

New megastigmane glucosides from *Excoecaria cochinchinensis* Lour. var. *cochinchinensis*

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Abstract: Two new megastigmane glucosides, called excoecariosides A and B were isolated from the leaves of a medicinal Vietnamese plant, *Excoecaria cochinchinensis* Lour. var. *cochinchinensis* (Euphorbiaceae) together with seven known compounds. Their structures were elucidated by spectroscopic analyses and chemical reactions including the modified Mosher's method. © 2005 Pharmaceutical Society of Japan.

Author Keywords: Euphorbiaceae; *Excoecaria cochinchinensis*; Excoecarioside; Megastigmane glucoside

Index Keywords: 4 hydroxybenzoic acid; astragalin; excoecarioside A; excoecarioside B; gallic acid; glucoside; kaempferol derivative; shikimic acid; unclassified drug; article; chemical reaction kinetics; drug isolation; drug structure; Euphorbia; *Excoecaria cochinchinensis*; medicinal plant; plant leaf; Chromatography, High Pressure Liquid; Chromatography, Thin Layer; Cyclohexanones; Euphorbiaceae; Glucosides; Hydrolysis; Magnetic Resonance Spectroscopy; Norisoprenoids; Plant Extracts; Plant Leaves; Solvents; Spectrometry, Mass, Fast Atom Bombardment; Spectroscopy, Fourier Transform Infrared; Vietnam

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References:

- Pham, H.H., (1992) Illustrated Flora of Vietnam, 2 (1), p. 353. , Published by the Author, Montreal
- Do, T.L., (1991) Vietnamese Medicinal Plants and Herbal Remedies, pp. 555-556. , Science and Technology, Hanoi
- Vo, V.C., (1997) The Dictionary of Vietnamese Medicinal Plants, p. 488. , Medicine, Ho Chi Minh City
- Miyase, T., Ueno, A., Takizawa, N., Kobayashi, H., Oguchi, H., (1988) Chem. Pharm. Bull., 36, pp. 2475-2484
- Otsuka, H., Kijima, H., Hirata, E., Shinzato, T., Takushi, A., Bando, M., Takeda, Y., (2003) Chem. Pharm. Bull., 51, pp. 286-290
- Ohtani, I., Kusumi, T., Kashman, Y., Kakisawa, H., (1991) J. Am. Chem. Soc., 113, pp. 4092-4096
- Maier, W., Schmidt, J., Nimtz, M., Wray, V., Strack, D., (2000) Phytochemistry, 54, pp. 473-479
- Weyerstahl, P., Meisel, T., (1994) Liebigs Ann. Chem., 1994, pp. 415-427
- Ina, K., Sakato, Y., Fukami, H., (1964) Tetrahedron Lett., 9, pp. 2777-2780
- Bovey, F.A., (1967) NMR Data Tables for Organic Compounds, 1. , John Wiley & Sons, New York
- Markham, K.R., Mohan Chari, V., Mabry, T.J., (1982) The Flavonoids: Advances in Research, , ed. by Harborne J. B., Mabry T. J., Chapman and Hall, London
- Gunasegaram, R., Kotiyal, J.P., Rani, F.V., Ramachandra, N.A.G., (1980) Indian J. Chem., 19 B, p. 821
- Markham, K.R., Geiger, H., (1994) The Flavonoids: Advances in Research since 1986, , ed. by Harborne J. B., Chapman & Hall, London