

BIBLIOGRAFÍA

- Blando F, Gerardi C, Nicoletti I. (2004) Sour Cherry (*Prunus cerasus* L) Anthocyanins as Ingredients for Functional Foods. J. of Biomedicine and Biotechnology 2004:5 253-258
- Bertuglia, S., Malandrino, S. and Colantuoni, A. (1995) Effect of *vaccinium myrtillus* anthocyanosides on ischaemia reperfusion injury in hamster cheek pouch microcirculation. Pharmacological Research, 31, 183-187.
- Brown, S.; Roger Way and David Ferry (1989) Sweet and Tart Cherry varieties: Description and Cultural Recomendations, New york's Food and Life Science Bulletin, Nº 127
- Bruzone, A. (2004) Frutas Finas en los Valles Cordilleranos Patagónicos. Alimentos Argentinos, Nº 24, pag. 36-38
- Cherry Marketing Institute, www.uscherries.com
- Chaovanalikit, A y Wrolstad, R. (2004) Total Anthocyanins and Total Phenolics of Fresh and Processed Cherries and Their Antioxidant Properties. J. Food Sci., 69, 67-72
- FAOSTAT, Base de datos estadísticos de la Organización de las Naciones Unidas para la Agricultura y la Alimentación FAO, <http://faostat.fao.org/faostat>
- Garavano C., 12 de julio-2006, Comité de Alimentos Funcionales ILSI (International Life Sciences Institute) Argentina
- Ghiselli, A., Nardini, M., Baldi, A. and Scaccini, C. (1998) Antioxidant activity of different phenolic fraction separated from an Italian red wine. J Agric. and Food Chem., 46, 361-367
- Janick, J. y Moore, J., (1996) Fruit Breeding Vol 1, Tree and Tropical Fruits. Ed. J.W. Wiley
- Kang, S.; Seeram, N.; Nair, MG.; Bourquin L. (2003) Tart Cherry anthocyanins inhibit tumor development in *Apc^{Min}* mice and reduce proliferation of human colon cancer cells. Cancer Letters 194, 13-19
- Kim, D., Heo, H., Kim, Y., Yang, H. and Lee, C.(2005) Sweet and Sour Cherry Phenolics and Their Protective Effects on Neuronal Cells. J. Agric. Food Chem. 53,(26), 9921-9927

- Koide, T. Kamei, H., Hashimoto, Y., Kojima, T. and Hasegawa, M. (1996). Antitumor effect of anthocyanin from grape rinds and red rice. *Cancer Biotherapy and Radiopharmacology*, 11, 273-277
- Koide, T. Kamei, H., Hashimoto, Y., Kojima, T. and Hasegawa, M. (1997). Antitumor effect of anthocyanin fraction extracted from red soybeans in vitro and in vivo. *Cancer Biotherapy and Radiopharmacology*, 12, 277-280
- Lloyd Ryall, M. y Pentzer, W. (1982) Handling, Transportation and Storage of Fruits and Vegetables, 2nd Ed, Vol. 2, Fruits and Tree Nuts. Avi Publishing Company, INC, Connecticut
- Meheriuk, M. y Mc Phee, W. J. (1984) Agriculture Canada Research Station Summerland, British Columbia. Publication 1768 E.
- Rieger Mark (2003). Cherries : *Prunus avium*, *Prunus cerasus* en : www.uga.edu/fruit/cherries
- Seymour, E. M. ; Singer, A. ; Kirakosyan, A.; Kaufman, P.; Warber, S.; Bolling, S. (2008). Tart Cherry enriched diets reduce hepatic lipid content, hepatic PPAR expresion, metabolic syndrome and oxidative stres in Dahl-SS rats. *J. Medicinal Food* 11 (2), 252-259
- SSD: Sistema de Soporte de Decisiones para la producción agrícola de los valles cordilleranos patagónicos, (2008) INTA – EEA Bariloche, versión en CD
- Tall J, Seeram N, Zhao Ch, Nair M, Meyer R, Raja S. (2004) Tart cherry anthocyanins suppress inflammation-induced pain behavior in rat. *Behavioral Brain Research* 153, 181-188.
- Tsuda, T. Shiga, K., Ohshima, K., Kawakishi, S and Osawa, T (1996) Inhibition of lipid peroxidation and the active oxygen radical scavenging effect of anthocyanin pigments isolated from *Phaseolus vulgaris* L. *Biochemical Pharmacology*, 52, 1033-1039
- Tsuda, T., Watanabe, M., Ohshima, K., Norinobu, S., Choi, S., Kawakishi, S. et al.(1994) Antioxidative activity of the anthocyanin pigments cyanidin 3-O-beta-D-Glucoside and cyanidin. *J.Agric. and Food Chem.*, 42, 2407-2410.
- U.S. Departament of Agriculture, Agricultural Research Service, (2008). USDA National Nutrient Database for Standard Reference, Release 21. <http://www.ars.usda.gov/ba/bhnrc/ndl>

- Wang H, Nair MG, Iezzoni A, Strasburg GM, Booren AM, Gray J. (1997) Quantification and characterization of anthocyanins in Balatón tart cherries. *J. Agric. Food Chem.*; 45 (7): 2556-2560
- Wang H, Nair MG, Strasburg GM , Yu-Chen Chang, Booren AM, Gray J, DeWitt D. (1999) Antioxidant and Antiinflammatory Activities Anthocyanins and Their Aglycon, Cyanidin, from Tart Cherries. *J. Nat. Prod.* 62 (2) 294-296

- Blumenkrantz, N. y Asboe-Hansen, G. (1973) New method for quantitative determination of uronic acids. *Anal. Biochem.* (54): 484-489.
- Cash, J.N., Shirazi, A. & Haines, W.C. (1989). Analysis of Physical and Chemical Properties of Cherries. Cherry Marketing Institute, Inc. Oregon, Michigan.
- Gebhardt, S. and Thomas, R. (2002) Nutritive Value of foods, Home and Garden Bulletin Nº 72, USDA, Beltsville, Maryland
- Giusti, M. and Wrolstad, R. (2001) Unit F1.2 Characterization and Measurement of Anthocyanins by UV-Visible Spectroscopy. In R.E. Wrolstad (Ed.), Current Protocols in Food Analytical Chemistry. J. Wiley & Sons, New York
- Hunter, R.S. (1975) Scales for measurements of color differences, en: J. Wiley (Ed), Measurement of Appearance N.Y. Interscience, p 133.
- International Federation of Fruit Juice Producers Analysis, (IFFJP), SUIZA (1996)
- Kintner, P. y Van Buren, T. (1982) Carbohydrate interference and its correction in pectin analysis using the m-hidroxydiphenyl method *J. Food Sci.* (47):756-759/764.
- Mc Comb, E. and Mc Cready, R. (1952) Colorimetric determination of pectic substances. *Anal. Chem.* (24), 10: 1630-1632
- Methods of Enzymatic BioAnalysis and Food Analysis. Using Test-Combinations. Boehringer Mannheim GmbH (1995). Germany
- Official Methods of Analysis, 15th Ed., 1990 AOAC (Association of Official Analytical Chemists)
- ORION Research Incorporated (1984) Guide to Food and Beverage Analysis, pag. 19-21
- U.S. Departament of Agriculture, Agricultural Research Service, (2008). USDA National Nutrient Database for Standard Reference, Release 21.
<http://www.ars.usda.gov/ba/bhnrc/ndl>

- Aguilera, J.M.; Chiralt, A. y Fito, P. (2003) Food Dehydration and Product Structure. *Trends in Food Science & Technology* 14, 423-437
- Aleixandre, J. (2003) Conservación de alimentos. Ed: Serv. de publicaciones de la Universidad Politécnica de Valencia, España.
- Alonso, J.; Tortosa, M.; Wenceslao C. y Rodríguez, M. (2005) Ultrastructural and Changes in Pectin Composition of Sweet Cherry from the Application of Prefreezing Treatments. *J. Food Science*, 70 (9) 526-530
- Alzamora, S., Gershenson, L.; Vidales, S. y Nieto, A. (1997) Structural Changes in the minimal processing of fruits Some effects of blanching and sugar impregnation. In P. Fito, E. Ortega-Rodriguez y G. Barbosa –Cánovas (Eds), *Food Engineering 2000* Chapman & Hall, New York
- Becker, H.A. (1959). A Study of Diffusion in Solids of Arbitrary Shape, with Application to the Drying of the Wheat Kernel. *J. Applied Polymer Science*, 1(2): 212-226
- Bernardi, I., Vullioud, M, Márquez, C A y De Michelis, A (2001). Cambios de volumen y área durante la deshidratación de frutos enteros del prunus cerasus. *Memorias del 8º Congreso Latinoamericano de Transferencia de calor y Materia. Latcym 2001*. Veracruz, Mexico. ISBN 698-5401-00-4. Pp. 197-200
- Bilbao-Sainz, C.; Andres, A.; Chiralt, A. y Fito, P. (2006) Microwawes Phenomena during drying of apple cylinders. *J. Food Engineering*, 74 (1) 160-167
- Bondaruk, J.; Markowski, M. y Blaszcak, W. (2007) Effect of Drying Conditions on the Quality of Vacuum-microwave dried potatos cubes. *J. Food Engineering*, 81 (2) 306-312
- Crapiste, G.H. y Rotstein, E. (1997). Design and Performance Evaluation of Dryers. Cap. 4 (pág. 125-165) en *Handbook of Food Engineering Practice* (Editores: Valentas, K.J.; Rotstein, E. y Singh, R.P.), CRC Press, Boca Raton y New York.
- Delgado, A. y Rubiolo, A. (2005) Microstructural changes in strawberry after freezing and thawing processes. *Lebensm.-Wiss.u-Technol.* 38, 135-142
- Di Matteo, M., Cinquanta, L., Galiero, G. & Crescitelli, S. (2000). Effect of a Novel Physical Pre-treatment Process on the Drying Kinetics of Seedless Grapes. *J. Food Engineering*, 46(1): 83-89

- Fito, P; Andrés, A; Barat, J; Albors, A.(2004) Introducción al Secado de Alimentos por Aire Caliente. Ed: Serv. de publicaciones de la Universidad Politécnica de Valencia, España.
- Giner, S.A. (1999). Diseño de Secadoras Continuas de Trigo. Simulación de la Transferencia de Calor y Materia y de Perdidas de Calidad. Tesis Doctoral. Departamento de Química e Ingeniería Química, Facultad de Ingeniería, Universidad Nacional de La Plata
- Giri, S. y Prasad, S. (2007) Drying Kinetics and rehydration characteristics of microwave-vacuum and convective hot-air dried mushrooms. *J. Food Engineering*, 78 (2) 512-521.
- Lewicki, P. y Pawlak, G. (2003) Effect of Drying on Microstructure of Plant Tissue. *Drying Technology*, 21, (4) 657-683
- Márquez, C.A.; De Michelis, A. y Giner, S.A. (2006). Drying kinetics of rose hip fruits (*Rosa eglanteria L.*). *J. Food Engineering*, 77 (3): 566-574
- Martinez, N; Andrés, A.; Chiralt, A. y Fito, P. (2003) Termodinámica y cinética de sistemas alimento entorno, pag 198 Ed: Serv. de publicaciones de la Universidad Politécnica de Valencia, España.
- Mulet, A. (1994). Drying Modelling and Water Diffusivity in Carrots and Potatoes. *J. Food Engineering*, 22: 329-348
- Nunes, C.; Santos, C.; Pinto, G.; Lopez da Silva, J.; Saraiva, J. y Coimbra, M. (2008) Effect of candying on microstructure and texture of plums (*Prunus domestica L.*). *LWT Food Science and Technology* 41, 1776-1783
- Ochoa, M.R., Kesseler, A.G.; Pirone, B.N., Márquez, C. A. y De Michelis, A. (2002). Volume and area shrinkage during dehydration of whole sour cherry fruits (*prunus cerasus*). *Drying Technology*, 20(1): 147-156
- Ochoa, M.R., Kesseler, A.G.; Pirone, B.N., Márquez, C. A. & De Michelis, A. (2002). Shrinkage during Convective Drying of whole Rose Hip (*Rosa Rubiginosa L*) Fruits. *Lebensmittel-Wissenchaff und Technologie*, 35(5): 400-406
- Prachayawarakorn, S.; Tia, W.; Plyto, N. y Soponronnarit, S. (2008) Drying kinetics and quality attributes of low-fat banana slices dried at high temperatura. *J. Food Engineering* 85, 509-517

- Ramos I.; Silva, C.; Sereno, A. y Aguilera, J.(2004) Quantification of microstructural changes during first stage air drying of grape tissue. *J. Food Engineering* 62, 159-164
- Ratti, C and Mujumdar, A (2005) Drying of Fruits, Cap. 7 en *Processing Fruits Science and Technology*, Second Edition (Editores: Barrett, D.; Somogyi, L; Ramaswamy, H.), CRC Press, Boca Raton y New York.
- Rizvi, S.S.H. (1995) Thermodynamic properties of food in dehydratation (pp 223-309) en *Engineering Properties of Foods*. 2nd Edition. (Editores: M.A. Rao and S.S.H. Rizvi) New York, Marcel Dekker, Inc.
- Shi, J.; Pan, Z.; McHugh, T.; Wood, D.; Hirschberg, E. y Olson, D. (2008) Drying and quality characteristics of fresh and sugar-infused blueberries dried with infrared radiation heating. *LWT-Food Science and Technology*, 41 (10) 1962-1972
- Simal, S.; Femenia, A.; Garau, M.C.; Roselló, C. (2005) Use of exponential, Page`s and difusional models to simulate the drying kinetics of kiwi fruits. *J. Food Engineering* Vol. 66 Nº 3, pp 323-328
- Sorribas, V. y Morales, A. (1986) *Introducción a la Microscopía Electrónica*. Editado por CRIBABB, UNS-CONICET, Bahía Blanca
- Stojanovic, J. y Silva, J. (2007) Influence of osmotic concentration, continuous high frequency ultrasound and dehydration on antioxidants, colour and chemical properties of rabbiteye blueberries. *Food Chemistry*, 101 (3) 898-906
- Suutarinen, J., Honkapaa, K., Heinio, R., Autio, K. y Mokkila, M. (2000). The effect of different prefreezing treatments on the structure of strawberries before and after jam making. *Lebensmittel-Wissenschaft und-Technologie*, 33 (3), 188-201.
- Thakor, N.J., Sokhansanj, S., Sosulski, F.W. & Yannacopoulos, S. (1999). Mass and Dimensional Changes of Single Canola Kernels During Drying. *J. Food Engineering*, 40: 153-160
- Togrul, I. T. and Pehlivan, D. (2003) Modelling of drying kinetics of single apricot. *J. Food Engineering*. Vol 58 Nº1, pp 23-32.
- Tronk J., Lamarche, F.y Makhlouf, J. (1997) Enzymatic Browning Inhibition in Cloudy Apple Juice by Electrodialysis. *J. Food Science*, 62, Nº1 pp 75-78
- Vega, A.; Andrés, A. Y Fito, P. (2005) Modelado de la cinética de secado del pimiento rojo (*Capsicum Annum L.*)cv. Lamuyo. *Revista Información Tecnológica* Vol 16 Nº6, pp 3-11

- Vega, A.; Tello Ireland, C.; Lemus Mondaca, R. (2007) Simulación Matemática del proceso de secado de la Gracilaria Chilena (*Gracilaria Chilensis*). Ingeniare. Revista chilena de ingeniería, vol 15 N°1, pp. 57-63
- Vega-Galvez, A.; Lemus-Mondaca, R.; Bilbao-Sainz, C.; Fito, P. y Andrés, A. (2008) Effect of fair drying temperature on the quality of rehydrated dried red bell pepper (var. Lamuyo). J. Food Engineering, 85 (1) 42-50
- Vega-Mercado, H.; Gongora-Nieto, M. y Barbosa-Cánovas, G. (2001) Advances in dehydration of foods. J. Food Engineering, 49 , 271-289
- Vullioud, M.; Márquez, C.A. and De Michelis, A. (2004). Desorption isotherms for sweet and sour cherry J. Food Engineering, 63(1): 15-19

- Francis, F.J. (1980). Color quality evaluation of horticultural crops. HortScience 15:58-59.
- Francis, F. J. (1999) Colorants. Eagen Press, St Paul, Minnesota.
- Hunter, R.S. (1975) Scales for measurements of color differences In: Measurement of appearance. New York: J. Wiley Interscience pag. 133-138
- Hunterlab, (2008) Applications Note, vol.13, Nº2, En: www.hunterlab.com/appnotes/an02-01.pdf
- Infostat (2008) Infostat versión 2008. Grupo InfoStat, FCA, Universidad Nacional de Córdoba, Argentina
- Joshi, P. (2002) Colour in food: Improving quality. Edited by Douglas B. MacDougall, CRC Press y Woodhead Publishing limited, Cambridge, England
- Konica Minolta (1998) Precise Color Communication. Konica Minolta Sensing, Inc. Japón
- Lozano, R. (1978) El Color y su Medición. Ed. Americalee, Bs. As. Argentina
- Rodríguez-Pulido, F., González-Miret, L., Zaldívar-Cruz, J., Heredia, F (2010) Application of image analysis to the colour-phenolic composition relationships of grape seeds. Proceeding, Congreso Internacional de Color 2010, Mar del Plata, Argentina, pag. 116-119
- Tronk J., Lamarche, F.y Makhlof, J. (1997) Enzimatic Browning Inhibition in Cloudy Apple Juice by Electrodialysis. Journal of Food Science, 62, Nº1 pp 75-78
- Wrolstad, E., Acree, T., Decker, E., Penner, M., Reid, D., Schwartz, S., Shoemaker, C., Smith, D, Sporn, P. (eds.) (2005) Handbook of Food Analytical Chemistry. Wyley- Interscience, New Jersey, EEUU
- Zaritzky, N. (1982) Determinaciones colorimétricas en hígado vacuno congelado, en Actas del Simposio sobre color en Alimentos , Bs. As. Agosto 1982

- Daravargas, G.; Cain, R. (1968) Thermal degradation of black raspberry anthocyanin pigments in model systems. *J. Food Sci.* 33: 138-142
- Dekazos, E. (1970) Quantitative determination of anthocyanin pigments during the maturation and ripening of red tart cherries. *J. of Food Sci.*, 35: 242-244
- Eiro, M.; Heinonen, M. (2002) Anthocyanin Color Behavior and Stability during Storage: Effect of Intermolecular Copigmentation. *J. Agric. Food Chem.* 50, 7461-7466
- Es-Safi, N.; Cheynier V.; Moutounet, M. (2002) Interactions between Cyanidin 3-O-Glucoside and Furfural Derivatives and Their Impact on Food Color Changes. *J. Agric. Food Chem.* 50, 5586-5595
- Fennema, O. "Química de los Alimentos". 2da. Ed. (2000) Ed. Acribia
- Figueiredo, P.; George, F.; Tatsuzawa, K.; Toki, K.; Saito, N.; Brouillard, R. (1999) New features of intramolecular copigmentation by acylated anthocyanins. *Phytochemistry* 51, 125-132
- Forni, E.; Polesello, A. y Torreggiani, D. (1993) Changes in anthocyanins in cherries (*Prunus avium*) during osmdehydration, pasteurizatio and storage. *Food Chemistry*, 48: 295-299
- Fuleki, T; Francis, F. Quantitative methods for anthocyanins. 1. Extracción and determination of total anthocyanin in cranberries. *J. Food. Sci*)33, 72 (1968a)
- García-Palazón, A.; Suthanthangjai, W.; Kajda P.; Zabetakis I. (2004) The effects of high hydrostatic pressure on b-glucosidase, peroxidase and polyphenoloxidase in red raspberry (*Rubus Ideae*) and strawberry (*Fragaria ananassa*) *Food Chem.* 88: 7-10
- Giusti, M. (1998) "Structure and Conformación of Red Radish Anthocyanins and theirs Effect on Color and Pigment Stability" a Thesis of Oregon State University.
- Giusti, M.; Rodriguez-Saona, E. y Wrolstad, R. (1999) Molar Absorptividad and Color Characteristics of Acylated and Non-Acylated Pelargonidin-Based Anthocyanins. *J. Agric. Food Chem.*, 47, 4631-4637
- Giusti, M.; Wrolstad, R. (2003) Acylated anthocyanins from edible sources and their applications in food system. *Biochem. Engineering Journal* 14, 217-225

- Goiffon, J.; Mouly, P. y Gaydou, E. (1999) Anthocyanic pigment determination in red fruit juices, concentrated juices and syrups using liquid chromatography. *Analytica Chimica Acta*, 382, 39-50
- Gonzales-Manzano, S.; Perez-Alonso, J.; Salinas Moreno, Y.; Mateus, N.; Silva, A.; De Freitas, V y Santos-Buelga, C. (2008) *J. of Food Composition and Análisis*, 21, 7, 521-526
- Hong, V. ; Wrolstad, R. Characterization of Anthocyanin-Containing Colorants and Fruit juices by HPLC/Photodiode Array. *J. Agric. Chem.* 38, 698-708 (1990) a
- Hong, V. ; Wrolstad, R. Use of HPLC separation/photodiode array detection for characterization of anthocyanins. *J. Agric. Chem.* 38, 708-715 (1990) b
- Hoshino, T.; Matsumoto, U.; Harada, N.; Goto, T. (1981) Chiral exciton coupled stacking of anthocyanins: interpretation of the origin of anomalous CD induced by anthocyanin association. *Tetrahedron Lett.* 22, 3621
- Jackman, R., Yada, R. y Tung, M. (1987) A review: Separation and chemical properties of anthocyanins used for their qualitative análisis. *J. Food Biochem.* 11, 279-308.
- Jakman R.L. y Smith J.L. (1996) Anthocyanins and Betalains. Cap.8 en *Natural Food Colorants*, Eds. G.A.F. Hendry y J.D. Houghton. 2da Ed. Blackie A&P, Inglaterra
- Kader, F.; Haluk, J.; Nicolas, J.; Metche, M. (1998) Degradation of Cyanidin 3-glucoside by blueberry polyphenol oxidase: Kinetic Studies and Mechanisms. *J. Agric. Food Chem.* 46, 3060-3065
- Kirca, A.; Cemeroglu, B. (2003) Degradation kinetics of anthocyanins in blood orange juice and concentrate. *Food Chemistry* 81, 583-587
- Kirca, A.; Özkan, M. y Cemeroglu, B. (2007) Effects of temperature, solid content and pH on the stability of black carrot anthocyanins. *Food Chemistry* 101, 212-218.
- Kosir, I., Lapornik, B; Andrensek, S.; Wondra, A.; Vrhovsek, U. y Kidric, J.(2004) Identification of anthocyanins in wines by liquid chromatography, liquid chromatography-mass spectrometry and nuclear magnetic resonance. *Analytica Chimica Acta*, 513, 277-282
- Longo, L.; Scardino, A. y Vasapollo, G. (2007) Identificación and quantification of anthocyanins in the berries of *Pistacia lentiscus* L., *Phillyrea*

- latifolia L. and Rubia peregrina L. Innovative Food Science & Emerging Technologies 8, 3, 360-364
- Markakis P. (1982) Stability of anthocyanins in foods. In Anthocyanins as Food Colors Markakis, P. (Ed), Academic Press Inc., New York,
 - Mateus, N., Carvalho, E.; Carvalho, A.; Melo, A.; Gonzalez-Paramás, A.; Santos-Buelga, C.; Silva, A. y De Freitas, V. (2003) Isolation and Structural Characterization of New Acylated Anthocyanin-Vinyl-Flavanol Pigments Occurring in Aging Red Wines. *J. Agric. Food Chem.* 51, 277-282
 - Mazza, G. and Brouillard, R. (1987) Recent developments in the stabilization of anthocyanins in food products. *Food Chemistry*, 25, 207.
 - Mazza, G. and Brouillard, R. (1990) The mechanism of co-pigmentation of anthocyanins in aqueous solutions. *Phytochemistry*, 29, 1097
 - Mazza, G.; Miniati, E. (1993) "Anthocyanin in Fruits, Vegetables and Grains" G. Mazza and E. Miniati Eds. CRC Press, Boca Raton, FL
 - Ochoa, M; Kesseler, M; Vullioud, M. and Lozano, (1999) Physical and Chemical Characteristics of Raspberry Pulp: Storage Effect on Composition and Color. *Lebensm.- Wiss. u.- Technol.*, 32, 149
 - Ochoa, M.; Kesseler, G; De Michelis, A.and Chavez, A. (2001). Kinetics of colour change of raspberry, sweet and sour cherries preserves packed in glass containers : light and room temperature effects. *J. of Food Eng.* 49, 55
 - Özkan, M.; Yemenicioglu, A.; Asefi, N.; Cemeroglu B. (2002) Degradation Kinetics of Anthocyanins from sour Cherry, Pomegranate, and Strawberry juice by Hydrogen Peroxide. *J. of Food Sci.* 67, 2, 525
 - Özkan, M.(2002) Degradation of anthocyanins in sour cherry and pomegranate juices by hydrogen peroxide in the presence of added ascorbic acid. *Food Chemistry* 78, 499-504
 - Pifferi, P. and Cultera, R. (1974) Enzimatic degradation of anthocyanins: The role of sweet cherry polyphenol oxidase. *J. of Food Sci.*, 39,786-791
 - Poei-Langston M.; Wrolstad, R.(1981) Color degradation in ascorbic acid-anthocyanin-flavanol model system. *J. Food Sci.* 46: 1218, 1222, 1236
 - Rein, M. (2005) Copigmentation reactions and color stability of berry anthocyanins (dissertation) EKT series 1331. University of Helsinki.
 - Sági, F.; Kollanyi, L. y Simon, I. (1974) Changes in the colour and anthocyanin contento f raspberry fruit during ripening. *Acta Aliment.* 3, 397.

- Scheffeldt, P. and Hrazdina, G. (1978) Co-pigmentación of anthocyanins under physiological conditions. *J. Food Sci.* 43, 517.
- Shrinkhande A.; Francis, F. (1974) Effect of flavonols on ascorbic acid and anthocyanin stability in model systems. *J. Food Sci.* 39: 904-906
- Siddiq M.; Arnold, J.; Sinha, N. and Cash, J. (1994) Effect of polyphenol oxidase and its inhibitors on anthocyanin changes in plum juice. *J. of Food Process. and Preserv.* 18, 75-84
- Skrede, G.; Wrolstad, R.; Durst, R. (2000) Changes in anthocyanins and polyphenolics during juice processing of highbush blueberries (*Vaccinium corymbosum* L) *J. Food Sci.* 65: 357-364
- Slimestad, R. y Solheim, H. (2002) Anthocyanins from Black Currants (*Ribes nigrum* L.) *J. Agric. Food Chem.* 50, 3228-3231
- Starr M.; Francis, F. (1968) Oxygen and ascorbic acid effect on the relative stability of four anthocyanin pigments in cranberry juice. *Food Tech.* 22: 1293-1295
- Stintzing, F.; Trichterborn, J. y Carle, R. (2006) Characterisation of anthocyanin-betalain mixtures for food colouring by chromatic and HPLC-DAD-MS analyses. *Food Chemistry* 94, 296-309
- Talcott S., Brenes C.; Pires D.; Del Pozo-Insfran D. (2003) Phytochemical stability and color retention of copigmented and processed muscadine grape juice. *J. Agric. Food Chem.* 51: 957-963
- Von Elbe, J. y Schwartz, S., (2000) Colorantes. En: *Química de los Alimentos*. Fennema, O. (ed) 3ra ed. Acribia, Zaragoza, España, p. 807-820
- Wang, H.; Nair, M.; Iezzoni, A.; Strasburg, G.; Booren A.; Gray, I. (1997) Quantification y Characterization of Anthocyanins in Balaton Tart Cherries. *J. Agric. Food Chem.* 45, 2556-2560
- Wang, W.; Xu, S. (2007) Degradation Kinetics of anthocyanins in blackberry juice and concentrate. *J. of Food Engineering* 82, 271-275
- Wesche-Ebeling, P. and Montgomery, M. (1990) Strawberry polyphenoloxidase: Its role in anthocyanin degradation. *J. of Food Sci.*, 55, 3: 731-734
- Wrolstad, R.; Skrede, G.; Lea, P.; Enersen G. (1990) Influence of sugar on anthocyanin pigment stability in frozen strawberries. *J. Food Sci.* 55: 1064-1072

- Wrolstad, R. ; Hong, V. ; Boyles, M. y Durst, R.(1995) Use of anthocyanin pigment analysis for detecting adulteration in fruit juices. In Vol. I, Methods to Detect Adulteration in Fruit Juice and Beverages. Eds. S. Nagy y R. Wade. AgScience Inc., Auburndale, FL
- Wrolstad, R. ; Durst, R. Use of anthocyanin and polyphenolic analyses in authenticating fruit juices . In Proceedings of Food Authenticity Workshop. ENI Laboratories, Eurofins Scientific International Group, Montreal, Sep, 13 (1998)
- www.agsci.ubc.ca/courses/fnh/410/colour/3_21.htm

- Chandra, A.; Nair, M.; Iezzoni, A. (1992) Evaluation and Characterization of the Anthocyanin Pigments in Tart Cherries (*Prunus cerasus* L.). *J. Agric. Food Chem.* 40, 967-969
- Chandra, A.; Nair, M.; Iezzoni, A. (1993) Isolation and Stabilization of Anthocyanins from Tart Cherries (*Prunus cerasus* L.). *J. Agric. Food Chem.* 41, 1062-1065
- Chandra, A.; Rana, J. y Li, Y. (2001) Separation, Identification, Quantification, and Method Validation of Anthocyanins in Botanical Supplement Raw Materials by HPLC and HPLC-MS. *J. Agric. Food Chem.* 49, 3515-3521
- Chaovanalikit A. y Wrolstad, R. (2004a) Anthocyanin and Polyphenolic Composition of fresh and Processed Cherries. *J. of Food Sci.*, 69, 1: 73-83
- Dalal, K.y Salunkhe, D.(1964) Thermal degradation of pigments and relative biochemical changes in canned apricots and cherries. En *Anthocyanins in Fruits, Vegetables, and Grain*, Mazza, G. y Miniati, E. (Eds) CRC, Press, Boca Raton, FL
- Daravinas, G.; Cain, R. (1968) Thermal degradation of black raspberry anthocyanin pigments in model systems. *J. Food Sci.* 33: 138-142
- Dekazos, E. (1970b) Quantitative determination of anthocyanin pigments during the maturation and ripening of red tart cherries. *J. of Food Sci.*, 35: 242-244
- Dekazos, E. (1970a) Anthocyanin pigments in red tart cherries. *J. of Food Sci.*, 35: 237-241
- Do, J.; Potewiratananond, S.; Salunkhe, D.; Rhaman, A. (1976) Freeze dehydrated compressed sour cherries. II Stability of anthocyanins during storage, *J. Food Technol.* 11, 265-272
- Durst, R.; Wrolstad, R. (2001) Separation and characterization of anthocyanins by HPLC.
- Fisher, R. and Von Elbe, J (1970) Identification of cyandin 3-(2^G-glucosyl)-rutinoside in Montmorency cherries. En *Anthocyanins in Fruits, Vegetables, and Grain*, Mazza, G. y Miniati, E. (Eds) CRC, Press, Boca Raton, FL
- Giusti, M.; Rodriguez-Saona, E. y Wrolstad, R. (1999) Molar Absorptivity and Color Characteristics of Acylated and Non-Acylated Pelargonidin-Based Anthocyanins. *J. Agric. Food Chem.*, 47, 4631-4637

- Giusti, M. ; Wrolstad, R. (2001) Unit F1.2: Anthocyanins. Characterization and measurement with UV-visible spectroscopy. En: *Current Protocols in Food Analytical Chemistry*; Wrolstad, R. Ed; Wiley, New York, pp.1-13
- Goiffon, J.; Mouly, P. y Gaydou, E. (1999) Anthocyanic pigment determination in red fruit juices, concentrated juices and syrups using liquid chromatography. *Analytica Chimica Acta*, 382, 39-50
- Gonçalves, B.; Silva, A.; Moutinho-Pereira, J.; Bacelar, E.; Rosa, E.; Meyer, A. (2007) Effect of ripeness and postharvest storage on the evolution of colour and anthocyanins in cherries (*Prunus avium* L.) *Food Chemistry* 103, 976-984
- Harborne, J. and Hall, E. (1964) Plant polyphenols XIII. The systematic distribution and origin of anthocyanins containing branched trisaccharides. En *Anthocyanins in Fruits, Vegetables, and Grain*, Mazza, G. y Miniati, E. (Eds) CRC, Press, Boca Raton, FL
- Harborn, J. (1967) *Comparative Biochemistry of the flavonoids*, Academic Press, London, p. 32
- Hong, V. ; Wrolstad, R. (1990)a Characterization of Anthocyanin-Containing Colorants and Fruit juices by HPLC/Photodiode Array. *J. Agric. Chem.* 38, 698-708
- Hong, V. ; Wrolstad, R. (1990)b Use of HPLC Separation/photodiode array detection for characterization of anthocyanins. *J. Agric. Chem.* 38, 708-715
- International Federation of Fruit Juice Producers (IFU), (1998) , Method N° 71
- Iversen, C. (1999) Blackcurrant Nectar: Effect of Processing and Storage on Anthocyanin and Ascorbic Acid Content. *J. of Food Sci.* 64 (1) 37-41
- Kim, O.; Padilla-Zakour, O. (2004) Jam Processing Effect on Phenolics and Antioxidant Capacity in Anthocyanin-rich Fruits: Cherry, Plum and Raspberry. *J.of Food Sci.*, 69, 9: 395-400
- Kirakosyan, A.; Seymour, E.; Urcuyo LLanes, D.; Kaufman, P.; Bolling S. (2009) Chemical profile and antioxidant capacities of tart cherry products. *Food Chemistry*, 115, 1: 20-25
- Li, K. and Wagenknecht, A. (1958) A minor anthocyanin pigment of sweet cherry. En *Anthocyanins in Fruits, Vegetables, and Grain*, Mazza, G. y Miniati, E. (Eds) CRC, Press, Boca Raton, FL

- Markakis, P. (1960) Zone electrophoresis of anthocyanins. En *Anthocyanins in Fruits, Vegetables, and Grain*, Mazza, G. y Miniati, E. (Eds) CRC, Press, Boca Raton, FL
- Mazza, G.; Miniati, E. (1993) “Anthocyanin in Fruits, Vegetables and Grains” G. Mazza and E. Miniati Eds. CRC Press, Boca Raton, FL
- Mozetic, B.; Trebse, P.; Hribar, J. (2002) Determination and Quantification of Anthocyanins and Hydroxycinnamic Acids in Diferent Cultivars of Sweet Cherries (*Prunus avium* L.) from Nova Gorica Region (Slovenia). Food Technol. Biotechnol. 40, 3: 207-212
- Ochoa, M; Kesseler, M; Vullioud, M. and Lozano, (1999) Physical and Chemical Characteristics of Raspberry Pulp: Storage Effect on Composition and Color. Lebensm.- Wiss. u.- Technol., 32, 149
- Ohaco, E.; Pirone, B.; Ochoa, M.; Kesseler, A; De Michelis, A. (2001) Pigment Evolution during air dehydration of sweet cherries. Proceedings of ENPROMER 2001, vol III, p. 1435-1440
- Ochoa, M.; Kesseler, G; De Michelis, A.and Chavez, A. (2001). Kinetics of colour change of raspberry, sweet and sour cherries preserves packed in glass containers : light and room temperature effects. J. of Food Eng. 49, 55
- Ochoa, M. ; De Michelis, A.; Lozano, E. y Agulló, E. (2005) Evolución de Antocianinas totales en Guindas Deshidratadas bajo distintas condiciones. Proceeding del X Congreso Argentino de Ciencia y Tecnología de Alimentos. 18 al 20 de mayo 2005, Mar del Plata. (versión en CD)
- Ochoa, M. ; De Michelis, A.; Agulló, E. y Lozano, J. (2009). Identificación de antocianinas individuales en guinda fresca y deshidratada. Resumen 7.21 del XII Congreso Argentino de Ciencia y Tecnología de Alimentos, 7 al 9 de octubre 2009, Concordia. (versión en CD)
- Pridham, J. (1964) Paper Electrophoresis of Phenolic Compounds. En: Use of HPLC Separation/photodiode array detection for characterization of anthocyanins. Hong, V. y Wrolstad, R. J. Agric. Chem. 38, 708-715 (1990)
- Rochleder, F. (1870) Ueber einiger Bestandtheile Fruechte von *Cerasus acida* Borckh. En *Anthocyanins in Fruits, Vegetables, and Grain*, Mazza, G. y Miniati, E. (Eds) CRC, Press, Boca Raton, FL

- Savic, M. (1985) Quantitative analysis of anthocyanins in sour cherry cultivars. En *Anthocyanins in Fruits, Vegetables, and Grain*, Mazza, G. y Miniati, E. (Eds) CRC, Press, Boca Raton, FL
- Shrinkhande A.; Francis, F. (1973) Anthocyanin pigments of sour cherry. J. of Food Sci. 38, 649-651
- Siegel, A.; Markakis, P.; Bedford, C. (1971) Stabilization of anthocyanins in frozen tart cherries by blanching. J. of Food Sci. 36: 962
- Slimestad, R. y Solheim, H. (2002) Anthocyanins from Black Currants (*Ribes nigrum L.*) J. Agric. Food Chem. 50, 3228-3231
- Spanos G.; Wrolstad, R. (1987) Anthocyanin pigment, non-volatile acid, and sugar composition of red raspberry juice. J. Assoc. Off. Anal. Chem. 70, 6: 1036-1046
- Stintzing, F.; Trichterborn, J. y Carle, R. (2006) Characterisation of anthocyanin-betalain mixtures for food colouring by chromatic and HPLC-DAD-MS analyses. Food Chemistry 94, 296-309
- Stój, A.; Targonski, Z.; Malik, A. (2006) Use of Anthocyanin Analysis for Detection of Berry Juice Adulteration. Acta Sci. Pol., Technol. Aliment. 5 (1) 73-85
- Suthanthangjai, W.; Kadja, P.; Zabetakis, I. (2005) The effect of high hydrostatic pressure on the anthocyanins of raspberry (*Rubus idaeus*). Food Chemistry, 90, 1-2, pp 193-197
- Urbaniyi, G. (1987) Changes in colour and anthocyanin content of quick-frozen sour cherries during freeze-drying and subsequent storage. En *Anthocyanins in Fruits, Vegetables, and Grain*, Mazza, G. y Miniati, E. (Eds) CRC, Press, Boca Raton, FL
- Von Elbe, J. (1964) Factors Affecting the Colour Stability of Cherry Pigments and cherry juice. En *Anthocyanins in Fruits, Vegetables, and Grain*, Mazza, G. y Miniati, E. (Eds) CRC, Press, Boca Raton, FL
- Wang, H.; Nair, M.; Iezzoni, A.; Strasburg, G.; Booren, A.; Gray, I. (1997) Quantification and Characterization of Anthocyanins in Balaton Tart Cherries. J. Agric. Food Chem. 45, 2556-2560
- Willstatter, R. and Zollinger, E. (1916) Untersuchung ueber die Anthocyane. XIV. Ueber die Farbstoffe der Kirsche und Schlehe. En *Anthocyanins in Fruits*,

Vegetables, and Grain, Mazza, G. y Miniati, E. (Eds) CRC, Press, Boca Raton, FL

- Will, F.; Ludwig, M.; Bonerz, D.; Dietrich, H. (2007) Anthocyanins in sour cherry juices and nectars. *Fruit*, September/October, p. 262-267
- Wrolstad, R. ; Hong, V. ; Boyles, M. y Durst, R.(1995) Use of anthocyanin pigment analysis for detecting adulteration in fruit juices. In Vol. I, Methods to Detect Adulteration in Fruit Juice and Beverages. Eds. S. Nagy y R. Wade. AgScience Inc., Auburndale, FL

- Berkè, B.; Chèz, C.; Vercauteren, J.; Deffieux, G. (1998) Bisulfite addition to anthocyanins: Revisited structures of colourless adducts. *Tetrahedron Letters*, 39, 5771-5774 En Wrolstad et al : Tracking color and pigment changes in anthocyanin products
- Cemeroglu, B.; Velioglu, S.; Isik, S. (1994) Degradation Kinetics of Anthocyanins in sour Cherry Juice and Concentrate. *J. of Food Sci.* 59, 6: 1216-1218
- Dalal, K. and Salunkhe, D.(1964) Thermal degradation of pigments and relative biochemical changes in canned apricots and cherries. En *Anthocyanins in Fruits, Vegetables, and Grain*, Mazza, G. y Miniati, E. (Eds) CRC, Press, Boca Raton, FL
- Daravargas, G.; Cain, R. (1968) Thermal degradation of black raspberry anthocyanin pigments in model systems. *J. Food Sci.* 33: 138-142
- Do, J.; Potewiratananond, S.; Salunkhe, D.; Rhaman, A. (1976) Freeze dehydrated compressed sour cherries. II Stability of anthocyanins during storage, *J. Food Technol.* 11, 265-272
- Eiro, M. and Heinonen, M. (2002) Anthocyanin Color Behavior and Stability during Storage: Effect of Intermolecular Copigmentation. *J. Agric. Food Chem.* 50, 7461-7466
- Forni, E.; Polesello, A. and Torregiani, D. (1993) Changes in anthocyanins in cherries (*Prunus avium*) during osmdehydration, pasteurization and storage. *Food Chemistry*, 48, 295-299
- Giusti, M.; Rodriguez-Saona, E. y Wrolstad, R. (1999) Molar Absorptivity and Color Characteristics of Acylated and Non-Acylated Pelargonidin-Based Anthocyanins. *J. Agric. Food Chem.*, 47, 4631-4637
- Giusti, M. ; Wrolstad, R. (2001) Unit F1.2: Anthocyanins. Characterization and measurement with UV-visible spectroscopy. En: *Current Protocols in Food Analytical Chemistry*; Wrolstad, R. Ed; Wiley, New York, pp.1-13
- International Federation of Fruit Juice Producers (IFFJP), (1998) , Method N° 71
- Iverse, C. (1999) Black currant nectar: Effect of processing and storage on anthocyanin and ascorbic acid content. *J. of Food Sci.*, 64, 1: 37-41

- Kim, O.; Padilla-Zakour, O. (2004) Jam Processing Effect on Phenolics and Antioxidant Capacity in Anthocyanin-rich Fruits: Cherry, Plum and Raspberry. *J. Food Sci.*, 69, 9: 395-400
- Kirakosyan, A.; Seymour, E.; Urcuyo LLanes, D.; Kaufman, P.; Bolling S. (2009) Chemical profile and antioxidant capacities of tart cherry products. *Food Chemistry*, 115, 1: 20-25
- Kirca, A.; Cemeroglu, B. (2003) Degradation kinetics of anthocyanins in blood orange juice and concentrate. *Food Chemistry* 81, 583-587.
- Kirca, A.; Özkan, M.; Cemeroglu, B. (2007) Effects of temperature, solid content and pH on the stability of black carrot anthocyanins. *Food Chemistry* 101, 212-218
- Kwok, B.; Hu, C.; Durance, T and Kitts, D. (2004) Dehydration techniques affect phytochemical content and free radical scavenging activities of Saskatoon berries (*Amelanchier alnifolia* Nutt.). *J. of Food Sci.*, 69, 122-126 En Stojanovick
- Mazza, G.; Miniati, E. (1993) “Anthocyanin in Fruits, Vegetables and Grains” G. Mazza and E. Miniati Eds. CRC Press, Boca Raton, FL
- Ochoa, M; Kesseler, M; Vullioud, M. and Lozano, (1999) Physical and Chemical Characteristics of Raspberry Pulp: Storage Effect on Composition and Color. *Lebensm.- Wiss. u.- Technol.*, 32, 149
- Ochoa, M.; Kesseler, G; De Michelis, A. and Chavez, A. (2001). Kinetics of colour change of raspberry, sweet and sour cherries preserves packed in glass containers : light and room temperature effects. *J. of Food Eng.* 49, 55
- Ochoa, M. ; De Michelis, A.; Lozano, E. y Agulló, E. (2005) Evolución de Antocianinas totales en Guindas Deshidratadas bajo distintas condiciones. Proceeding del X Congreso Argentino de Ciencia y Tecnología de Alimentos. 18 al 20 de mayo 2005, Mar del Plata. (versión en CD)
- Ochoa, M. ; De Michelis, A.; Agulló, E. y Lozano, J. (2009). Identificación de antocianinas individuales en guinda fresca y deshidratada. Resumen 7.21 del XII Congreso Argentino de Ciencia y Tecnología de Alimentos, 7 al 9 de octubre 2009, Concordia. (versión en CD)
- Official Methods of Analysis, 15th Ed., (1990) AOAC (Association of Official Analytical Chemists)

- Ohaco, E.; Pirone, B.; Ochoa, M.; Kesseler, A; De Michelis, A. (2001) Pigment Evolution during air dehydration of sweet cherries. Proceedings of ENPROMER 2001, vol III, p. 1435-1440
- Patras, A.; Brunton, N.; O'Donnell, C.; Tiwari, B. (2010) Effect of thermal processing on anthocyanin stability in foods; mechanisms and kinetics of degradation. Trends in Food Science & Technology, 21, 1, 3-11
- Rommel, A.; Heatherbell, D.; Wrolstad, R. (1990) Red Raspberry Juice and Wine: Effect of Processing and Storage on Anthocyanin Pigment Composition, Color and Appearance. J. of Food Sci. 55, 4, 1011-1017
- Rommel, A.; Wrolstad, R. Heatherbell, D (1990) Blackberry juice and wine: Processing and Storage Effects on Anthocyanin Composition, Color and Appearance. J of Food Sci. 57, 2, 385-391
- Rubinskiene, M.; Viskelis, P.; Jasutiene, I.; Viskeliene, R.; Bobinas, C. (2005) Impact of various factors on the composition and stability of black currant anthocyanins. Food Research International 38, 867-871
- Siegel, A.; Markakis, P.; Bedford, C. (1971) Stabilization of anthocyanins in frozen tart cherries by blanching. J. of Food Sci. 36: 962
- Spanos G.; Wrolstad, R. (1987) Anthocyanin pigment, non-volatile acid, and sugar composition of red raspberry juice. J. Assoc. Off. Anal. Chem. 70, 6: 1036-1046
- Stojanovic, J.; Silva, J. (2007) Influence of osmotic concentration, continuous high frequency ultrasound and dehydration on antioxidants, colour and chemical properties of rabbiteye blueberries. Food Chemistry 101, 898-906
- Tronk J., Lamarche, F.y Makhlouf, J. (1997) Enzymatic Browning Inhibition in Cloudy Apple Juice by Electrodialysis. Journal of Food Science, 62, N°1 pp 75-78
- Urbaniyi, G. (1987) Changes in colour and anthocyanin content of quick-frozen sour cherries during freeze-drying and subsequent storage. En *Anthocyanins in Fruits, Vegetables, and Grain*, Mazza, G. y Miniati, E. (Eds) CRC, Press, Boca Raton, FL
- Von Elbe, J. (1964) Factors Affecting the Colour Stability of Cherry Pigments and cherry juice. En *Anthocyanins in Fruits, Vegetables, and Grain*, Mazza, G. y Miniati, E. (Eds) CRC, Press, Boca Raton, FL

- Wang, W.; Xu, S. (2007) Degradation kinetics of anthocyanins in blackberry juice and concentrate. *J. of Food Engineering* 82, 271-275
- Will, F.; Ludwig, M.; Bonerz, D.; Dietrich, H. (2007) Anthocyanins in sour cherry juices and nectars. *Fruit*, September/October, p. 262-267
- Wrolstad, R.; Culberston, J.; Cornwell, J.; Mattick, L. (1982) Detection of Adulteration in Blackberry Juice Concentrates and Wine. *J. Assoc. Off. Anal. Chem.* 65, 6, 1417-1423
- Zhongxiang, F; Min, Z.; Yunfei, S.; Jingcai, S. (2006) How to improve Bayberry (*Myrica rubra* Sieb et Zucc.) Juice Color Quality: Effect of Juice Processing on Bayberry Anthocyanins and Polyphenolics. *J. of Agric. and Food Chem.* 54, 99-106