

REFERENCES

ถนนหัววัง และ ครุณ เพ็ชรพลาย. 2517. การศึกษาฤทธิ์ยาสัตว์ และ เกสซ์เวทของบีนเครื่อ
วารสารกรรมวิทยาศาสตร์การแพทย์ 16 : 19-30.

Abdel-Barry, J.A., Abdel-Hassan, I.A., Al-Hakiem, M.H.H. 1997. Hypoglycaemic and antihyperglycaemic effects of *Trigonella foenumgraecum* leaf in normal and alloxan induced diabetic rats. **J Ethnopharmacol.** 58 : 149-155.

Al-Khazraji, S.M., Al-Shamaony, L.A., Twaij, H.A.A. 1993. Hypoglycaemic effects of *Artemisia herba alba*. I. Effect of different parts and influence of the solvent on hypoglycaemic activity. **J Ethnopharmacol.** 40 : 163-166.

Avirutnant, W. and Pongpan, A. 1983. The antimicrobial activity of some Thai flowers and plants. **Mahidol Univ. J. Pharm. Sci.** 10 (3) : 81-86.

Avirutnant, W. and Wutiudomleart, M. 1983. The antifungal activity of some Thai herbal . **Mahidol Univ. J. Pharm. Sci.** 10 (3) : 87-89.

Boonyaprakorn, P., Dampawan, P. and Wiriya chitra, P. 1983. Chemical constituents of *Fibraurea tinctoria* Lour. **Songklanakarin J. Sci Technol.** 5 (4) : 343-345.

Chang, F-R., Chen, C-Y., Hsieh, T-J., Cho, C-P and Wu, Y-C. 2000. Chemical constituents from *Annona glabra* III. **J. Chin. Chem. Soc.** 47 (4) : 913-920.

Chaoradol, T., Teeratorn, B. and Toranin, B., 1972. Hypoglycemic of *coccinia indica*. **Siriraj Hosp. Gaz.** 24 (6) : 933-940.

Chitcharoenthum, M., Thusaneeyakul, V., Chintakanoncharoensiri, D., Thanasrivanichai, U. and Parasupatana, S. 1990. Effects of *A. flava*, methoxsalen and on trimetazidine hepatotoxic effects of carbon tetrachloride.

Thai J. Pharm. 12 : 15-24 .

Creasey, W.A. 1979. Biochemical effects of berberine. **Biochem. Pharmacol.** 28 : 1081-1084.

Daechativong, K., Thappayutpijarn, P., Hinjcheeranun, T., Ratthanapee, S. and Pidech, P. 1988. Hypoglycemic effect and chronic toxicity of *Minosa pudica* L. **Thai J. Pharmacol.** 10 : 33-43.

El-Fiky, F.K., Abou-Karam, M.A., Afify, E.A. 1996. Effect of *Luffa aegyptiaca* (seeds) and *Carissa edulis* (leaves) extracts on blood glucose level of normal and streptozotocin diabetic rats. **J Ethnopharmacol.** 50 : 43-47.

Estrada, H.R., Deleon, G.V., Lim, P.T. and Kintanar, Q.L. 1963. Some pharmacologic effects of *Arcangelisia flava*(Linn.) Merr. Extract. **Acta Med. Phillip.** 19(2): 11-20.

Forman, L.L. 1991. Menispermaceae. **Flora of Thailand.** 5(3) : 300-365.

Garcia, L.M., Jewers, K., Manchanda, A.H., Martinod, P., Nabney, J. and Robinson, F.V. 1970. The alkaloids of *Arcangelisia loureirii* and *Coscinium wallchianum*. **Phytochemistry.** 9: 663 –664.

Glasby, J.S. 1975. **Encyclopedia of alkaloid Vol. 1-2. USA : Plenum Press.**

Hilaly, J.E., Lyoussi, B., 2002. Hypoglycaemic effect of the lyophilised aqueous extract of *Ajuga iva* in normal and streptozotocin diabetic rats. **J Ethnopharmacol.** 80: 109-113.

Hsieh, T-J., Chia, Y-C., Wu, Y-C. and Chen, C-Y., 2004. Chemical constituents from the stems of *Mahonia japonica*. **J Chin. Chem. Soc.** 50 (2) : 443-446.

Itokawa, H., Mizuno, K., Tajima, R. and Takeya, K. 1986. Furanoditerpene from *Fibraurea tinctoria*. **Phytochemistry** 25 (4) : 905-908.

Jayaweera, D.M.A. 1982. **Medicinal plants (Indigenous and exotic) used in**

Ceylon part IV : Magnoliaceae-Rublaceae. Srilanka : M.D. Gunasena & Co. Ltd.

- Keawpradub, S. 1992. The alkaloids from the stems of *Coscinium fenestratum* Colebr. **Master's Thesis. Graduate school, Chulalongkorn University.**
- Kamalakkannan, N. and Stanely Mainzen Prince, P. 2003. Hypoglycemic effect of water extracts of *Aegle marmelos* fruits in streptozotocin diabatic rats. **J Ethnopharmacol.** 87 : 207-210.
- Ladeji, O., Omekarah, I. and Solomon, M. 2003. Hypoglycemic properties of aqueous bark extract of *Ceiba pentandra* in streptozotocin-induced diabetic rats. **J Ethnopharmacol.** 84 : 139-142.
- Lee, M.K., and Kim, H.S. 1996. Inhibitory effects of protoberberine alkaloids from the roots of *Coptis japonica* on Catecholamine biosynthesis in PC12 cells. **Planta. Med.** 62 : 31-34.
- Malhotra, S., Taneja, S.C. and Dhar, K.L. 1989. Minor alkaloid from *Coscinium fenestratum*. **Phytochemistry.** 28 : 1998-1999.
- Manske, R.H.F. and Ashford, W.R. 1954. **The Alkaloids : Chemistry and Physiology Vol. IV.**
- Maroo, J., Vasu, V. T., Aalinkeel, R., Gupta, S.. 2002. Glucose lowering effect of aqueous extract of *Enicostemma littorale* Blume in diabetes: a possible mechanism of action. **J Ethnopharmacol.** 81 : 317-320.
- Naik, S.R., Filho, J.M.B., Dhuley, J.N. and Deshmukh, R. 1991. Probable mechanism of hypoglycemic activity of bassic acid, a natural product isolated from *Bumelia sartorum*. **J Ethnopharmacol** 33 : 37-44.
- Perfumi, M., Arnold, N., Tacconi, R. 1991. Hypoglycemic activity of *Salvia fruticosa* Mill. from Cyprus. **J Ethnopharmacol.** 34: 135-140.

- Peungvicha, P., Thirawarapan, S.S., Temsiririrkkul, R., Watanabe, H., Prasain, J.K., Kadota, S. 1998. Hypoglycemic effect of the water extract of *Piper samentosum* in rats. **J Ethnopharmacol.** 60: 27-32.
- Peungvicha, P., Temsiririrkkul, R., Thongpraditchote, S. 1999. Hypoglycemic effect of *Pluchea indica* (L.) Less root extract in normal and diabetes rats. **Thai J. Phytopharmacy.** 6(2) : 18-22.
- Pinho, P.M.M., Pinto, M.M.M., Kijjoa, A., Pharadai, K., Diaz, J.G. and Herz, W. 1992. Protoberberine alkaloids from *Coscinium fenestratum*. **Phytochemistry.** 31 : 1403-1407.
- Rabbani, G.H., Butler, T., Knight, J., Sanyal, S.C. and Alam, K. 1987. Randomized controlled trial of berberine sulfate therapy for diarrhea due to enterotoxigenic *Escherichia coli* and *Vibrio cholerae*. **J Infect. Dis.** 155: 979-984.
- Rao, B. K., Kesavulu, M.M., Apparao, Ch. 2001. Antihyperglycemic activity of *Momordica cymbalaria* in alloxan diabetic rats. **J Ethnopharmacol.** 78 : 67 -71.
- Rungsimakan, S. 2001. Pharmacognostic properties of Khamin Khrua. **Master's Thesis. Graduate school, Chulalongkorn University.**
- Sabu, M.C., Kuttan, R. 2002. Anti-diabetic activity of medicinal plants and its relationship with their antioxidant property. **J Ethnopharmacol.** 81 :155 – 160.
- Sethi, M.L. 1983. Enzyme inhibition VI : Inhibition of reverse transcriptase activity by protoberberine alkaloid and structure-activity relationships. **J Pharm. Sci.** 72 (5) : 538-541.
- Sethi, M.L. 1985. Comparison of inhibition of reverse transcriptase and antileukemic activities exhibited by protoberberine and benzophenanthridine alkaloids and

- Sharma, S.B., Nasir, A., Prabhu, K.M., Murthy, P.S. and Dev, G. 2003. Hypoglycemic and hypolipidemic effect of ethanolic extract of seeds of *Eugenia jambolana* in alloxan-induced diabetic rabbits. **J Ethnopharmacol.** 85 : 201.206.
- Singh, G.B., Singh, S., Bani, S. and Malhotra, S. 1990. Hypotensive action of a *Coscinium fenestratum* stem extract. **J Ethnopharmacol.** 30 (2) : 151- 155.
- Siwon, J., Verpoorte, R., Van Essen, G.F.A. and Baerheim, S. A. 1980. Studies on Indonesian medicinal plants III. The alkaloids of *Coscinium fenestratum*. **Planta Med.** 38 : 24-32.
- Siwon, J., Verpoorte, R. and Svendsen, A.B. 1981. Studies on Indonesian medicinal plants VI. Further alkaloids from *Fibraurea chloroleuca*. **Planta Med.** 41 : 65-68.
- Sriwilajaleon, N., Petmitr, S., Mutirangura, A., Ponglikitmongkol, M. and Wilairat, P. 2002. Stage specificity of *Plasmodium falciparum* telomerase and its inhibition by berberine. **Parasitol Int.** 51 (1) : 99-103.
- Thornber, C.W. 1970. Alkaloids of the Menispermaceae, review article. **Phytochemistry.** 9 : 157-187.
- Utaipatana, A. and Chumsri, P. 1987. Acute toxicity studies on isoquinoline alkaloids of *Arcangelisia flava* Merr. In the First Princess Chulabhorn Science congress, **International congress on natural products**, p.89.
- Verpoorte, R., Siwon, J., Van Essen, G.F.A., Tieken, M. and Svendsen, A.B. 1988. Studies on Indonesian medicinal plants VII. alkaloids of *Arcangelisia flava*. **Planta Med.** 41 (65) : 582-584.
- Schmeller, T., Latz-Bruning, B. and Wink, M. 1997. Biochemical activities of berberine, palmatine and sanguinarine mediating chemical defence against

microorganisms and herbivores. **Phytochemistry.** 44 (2) : 257-266.

Zakaria, M.B., Saito, I., Yao, X.K., Wang, R.J. and Motsuura, T. 1989.

Furanoditerpenes of *Fibraurea chloroleuca*. **Planta. Med.** 55: 477-478.

APPENDIX

APPENDIX

Reagents

1. Dragendorff's TS, modified

Solution A : Dissolve 0.85 g of bismuth subnitrate in a mixture of 40 ml of water and 10 ml of glacial acetic acid

Solution B : Dissolve 8 g potassium iodide in 20 ml of water

Mix 5 ml solution A, 5 ml solution B, 20 ml glacial acetic acid and 70 ml of water.

2. 10 % Sulfuric acid

10 ml of conc. sulfuric acid in 90 ml of ethanol.

VITAE

Miss Napapan Pongpoungphet was born on July 30, 1978 in Thailand. She received her Bachelor's degree of Science in Biotechnology in 2000 from the Faculty of Technology, Mahasarakham University, Thailand. She studied for Master's degree of Science in Biomedicinal Chemistry in 2000 at Department of Biochemistry, Faculty of Pharmaceutical Sciences, Chulalongkorn University, Thailand.