PEMBUATAN ASAP CAIR DARI LIMBAH KAYU SUREN (*Toona sureni*), SABUT KELAPA DAN TEMPURUNG KELAPA (Cocos *nucifera* Linn)

Yefrida, Yani Kasuma Putri, Richi Silvianti, Novita Lucia, Refilda, Indrawati
Laboratorium Kimia Analisis Lingkungan Jurusan Kimia
Universitas Andalas

ABSTRACT

The waste of red cedar wood, coconut husk and coconut shell has not been well used. They had been used as traditional cooking fuel and also direct food smoking process by community, but they still had several disadvantages. Those could be treated by the simple processing, they can produce new high economics product. In this research, the use of waste red cedar wood, coconut husk and coconut shell as resources of liquid smoke by pyrolization followed by condensation has investigated. Liquid smoke is condensates of smoke which have experienced storage and screening to separate the tar and particulate matter. Liquid smoke that was produced were different in color and smells, light brown and smells of smoke of red cedar wood burn, blackness of brown and smells like burning smoke of coconut husk and brown with smelled like the smoke of burned coconut shell. The pH of liquid smoke of red cedar wood was 3.34, liquid smoke of coconut husk is 3.48 and liquid smoke of coconut shell was 3.21, where its value was influenced by the component of acid which were the biggest component in coconut shell liquid smoke. The result of characterization using GC/MS indicated that there were 27 compounds and the main component of liquid smoke of red cedar wood is acetic acid (45.17%), 2-propanone (15.75%), 1-hidroxy-2-propanone (7.36%), furfural (5.50%) and phenol (4.17%), 27 compounds with the main component of liquid smoke of coconut husk is acetic acid (42.00 %), phenol (25.99%), 2-propanone (7.04%), furfural (4.06%) and guaiacol (3.32%), and 37 compounds with the main component of coconut shell liquid smoke are acetic acid (51.99%), phenol (19.90%), methyl acetate (5.37%), furfural (4.56%), hydroxyl acetone (2.90%), guaiacol (2.62%) and syringol (1.85%).

Keywords: *waste red cedar wood, coconut husk, coconut shell, liquid smoke, GC/MS*

DAFTAR PUSTAKA

1. Stolyhwo, Andrzej and Sikorski, Z. E., 2005, Polycyclic Aromatic Hydrocarbon in Smoked Fish – a critical review, *J. of Food Chem.,* 91: 303-311.
2. Darmaji, P., 1996, Aktivitas Antibakteri Asap Cair yang Diproduksi dari Bermacam-Macam Limbah Pertanian, Laporan Penelitian Mandiri, DPP-UGM, 16: 19-22.
3. http://www.cifor.cgiar.org/docs/_ref/media/innews/2005/indeks-2.htm
4. http://republika.co.id/koran_details.asp?
5. Vivas, N., Absalon, C., Soulie, Ph., Fouquet, E., 2006, Pyrolysis-gas chromatography/mass spectrometry of Quercus sp. wood, *J. of Anal. and App. Pyrol.*, 75: 181-193.
6. Fatimah, I., Nugraha, J., 2005, Identifikasi Hasil Pirolisis Serbuk Kayu Jati Menggunakan Principal Component Analysis, *Jurnal Ilmu Dasar*, 6: 41-47.
7. www.AsapCair.Com
8. Girard, J.P., 1992, Smoking In: Technology of Meat and Meat Products, J.P Girard and I. Morton (ed) Ellis horword Limited, New York.

 ISSN : 1978-628X

 ISSN : 1978-628X