

## REFERENCES

1. <http://en.wikipedia.org/wiki/Rice>.
2. [www. botanical.com/butanical/mgmh/r/rice--15.html](http://www.botanical.com/butanical/mgmh/r/rice--15.html).
3. [http:// www.knowledgebank.irri.org/ses/Growth\\_Stages\\_of\\_Rice\\_Plants.htm](http://www.knowledgebank.irri.org/ses/Growth_Stages_of_Rice_Plants.htm).
4. [http://en.wikipedia.org/wiki/Black\\_rice](http://en.wikipedia.org/wiki/Black_rice).
5. S. Zullaikah, E. Melwita, and Y. H. Ju, *Bioresource Technology*, **2009**, *100*, 299-302.
6. R. Yawadio, S. Tanimori, and N. Morita, *Food Chem.*, **2007**, *101*, 1616–1625.
7. [www. nstlearning.com/~km/index.php?paged=234](http://www.nstlearning.com/~km/index.php?paged=234).
8. <http://en.wikipedia.org/wiki/Bran>.
9. Z. Xu, N. Hua and J. S. Godber, *J. Agricul. Food Chem.*, **2001**, *49*, 2077-2081.
10. I.G. Zigoneanu, L. Williams, Z. Xu, and C.M. Sabliov, *Bioresource Technology*, **2008**, *99*, 4910–4918.
11. R. Yawadio, S. Tanimori, and N. Morita, *Food Chem.*, **2007**, *101*, 1616–1625.
12. H. S. Chung, and J. C. Shin, *Food Chem.*, **2007**, *104*, 1670–1677.
13. F. A. Macias, N. Chinchilla, R. M. Varela, and J.M.G. Molinillo, *Steroids*, **2006**, *71*, 603–608.
14. T.Y. Haa, S. Hana, S. R. Kima, I.H. Kimb, H.Y. Leea, and H.K.Kim, *Nutrition Res.*, **2005**, *25*, 597–606.
15. P. Imsanguana, A. Roaysubtaweea, R. Boriraka, S.Pongamphaia, S. Douglassa, and P. L. Douglas, *LWT*, ARTICLE IN PRESS.

16. J. M. Kong, L. S. Chia, N. K. Goh, T. F. Chia, and R. Brouillard, *Phytochemistry*, **2003**, *64*, 923-933.
17. Y. Choi, H. S. Jeong and J. Lee, *Food Chem.*, **2007**, *103*, 130-138.
18. Y. Shen, L. Jin, P. Xiao, Y. Lu, and J. Bao, *J. Food Engineering*, **2009**, *1*, 44-52.
19. K. B. G. Torrsell, *Natural product chemistry; A mechanistic and biosynthetic approach to secondary metabolism*, John Wiley & Sonc Ltd., New York, **1983**, 138-145.
20. F. Shahidi and M. Necak, *Phenolic in food and nutraceuticals*, CRC press LLC. Newyork, **2004**, 334-338.
21. K. S. Vareed, M. K. Reddy, R. E. Schutzki, and G. Muraleedharan, *NairLife Sciences*, **2006**, *78*, 777 – 784.
22. P. N. Chena, S. C. Chub, H. L. Chiouc, W. H. Kuoa, C. L. Chiang, and Y. S. Hsieh. *Cancer Lett.*, **2006**, *235*, 248–259.
23. A. Ferina, A. Doldo, V. Cotichini, M. Rejevic, M. G. Quaglia, N. Mulinacci, and F. F. Vincieri, *J. Pharmac. and Biomed. Anal.*, **1995**, *14*, 203-211.
24. P. Bridle and C. G. Viguera, *Food Chem.*, **1996**, *55*, 111-113.
25. J. Bakker, P. Bridle, T. Honda, H. Kuwano, N. Saito, N. Terhara, and C. F. Timberlake, *Phytochemistry*, **1997**, *44*, 1375-1382
26. R. Norbaek and T. Kondo, *Phytochemistry*, **1998**, *47*, 861-864.
27. K. Torskangerpoll, T. Fossen, and E.M. Andersen, *Phytochemistry*, **1999**, *52*, 1686-1692
28. M.S. Narayan, and L.V. Venkataraman, *Food Chem.*, **2000**, *70*, 361-363.
29. P. Dugo. Giuffrida, G. Dugo, and L. Mondello, *J. Chromatog. A*, **2001**, *1189*, 196-206.

30. T. Fossen, R. Slimestad, D.O. Ovstedal, and O.M. Andersen, *Biochemical Systematics and Ecology*, **2002**, 30, 855–864.
31. T. Fossen, and D. O. vstedal, *Phytochemistry*, **2003**, 63, 783–787.
32. A. De Villiersa, G. Vanhoenackerb, P. Majekc, and P. Sandraa, *J. Chromatog A*, **2004**, 1054, 195–204.
33. Q. Tian, I. Konczak and S. Schwartz, *J. Agric. Chem.*, **2005**, 53, 6503–6509.
34. L. Longo, and G. Vasapollo, *Food Chem.*, **2006**, 94, 226–231.
35. L. Longo, A. Scardino, and G. Vasapollo, *Innovative Food Science and Emerging Technologies*, **2007**, 8, 360–364.
36. M. Duenas, J. J. Perez-Alonso, C. Santos-Buelga, and T. Escribano-Bailon, *J. Food Composition and Analysis*, **2008**, 21, 107–115.
37. H.H. Willard, L. L. meritt, J. A. Dean and F. A. Settee, *Instumental Methods of Analysis sixth edition*, Worsworth Publishing Company, California. **1984**, 495-517.
38. [www.lcresources.com/resources/getstart/zq01.html](http://www.lcresources.com/resources/getstart/zq01.html).
39. S. Lindsay, *High Preformance Liquid Chromatrography*, John Wiley & Sonc Ltd., New York, **1991**, 1-5.
40. Z. Deyl, K. Macek and J. Janak, *Liquid Chromatrography; Survey of Modern Techniques and Application* (V.3), Elserier Sciencetific Publishing company, **1986**, 69-85.
41. [www.sec.psu.th/web-board/?pid=view](http://www.sec.psu.th/web-board/?pid=view)
42. E. S. Yeung, *Detector for Liquid Chromatography* (V.89), John Wiley& Sonc Ltd. New York, **1986**, 29-148.
43. [www.hull.ac.uk/chemistry/massspec3/principles%20 of 20 ms.html](http://www.hull.ac.uk/chemistry/massspec3/principles%20of%20ms.html).

44. E. de Hoffmann, J. Charette and V. Steubond, *Mass Spectrometry; Principles and Application*. John Wiley & Sons Ltd, New York, **1986**, 1-8.
45. [www.chem.bris.ac.uk/ms/theory/fab-ionisation.html](http://www.chem.bris.ac.uk/ms/theory/fab-ionisation.html).
46. [www.chem.bris.ac.uk/ms/theory/maldi-ionisation.html](http://www.chem.bris.ac.uk/ms/theory/maldi-ionisation.html).
47. <http://www.chm.bris.ac.uk/ms/theory/ESI-APCI-ionisation.html>.
48. X. Wu and R. L. Prior, *J. Agric. Food Chem.*, **2005**, *53*, 2589-2599.
49. C. Alcalde-Eon, G. Saavedra, S. de Pascual-Teresa, and J.C. Rivas-Gonzalo, *J. Chromatog. A*, **2004**, *1054*, 211-215.
50. [www.chm.ac.uk/ms/theory/qit-massspec.html](http://www.chm.ac.uk/ms/theory/qit-massspec.html).
51. [www.chem.bris.ac.uk/ms/theory/sector-massspec.html](http://www.chem.bris.ac.uk/ms/theory/sector-massspec.html).
52. [www.bris.ac.uk/nerclsmsf/techniques/gcms.html](http://www.bris.ac.uk/nerclsmsf/techniques/gcms.html).
53. R. J. Cotter, *Time-of-flight mass spectrometry Instrumentation and Application in Biological Research*. American chemical society. Washington DC. **2001**, 1-40.
54. <http://oldwww.iosh.gov.tw/data/fz/sp73-5.html>.
55. K.L. Busch, G.L. Glush and S.A. McLuckey, *Mass spectrometry- Mass spectrometry technique and application of tandem mass spectrometry*, VCH Publisher, Inc. **1988**, 153-159.
56. F. Cuyckens and M. Claeys, *J. Mass Spectrom*, **2004**, *39*, 1-15.
57. N. P. Seeram, R. Lee, H. S. Scheuller, and D. Heber, *Food Chem.*, **2006**, *97*, 1-11.
58. Q. Tian, M. M. Giusti, G. D. Stoner, and S. J. Schwartz, *J. Chromatog. A*, **2005**, *1091*, 72-82.
59. I. Revilla, S. Perez-Magarino, M.L. Gonzalez-SanJose, and S. Beltran, *J. Chromatog. A*, **1999**, *847*, 83-90.

60. E. S. de Brito, M. C. P. de Araujo, L. Z. Lin, and J. Harnly, *Food Chem.*, **2007**, *105*, 1112–1118.
61. P. Montoro, C.I.G. Tuberoso, A. Perrone, S. Piacente, P. Cabras, and C. Pizza *J. Chromatog. A*, **2006**, *1112*, 232–240.
62. A. H. Nielsen, C. E. Olsen, and B. L. Maller, *Phytochemistry*, **2005**, *66*, 2829–2835
63. K. Kazuma, N. Noda, and M. Suzuki, *Phytochemistry*, **2003**, *64*, 1133–1139.
64. C. S. Wu, B. L. Guo, Y. X. Sheng, and J. L. Zhang, *Chinese Chemical Letters*, **2008**, *19*, 329–332.
65. P. Arapitsas, P.J.R. Sjoberg, and C. Turner, *Food Chem.*, **2008**, *109*, 219–226.
66. M. Monagas, C. Gomez-Cordoves, and B. Bartolome, *Food Chem.*, **2007**, *104*, 814–823.
67. [www.chem.aglient.com/caglother/appi%20source.gif](http://www.chem.aglient.com/caglother/appi%20source.gif).
68. H. G. Krishnamurty, V. Krishnamoorthy, and T. R. Seshadri, *Phytochemistry*, **2003**, *60*, 47-253.
69. P. Winterhalter, *Food Res Int.*, **2005**, *38*, 943–948.
70. B.D. Davis, and J. S. Brodbelt, *J. Am. Soc. Mass. Spectrum*, **2004**, *15*, 1287-1299.

**CURRICULUM VITAE**

- Name :** Mr. Kitsada Pitija
- Date of Birth:** February 3, 1982
- Education:** B. Sc. (chemistry), Chiang Mai Rajabhat University,  
2000-2004  
M. S. (chemistry), Chiang Mai University, 2006-2009
- Scholarship:** M. S. Scholarship supported by Center of Excellence for  
Innovation in Chemistry: PERCH-CIC
- List of conferences:** Poster presentation, "Analysis of anthocyanins in leaves  
and seed of Thai black rice cultivars by liquid  
chromatography-electrospray ionization-tandem mass  
spectrometry" at the 34<sup>th</sup> congress on science and  
technology Thailand (STT 34), Bangkok, 2008,  
Thailand



Poster presentation, “Anthocyanin and Total phenolic Contents, Antioxidation Property, and Metal Chelating Ability in Leaf and Seed at Six Growth Stage of Some Thai Black Rice Cultivars at the 6<sup>th</sup> International Congress on Chemistry for Innovation (PERCH-CIC congress VI), Jomtien Plam Beach Resort Pattaya, Chonburi, 2009, Thailand

**Publication:**

Antioxidant Activities and the Major Bioactive Components of Bran Extracts from Some Thai Black Rice Cultivars. *Submitted.*



