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Chemical Components Analysis of Cinnamon Liquid Smoke with GC MS from Various Production of different Purification Method

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Abstract: This study aims to determine the chemical components of cinnamon liquid smoke obtained from different purification method. This research is performed experimentally by using GC MS on the cinnamon liquid smoke by purification on 100°C distillation temperature, 140°C distillation temperature, filtration purification by using active charcoal, active charcoal mixture with zeolite (50%:50%), purification by precipitation for 1,2 and 3 days) .The observed parameter is the chemical components of cinnamon liquid smoke from different purification method. The result of research shows that purification method treatment affects component structure of liquid smoke. Chemical component of liquid smoke with the biggest retention value obtained in cinnamon raw material treatment on purification method by distillation at 140°C temperature with chemical components of GC MS is phenol 2,6-Dimethoxy with retention value (RT) at 28.49, then the filtration treatment on purification treatment by using active charcoal is the compound of 2,4-Dimethyl-3-(Methoxycarbonil)-5 2,3,5-Trimetosytoluene Hydroquinone, Mono-TMS with retention value (RT) at 32.90, and decantation treatment for one day is Phenol,2,6-Dimethoxy with retention value (RT) 24,90. Based on this research, it can be concluded that the usage of cinnamon by purification method on distillation temperature of 140°C is better than the other purification method because it has better color result.
Keywords: chemical component; purification method; liquid smoke; cinnamon,GC-MS.

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