

Index to Volume 73

Author Index

- Alberti, E. *See* N. Guerrieri, 368
Alcantara, J. M. *See* C. M. Perez, 556
Almaer, S. *See* R. Ruan, 328
Alvarado-Gil, J. J. *See* M. E. Rodríguez, 593
Amado, R. *See* M. U. Beer, 58
Andrews, J. L., and J. H. Skerritt. Wheat dough extensibility screening using a two-site enzyme-linked immunosorbent assay (ELISA) with antibodies to low molecular weight glutenin subunits, 650
Andrews, L. C. *See* C. S. Gaines, 278
Añón, M. C. *See* A. E. Leon, 779
Arrigoni, E. *See* M. U. Beer, 58
Aussenac, T. *See* Y.-Q. Jia, 123, 526

Baenziger, S. *See* G. L. Lookhart, 547
Bagley, E. B. *See* F. R. Dintzis, 638
Barberis, G. E. *See* C. E. Mendes Da Silva, 297
Barlow, E. W. R. *See* C. Blumenthal, 762
—. *See* S. Seneweera, 239
Bason, M. L. *See* M. Berman, 323
Basra, A. S. *See* S. Seneweera, 239
Bean, S. R. *See* G. L. Lookhart, 81, 547
Bechtel, D. B., J. D. Wilson, and C. R. Martin. Determining endosperm texture of developing hard and soft red winter wheats dried by different methods using the single-kernel wheat characterization system, 567
Beer, M. U., E. Arrigoni, and R. Amado. Extraction of oat gum from oat bran: Effects of process on yield, molecular weight distribution, viscosity and (1→3)(1→4)- β -D-glucan content of the gum, 58
Bekes, F. *See* J. H. Skerritt, 644
Bello-Pérez, L. A., O. Paredes-López, P. Roger, and P. Colonna. Molecular characterization of some amylopectins, 12
Berman, M., M. L. Bason, F. Ellison, G. Peden, and C. W. Wrigley. Image analysis of whole grains to screen for flour-milling yield in wheat breeding, 323
BeMiller, J. N. *See* M. Obanni, 333
Bequette, R. K. *See* C. Fares, 232
Berglund, P. *See* Y. S. Kim, 302
Berhow, M. A. *See* F. R. Dintzis, 638
Berke, T. G. *See* M. R. Campbell, 536
Bett, K. L. *See* E. T. Champagne, 290
Bhatnagar, S., and M. A. Hanna. Starch-based plastic foams from various starch sources, 601
—. *See* A. N. R. Kollengode, 539
Bhattacharya, M., and H. Corke. Selection of desirable starch pasting properties in wheat for use in white salted or yellow alkaline noodles, 721
Bhatty, R. S. Production of food malt from hull-less barley, 75
—. *See* T. Vasantha, 199
Biss, R., and Uri Cogan. Sulfur dioxide in acid environment facilitates corn steeping, 40
Bjørge, J. M. *See* E. L. Molteberg, 579
Blakeney, A. *See* S. Seneweera, 239
Blumenthal, C., H. M. Rawson, E. McKenzie, P. W. Gras, E. W. R. Barlow, and C. W. Wrigley. Changes in wheat grain quality due to doubling the level of atmospheric CO₂, 762
Bohlin, L. *See* K. Wikström, 686
Borghi, B., R. Castagna, M. Corbellini, M. Heun, and F. Salamini. Breadmaking quality of Einkorn wheat (*Triticum monococcum* ssp. *monococcum*), 208
Börjesson, T., T. Eklöv, A. Jonsson, H. Sundgren, and J. Schnürer. Electronic nose for odor classification of grains, 457
Borrás, F. S. *See* G. H. Eyherabide, 775
Bowden, R. L. *See* T. J. Herrman, 235
Braton II, F. E. *See* E. T. Champagne, 290
Brümmer, J.-M. *See* E. A. El-Hady, 472
Buchanan, B. B. *See* P. Gobin, 495
Buriak, P. *See* S. R. Eckhoff, 54
Bushuk, W. *See* B. Dupuis, 131
—. *See* S. M. Wang, 445
Butler, L. *See* A. Menkir, 613

Calcagno, C. *See* P. Zunin, 691
Campanella, O. H. *See* P. X.-P. Li, 466
Campbell, M. L., J. Li, T. G. Berke, and D. V. Glover. Variation of starch granule size in tropical maize germ plasm, 536
Campos, D. T., Steffe, J. F., and P. K. W. Ng. NOTE: Mixing wheat flour and ice to form undeveloped dough, 105
Cassman, K. G. *See* C. M. Perez, 556
Castagna, R. *See* B. Borghi, 208
Çelik, S. *See* H. Köksel, 506
Cerletti, P. *See* N. Guerrieri, 368, 375
Champagne, E. T., O. A. Richard, K. L. Bett, C. C. Grimm, B. T. Vinyard, B. D. Webb, A. M. McClung, F. E. Barton II, B. G. Lyon, K. Moldenhauer, S. Linscombe, R. Mohindra, and D. Kohlwey. Quality evaluation of U.S. medium-grain rice using a Japanese taste analyzer, 290
Chang, K. C. *See* W. Lu, 785, 787
Che Maimon, C. H. *See* I. Nor Aini, 462
Chen, C.-Y. *See* S. Lu, 5
Chen, P. *See* R. Ruan, 328
Chen, X., and J. D. Schofield. Changes in the glutathione content and breadmaking performance of white wheat flour during short-term storage, 1
Cherian, G., and P. Chinachoti. ²H and ¹⁷O nuclear magnetic resonance study of water in gluten in the glassy and rubbery state, 618
Chibbar, R. N. *See* P. Hucl, 756
Chinachoti, P. *See* G. Cherian, 618
—. *See* S. Li, 736
—. *See* Y. Vodovotz, 264
Chishaki, N. *See* N. Islam, 571
Chiu, M. M. *See* T. S. Kahlon, 69
Chow, F. I. *See* T. S. Kahlon, 69
Chung, O. K. *See* G. L. Lookhart, 547
Ciacco, C. F. *See* C. E. Mendes Da Silva, 297
Ciaffi, M., L. Tozzi, and D. Lafiandra. Relationship between flour protein composition determined by size-exclusion high-performance liquid chromatography and dough rheological parameters, 346
Clear, R. M. *See* J. E. Dexter, 695
Cogan, U. *See* R. Biss, 40
Collado, L. S., and H. Corke. Use of wheat-sweet potato composite flours in yellow-alkaline and white-salted noodles, 439
Colonna, P. *See* L. A. Bello-Pérez, 12
Conroy, J. *See* S. Seneweera, 239
Corbellini, M. *See* B. Borghi, 208
Corke, H. *See* M. Bhattacharya, 721
—. *See* L. S. Collado, 439
Corzo, N. *See* E. Guerra-Hernandez, 729
Cruz y Celis, L. P., L. W. Rooney, and C. M. McDonough. A ready-to-eat breakfast cereal from food-grade sorghum, 108
Czuchajowska, Z., Lin, P.-Y., and S. Smolinski. Role in dough rheology of high molecular weight glutenin subunits of soft white winter and club wheats, 338
—, and B. Paszczyńska. Is wet gluten good for baking?, 483
—. *See* N. Erdogan-Arnoczky, 309
—. *See* P.-Y. Lin, 551

Daniels, C. R. *See* L. Du, 96
Debaeke, P. *See* Y.-Q. Jia, 123
Debbouz, A., and C. Doetkott. Effect of process variables on spaghetti quality, 672
—, and B. J. Donnelly. Process effect on couscous quality, 668
Delwiche, S. R., and D. R. Massie. Classification of wheat by visible and near-infrared reflectance from single kernels, 399
—, K. S. McKenzie, and B. D. Webb. Quality characteristics in rice by near-infrared reflectance analysis of whole-grain milled samples, 257
Desmarchelier, J. *See* J. H. Skerritt, 605
Dexter, J. E., R. M. Clear, and K. R. Preston. Fusarium head blight: Effect on the milling and baking of some Canadian wheats, 695
—. *See* N. M. Edwards, 708
—. *See* S. J. Symons, 561
Deyoe, C. W. *See* D. M. Trigo-Stockli, 388

- Di Fonzo, N. *See* C. Fares, 232
 Dickinson, L. C. *See* S. Li, 736
 Dintzis, F. R., M. A. Berhow, E. B. Bagley, Y. V. Wu, and F. C. Felker. Shear-thickening behavior and shear-induced structure in gently solubilized starches, 638
 Doekott, C. *See* A. Debbouz, 672
 Donnelly, B. J. *See* A. Debbouz, 668
 Du, L., B. Li, J. F. Lopes-Filho, D. R. Daniels, and S. R. Eckhoff. Effect of selected organic and inorganic acids on corn wet-milling yields, 96
 Dupuis, B., W. Bushuk, and H. D. Sapirstein. Characterization of acetic acid soluble and insoluble fractions of glutenin of bread wheat, 131
 Duviau, M. P., H. Yamamoto, P. K. W. Ng, and K. Kobrehel. Modifications of wheat proteins due to flour chlorination, 490
 —. *See* P. Gobin, 495
- Eckhoff, S. R., S. K. Singh, B. E. Zehr, K. D. Rausch, E. J. Fox, A. K. Mistry, A. E. Haken, Y. X. Niu, S. H. Zou, R. Buriak, M. E. Tumbleson, and P. L. Keeling. A 100-g laboratory corn wet-milling procedure, 54
 —. *See* L. Du, 96
 —. *See* N. Singh, 659
 —. *See* S. K. Singh, 51
 —. *See* V. Singh, 716
 —. *See* Z. Pan, 517
 —. *See* K. F. Yaptenco, 249
- Edwards, N. M., M. G. Scanlon, J. E. Kruger, and J. E. Dexter. Oriental noodle dough rheology: Relationship to water absorption, formulation, and work input during dough sheeting, 708
 Ejeta, G. *See* A. Menkir, 613
 Eklöv, T. *See* T. Börjesson, 457
 El-Hady, E. A., S. K. El-Samahy, W. Seibel, and J.-M. Brümmer. Changes in gas production and retention in non-prefermented frozen wheat doughs, 472
 Eliasson, A.-C. *See* H. Larsson, 18, 25
 —. *See* L. Wannerberger, 499
 Ellison, F. *See* M. Berman, 323
 El-Samahy, S. K. *See* E. A. El-Hady, 472
 Erdogdu-Arnoczky, N., Z. Czuchajowska, and Y. Pomeranz. Functionality of whey and casein in fermentation and in breadbaking by fixed and optimized procedures, 309
 Eskins, K. *See* C. A. Knutson, 185
 Evangelisti, F. *See* P. Zunin, 691
 Eyherabide, G. H., J. L. Robutto, and F. S. Borrás. Effect of near-infrared transmission-based selection on maize hardness and the composition of zeins, 775
- Fabre, J.-L. *See* Y.-Q. Jia, 123, 526
 Fang, K., and K. Khan. Pasta containing regrinds: Effect of high temperature drying on product quality, 317
 Fanta, G. F. *See* C. A. Knutson, 185
 Fares, C., A. Troccoli, and N. Di Fonzo. Use of friction debranning to evaluate ash distribution in Italian durum wheat cultivars, 232
 Felker, F. C. *See* F. R. Dintzis, 638
 —. *See* J. F. Pedersen, 421
 Figueroa, J. D. C. *See* M. E. Rodríguez, 593
 Finney, P. F. *See* C. S. Gaines, 278
 Finney, P. L. *See* C. S. Gaines, 521
 Fjell, K. M., W. Seibel, and P. Gerstenkorn. NOTE: Method for ash determination by conductivity, 510
 Fleege, L. M. *See* C. S. Gaines, 278
 Flores, R. A. *See* J. Yuan, 574
 Fox, E. J. *See* S. R. Eckhoff, 54
 —. *See* K. F. Yaptenco, 249
 Fu, B. X., and H. D. Sapirstein. Procedure for isolating monomeric proteins and polymeric glutenin of wheat flour, 143
 Fulcher, R. G. *See* R. Ruan, 328
- Gaines, C. S., P. F. Finney, L. M. Fleege, and L. C. Andrews. Predicting a hardness measurement using the single-kernel characterization system, 278
 —, —, and G. Rubenthaler. Milling and baking qualities of some wheats developed for eastern and northwestern regions of the United States and grown at both locations, 521
- Gélinas, P., C. M. McKinnon, O. M. Lukow, and F. Townley-Smith. NOTE: Rapid evaluation of frozen and fresh doughs involving stress conditions, 767
 —. *See* C. M. McKinnon, 45
 Gelroth, J. A. *See* G. S. Ranhotra, 176, 533
 Gerstenkorn, P. *See* K. M. Fjell, 510
 Ghaedian, A. R., and R. L. Wehling. Distribution of uric acid in the fractions obtained from experimental milling of wheat infested with granary weevil larvae, 628
 —, —. Stability of uric acid used as an indicator of insect contamination during extrusion of wheat flour, 625
 Glaser, B. K. *See* G. S. Ranhotra, 176, 533
 Glover, D. V. *See* M. R. Campbell, 536
 Gnanasambandam, R. *See* N. S. Hettiarachchy, 364
 Gobin, P., M.-P. Duviau, J. H. Wong, B. B. Buchanan, and K. Kobrehel. Change in sulphydryl-disulfide status of wheat proteins during conditioning and milling, 495
 González-Hernández, J. *See* M. E. Rodríguez, 593
 Gore, P. J. *See* J. H. Skerritt, 605
 Grafton, K. F. *See* W. Lu, 788
 Gras, P. W. *See* C. Blumenthal, 762
 Graybosch, R. *See* G. L. Lookhart, 547
 Griffin, V. K. *See* N. S. Hettiarachchy, 364
 Grimm, C. C. *See* E. T. Champagne, 290
 Guerra-Hernandez, E., and N. Corzo. Furosine determination in baby cereals by ion-pair reversed-phase liquid chromatography, 729
 Guerreri, N., E. Alberti, V. Lavelli, and P. Cerletti. Use of spectroscopic and fluorescence techniques to assess heat-induced molecular modifications of gluten, 368
 —, and P. Cerletti. Effect of high-temperature short-time treatment of wheat flour on gluten vitality and structure, 375
 Guihot, S. L. *See* J. H. Skerritt, 605
- Haken, A. E. *See* S. R. Eckhoff, 54
 Hallberg, L. *See* Y. Vodovotz, 264
 Hamaker, B. R. *See* R. L. Wehling, 543
 Hamauzu, Z. *See* N. Moritz, 99
 Hanna, M. A. *See* S. Bhatnagar, 601
 —. *See* A. N. R. Kollengode, 539
 —. *See* K. Subramanian, 179
 Hardacre, A. K. *See* P. X.-P. Li, 466
 Harris, M., and M. Peleg. Patterns of textural changes in brittle cellular cereal foods caused by moisture sorption, 225
 Hazelton, J. L., and C. E. Walker. Temperature of liquid contents in RVA cans during operation, 284
 Herrman, T. J., R. L. Bowden, T. Loughin, and R. K. Bequette. Quality response to the control of leaf rust in Karl hard red winter wheat, 235
 Hettiarachchy, N. S., V. K. Griffin, and R. Gnanasambandam. Preparation and functional properties of a protein isolate from defatted wheat germ, 364
 Heun, M. *See* B. Borghi, 208
 Hill, A. S. *See* J. H. Skerritt, 605
 Hizukuri, S. *See* I. A. Jideani, 677
 Holst, S. E. *See* M. P. Morgenstern, 478
 Horiguchi, T. *See* N. Islam, 571
 Hosenev, R. C. *See* R. R. Roach, 197
 Hosig, K. B., F. L. Shinnick, M. D. Johnson, J. A. Story, and J. A. Marlett. Comparison of large bowel function and calcium balance during soft wheat bran and oat bran consumption, 392
 Hou, G., H. Yamamoto, and P. K. W. Ng. Relationships of quantity of gliadin subgroups of selected U.S. soft wheat flours to rheological and baking properties, 352
 —, —, and —. Relationships of quantity of glutenin subunits of selected U.S. soft wheat flours to rheological and baking properties, 358, 515
 —. *See* H. Yamamoto, 215
 Hsieh, F. *See* Y. Lin, 189
 Huang, D. Y., and K. Khan. COMMUNICATION TO THE EDITOR: Unexpected solubility changes in wheat proteins during fermentation and oven stages of the breadmaking process, 512
 Huang, V. T. *See* R. Ruan, 328
 Hucl, P., and R. Chibbar. Variation for starch concentration in spring wheat and its repeatability relative to protein concentration, 756
 Hudson, C. A. *See* T. S. Kahlon, 69
 Huff, H. E. *See* Y. Lin, 189

- Iannotti, E. *See* Y. Lin, 189
 Imai, T. *See* K. Uno, 452
 Inanaga, S. *See* N. Islam, 571
 Islam, N., S. Inanaga, N. Chishaki, and T. Horiguchi. Effect of N top-dressing on protein content in Japonica and Indica rice grains, 571
 Jackson, D. S. *See* D. L. Shandera, 632
 —. *See* R. L. Wehling, 543
 Jane, J.-L. *See* T. Kasemsuwan, 702
 Jia, Y.-Q., J.-L. Fabre, and T. Aussenac. Effects of growing location on response of protein polymerization to increased nitrogen fertilization for the common wheat cultivar Soissons: Relationship with some aspects of the breadmaking quality, 526
 —, V. Masbou, T. Aussenac, J.-L. Fabre, and P. Debaeke. Effects of nitrogen fertilization and maturation conditions on protein aggregates and on the breadmaking quality of Soissons, a common wheat cultivar, 123
 Jideani, I. A., Y. Takeda, and S. Hizukuri. Structures and physicochemical properties of starches from Acha (*Digitaria exili*), Iburu (*D. Iburua*), and Tamba (*Eleusine coracana*), 677
 Johnson, M. D. *See* K. B. Hosig, 392
 Jonsson, A. *See* T. Börjesson, 457
 Juliano, B. O. *See* C. M. Perez, 556
 Kahlon, T. S., F. I. Chow, M. M. Chiu, C. A. Hudson, and R. N. Sayre. Cholesterol-lowering by rice bran and rice bran oil unsaponifiable matter in hamsters, 69
 Kaneda, Y., K. Kitahara, T. Suganuma, and T. Nagahama. Introduction of fatty acids into low-lipid starches and their Nägeli amyloextrins, 244
 Karkalas, J. *See* R. F. Tester, 271
 Karwe, M. V. *See* B. K. Koh, 115
 Kasemsuwan, T., and J.-L. Jane. Quantitative method for the survey of starch phosphate derivatives and starch phospholipids by ^{31}P nuclear magnetic resonance spectroscopy, 702
 Keeling, P. L. *See* S. R. Eckhoff, 54
 Khan, K. *See* K. Fang, 317
 —. *See* D. Y. Huang, 512
 Kılıç, I. *See* I. Saldamli, 424
 Kim, Y. S., D. P. Wiesenborn, J. H. Lorenzen, and P. Berglund. Suitability of edible bean and potato starches for starch noodles, 302
 Kirkpatrick, K. J. *See* P. X.-P. Li, 466
 Kitahara, K., T. Suganuma, and T. Nagahama. Susceptibility of amylose-lipid complexes to hydrolysis by glucoamylase from *Rhizopus niveus*, 428
 —. *See* Y. Kaneda, 244
 Knutson, C. A., K. Eskins, and G. F. Fanta. Composition and oil-retaining capacity of jet-cooked starch-oil composites, 185
 Kobrehel, K. *See* M. P. Duviau, 490
 —. *See* P. Gobin, 495
 Koh, B. K., M. V. Karwe, and K. M. Schaich. Effects of cysteine on free radical production and protein modification in extruded wheat flour, 115
 Kohlwey, D. *See* E. T. Champagne, 290
 Kohyama, K. *See* K. Uno, 452
 Kokini, J. L. *See* H. Madeka, 433
 Köksel, H., S. Çelik, and T. Tuncer, NOTE: Effects of gamma irradiation on durum wheats and spaghetti quality, 506
 —. *See* I. Saldamli, 424
 Kollengode, A. N. R., S. Bhatnagar, and M. A. Hanna. (60)Co radiation effect on copolymers of starch and plastics, 539
 Kruger, J. E. *See* N. M. Edwards, 708
 Kunze, O. R. *See* Y. Lan, 222
 Lafiandra, D. *See* M. Ciaffi, 346
 Laghetti, G. *See* A. R. Piergiovanni, 732
 Lan, Y., and O. R. Kunze. Relative humidity effects on the development of fissures in rice, 222
 Larsson, H., and A.-C. Eliasson. Phase separation of wheat flour dough studied by ultracentrifugation and stress relaxation. I. Influence of water content, 18
 —, and —. Phase separation of wheat flour dough studied by ultracentrifugation and stress relaxation. II. Influence of mixing time, ascorbic acid, and lipids, 25
 Lavelli, V. *See* N. Guerrieri, 368
 Leon, A. E., A. Rubiolo, and M. C. Añón. Use of triticale flours in cookies: Quality factors, 779
 Li, B. *See* L. Du, 96
 Li, J. *See* M. R. Campbell, 536
 Li, P. X.-P., A. K. Hardacre, O. H. Campanella, and K. J. Kirkpatrick. Determination of endosperm characteristics of 38 corn hybrids using the Stenvirt Hardness Test, 466
 Li, S., L. C. Dickinson, and P. Chinachoti. Proton relaxation of starch and gluten by solid-state nuclear magnetic resonance spectroscopy, 736
 Liboön, S. P. *See* C. M. Perez, 556
 Lii, C.-Y., M.-L. Tsai, and K.-H. Tseng. Effect of amylose content on the rheological property of rice starch, 415
 —. *See* S. Lu, 5
 Lin, P.-Y., and Z. Czuchajowska. Starch damage in soft wheats of the Pacific Northwest, 551
 —. *See* Z. Czuchajowska, 338
 Lin, Y., F. Hsieh, H. E. Huff, and E. Iannotti. Physical, mechanical, and thermal properties of water-blown rigid polyurethane foam containing soy protein isolate, 189
 Linscombe, S. *See* E. T. Champagne, 290
 Litchfield, J. B. *See* Z. Pan, 517
 Liu, C.-Y., K. W. Shepherd, and A. J. Rathjen. REVIEW: Improvement of durum wheat pastamaking and breadmaking qualities, 155
 Longacre, M. J. *See* J. A. Marlett, 63
 Lookhart, G. L., and S. R. Bean. Improvements in cereal protein separations by capillary electrophoresis: Resolution and reproducibility, 81
 —, —, R. Graybosch, O. K. Chung, B. Morena-Sevilla, and S. Baenziger. Identification by high-performance capillary electrophoresis of wheat lines containing the 1AL.1RS and the 1BL.1RS translocation, 547
 Lopes-Filho, J. F. *See* L. Du, 96
 Lorenz, K. *See* D. A. Sampson, 770
 Lorenzen, J. H. *See* Y. S. Kim, 302
 Loughin, T. *See* C. Fares, 232
 Lu, S., C.-Y. Chen, and C.-Y. Lii. Gel-chromatography fractionation characterization of rice starch affected by hydrothermal treatment, 5
 Lu, W., and K. C. Chang. Correlations between chemical composition and canning quality attributes of navy bean (*Phaseolus vulgaris* L.), 785
 —, —, K. F. Grafton, and P. B. Schwarz. Correlations between physical properties and canning quality attributes of navy bean (*Phaseolus vulgaris* L.), 788
 Lukow, O. M. *See* P. Gélinas, 767
 —. *See* S. M. Wang, 445
 Lyon, B. G. *See* E. T. Champagne, 290
 Madeka, H., and J. L. Kokini. Effect of glass transition and cross-linking on rheological properties of zein: Development of a preliminary state diagram, 433
 Madson, M. A. *See* J. Zhao, 379
 Magnus, E. M. *See* E. L. Molteberg, 579
 Marchylo, B. A. *See* S. J. Symons, 561
 Marlett, J. A., and M. J. Longacre. Comparison of in vitro and in vivo measures of resistant starch in selected grain products, 63
 —. *See* K. B. Hosig, 392
 Martin, C. R. *See* D. B. Bechtel, 567
 —. *See* J. F. Pedersen, 421
 Martínez-Bustos, F. *See* M. E. Rodríguez, 593
 Martínez-Montes, J. L. *See* M. E. Rodríguez, 593
 Masbou, V. *See* Y.-Q. Jia, 123
 Massie, D. R. *See* S. R. Delwiche, 399
 Matsuo, R. R. *See* S. J. Symons, 561
 McClung, A. M. *See* E. T. Champagne, 290
 McDonough, C. M. *See* L. P. Cruz y Celis, 108
 McKenzie, E. *See* C. Blumenthal, 762
 McKenzie, K. S. *See* S. R. Delwiche, 257
 McKinnon, C. M., P. Gélinas, and R. E. Simard. Wine yeast preferment for enhancing bread aroma and flavor, 45
 —. *See* P. Gélinas, 767
 Melakeberhan, A. *See* A. Menkir, 613
 Mendes Da Silva, C. E., C. F. Ciacco, G. E. Barberis, W. M. R. Solano, and C. Rettori. Starch gelatinization measured by pulsed nuclear magnetic resonance, 297
 Menkir, A., G. Ejeta, L. Butler, and A. Melakeberhan. Physical and chemical kernel properties associated with resistance to grain mold in sorghum, 613
 Milham, P. *See* S. Seneweera, 239
 Miranda, L. C. M. *See* M. E. Rodríguez, 593

- Mistry, A. K. *See* S. R. Eckhoff, 54
 Mock, C. M. *See* P. Rayas-Duarte, 381
 Mohindra, R. *See* E. T. Champagne, 290
 Moldenhauer, K. *See* E. T. Champagne, 290
 Molteberg, E. L., E. M. Magnus, J. M. Bjørge, and A. Nilsson. Sensory and chemical studies of lipid oxidation in raw and heat-treated oat flours, 579
 Morena-Sevilla, B. *See* G. L. Lookhart, 547
 Morgenstern, M. P., M. P. Newberry, and S. E. Holst. Extensional properties of dough sheets, 478
 Morita, N., K. Nakata, Z. Hamauzu, and J. Toyosawa. Effect of α -glucosyl rutin as improvers for wheat dough and breadmaking, 99
 Murray, D. *See* J. H. Skerritt, 644
- Nagahama, T. *See* Y. Kaneda, 244
 —. *See* K. Kitahara, 428
 Nakata, K. *See* N. Moritz, 99
 Newberry, M. P. *See* M. P. Morgenstern, 478
 Newman, C. W. *See* Q. Xue, 588
 Newman, R. K. *See* Q. Xue, 588
 Ng, P. K. W. *See* D. T. Campos, 105
 —. *See* M. P. Duviau, 490
 —. *See* G. Hou, 352, 358, 515
 —. *See* H. Yamamoto, 215
 Nilsson, A. *See* E. L. Molteberg, 579
 Niu, Y. X. *See* S. R. Eckhoff, 54
 Nor Aini, I., and C. H. Che Maimon. Characteristics of white pan bread as affected by tempering of the fat ingredient, 462
- Obanni, M., and J. N. BeMiller. Ghost microstructures of starch from different botanical sources, 333
 Ogata, N. *See* K. Uno, 452
 Özalp, I. *See* I. Saldamli, 424
 Özboy, Ö. *See* I. Saldamli, 424
- Pan, Z., S. R. Eckhoff, M. R. Paulsen, and J. B. Litchfield. Physical properties and dry-milling characteristics of six selected high-oil maize hybrids, 517
 Paredes-López, O. *See* L. A. Bello-Pérez, 12
 Paszczyńska, B. *See* Z. Czuchajowska, 483
 Paulsen, M. R. *See* Z. Pan, 517
 Peden, G. *See* M. Berman, 323
 Pedersen, J. F., C. R. Martin, F. C. Felker, and J. L. Steele. NOTE: Application of the single kernel wheat characterization technology to sorghum grain, 421
 Pedersen, J. R. *See* D. M. Trigo-Stockli, 388
 Peleg, M. Mathematical characterization of the plasticizing and antiplasticizing effects of fructose on amylopectin, 712
 —. *See* M. Harris, 225
 Perez, C. M., B. O. Juliano, S. P. Liboon, J. M. Alcantara, and K. G. Cassman. Effects of late nitrogen fertilizer application on head rice yield, protein content, and grain quality of rice, 556
 Perkins, P. *See* R. Ruan, 328
 Perrino, P. *See* A. R. Piergiovanni, 732
 Piazza, L. *See* A. Schiraldi, 32
 Piergiovanni, A. R., G. Laghetti, and P. Perrino. Characteristics of meal from hulled wheats (*Triticum dicoccum* Schrank and *T. spelta* L.): An evaluation of selected accessions, 732
 Pomeranz, Y. *See* N. Erdogdu-Arnoczky, 309
 Preston, K. R. *See* J. E. Dexter, 695
- Ranhotra, G. S., J. A. Gelroth, and B. K. Glaser. Effect of resistant starch on blood and liver lipids in hamsters, 176
 —, —, —, and G. F. Stallknecht. NOTE: Nutritional profile of three spelt wheat cultivars grown at five different locations, 533
 Rathjen, A. J. *See* C.-Y. Liu, 155
 Rausch, K. D. *See* S. R. Eckhoff, 54
 Rawson, H. M. *See* C. Blumenthal, 762
 Rayas-Duarte, P., C. M. Mock, and L. D. Satterlee. Quality of spaghetti containing buckwheat, amaranth, and lupin flours, 381
 Rettori, C. *See* C. E. Mendes Da Silva, 297
 Richard, O. A. *See* E. T. Champagne, 290
 Riva, M. *See* A. Schiraldi, 32
 Roach, R. R., and R. C. Hosenev. Monocaprin and tricaprin in breadmaking, 197
- Robutti, J. L. *See* G. H. Eyherabide, 775
 Rodríguez, M. E., M. Yáñez-Limón, J. J. Alvarado-Gil, H. Vargas, F. Sánchez-Sinencio, J. D. C. Figueroa, F. Martínez-Bustos, J. L. Martínez-Montes, J. González-Hernández, M. D. Silva, and L. C. M. Miranda. Influence of the structural changes during alkaline cooking on the thermal, rheological, and dielectric properties of corn tortillas, 593
 Roger, P. *See* L. A. Bello-Pérez, 12
 Rooney, L. W. *See* L. P. Cruz y Celis, 108
 Ruan, R., S. Almaer, V. T. Huang, P. Perkins, P. Chen, and R. G. Fulcher. Relationship between firming and water mobility in starch-based food systems during storage, 328
 Rubenthaler, G. *See* C. S. Gaines, 521
 Rubiolo, A. *See* A. E. Leon, 779
- Salamini, F. *See* B. Borghi, 208
 Saldamli, I., H. Köksel, Ö. Özboy, I. Özalp, and I. Kılıç. Zinc-supplemented bread and its utilization in zinc deficiency, 424
 Sambucetti, M. E., and A. Zuleta. Resistant starch in dietary fiber values measured by the AOAC method in different cereals, 759
 Sampson, D. A., Q.-B. Wen, and K. Lorenz. Vitamin B₆ and pyridoxine glucoside content of wheat and wheat flours, 770
 Sánchez-Sinencio, F. *See* M. E. Rodríguez, 593
 Sapirstein, H. D. *See* B. Dupuis, 131
 —. *See* B. Xu, 143
 Satterlee, L. D. *See* P. Rayas-Duarte, 381
 Satumbaga, R. F. *See* D. M. Trigo-Stockli, 388
 Sauer, D. B. *See* L. M. Seitz, 744
 Sayre, R. N. *See* T. S. Kahlon, 69
 Scanlon, M. G. *See* N. M. Edwards, 708
 Schaich, K. M. *See* B. K. Koh, 115
 Schiraldi, A., L. Piazza, and M. Riva. Bread staling: A calorimetric approach, 32
 Schlichting, L. *See* S. M. Wang, 445
 Schnürer, J. *See* T. Börjesson, 457
 Schofield, J. D. *See* X. Chen, 1
 Schropp, P., and H. Wieser. Effects of high molecular weight subunits of glutenin on the rheological properties of wheat gluten, 410
 Schwarz, P. B. *See* W. Lu, 788
 Seib, P. A. *See* K. R. Vadlamani, 88
 —. *See* L. Wang, 167
 —. *See* P. Yang, 751
 Seibel, W. *See* E. A. El-Hady, 472
 —. *See* K. M. Fjell, 510
 Seitz, L. M., and D. B. Sauer. Volatile compounds and odors in grain sorghum infested with common storage insects, 744
 Seneweera, S., A. Blakeney, P. Milham, A. S. Basra, E. W. R. Barlow, and J. Conroy. Influence of rising atmospheric CO₂ and phosphorus nutrition on the grain yield and quality of rice (*Oryza sativa* cv. Jarrah), 239
 Shandera, D. L., and D. S. Jackson. Effect of corn wet-milling conditions (sulfur dioxide, lactic acid, and steeping temperature) on starch functionality, 632
 Shepherd, K. W. *See* C.-Y. Liu, 155
 Shih, F. F. Edible films from rice protein concentrate and pullulan, 406
 Shinnick, F. L. *See* K. B. Hosig, 392
 Silva, M. D. *See* M. E. Rodríguez, 593
 Simard, R. E. *See* C. M. McKinnon, 45
 Singh, N., and S. R. Eckhoff. Wet milling of corn—A review of laboratory-scale and pilot plant-scale procedures, 659
 Singh, S. K., and S. R. Eckhoff. Effect of pump rate and table slope on starch recovery for a 100-g laboratory wet-milling procedure, 51
 —. *See* S. R. Eckhoff, 54
 Singh, V., and S. R. Eckhoff. Effect of soak time, soak temperature, and lactic acid on germ recovery parameters, 716
 Skerritt, J. H., F. Bekes, and D. Murray. Isolation treatment and effects of gliadin and glutenin fractions on dough mixing properties, 644
 —. *See* S. L. Guihot, A. S. Hill, J. Desmarchelier, and P. J. Gore. Analysis of organophosphate, pyrethroid, and methoprene residues in wheat end products and milling fractions by immunoassay, 605
 —. *See* J. L. Andrews, 650
 Smolinski, S. *See* Z. Czuchajowska, 338
 Solano, W. M. R. *See* C. E. Mendes Da Silva, 297
 Stallknecht, G. F. *See* G. S. Ranhotra, 533
 Steele, J. L. *See* J. F. Pedersen, 421
 —. *See* I. Y. Zayas, 136
 Steffe, J. F. *See* D. T. Campos, 105

- Story, J. A. *See* K. B. Hosig, 392
- Subramanian, K., and M. A. Hanna. Glycol glucosides process synthesis by reactive extrusion with a static mixer as postextruder reactor, 179
- Suganuma, T. *See* Y. Kaneda, 244
- . *See* K. Kitahara, 428
- Sundgren, H. *See* T. Börjesson, 457
- Symons, S. J., J. E. Dexter, R. R. Matsuo, and B. A. Marchylo. Semolina speck counting using an automated imaging system, 561
- Takeda, Y. *See* I. A. Jideani, 677
- Tester, R. F., and J. Karkalas. Swelling and gelatinization of oat starches, 271
- Tiscornia, E. *See* P. Zunin, 691
- Townley-Smith, F. *See* P. Gélinas, 767
- Toyosawa, I. *See* N. Moritz, 99
- Tozzi, L. *See* M. Ciaffi, 346
- Trigo-Stockli, D. M., C. W. Deyoe, R. F. Satumbaga, and J. R. Pedersen. Distribution of deoxynivalenol and zearalenone in milled fractions of wheat, 388
- Troccoli, A. *See* C. Fares, 232
- Tsai, M.-L. *See* C.-Y. Lii, 415
- Tseng, K.-H. *See* C.-Y. Lii, 415
- Tumbleston, M. E. *See* S. R. Eckhoff, 54
- Tuncer, T. *See* H. Köksel, 506
- Uno, K., T. Imai, N. Ogata, and K. Kohyama. New viscopgraph for rheological analysis of a small quantity of wheat flour, 452
- Vadlamani, K. R., and P. A. Seib. Reduced browning in raw oriental noodles by heat and moisture treatment of wheat, 88
- Vargas, H. *See* M. E. Rodríguez, 593
- Vasanthan, T., and R. S. Bhatty. Physicochemical properties of small- and large-granule starches of waxy, regular, and high-amylose barleys, 199
- Vinyard, B. T. *See* E. T. Champagne, 290
- Vodovotz, Y., L. Hallberg, and P. Chinachoti. Effect of aging and drying on thermomechanical properties of white bread as characterized by dynamic mechanical analysis (DMA) and differential scanning calorimetry (DSC), 264
- Wahlgren, M. *See* L. Wannerberger, 499
- Walker, C. E. *See* J. L. Hazelton, 284
- Wang, L., and P. A. Seib. Australian salt-noodle flours and their starches compared to U.S. wheat flours and their starches, 167
- Wang, S. M., B. M. Watts, O. M. Lukow, L. Schlichting, and W. Bushuk. Dough profiling: An instrumental method for dough stickiness measurement, 445
- Wannerberger, L., M. Wahlgren, and A.-C. Eliasson. Adsorption of protein fractions from wheat onto methylated silica surfaces, 499
- Watts, B. M. *See* S. M. Wang, 445
- Webb, B. D. *See* E. T. Champagne, 290
- . *See* S. R. Delwiche, 257
- Wehling, R. L., D. S. Jackson, and B. R. Hamaker. Prediction of corn dry-milling quality by near-infrared spectroscopy, 543
- . *See* A. R. Ghaedian, 625, 628
- Wen, Q.-B. *See* D. A. Sampson, 770
- Whistler, R. L. *See* J. Zhao, 379
- Wiesenborn, D. P. *See* Y. S. Kim, 302
- Wieser, H. *See* P. Schropp, 410
- Wikström, K., and L. Bohlin. Multivariate analysis as a tool to predict bread volume from mixogram paarameters, 686
- Wilson, J. R. *See* D. B. Bechtel, 567
- Wong, J. H. *See* P. Gobin, 495
- Worthington, S. T. *See* H. Yamamoto, 215
- Wrigley, C. W. *See* M. Berman, 323
- . *See* C. Blumenthal, 762
- Wu, Y. V. *See* F. R. Dintzis, 638
- Xue, Q., R. K. Newman, and C. W. Newman. Effects of heat treatment of barley starches on in vitro digestibility and glucose response in rats, 588
- Yamamoto, H., S. T. Worthington, G. Hou, and P. K. W. Ng. Rheological properties and baking qualities of selected soft wheats grown in the United States, 215
- . *See* G. Hou, 352, 358, 515
- . *See* M. P. Duviau, 490
- Yáñez-Limón, M. *See* M. E. Rodríguez, 593
- Yang, P., and P. A. Seib. Wet milling of grain sorghum using a short steeping period, 751
- Yaptenco, K. F., E. J. Fox, and S. R. Eckhoff. A laboratory countercurrent steep battery for corn wet-milling, 249
- Yuan, J., and R. A. Flores. Laboratory dry-milling performance of white corn: Effect of physical and chemical corn characteristics, 574
- Zayas, I. Y., and J. L. Steele. Image texture analysis for discrimination of mill fractions of hard and soft wheat, 136
- Zehr, B. E. *See* S. R. Eckhoff, 54
- Zhao, J., M. A. Madson, and R. L. Whistler. NOTE: Cavities in porous corn starch provide a large storage space, 379
- Zou, S. H. *See* S. R. Eckhoff, 54
- Zuleta, A. *See* M. E. Sambucetti, 759
- Zunin, P., F. Evangelisti, C. Calcagno, and E. Tiscornia. Cholesterol oxidation in dried egg pasta: Detecting 7-ketocholesterol content, 691

Subject Index

Page numbers of errata are in italics.

- Acetic acid, fractions, characterization of glutenin of bread wheat (Dupuis et al), 131
- Acknowledgment of reviewers, v
- Adsorption, gliadin and water-soluble fractions from wheat onto methylated silica surfaces (Wannerberger et al), 499
- Alkaline cooking, influence of structural changes during, on thermal, rheological, and dielectric properties of corn tortillas (Rodríguez et al), 593
- Amylopectin
 - African cereals, structure (Jideani et al), 677
 - mathematical characterization of plasticizing and antiplasticizing effects on amylopectin (Peleg), 712
 - molecular characterization (Bello-Perez et al), 12
- Amylose
 - African cereals, structure (Jideani et al), 677
 - content in whole-grain milled rice by NIR reflectance spectroscopy (Delwiche et al), 257
 - effect on rheological property of rice starch (Lii et al), 415
 - lipid complexes; to hydrolysis by glucoamylase (Kitahara et al), 428
- Antibody, wheat dough extensibility screening (Andrews and Skerritt), 650
- Ash
 - determination of, by conductivity (Fjell et al), 510
 - distribution pattern; screening among lines with (Fares et al), 232
- Baked goods, firming and water mobility during storage (Ruan et al), 328
- Baking
 - Canadian wheats; Fusarium head blight effect (Dexter et al), 695
 - effect of flour storage on breadmaking performance (Chen and Schofield), 1
 - low volume increased by gluten proteins (Czuchajowska and Paszczyńska), 483
 - protein solubility changes of different varieties (Huang and Khan), 512
 - qualities of wheats developed and grown in eastern and northeastern U.S. (Gaines et al), 521
 - review on effect of HMW glutenin subunits of durum semolina/flour for potential use (Liu et al), 155
 - rheological properties relationships to cakes and cookies (Yamamoto et al), 215
 - white pan bread; characteristics as affected by fat tempering (Nor Aini and Che Maimon), 462
- Barley
 - hull-less, food malt production from (Bhatty), 75
 - starch; heat treatment effects on digestibility (Xue et al), 588
 - starch; physicochemical properties (Vasanthan and Bhatty), 199
- Bean
 - navy, chemical composition and canning quality correlations (Lu and Chang), 785
 - navy, physical properties and canning quality correlations (Lu and Chang), 788
- Bran, soft wheat and oat consumption, comparison of large bowel function and calcium balance (Hosig et al), 392
- Bread
 - aging and drying effect on thermomechanical properties of (Vodovotz et al), 264
 - aroma and flavor; use of wine yeast preferment (McKinnon et al), 45
 - common wheat cultivar Soissons, relation to growing location effect on protein polymerization (Jia et al), 526
 - staling; calorimetry (Schiraldi et al), 32
 - volume; multivariate analysis to predict (Wikström and Bohlin), 686
 - white pan bread, effects of fat tempering on texture (Nor Aini and Che Maimon), 462
 - zinc supplementation effect on baking quality (Saldamli et al), 424
- Bread-baking, dairy ingredients in (Erdogdu-Arnoczky et al), 309
- Breadmaking
 - baking potential of diploid wheats (Borghi et al), 208
 - effect of α -glucosyl rutin on (Morita et al), 99
- quality; effects of nitrogen fertilization and maturation on (Jia et al), 123
- glutathione and the effect of flour storage (Chen and Schofield), 1
- review of improvement of durum semolina/flour on potential use (Liu et al), 155
- use of monocaprin and tricaprin (Roach and Hoseney), 197
- Cakes
 - flour physicochemical and rheological properties (Yamamoto et al), 215
 - milling and baking qualities of wheats developed and grown in eastern and northeastern U.S. (Gaines et al), 521
 - quality; gliadin quantity in soft wheat flour relation (Hou et al), 352
 - quality, glutenin quantity in soft wheat flour relation (Hou et al), 358, 515
- Carbon dioxide, influence on grain yield and quality of rice (Seneweera et al), 239
- Cereal
 - baby, ion-pair reversed phase liquid chromatography for furosine determination in (Guerra-Hernandez and Corzo), 729
 - foods; textural change patterns in, caused by moisture sorption (Harris and Peleg), 225
 - ready-to-eat, sorghum for (Cruz y Celis et al), 108
 - resistant starch in dietary fiber values measured in (Sambucetti and Zuleta), 759
- Chlorination, flour, wheat protein modifications due to (Duviau et al), 490
- Cholesterol
 - lowering with rice bran (Kahlon et al), 69
 - oxidation; in dried egg pasta (Zunin et al), 691
- Chromatography, ion-pair reversed-pair liquid, for furosine determination in (Guerra-Hernandez and Corzo), 729
- Cookies
 - flour physicochemical and rheological properties (Yamamoto et al), 215
 - milling and baking qualities of wheats developed and grown in eastern and northeastern U.S. (Gaines et al), 521
 - quality; gliadin quantity in soft wheat flour relation (Hou et al), 352
 - quality, glutenin quantity in soft wheat flour relation (Hou et al), 358, 515
 - triticale flours used in, quality factors (Leon et al), 779
- Cooking, loss; of pasta made from incorporation of regrinds (Fang and Khan), 317
- Corn
 - dry milling characteristics of (Pan et al), 517
 - dry milling quality prediction by NIR spectroscopy (Wehling et al), 543
 - endosperm characteristics determined by Stenvert Hardness Test (Li et al), 466
 - germ plasm; starch granule size variation in (Campbell et al), 536
 - steeping; facilitated by sulfur dioxide at low pH (Biss and Cogan), 40
 - wet milling; acid effect on (Du et al), 96
 - wet milling; laboratory countercurrent steep battery for (Yaptenco et al), 249
 - wet milling procedure (Eckhoff et al), 54
 - wet milling; review of laboratory-scale and pilot plant-scale procedures (Singh and Eckhoff), 659
 - wet milling conditions; effect of sulfur dioxide, lactic acid, and steeping temperature on starch functionality (Shanders and Jackson), 632
 - white, laboratory dry-milling performance of (Yuan and Flores), 574
- Corn starch
 - granule size, variation in tropical maize germ plasm (Campbell et al), 536
 - porous, cavities for storage space (Zhao et al), 379
- Couscous, quality affected by process effect (Debbouz and Donnelly), 668
- Cysteine, as free radical scavenger in extrusion (Koh et al), 115
- Dietary fiber, resistant starch in, measured in cereals (Sambucetti and Zuleta), 759

- Dough**
- extensibility (Andrews and Skerritt), 650
 - extensional properties of (Morgenstern et al), 478
 - frozen and fresh, evaluation of, involving stress conditions (Gélinas et al), 767
 - frozen, gas production and retention changes in (El-Hady et al), 472
 - protein solubility changes (Huang and Khan), 512
 - reconstitutin (Skerritt et al), 644
 - review on durum and bread rheological differences (Liu et al), 155
 - rheological parameters; size-exclusion HPLC to determine relation with flour protein composition (Ciaffi et al), 346
 - rheological properties (Czuchajowska and Paszczyńska), 483
 - rheological properties of diploid wheats (Borghi et al), 208
 - stickiness measurement (Wang et al), 445
 - undeveloped, mixing wheat flour and ice to form (Campos et al), 105
 - wheat, effect of α -glucosyl rutin on (Morita et al), 99
 - wheat flour, influence of mixing time, ascorbic acid, and lipids on phase separation (Larsson and Eliasson), 25
 - wheat flour, water content influence on phase separation (Larsson and Eliasson), 18
- Dry milling, quality prediction of corn by NIR spectroscopy** (Wehling et al), 543
- Drying**
- effect on hardness (Bechtel et al), 567
 - effect on thermomechanical properties of bread (Vodovotz et al), 264
- Electrophoresis**
- capillary, separations of wheat, rice, and oat proteins (Lookhart and Bean), 81
 - capillary of wheat prolamin for identification of rye translocation lines (Lookhart et al), 547
 - of glutenin during breadmaking (Huang and Khan), 512
- Errata**
- vol. 72, no. 6, p. 599, 152
 - vol. 72, no. 6, pp. 632, 634, 636, 295
 - vol. 73, no. 3, pp. 361, 363, 515
- Extrusion**
- of pasta made from incorporation of regrinds (Fang and Khan), 317
 - reactive, glycol glucosides process synthesis by (Subramanian and Hanna), 179
- Fermentatin, protein solubility changes** (Huang and Khan), 512
- Fertilizer, late nitrogen, effects on rice** (Perez et al), 556
- Films, from rice protein concentrate and pullulan** (Shih), 406
- Fissures, in rice caused by moisture adsorption** (Lan and Kunze), 222
- Flour**
- affecting spaghetti quality (Rayas-Duarte et al), 381
 - composite wheat-sweet potato (Collado and Corke), 439
 - diploid wheat, carotenoids, gluten, and protein content (Borghi et al), 208
 - effect of storage on glutathion content and breadmaking performance (Chen and Schofield), 1
 - fortification by gluten (Czuchajowska and Paszczyńska), 483
 - milling and baking qualities of wheats developed and grown in eastern and northeastern U.S. (Gaines et al), 521
 - quality evaluation using new viscopgraph (Uno et al), 452
 - wheat, cysteine effects on (Koh et al), 115
 - wheat, effect of high-temperature short-time treatment (Guerrieri and Cerletti), 375
 - wheat, mixed with ice to form undeveloped dough (Campos et al), 105
 - wheat, vitamin B₆ and pyridoxine glucoside content of (Sampson et al), 770
- Fluorescence**
- of gluten; intrinsic and extrinsic, as affected by temperature (Guerrieri et al), 368
 - intrinsic and extrinsic of gluten, effect of high-temperature short-time treatment (Guerrieri and Foam), 375
- Foam**
- physical, mechanical, and thermal properties (Lin et al), 189
 - starch-based plastic, from various starch sources (Bhatnagar and Hanna), 601
- Fractionation, of flour proteins** (Andrews and Skerritt), 650; (Skerritt et al), 644
- Fructose, mathematical characterization of plasticizing and antiplasticizing effects, on amylopectin** (Peleg), 712
- Gelatinization, measured by pulsed NMR** (Mendes da Silva et al), 297
- Germ, recovery parameters affected by soak time and temperature and lactic acid** (Singh and Eckhoff), 716
- Glass transition, effect on zein rheological properties** (Madeka and Kokini), 433
- Gliadin**
- adsorption onto methylated silica surfaces (Wannerberger et al), 499
 - fractionation (Skerritt et al), 644
 - relation to rheological properties, cake- and cookie-baking qualities (Hou et al), 352
- Glucosides, glycol, synthesis by reactive extrusion** (Subramanian and Hanna), 179
- Gluten**
- NMR study of water in (Cherian and Chinachoti), 618
 - protein aggregation due to temperature (Guerrieri et al), 368
 - proton relaxation of by solid-state NIR spectroscopy (Li et al), 736
 - review, relationship of HMW and LMW glutenin subunits and dough strength (Liu et al), 155
 - wet, in baking (Czuchajowska and Paszczyńska), 483
 - wheat, effects of HMW subunits of glutenin on rheological properties of (Schropp and Wieser), 410
- Glutenin**
- characterization of acetic acid fractions of bread wheat (Dupuis et al), 131
 - fractionation (Skerritt et al), 644
 - fractionation by SDS-PAGE (Andrews and Skerritt), 650
 - fractionation of soluble and insoluble (Fu and Sapirstein), 143
 - HMW subunits, dough rheology role in SWW and club wheats (Czuchajowska et al), 338
 - relation to rheological properties, cake- and cookie-baking qualities (Hou et al), 358, 515
- Grain**
- electronic nose for odor classification (Börjesson et al), 457
 - mold; resistance properties to, in sorghum (Menkir et al), 613
 - quality; Stenvert Hardness Test to determine endosperm characteristics (Li et al), 466
 - starch in, measure comparison (Marlett and Longacre), 63
- Grain sorghum**
- volatile compounds and odors in (Seitz and Sauer), 744
 - wet milling of (Yang and Seib), 751
- Hardness**
- affected by drying conditions (Bechtel et al), 567
 - maize, effect of NIR transmission-based selection on (Eyherabide et al), 775
 - measurement; predicting with single-kernel characterization system (Gaines et al), 278
 - Stenvert Test to determine corn endosperm characteristics (Li et al), 466
- HPLC**
- analysis of amylose and amylopectin from African cereals (Jideani et al), 677
 - separation of ω -gliadins, HMW-, and LMW-glutenin subunits (Fu and Sapirstein), 143
 - size-exclusion, to determine relation between flour protein composition and dough rheological parameters (Ciaffi et al), 346
- Hydrothermal treatment, thermal characterization from heat-moisture treated rice** (Lu et al), 5
- Image analysis**
- for semolina speck counting (Symons et al), 561
 - whole grain to screen for wheat-milling quality (Berman et al), 323
- Image texture analysis, for discrimination of mill fractions of wheat** (Zayas and Steele), 136
- Insect**
- contamination; detection in wheat milling fractions by measurement of uric acid (Ghaedian and Wehling), 625
 - infestation of grain sorghum, volatile compounds and odors (Seitz and Sauer), 744
- Instructions to authors, iii**
- Instruments and instrumentation**
- predicting a hardness measurement using single-kernel characterization system (Gaines et al), 278
 - RVA, temperature of liquid contents in cans (Hazelton and Walker), 284
- Irradiation, effects on spaghetti cooking quality** (Köksel et al), 506

- Jet-cooking, preparation of starch-oil composites, composition and oil-retaining capacity (Knutson et al), 185
- Lactic acid, effect on germ recovery parameters (Singh and Eckhoff), 716
- Lipids
- amylose complexes; to hydrolysis by glucoamylase (Kitahara et al), 428
 - liver, resistant starch effect on, in hamsters (Ranhotra et al), 176
- Maize, hardness; effect of NIR transmission-based selection on (Eyherabide et al), 775
- Malt, food, production from hull-less barley (Bhatty), 75
- Milling
- Canadian wheats; Fusarium head blight effect (Dexter et al), 695
 - change in sulfhydryl-disulfide status during (Gobin et al), 495
 - corn, effect of physical and chemical corn characteristics (Yuan and Flores), 574
 - distribution of uric acid in fractions obtained from granary weevil-infested wheat (Ghaedian and Wehling), 628
 - effect of flour storage on glutathione and breadmaking performance (Chen and Schofield), 1
 - flour, image analysis of wheat grain (Berman et al), 323
 - fractions; immunoassay for analysis of residues (Skerritt et al), 605
- Mixing, wheat flour and ice to form undeveloped dough (Campos et al), 105
- Moisture
- adsorption causes rice grains to fissure (Lan and Kunze), 222
 - sorption; cause of textural changes in cereal foods (Harris and Peleg), 225
- Mycotoxins, deoxynivalenol and zearalenone in milled fractions of wheat (Trigo-Stockli et al), 388
- NIR spectroscopy
- classification of wheat based on single kernel analysis (Delwiche and Massie), 399
 - quality characteristics in whole-grain milled rice (Delwiche et al), 257
 - selection criteria for endosperm hardness in maize (Eyherabide et al), 775
 - spectroscopy, solid-state, for proton relaxation of starch and gluten (Li et al), 736
- Nitrogen, fertilization; effect on protein aggregates and breadmaking (Jia et al), 123
- NMR
- study of water in glutenin (Cherian and Chinachoti), 618
 - to survey starch phosphate derivatives and starch phospholipids (Kasemsuwan and Jane), 702
- Noodles
- comparison of U.S. and Australian flours and their starches (Wang and Seib), 167
 - effect of formulation on rheological properties (Edwards et al), 708
 - from potato and edible bean starch (Kim et al), 302
 - raw oriental, reduced browning by heat and moisture treatment of wheat (Vadlamani and Seib), 88
 - white-salted and yellow-alkaline, selection of starch pasting properties in wheat for use in (Bhattacharya and Corke), 721
 - yellow-alkaline and white-salted, composite flour, discoloration (Collado and Corke), 439
- Oat
- gum; extraction (Beer et al), 58
 - sensory quality and lipid oxidation in raw and heat-treated flours (Molteberg et al), 579
 - starches; swelling and gelatinization of (Tester and Karkalas), 271
- Oat bran, oat gum extraction from (Beer et al), 58
- Oil, high-oil corn, dry milling characteristics of (Pan et al), 517
- Oxidation, cholesterol, in dried egg pasta (Zunin et al), 691
- Pasta
- made from incorporation of regrinds (Fang and Khan), 317
 - quality; affected by process variables (Debbouz and Doetkott), 672
 - quality of, containing buckwheat, amaranth, and lupin flours (Rayas-Duarte et al), 381
 - review of improved durum semolina/flour on potential use (Liu et al), 155
- Physicochemical properties
- of barley starches (Vasanthan and Bhatty), 199
 - of starches from African cereals (Jideani et al), 677
- Plastic, radiation effect on copolymers of (Kollengode et al), 539
- Protein
- adsorption of gliadin and water-soluble fractions from wheat onto methylated silica surfaces (Wannerberger et al), 499
 - aggregates, nitrogen fertilization and maturation effects on (Jia et al), 123
 - concentration; spring wheat cultivars (Hucl and Chibbar), 756
 - content in dairy ingredients (Erdogdu-Arnoczky et al), 309
 - of gluten, solubility, effect of temperature (Guerrieri et al), 368
 - isolate; preparation and functional properties of, from defatted wheat germ (Hettiarachchy et al), 364
 - nitrogen top-dressing effect on, in Japonica and Indica rice grains (Islam et al), 571
 - review of improved durum semolina/flour quality for potential use on pastamaking and breadmaking (Liu et al), 155
 - from rice (Shih), 406
 - separation of gliadins and identification of wheat-rye translocations by capillary zone electrophoresis (Lookhart et al), 547
 - separation of monomeric proteins and polymeric glutenin of wheat flour (Fu and Sapirstein), 143
 - wheat, modifications due to flour chlorination (Duviau et al), 490
 - wheat, rice, oats, separated by capillary electrophoresis (Lookhart and Bean), 81
- Radiation, effect on copolymers of starch and plastics (Kollengode et al), 539
- Relative humidity, effects on development of fissures in rice (Lan and Kunze), 222
- Rheological properties
- of corn tortillas; influence of structural changes during alkaline cooking (Rodríguez et al), 593
 - effect of amylose content on rice starch during heating, cooling, and aging by dynamic rheometry (Lii et al), 415
 - effects of gamma irradiation (Köksel et al), 506
 - of soft wheat flours (Yamamoto et al), 215
- Rheology
- dough, HMW glutenin subunits of SWW and club wheats (Czuchajowska et al), 338
 - dough profiling method for determination of stickiness (Wang et al), 445
 - oriental noodle dough, relationship to water absorption, formulatin and work input (Edwards et al), 708
- Rice
- bran; and rice bran oil unsaponifiable matter, cholesterol-lowering properties (Kahlon et al), 69
 - fissures from moisture adsorption (Lan and Kunze), 222
 - grain yield and quality influenced by carbon dioxide (Seneweera et al), 239
 - Japonica and Indica, nitrogen top-dressing effect on (Islam et al), 571
 - late nitrogen fertilizer application effect on (Perez et al), 556
 - protein concentrate (Shih), 406
 - quality characteristics by whole-grain NIR reflectance spectroscopy (Delwiche et al), 257
 - sensory quality evaluation (Champagne et al), 290
 - starch; effect of amylose content on rheological property (Lii et al), 415
 - starch; molecular weight distribution of (Lu et al), 5
- Semolina, speck counting; imaging system for (Symons et al), 561
- Shortening, use of monocaprin and tricaprin in breadmaking (Roach and Hoseney), 197
- Sorghum
- grain; single kernel wheat characterization technology applied to (Pedersen et al), 421
 - grain mold; resistance properties (Menkir et al), 613
 - for ready-to-eat breakfast cereal (Cruz y Celis et al), 108
- Spaghetti
- gamma irradiation effect on quality (Köksel et al), 506
 - quality affected by process variables (Debbouz and Doetkott), 672
- Spaghetti, quality of, containing buckwheat, amaranth, and lupin flours (Rayas-Duarte et al), 381

- Staling, bread, calorimetry (Schiraldi et al), 32**
Starch
 —African cereals, structures and physicochemical properties (Jideani et al), 677
 —amylopectin characterization (Bello-Perez et al), 12
 —barley, heat treatment effects on digestibility (Xue et al), 588
 —barley, physicochemical properties of (Vasanthan and Bhatty), 199
 —comparison of U.S. and Australian flours (Wang and Seib), 167
 —concentration; spring wheat cultivar (Hucl and Chibbar), 756
 —damage; influence of growing conditions and cultivars (Lin and Czuchajowska), 551
 —fatty acid introduction into (Kaneda et al), 244
 —firming and water mobility in (Ruan et al), 328
 —functionality after wet milling (Shandera and Jackson), 632
 —in grain products; measure comparison (Marlett and Longacre), 63
 —granule ghost microscopy (Obanni and BeMiller), 333
 —jet-cooked composites with vegetable oil, composition and oil-retaining capacity (Knutson et al), 185
 —oat, swelling and gelatinization of (Tester and Karkalas), 271
 —pasting properties in wheat for use in noodles (Bhattacharya and Corke), 721
 —phosphate derivatives and phospholipids; quantitative method for survey of by NMR spectroscopy (Kasemsuwan and Jane), 702
 —plastic foams from (Bhatnagar and Hanna), 601
 —porous, cavities for storage space (Zhao et al), 379
 —potato and edible bean, for noodle manufacture (Kim et al), 302
 —proton relaxation of by solid-state NIR spectroscopy (Li et al), 736
 —radiation effect on copolymers of (Kollengode et al), 539
 —recovery; wet-milling for effect of pump rate and table slope (Singh and Eckhoff), 51
 —resistant, dietary fiber values measured in cereals (Sambucetti and Zuleta), 759
 —resistant, effect on hamster blood and liver lipids (Ranhotra et al), 176
 —shear-induced structure in starch solutions (Dintzis et al), 638
 —sweet potato, pasting and gelatinization (Collado and Corke), 439
 —wheat, NMR method to measure gelatinization (Mendes da Silva et al), 297
Steeping, corn, facilitated by sulfur dioxide at low pH (Biss and Cogan), 40
Storage
 —effects on lipids and sensory quality of oat flours (Molteberg et al), 579
 —firming and water mobility in starch-based systems during (Ruan et al), 328
Sulphydryl, change in status of wheat proteins during conditioning and milling (Gobin et al), 495
Temperature, effects on wheat gluten (Guerrieri et al), 368
Texture, starch noodle, as affected by starch source (Kim et al), 302
Tortillas, corn, influence of structural changes on thermal, rheological, and dielectric properties of (Rodríguez et al), 593
Triticale, flours; used in cookies, quality factors (Leon et al), 779
Uric acid
 —distribution in fractions obtained by milling granary weevil-infested wheat (Ghaedian and Wehling), 628
 —stability when used as indicator of insect contamination during wheat extrusion (Ghaedian and Wehling), 625
Viscograph, evaluation of small quantity of wheat flour (Uno et al), 452
Wet milling
 —corn, acid effect on (Du et al), 96
 —corn, laboratory countercurrent steep battery for (Yaptenco et al), 249
 —corn procedure (Eckhoff et al), 54
 —of corn, review of laboratory-scale and pilot plant-scale procedures (Singh and Eckhoff), 659
 —corn starch functionality (Shanders and Jackson), 632
 —effect of pump rate and table slope on starch recovery (Singh and Eckhoff), 51
 —grain sorghum (Yang and Seib), 751
Wheat
 —adsorption of gliadin and water-soluble fractions from, onto methylated silica surfaces (Wannerberger et al), 499
 —Canadian, Fusarium head blight effect on milling and baking (Dexter et al), 695
 —classification by visible and NIR from single kernels (Delwiche and Massie), 399
 —diploid grain, flour, dough, and bread characteristics (Borghi et al), 208
 —dough rheology of HMW glutenin subunits of (Czuchajowska et al), 338
 —dough; stickiness measurement using dough profiling method (Wang et al), 445
 —durum, gamma irradiation effect on (Köksel et al), 506
 —durum, potential millability (Fares et al), 232
 —durum, review of improved semolina/flour quality for potential use in pastamaking and breadmaking (Liu et al), 155
 —end products; immunoassay for analysis of residues (Skerritt et al), 605
 —gluten; effects of HMW subunits of glutenin on rheological properties of (Schropp and Wieser), 410
 —grain quality; changes due to doubling level of atmospheric carbon dioxide (Blumenthal et al), 762
 —heat and moisture treatment of, reduced browning in raw oriental noodles (Vadlamani and Seib), 88
 —hulled, characteristics of meal from (Piergiovanni et al), 732
 —identification of wheat-rye translocation lines (Lookhart et al), 547
 —mill fractions; image texture analysis for discrimination of (Zayas and Steele), 136
 —milled fractions, deoxynivalenol and zearalenone distribution in (Trigo-Stockli et al), 388
 —proteins; change in sulphydryl-disulfide status during conditioning and milling (Gobin et al), 495
 —proteins; modifications due to flour chlorination (Duviau et al), 490
 —proteins separated by capillary electrophoresis (Lookhart and Bean), 81
 —quality response to disease control (Herrman et al), 235
 —soft, predicting a hardness measurement using single-kernel characterization system (Gaines et al), 278
 —soft, quantities of gliadins related to rheological properties and baking qualities (Hou et al), 352
 —soft, quantities of glutenin related to rheological properties and baking qualities (Hou et al), 358, 515
 —soft, rheological properties and baking qualities (Yamamoto et al), 215
 —Soissons, effects of nitrogen fertilization and maturation on protein aggregates and breadmaking (Jia et al), 123
 —Soissons, growing location effect on protein polymerization, relation to breadmaking (Jia et al), 526
 —spelt cultivars, nutritional profile (Ranhotra et al), 533
 —spring, variation for starch concentration in (Hucl and Chibbar), 756
 —starch damage in (Lin and Czuchajowska), 551
 —vitamin B₆ and pyridoxine glucoside content of (Sampson et al), 770
 —whole-grain image analysis, milling quality (Berman et al), 323
Wheat germ, protein isolate from, preparation and functional properties of (Hettiarachchy et al), 364
Yeast, wine yeast preferment and bread aroma (McKinnon et al), 45
Zein
 —composition; effect of NIR transmission-based selection on (Eyherabide et al), 775
 —glass transition and cross-linking effect on rheological properties of (Madeka and Kokini), 433
Zinc, deficiency, body weight (Saldamli et al), 424