Comparison between compositions of wood and rice hull vinegars

Joo Hee Kim, Soo Mi Kim, Myoung Jin Son, Se Young Kim, Catherine Rico, Mi Young Kang[†] Department of Food Science & Nutrition, Kyungpook National University, Daegu 702-701, Korea

Component analysis and physico-chemical properties of wood and rice hull vinegars were conducted in order to promote the utilization of these environment-friendly materials. Results showed that wood vinegar had higher specific gravity (2.5) and tar content (0.3%), but lower acid content (1.0%) than rice hull vinegar (1.7, 0.05% and 4.4%, respectively). GC-MS component analysis revealed that rice vinegar had higher phenol content (34%) than wood vinegar (11.49%). Acetic acid and propionic acid were also higher in rice hull vinegar. On the contrary, wood vinegar had higher Furancarboxyl aldehyde content (41.6%) than rice hull vinegar (0.67%). Thus, different results in DPPH radical electron donating-abilities were obtained due to different percent composition of each vinegar.

[†]Corresponding Author: <u>mykang@knu.ac.kr</u>