPLC (Huebner and Bietz), 504
- β -Glucan
 - enrichment by fractionation (Yoon et al), 187
 - from high-protein oats by air classification (Wu and Stringfellow), 132
 - from oats, rheology in relation to macromolecular characteristics (Doublie and Wood), 335
- Gluten
 - effect of reduction on gel protein (Kim and Bushuk), 450
 - film; thermomechanical behavior of (Cherian et al), 1
 - interaction with starch (Petrofsky and Hosenej), 53
- Glutenin
 - gene from durum wheat, nucleotide sequence (D'Ovidio et al), 443
 - high molecular weight subunits; reoxidation (Schropp et al), 406
 - low-molecular-weight subunit, amino acid sequences (Vensel et al), 356
 - polymeric, relation with quality characteristics in wheat (El Haddad et al), 598
 - subunit quantification by sequential acetone precipitation and SDS-PAGE (Hou and Ng), 545
 - subunits; allelic composition, communication to the editor (Blumenthal et al), 135
- Grains, heat stress effect on quality, wheat genotype identification (Blumenthal et al), 539
- Hardness
 - maize kernel, breeding estimation by NIT analysis (Robutti), 632
 - of maize kernels associated with zein classes (Pratt et al), 162
- HPEC, wheat protein fractions separated and characterized by (Lookhart and Bean), 527
- HPLC
 - comparison of gliadins from hard red winter and spring wheats (Huebner et al), 341
 - separation of wheat proteins by RP-HPLC (Huebner and Bietz), 504
 - for sugar analysis in dough and baked goods (Langemeier and Rogers), 349
- Instructions to authors, iii
- Instruments and instrumentation, analytical technique (Hazelton and Walker), 368
- Lupinus albus*
 - composition of (Mohamed and Rayas-Duarte), 643
 - cotyledon and hull; nonstarchy polysaccharide analysis of (Mohamed and Rayas-Duarte), 648
- Maize
 - identification of endosperm mutant starch of (Obanni and BeMiller), 436
 - kernel hardness association with zein classes (Pratt et al), 162
- kernel hardness; breeding estimation by NIT analysis (Robutti), 632
- kernel proteins; extraction procedure for high prolamin contents (Hamaker et al), 583
- nutrient and microstructural indices of (Turner et al), 589
- starch structure of dominant mutant amylose-extender (*ae1-5180*) (Kasemsuwan et al), 457
- wet milling of inbred lines and their hybrids (Zehr et al), 491
- Malting
 - quality of barley lines from tissue culture (Bregitzer et al), 433
 - sorghum cultivar characteristics (Beta et al), 533
- Methods
 - comparison of objective and objective color measurements (Floyd et al), 488
 - micro cake baking (Raeker and Johnson), 167
 - starch damage determination (Morgan and Williams), 209
 - vitamin B6 content of wheat by HPLC (Sampson et al), 217
- Microscopy, of starch ghosts (Obanni and BeMiller), 436
- Milk, fermented dairy ingredients for bread (Gélinas and La Chance), 17
- Milling
 - of corn kernels; laboratory friability test for prediction (Mestres et al), 652
 - flour refinement influence on FY sedimentation test (Kruger and Hatcher), 33
 - quality affected by brown rice temperature (Archer and Siebenmorgen), 304
 - Septoria leaf blotch effect on soft red winter wheat (McKendry et al), 142
 - wet, hydrocyclone procedure for starch-protein separation (Singh and Eckhoff), 344
- Mixograph, sample frequency effects (Hazelton and Walker), 368
- Mycotoxins
 - distribution and occurrence in 1993 Kansas wheat (Trigo-Stockli et al), 470
 - retention of ergot alkaloids in wheat during processing (Fajardo et al), 291
 - in rye kernels (Perkowski et al), 205
- Neural networks
 - for classification of ground hard red wheat (Chen et al), 317
 - prediction of dough rheological properties (Ruan et al), 308
- NIR spectroscopy
 - amylose content in rice (Delwiche et al), 182
 - classification of ground hard red wheat by neural networks (Chen et al), 317
 - classification of hard red wheat in bulk form (Delwiche et al), 243
 - protein content of single wheat kernels (Delwiche), 11
 - starch damage determination (Morgan and Williams), 209
- NMR, imaging, of wheat flour biscuits during baking (Duce et al), 105
- Nonprotein nitrogen, determination and characterization of, in defatted soybean and almond meals (Wolf), 115
- Noodles, dough, discoloration of (Baik et al), 198
- Oat
 - endosperm cell wall isolation and composition (Miller et al), 421
 - endosperm cell walls, solubilization and enzymatic digestion (Miller and Fulcher), 428
 - free fatty acids in, effects of storage and heat processing on (Molteberg et al), 88
 - β -glucan in aqueous medium (Doublie and Wood), 335
 - high-protein, β -glucan and protein from, by air classification (Wu and Stringfellow), 132
 - protein characterization by RP-HPLC and SDS-PAGE (Lapveteläinen et al), 259
 - stability of tocots (Peterson), 21
- Oat bran, dry- and wet-milled, hydrothermal and enzymic treatment effect on viscous behavior of (Jaskari et al), 625
- Pentosans
 - from rye, structure (Vinkx et al), 227, 334
 - rye, water-unextractable arabinoxylans, structure (Vinkx et al), 411
- Peroxidase, of durum wheat flour (Iori et al), 176
- Physicochemical properties @of calcium-fortified rice (Lee et al), 352
- Polydextrose, blends and a synthetic fat; energy value (Ranhotra et al), 30
- Polyols, effect on processing and qualities of wheat tortillas (Suhendro et al), 122
- Polysaccharide, analysis, nonstarchy, of cotyledon and hull of *Lupinus albus* (Mohamed and Rayas-Duarte), 648P
- Prolamin, maize and sorghum kernel protein extraction procedure (Hamaker et al), 583
- Protein
 - characterization of in durum wheat biotypes differing in quality (Masci et al), 100
 - content and relationship with amino acid composition of wheat grain (Acquistucci et al), 213

- content in single wheat kernels by NIR transmittance (Delwiche), 11
 - content; in durum wheat, additive environmental effect (Mariani et al), 194
 - contribution of HMW subunit 21* on breadmaking quality in Swedish wheats (Johansson and Svensson), 287, 512
 - digestibility; factors in soybean foods (Ikeda et al), 401
 - flour, physicochemical properties of (Kim and Bushuk), 450
 - gliadins characterized by capillary electrophoresis (Lookhart and Bean), 42
 - from high-protein oats by air classification (Wu and Stringfellow), 132
 - maize and sorghum kernel, extraction for high prolamin contents (Hamaker et al), 583
 - molecular weight determination of high molecular weight glutenin subunits from Ferguson analysis by capillary electrophoresis (Werner), 248
 - quantitation by ELISA (Moro et al), 94
 - salt-, alcohol-, and alkali-soluble fractions of oats; characterization by RP-HPLC and SDS-PAGE (Lapveteläinen et al), 259
 - secalins, relation to breadmaking quality (Seo et al), 252
 - semolina, changes in solubility and distribution due to extrusion processing (Ummadi et al), 564
 - separation of gliadins and glutenin subunits by RP-HPLC (Huebner and Bietz), 504
 - separation of oat and rice prolamins by capillary electrophoresis (Lookhart and Bean), 312
 - wheat storage, characterization by two-dimensional electrophoresis (Yang et al), 568
- Retrogradation, starch, in presence of sucrose by low-resolution NMR (Le Botlan and Desbois), 191
- Rheological properties, rice starch during gelation using dynamic rheometer (Lii et al), 393
- Rheology
- dough mixing (Ruan et al), 308
 - effect of oxidizing and reducing agents on wheat flour dough (Dong and Hosney), 58
 - of gluten-starch doughs (Petrofsky and Hosney), 53
 - oscillatory and flow measurements on wheat flour doughs (Berland and Launay), 48
 - shortening system effect on (Inoue et al), 221, 334
- Rice
- amylose analysis by NIR reflectance spectroscopy (Delwiche et al), 182
 - Basmati storage proteins, characterization and digestibility (Steenon and Sathe), 275
 - calcium-fortified, physicochemical properties (Lee et al), 352
 - gelation mechanism and rheological properties of starch (Lii et al), 393
- RP-HPLC, of oat proteins; application to cultivar comparison and analysis of the effect of wet processing (Lapveteläinen et al), 259
- Rye
- mycotoxin and ergosterol content in grain (Perkowski et al), 205
 - pentosan structure (Vinkx et al), 227, 334
 - water-unextractable arabinoxylans, structure of (Vinkx et al), 411
- Scanning electron microscopy, of starch-based microcellular foams (Glenn and Irving), 155
- SDS-PAGE
- of gluten fractions after partial reduction by DTT (Kim and Bushuk), 450
 - for glutenin subunit quantification (Hou and Ng), 545
- Semolina, proteins, changes in solubility and distribution due to extrusion processing (Ummadi et al), 564
- Sorghum
- cultivars; malting characteristics of (Beta et al), 533
 - kernel proteins; extraction procedure for high prolamin contents (Hamaker et al), 583
 - nutrient and microstructural indices of (Turner et al), 589
 - starch; as measured by high-performance size-exclusion chromatography (Bello et al), 80
 - starch; shear thinning properties (Subrahmanyam and Hosney), 7
 - to get readily accessible starch (Yang and Seib), 498
- Soy, protein isolate/poly(ethylene oxide) films (Ghorpade et al), 559
- Soybean
- determination and characterization of nonprotein nitrogen in defatted meal (Wolf), 115
 - meal; physical properties of (Wang et al), 523
 - protein digestibility factors (Ikeda et al), 401
- Spaghetti, bleaching effect on quality (Debbouz et al), 128
- Staling, moisture redistribution throughout bread loaf (Piazza and Masi), 320
- Starch
- annealing influence on pasting properties of (Jacobs et al), 480
 - in bread; effect of surfactants on (Roach and Hosney), 578
 - corn, thermal and functional properties from inbreds (Campbell et al), 281
 - damage, measurement (Morgan and Williams), 209
 - dielectric properties and water mobility for heated mixtures of (Tsoubeli et al), 64
 - granule protein; immunocytochemistry to locate durum wheat endosperm (Rayas-Duarte et al), 269
 - interaction with gluten (Petrofsky and Hosney), 53
 - maize, yield from wet milling (Zehr et al), 491
 - microscopy of corn starch ghosts (Obanni and BeMiller), 436
 - modification during baking (Eynard et al), 594
 - physically modified, cold-water-soluble, controlled-release for agricultural chemicals (Chen and Jane), 265
 - properties of extruded wheat and corn starches (Wang et al), 38
 - properties of microcellular foams (Glenn and Irving), 155
 - purification of waxy, normal, and high amylose barley (Vasanthan and Bhaty), 379
 - retrogradation; in presence of sucrose by low-resolution NMR (Le Botlan and Desbois), 191
 - rice, gelation mechanism and rheological properties (Lii et al), 393
 - solubility and retrogradation; effect on sorghum porridge texture (Bello et al), 80
 - sorghum, shear thinning properties (Subrahmanyam and Hosney), 7
 - structure of dominant mutant amylose-extender (*Ael-5180*) maize (Kasemsuwan et al), 457
 - su-2, thermal and textural properties (Campbell et al), 389
 - surfactant effect on swelling, solubility, and amylograph consistency (Roach and Hosney), 571
 - wheat granules, surface staining of (Seguchi), 602
 - wheat, relation between endosperm texture and friabilin and bound polar lipids on (Greenblatt et al), 172
- Storage, effect on free fatty acids in oats (Molteberg et al), 88
- Sugar, rapid method for analysis (Langemeier and Rogers), 349
- Sulphydryl
- analysis; determination of free sulphydryls in wheat flour doughs (Andrews et al), 326
 - analysis; free sulphydryl content of wheat doughs (Andrews et al), 330
- Surfactants
- effect on starch in bread (Roach and Hosney), 578
 - effect on swelling, solubility, and amylograph consistency of starch (Roach and Hosney), 571
- Temperature, brown rice, milling quality as affected by (Archer and Siebenmorgen), 304
- Tocols, concentration and stability in oats (Peterson), 21
- Tortillas, wheat; polyol effect on processing and qualities of (Suhendro et al), 122
- Triglycerides, medium-chain, energy value (Ranhotra et al), 365
- Water mobility, for heated mixtures of starch, milk protein, and water (Tsoubeli et al), 64
- Wet milling
- corn, interactions of sulfur dioxide, lactic acid, temperature (Shandera et al), 37
 - grain sorghum; for readily accessible starch and animal feed (Yang and Seib), 498
 - maize; comparison of yield from inbred lines and their hybrids (Zehr et al), 491
- Wheat
- classification by neural networks (Chen et al), 317
 - classification distinguished by NIR reflectance on bulk samples (Delwiche et al), 243
 - contribution of HMW subunit 21* on breadmaking quality (Johansson and Svensson), 287, 512
 - diploid, amino acid composition and protein content (Acquistucci et al), 213
 - dough; freeze-thaw stability of prefermented frozen lean, effect of flour quality and fermentation time (Räsänen et al), 637
 - durum, cultivar and environment effects and their interaction on quality characteristics (Mariani et al), 194
 - durum, effect of bleaching on (Debbouz et al), 128
 - durum, glutenin gene from, nucleotide sequence (D'Ovidio et al), 443
 - durum endosperm, starch granule protein in (Rayas-Duarte et al), 269
 - durum quality (Kovacs et al), 85
 - einkorn and spelt compared to HRS and durum (Abdel-Aal et al), 621
 - fast varietal identification using narrow-bore RP-HPLC columns (Huebner and Bietz), 504
 - flour fractions; characterized by DSC (Erdogdu et al), 70, 76
 - genotype identification, heat stress effect on grain quality (Blumenthal et al), 539
 - gluten film; thermomechanical behavior of (Cherian et al), 1

- mycotoxins in (Trigo-Stockli et al), 470
 - polymeric glutenin and quality characteristic relation (El Haddad et al), 598
 - properties of extruded products (Wang et al), 38
 - protein fractions; separation and characterization by HPCE (Lookhart and Bean), 527
 - quality of wheat-rye chromosomal translocations (Seo et al), 252
 - red and white flavor chemistry (Chang et al), 237
 - retention of ergot alkaloids during processing (Fajardo et al), 291
 - similarity of gliadins from spring and winter wheats (Huebner et al), 341
 - single kernel protein content by NIR transmittance (Delwiche), 1
 - soft red winter, Septoria leaf blotch effect on milling and baking quality (McKendry et al), 142
 - starch granules; surface staining of (Seguchi), 602
 - storage protein characterization by two-dimensional electrophoresis (Yang et al), 568
 - tortillas; polyol effect on processing and qualities of (Suhendro et al), 122
 - vitamin B6 content of, pyridoxine glucoside content of (Sampson et al), 217
- Zein
- association of classes with maize kernel hardness (Pratt et al), 162
 - in maize normal endosperm (Moro et al), 94