

from *F. griffithii* leaves by kinetic maceration is the highest compared to other extracts.

Acknowledgement

The authors greatly appreciate Institute for Research and Community Services, University of Surabaya (Indonesia) for financial support, contract No. 12/Lit/LPPM/FF/VII/2009 and students for technical assistance.

References

- [1] G. A. Goodman and W. Rall, Goodman and Gilman's: The Pharmacological Basis of Therapeutics (11th ed.), Mc Graw-Hill: New York, 2006.
- [2] Siswandono and B. Soekardjo, Kimia Medisinal 2, Airlangga University Press: Surabaya, 2000, p. 236.
- [3] Fontanarosa, Alternative Medicine: An Objective Assesment, American Medical Association, 2000.
- [4] NIDA (National Institute on Drug Abuse), CNS Depressants, available online at: <http://www.nida.nih.gov/Researchreports/Prescription/prescription3.html>.
- [5] W. Sumaryono, Peluang, Tantangan dan Strategi Pengembangan Produk Bahan Alami untuk Penanganan Kanker, Prosiding Simposium Penelitian Bahan Obat Alami XIV, Jakarta, 2009, pp. 1-12.
- [6] Sutarjadi, *Fraxinus Griffithii* Clarke, Penelitian Taksonomi dan Fitokimia, Desertasi, Universitas Airlangga, 1980.
- [7] Sutarjadi and N. C. Zaini, *Fraxinus eedenii* Boerl. Et Kds (Studi Pendahuluan Farmakognosi dan Fitokimia), Research Report, Airlangga University, 1973.
- [8] S. A. Ahaditomo and H. D. Ma'rifin, Penelitian pendahuluan beberapa khasiat tiken: *Fraxinus griffithii* clarke, Prosiding Simposium Penelitian Tanaman Obat I, Bogor, 1975, pp. 267-398.
- [9] A. Basori, Isolation and pharmacodynamic screening of ligustroside–A CNS Active Substances–Isolated from *Fraxinus griffithii* Clarke, *Folia Medica Indonesiana* 4 (1999) 4-8.
- [10] A. Basori, Pharmacodynamic studies of central nervous system depressant effects of ligustroside: A CNS Active Substances–Isolated from *Fraxinus griffithii* Clarke, *Folia Medica Indonesiana* 1 (2000) 39-46.
- [11] R.A. Macahig, L. Harinantenaina, K. Matsunami, H. Otsuka, Y. Takeda and T. Shinzato, Secoiridoid and Iridoid Glucosides from the Leaves of *Fraxinus griffithii*, *J Nat Med* 64 (2010) 1-8.
- [12] P. H. List and P. C. Schmidt, *Phytopharmaceutical Technology*, CRC Press: Boca Raton, 1989.
- [13] R. I. Depkes, Parameter Standar Umum Ekstrak Tumbuhan Obat, Dirjen POM: Jakarta, 2000.
- [14] S. Soetarno and I. S. Soediro, Standardisasi Mutu Simplisia dan Ekstrak Bahan Obat Tradisional, Prosiding Temu Ilmiah Nasional Bidang Farmasi, 1997.
- [15] WHO, *Quality Control Methods for Medicinal Plant Materials*, WHO: Geneva, 1998.
- [16] R. O. B. Wijesekera, *The Medicinal Plant Industry*, CRC Press: Boca Raton, 1991.
- [17] S. Li, Q. Han, C. Qiao, J. Song, C. L. Cheng and H. Xu, Chemical Markers for the quality control of herbal medicines: An overview, *Chinese Medicine* 3 (2008).