

บรรณานุกรม

1. จีราพร พันสถา. 1994. การสกัดและตกตะกอนโปรตีนจากกากมัสตาร์ด. ปัญหาพิเศษ ภาควิชาเคมี คณะวิทยาศาสตร์ มหาวิทยาลัยเชียงใหม่ : 1-54.
2. สุขชน ตั้งทวีพัฒน์. 1999. การใช้เศษเหลือจากโรงงานผลิตมัสตาร์ดเป็นแหล่งโปรตีนและพลังงานในอาหารสัตว์. ภาควิชาสัตวศาสตร์ คณะเกษตรศาสตร์ และ วิศวกรรมศาสตร์ มหาวิทยาลัยเชียงใหม่ : 11-50.
3. Dalgalarondo, M., Raymond, J and Azanza, J.L. 1984. Sunflower seed proteins : characterization and subunit composition of the globulin fraction. *J. Exp bot.* 35 : 1618-1628.
4. Bhatti, R.S., Sosulski, F.W and Wu, K.K. 1973. Protein and nonprotein nitrogen contents of some oilseeds and peas. *Can. J. Plant Sci.* 53 : 651-657.
5. Gillberg, L and Tornell, B. 1976. Preparation of rapeseed protein isolates : dissolution and precipitation behavior of rapeseed proteins. *J. Food Sci.* 41 : 1063-1069.
6. Gillberg, L and Tornell, B. 1976. Preparation of rapeseed protein isolates : precipitation of rapeseed proteins in the presence of polyacids. *J. Food Sci.* 41 : 1070-1075.
7. Guzman, G.A., Ebeling, P.W and Maiti, R. 1995. Chemical, nutritional and functional characterization of proteins extracted from wild mustard (*Brassica campestris*) seeds from Nuevo Leon, Mexico. *Econ Bot.* 49 : 260-268.
8. Lonnerdal, B and Janson, J.C. 1972. Studies on Brassica seed proteins. *Biochim.Biophys.Acta.* 278 : 175-183.
9. Shahidi, F., Naczki, M., Rubin, L.J and Diosady, L.L. 1988. A novel processing approach for rapeseed and mustard seed-removal of undesirable constituents by methanol-ammonia. *J. Food Prot.* 51 : 743-749.

10. Venkatesh, A and Rao, A.G. 1988. Isolation and characterization of low molecular weight protein from mustard (*Brassica juncea*). *J. Agric. Food Chem.* 36 : 1150-1155.
11. Xu, L and Diosady, L.L. 1994. The production of Chinese rapeseed protein isolates by membrane processing. *JAOCS.* 71 : 935-939.
12. Zhou, B., He, Z.Q., Yu, H.M and Mukherjee, K.D. 1990. Proteins from double zero rapeseed. *J. Agric. Food Chem.* 38 : 690-694.
13. Ahmad, M., Badshah, A and Chaudhry, M.A. 1993. Phytic acid, polyphenols and potential nutrients in Brassica seeds. *Pak. J. Sci. Ind. Res.* 36 : 23-26.
14. Kozłowska, H., Rotkiewicz, D.A and Zadernowski, R. 1983. Phenolic acids in rapeseed and mustard. *JAOCS.* 60 : 1119-1123.
15. Naczki, M., Wanasundara, P.K and Shahidi, F. 1992. Facile spectrophotometric quantification method of sinapic acid in hexane-extracted and methanol-ammonia-water-treated mustard and rapeseed meals. *J. Agric. Food Chem.* 40 : 444-448.
16. Shahidi, F and Naczki, M. 1992. An overview of the phenolics of canola and rapeseed : chemical, sensory and nutritional significance. *JAOCS.* 69 : 917-924.
17. Shahidi, F. 1992. *Phenolic compounds in food and their effects on health.* American chemical society, USA : 130-142.
18. Sosulski, F. 1979. Organoleptic and nutritional effects of phenolic compounds on oilseed protein products : a review. *JAOCS.* 56 : 711-715.
19. Erdman, J.W. 1979. Oilseed phytates : nutritional implications. *JAOCS.* 56 : 736-741.
20. Maga, J.A. 1982. Phytate : Its chemistry, occurrence, food interactions, nutritional significance, and methods of analysis. *J. Agric. Food Chem.* 30 : 1-9.
21. Thompson, L.U., Reyes, E and Jones, J.D. 1982. Modification of the sodium hexametaphosphate extraction-precipitation technique of rapeseed protein concentrate preparation. *J. Food Sci.* 47 : 982-988.

22. ศิริวรรณ สุทธิจิตต์. 2527. สารประกอบฟีนอลิก. เอกสารประกอบการสอนกระบวนการวนวิชาเภสัชเวท ชั้นสูง 2 : 1-49.
23. Adzet, T. 1985. *Herbs, Spices, and medicinal plants*. V 1 : 167-177.
24. Goodwin, T.W and Mercer, E.I. 1972. *Introduction to plant biochemistry*. Oxford, Permagon Press : 528-565.
25. Durkee, A.B and Thivier, P.A. 1975. Bound phenolic acids in Brassica and Sinapis oilseeds. *J. Food Sci.* 40 : 820-822.
26. Fenton, W.T., Leung, J and Clandinin, R.D. 1980. Phenolic components of rapeseed meal. *J. Food Sci.* 45 : 1702-1705.
27. Krygier, K., Sosulski, F and Hogge, L. 1982. Free, esterified, and insoluble-bound phenolic acids : extraction and purification procedure. *J. Agric. Food Chem.* 30 : 330-334.
28. Raymond, J., Rakariyatham, N and Azanza, J.L. 1984. Polyphenol-protein interactions in sunflower seed (*Helianthus annuus*). *Sciences Des Aliments*. 4 : 95-108.
29. Schieber, A., Keller, P and Carle, R. 2001. Determination of phenolic acids and flavonoids of apple and pear by high-performance liquid chromatography. *J. Chromatogr A*. 910 : 265-273.
30. Revilla, E and Ryan, J.M. 2000. Analysis of several phenolic compounds with potential antioxidant properties in grape extracts and wines by high-performance liquid chromatography-photodiode array detection without sample preparation. *J. Chromatogr A*. 881 : 461-469.
31. Mayer, M.A and Harel, E. 1979. Polyphenol oxidases in plants. *Phytochem.* 18 : 193-215.
32. Mayer, M.A. 1987. Polyphenol oxidase in plants-Recent progress. *Phytochem.* 26 : 11-20.
33. Mayer, M.A and Harel, E. 1982. *Polyphenol oxidase in fruits-changes during ripening*. Elsevier : 161-180.

34. Zawistowski, J. Biliaderis, G.C and Eskin, A.N. 1991. *Oxidative enzymes in foods*. Elsevier Applied Science : 217-273.
35. Kwok, K.H. 1999. Characterization of polyphenol oxidase from aerial roots of an orchid, Aranda "Christine 130". *Plant Physiol. Biochem.* 37 : 841-848.
36. Ridgway, T.J and Tucker, G.A. 1999. Procedure for the partial purification of apple leaf polyphenol oxidase suitable for commercial application. *Enzyme Microb. Technol.* 24 : 225-231.
37. Richardson, A and McDougall, G.J. 1997. A laccase type polyphenol oxidase from lignifying xylem of tobacco. *Phytochem.* 44 : 229-235.
38. Busch, J.M. 1999. Enzymic browning in potatoes : a simple assay for a polyphenol oxidase catalysed reaction. *Biochem Edu.* 27 : 171-173.
39. Espin, J.C., Ochoa, M., Tudela, J and Canovas, F.G. 1997. Monophenolase activity of strawberry polyphenol oxidase. *Phytochem.* 45 : 667-670.
40. Jiang, Y.M. 1999. Purification and some properties of polyphenol oxidase of longan fruit. *Food Chem.* 66 : 75-79.
41. Partington, J.C and Bolwell, G.P. 1996. Purification of polyphenol oxidase free of the storage protein patatin from potato tuber. *Phytochem.* 42 : 1499-1502.
42. Singh, N., Singh, R., Kaur, K. and Singh, H. 1999. Studies of the physico-chemical properties and polyphenoloxidase activity in seeds from hybrid sunflower (*Helianthus annuus*) varieties grown in India. *Food Chem.* 66 : 241-247.
43. Greco, G., Toscano, G., Cioffi, M., Gianfreda, L and Sannino, F. 1999. Dephenolisation of olive mill waste-water by olive husk. *Wat. Res.* 33 : 3046-3050.
44. Ikehata, K. and Nicell, J.A. 2000. Characterization of tyrosinase for the treatment of aqueous phenols. *Biores Technol.* 74 : 191-199.
45. Russell, M.I., Burton, G.S. 1999. Development and demonstration of an immobilised - polyphenol oxidase bioprobe for the detection of phenolic pollutants in water. *Analyt Chim Acta.* 389 : 161-170.
46. Jiang, Y.M and Fu, J. 1998. Inhibition of polyphenol oxidase and browning control of litchi fruit by glutathione and citric acid. *Food Chem.* 62 : 49-52.

47. Kermasha, S., Goetghebeur, M and Monfette, A. 1993. Studies on inhibition of mushroom polyphenol oxidase using chlorogenic acid as substrate. *J. Agri. Food Chem.* 41 : 526-531.
48. Robert, C., Rouch, C and Cadet, F. 1997. Inhibition of palmito (*Acanthophoenix rubra*) polyphenol oxidase by carboxylic acids. *Food Chem.* 59 : 355-360.
49. Negishi, O and Ozawa, T. 2000. Inhibition of enzymatic browning and protection of sulfhydryl enzymes by thiol compounds. *Phytochem.* 54 : 481-487.
50. Tan, B.K and Harris, N.D. 1995. Maillard reaction products inhibit apple polyphenol oxidase. *Food Chem.* 53 : 267-273.
51. Lee, G.C and Lee, C.Y. 1997. Inhibitory effect of caramelisation products on enzymic browning. *Food Chem.* ; 60 : 231-235.
52. Raymond, J., Rakariyatham, N and Azanza, J.L. 1993. Purification and some properties of polyphenol oxidase from sunflower seeds. *Phytochem.* 34 : 927-931.
53. Zhou, P., Smith, N.L and Lee, C.Y. 1993. Potential purification and some properties of Monroe apple peel polyphenol oxidase. *J. Agri. Food Chem.* 41 : 532-536.
54. Fujita, S., Saari, N.B., Maegawa, M., Tetsuka, T., Hayashi, N and Tono, T. 1995. Purification and properties of polyphenol oxiase from cabbage (*Brassica oleracea* L). *J. Agric. Food Chem.* 43: 1138-1142.
55. Ming, J.Y., Giora, Z and Fuchs, Y. 1997. Partial purification and some properties of polyphenol oxidase extracted from litchi fruit pericarp. *Post Harv Biol Technol.* 10 : 221-228.
56. ลักษณะ รุจนะไกรกานต์ และ นิธิยา รัตนปนนท์. 2532. *หลักการวิเคราะห์อาหาร*. คณะเกษตรศาสตร์ มหาวิทยาลัยเชียงใหม่ : 8-69.
57. Dubois, M., Gilles, K.A., Hamilton, J.K., Rebers, P.A and Smith, F. 1956. Colorimetric method for determination of sugars and related substances. *Anal. Chem.* 28 : 350-356.

58. อนุชาวรรณก้อน. 2535. การหาปริมาณเอนไซม์อะไมเลส โพลีฟีนอลออกซิเดส และสารประกอบโพลีฟีนอลในดินอ่อนของข้าวสาลี และข้าวโพดพันธุ์ต่างๆ. ปัญหาพิเศษ วิทยาศาสตร์บัณฑิต ภาควิชาเคมี คณะวิทยาศาสตร์ มหาวิทยาลัยเชียงใหม่. 40-42.
59. Lowry, O.H., Rosebrough, N.J. Farr, A.L and Randall, R.L. 1951. Protein measurement with the Folin phenol reagent. *J. Biol.Chem.* 193 : 165-175.
60. Laemmli, U.K. 1970. Cleavage of structural protein during the assembly of the head of bacteriophage T4. *Nature.* 227 : 680-685.
61. Harris, E.L.V and Angal, S. 1989. *Protein purification methods*. IRL Press, New York.
62. Scopes, R. 1982. *Protein purification*. Springer-Verlag, New York.